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DARK TOURISM: MOTIVATIONS AND SERVICE DEMANDS OF VISITORS TO THE TAIPEI 2-28 MEMORIAL MUSEUM

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ABSTRACT

The term “dark tourism” refers to tourist activities or experiences that involve themes of death or disaster. Many studies have investigated the motivations of those who participate in dark tourism, but few have explored these individuals’ service demands. This research consisted of a survey questionnaire administered at the Taipei 2-28 Museum in Taiwan that includes a motivation scale and a service-demand scale. A total of 402 responses were collected. The factor analysis results suggest that visitor motivations are comprised of three dimensions: “desire for meaningfulness/authenticity,” “being curious about sensitive issues,” and “desire for a leisure experience.” The results of canonical correlation analysis suggest that when visitors have a stronger motivation for “meaningfulness/authenticity,” their demands to see “physical displays” become higher. However, the opportunity to view “digitized displays” is not the service that visitors demand the most.

Keywords: Dark tourism, Motivations, Service demands

I. INTRODUCTION

Foley and Lennon coined the term “dark tourism” in 1996 and suggested that the fast-growing global tourism market was driving many tourism spots to become commoditized. Under these circumstances, some tourists began to appreciate the “authenticity” of certain tourist locations. Dark tourism refers to tourist activities or experiences that involve themes of death or disaster, rather than themes related to artificial enjoyment. Dark tourism provides tourists with opportunities to have access to “authenticity.”

Many studies have examined the motivations of those who participate in dark tourism. However, as Stone (2006) indicated, it is necessary to explore this topic by considering the role those who plan dark tourism.

On February 28, 1947, a bloody conflict between the government and Taiwanese citizens broke out and subsequently led to a series of riots nationwide. In response, the government imposed martial law. The so-called 2-28 Incident became taboo within Taiwanese society until the late 1980s when Taiwan became democratic. In 1997, the Taipei 2-28 Memorial Museum

opened to the public, and it was the first museum established by the public sector to commemorate the incident. The building, which contained a broadcast station, transmitted messages nationwide that were related to the incident as it occurred in 1947. Initially, the beginning, the Taipei City Government allowed non-governmental organizations to run the museum. Then later, in 2003, the City Government took over the operation of the site. In 2007, it began to renovate the museum, which was completed in 2011. Many digital display media or symbolic displays were installed at the time (Department of Cultural Affairs, 2012).

Taking the 2-28 Memorial Museum as case study, this paper explores the relationship between the motivations of those who participate in dark tourism and their demands for services that are designed by museum staff.

II. RELATED WORKS

In terms of empirical studies that investigate the motivations of individuals who take part in dark tourism, similar to the approach of Foley and Lennon (1996), early studies usually employed quantitative methods to examine the issue (e.g. Dunkley, 2011; Preece and Price, 2005). In the last decade or so, more quantitative studies have appeared. For example, based on the application of a theory related to tourists' reasons for visiting a particular destination, Shih (2007) conducted a survey to investigate tourists' motivations for visiting the Korean Demilitarized Zone (DMZ). The results suggest that, rather than "business," "visiting friends and relatives," "educational," and "others," the main reason why tourists visit the zone is "pleasure/holiday."

Recent studies have begun to use factor analysis to explore the motivations of those who participate in dark tourism. For instance, Bigley et al. (2010) investigated Japanese tourists' reasons for visiting the DMZ, and their results suggested that these included "opposing political regime," "curiosity/adventure," "war and consequences," "nature-based tourism," and "knowledge/appreciation of history, culture and security." Similarly, Hyde and Harman (2011) used factor analysis to explore New Zealanders' and Australians' motivations in visiting a war heritage site in Gallipoli, Turkey. The result indicate that the motivations include "nationalistic," "family," "friendship," "spiritual," and "travel."

Regarding tourists' demands for services that are designed by planners of dark tourism exhibits, some studies have used qualitative methods to explore how tourists feel about the exhibits offered by these sites and museums (e.g. Cohen, 2011). However, there seems to be a lack of studies that examine the issue through quantitative methods. Therefore, this paper employs the Taipei 2-28 Memorial Museum as a case study.

III. METHODS

A survey questionnaire was designed by consulting relevant studies that investigate dark tourism. Then, the researcher interviewed the staff of the Taipei 2-28 Memorial Museum in October 2012 to confirm the content of the questionnaire. In addition to asking the tourists' demographic information, the questionnaire consisted of two parts. The first part was composed of four dimensions of motivations, including "commemoration/participation/education," "seeking truth/proof/reality," "being curious about sensitive issues," and "seeking a leisure experience." Each dimension consisted of four related statements. A Likert five-point scale was used to allow tourists to express to what extent they agreed or disagreed with the statements, with 1 representing "strongly disagree," 2 "disagree," 3 "neutral," 4 "agree," and 5 "strongly agree." If the mean score of a statement or dimension is larger than 3, it means the respondent has the related motivation to visit the museum.

The other part of the questionnaire listed the museum's five featured services, including "digitized displays," "physical displays," "guide services," "research information and events," and "food and beverage." A Likert five-point scale was designed to investigate to what extent tourists assess the importance of these services, with 1 representing "very unimportant," 2 "unimportant," 3 "neutral," 4 "important," and 5 "very important." If the mean score of a feature service is larger than 3, this means the respondent appreciates the service.

The survey took place in the museum between November 2012 and February 2013. A total of 405 usable samples were collected. The data analyses were performed by using SPSS 18.0 for Windows. The main statistical analysis methods were factor analysis, descriptive analysis, and canonical correlation.

IV. RESULTS

A factor analysis was performed to examine the structure of the motivation scale. The results indicated that both factors of "seeking a leisure experience" and "being curious about sensitive issues" remained unchanged. The factors of "commemoration/participation/education" and "seeking truth/proof/reality" were combined into one factor. The new dimension was renamed "seeking meaningfulness/authenticity."

The descriptive analysis showed that the respondents generally had a strong motivation for "seeking meaningfulness/authenticity" as the total mean score was 4.05. The respondents also had the motivation of "being curious about sensitive issues" as the total mean score was 3.67. However, they were not motivated by the factor of "seeking a leisure experience" as the total mean score was 2.56 (Table 1).

In terms of the museum’s featured services, the descriptive analysis indicated that “physical displays” received the highest recognition of importance as the mean score was 4.44. The respondents also appreciated “digitized displays,” “guide services,” and “research information and events,” shown in their mean scores, which were greater than 3. However, the mean score of “food and beverage” was slightly less than 3 (Table 2).

The canonical correlation was performed to find possible connections between the three motivation dimensions and the importance of the five featured services. The statistical results suggested that when the respondents had a stronger motivation of “seeking meaningfulness/authenticity,” they tended to appreciate “physical displays” more than “digitized displays.” Meanwhile, “seeking a leisure experience” had a negative correlation with each featured service except for “food and beverage” (Figure 1).

Table 1 – Results of Descriptive Analysis of Motivations

Factor	Mean
Seeking meaningfulness/authenticity	4.05
Seeking a leisure experience	2.56
Being curious about sensitive issues	3.67

Table 2 – Results of Descriptive Analysis of Service Demands

Featured services	Mean
Digitized displays	4.25
Physical displays	4.44
Guide services	3.74
Research information and events	3.76
Food and beverage	2.94

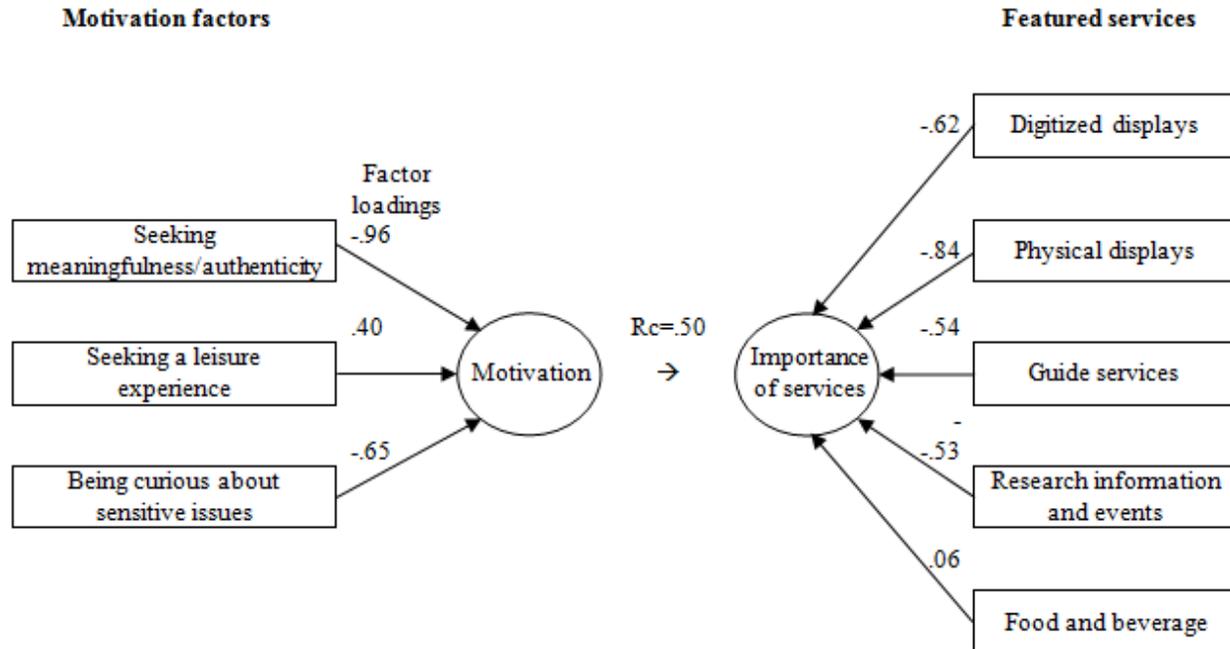


Figure 1 – Results of Canonical Correlation

V. CONCLUSION AND FUTURE WORK

In general, the main motivation for tourists to visit the Taipei 2-28 Museum is to seek “meaningfulness/authenticity.” “Being curious about sensitive issues” is also a reason. However, “seeking a leisure experience” is not a driving motivation.

In terms of tourists’ demands for services, the physical displays are ranked the most important service. In particular, they prefer physical displays to digitized displays, which are ranked as the second most important service. The tourists also recognize the importance of guide services and research information and events that are provided by the museum staff. However, the importance of food and beverage is not recognized in this survey.

The canonical correlation analysis further indicates that when tourists have a greater motivation to seek “meaningfulness/authenticity,” they tend to have a stronger demand for physical displays than digitized displays.

The results suggest that physical displays play an important role in attracting serious-minded tourists to the Taipei 2-28 Memorial Museum. These individuals considered as the target market for the museum. Therefore, it may be unnecessary for the museum authorities to focus too much on developing digitized displays.

In terms of future research, segmentation could be an approach for consideration. For instance, one might segment tourists based on their motivations, and then examine the different motivation segments' demands for featured services.

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SOCIOINTERCULTURAL EVALUATION FOR INVESTMENT PROJECTS IN INDIGENOUS COMMUNITIES *WIXARIKAS*

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ABSTRACT

This paper analyzes aspects of the problem that occurs in the social evaluation of investment projects for indigenous communities' *Wixarikas* (Huichols). A project in this context make particularly complex the evaluation. On the socio-economic perspective with which it is evaluated comes into play the incommensurability of social and intercultural issues that cannot be ignored. It is addressed the questions that have arisen in the development of this type of project and presents a theoretical framework for the methodological proposal of socio-cultural evaluation.

Keywords: Social evaluation of investment projects, socio-intercultural evaluation, indigenous communities, *Wixarikas*.

Resumen

Se analizan aspectos de la problemática que se presenta en la evaluación social de proyectos de inversión para las comunidades indígenas *wixarikas* (huicholes). Los proyectos en este contexto hacen particularmente compleja la evaluación, En la perspectiva socioeconómica con la que se evalúa entra en juego la inconmensurabilidad de los asuntos de carácter social e intercultural que no se pueden pasar por alto. Se abordan las interrogantes que han surgido en la elaboración de este tipo de proyecto y se presenta un marco teórico para la propuesta metodológica de evaluación socio-intercultural.

Palabras clave: evaluación social de proyectos de inversión, evaluación socio-intercultural, comunidades indígenas, *Wixarikas*.

1. INTRODUCTION

While developing investment projects for the implementation of alternative energy in communities *Wixarikas* (hichols) in Mexico in 2010, it was found that there were a number of issues to discuss in the theory of social evaluation of investment projects when they are applied in an indigenous context. These projects aim to improve the conditions of *Wixarikas* and other indigenous communities through promoting basic infrastructure. This basic infrastructure also enables the generation of projects with their own principles and approaches in line with the cultures and economic logics of the involved ethnic groups, as well as their social and environmental rationality, especially how they relate with Mother Earth (Gómez González, Gómez Calderón and Gómez Calderón, 2008).

In *Wixarikas* communities, the fact of assessing the possibility of provide electric service through alternative energies presents in advance externalities which can be considered negative to their culture, as this service would involve greater use of television sets, radios and other media which open the possibility of extending an acculturating process that despite the benefits, negative effects could be even more undesirable. However, the installation of all services would result in improving their means of agricultural production through the use of machinery and equipment that cannot be used without electricity. But the simple fact of wanting to help *Wixarikas* as part of government policy may have racist implications to place the national mestizo culture above them.

This is not a simple matter; the sample is that despite the high interest in this culture, in recent decades, the government policy has not been able to contribute to significantly improve the economic and material well-being of this ethnic group (Wiegand and Fikes, 2004: 54).

Externalities are found in opposed directions and they should be valued them both from the perspectives of the indigenous communities and the non-indigenous society. Clearly, it is evident that the non-indigenous culture has a greater weight and that decisions will have a particular bias in this direction, but through a series of ethical issues in public policy, they could be taken into account qualifications of the indigenous world to try to balance their interests. For example, unlike the non-indigenous world, for Huichol peasants both production and religion are so closely linked with economic and social life which apparently show a lack of interest in the adoption and adaptation of technology (Torres Contreras, 2000: 162 - 163).

The Huichol Serrano uses his time not devoted to alternative working techniques in the performance of ritual acts jointly with his family and other families in the social and production environment production (Torres Contreras, 2000: 163).

This does not mean that *Wixarikas* are isolated from the mestizo society. The persistence of their culture and community can be explained through processes of identification to the world, but the specificity of their ethnicity is due in part to the creative integration of what is not their culture (Florentine Beimbord and Peñaflor Romandie, 2009: 13). The complex skein for the analysis of projects in these contexts begins with the consideration that in the social assessment, mentions Fontaine (1999), externalities allow to understand the feasibility of promoting a non-profit

project and socio-intercultural context. Externalities are multi-way and should be analyzed in intra-social, the intra-cultural and inter-cultural (Guerra García, 2004).

This research refers to intra-societal aspects when what it is analyzed is not unique to one of the participating cultures involved and is not put into consideration in inter-cultural relationships. The intra-societal aspects are all those cross-cutting issues in society regardless of the cultures involved, such as poverty, technology and welfare that concern to all human beings. The inter-cultural affairs, on the other hand, are placed on the discussion of the interrelationships among cultures such as the use of resources, domination, language shifts and displacements, asymmetries, differences of understanding, among others. Intra-cultural refers to the differences within the ethnic and cultural groups and that does not give a clear and uniform idea of what a community or people want.

By introducing this methodological perspective of analysis that it has been called socio-intercultural (Guerra García, 2004) in the social assessment, it opens an area of research to generate models that describe the categories to consider in this type of environment.

To pay to the issue is necessary to take into account the fact that decision-makers and intended beneficiaries of the project are from different cultures necessarily involves a "poli-relativism", i.e., to consider all possible relative positions on the evaluation at the same time. That is, if relativity is understood as the application of criteria and calculations from a determined particular perspective accepting that there are certain other points of reference, then, implies not only the acceptance of the existence of other criteria, but the development of mechanisms to consider these other benchmarks and other ways of seeing the world in her assessment of a project.

This implies that the assessment must be also performed as 'multi-criteria', i.e. recognizing that treating complex problems such as those presented in ethno-regions will need to consider the social, cultural, intercultural and intra-cultural un-commensurabilities present in these situations. This incommensurability refers to the presence of multiple legitimate values in society and culture, diverse views and conflicting that result not only the in need to involve all the different actors and agents in the decision making process, but understand the policies of the State implied to the effect (Vargas Isaza, 2005). The incommensurability is associated with the multidimensional nature of complexity and the use of different dimensions of socio-intercultural analysis.

Therefore, this paper is aimed to answer the following research questions: How to make a socio-intercultural assessment of an investment project in an indigenous community? Or more specifically, what are the categories to be considered in these assessments? These issues have been analyzed for the case mentioned and briefly described in this article.

2. Evaluation of investment projects

It is understood as an investment project to be considered as the formulation of an intervention as a mean to study an existing problem and analyzing the feasibility of achieving a desired change at least in some parts of society. The investment project is one where is delineated with clarity and detail what is to be achieved and also how to do, allowing to justify the intervention from different points of view to give or not give solution to a problem (Andia Valencia, 2010: 28-29).

Before achieving any activity are assessed the possibilities and potential for the project or projects. In any case, even when the target is private, the assessment should be considered a form of social research.

...applied, systematic, planed and directed, on which is supported a judgment about the merit and value of different components of a program, in such a way that serve as a basis or guide for making rational and intelligent decisions between courses of action (Matos Bazó, 2005:23).

3. Evaluation of investment projects

The objectives of any project evaluation, private or social, are always aimed at developing or improving living conditions. The development of the formulation comprises activities from the intention until the end and how it is to be put into operation the project. The project evaluation, although not mentioned in many methodologies, borrows from making public policy criteria already established or commonly accepted. The private evaluation of investment projects provides criteria that mostly come from public policies aligned with an individualistic perspective they put on a secondary level the involvement made to the community. The social assessment of investment projects, however, departs from public policy underlining the common good as a priority.

It is to be considered that public policies can be placed in streams and approaches of economic thought. Classical economics often includes only the variables that are monetary and cash, but the latest trend precisely it includes all aspects of the social fabric that could not be strongly measured though can be qualified. Especially when considering the known effects as externalities previously thought to be indirect or of minor importance, but increasingly are taking on a greater significance. Without putting aside the economic and financial technicalities, the fact that many externalities are hardly difficult to quantify in general makes more difficult to evaluate.

Evaluation is one of the more difficult concepts to address in socio-inter-cultural environments because is generally not possible to implement a valid metric valid and accepted by all

stakeholders. In addition, the aspects that commonly are considered to have universal validity are questioned in the presence of other ways of seeing and perceiving the world. Then for this case, to evaluate means to clarify any doubts that the operation of a project might have before it is applied from the poli-relativism and multi-criteria mentioned.

Such type of projects do not always represent a competition for the allocation of scarce resources, where the guiding principle of the allocation would be given by an indicator of profitability, but there are other equally valid criteria that deal with socio-inter-cultural issues where cultural relativism provides different views that may converge or diverge. The uncertainties that arise are due in large part because of problems involving socio-inter-cultural information and the difficulties for prescribing and determining the final outcome (Arroyave, 1994).

3. The social economics approach

The crisis of development models has allowed the visibility of some ancestral ways of understanding the economy and the emergence of innovations that have being called the third sector economy, solidarity economy, barter economy, popular economy or social economy (Bastidas Delgado and Richer, 2001: 1). In fact, any economy is social. However, when the focus is on private, all considerations are set aside of the other actors involved in the whole economy (Bastidas Delgado and Richer, 2001:2). The purpose is not to add a more endogenous variable but predominantly recognize the social dimensions of the economy (Izquierdo, 2009:5).

The aim of the social economy is not for profit, it is a welfare-oriented model of groups and communities (Pujol, 2003:36). So, an alternative energy project in these communities ensures sustainability, even if the investment cost is high and apparently did not have a positive financial result. The good life of the community and social synergies generation may be sufficient to justify a project of this type. From this perspective, the State would pursue the aim to improve conditions in communities. In addition, the social economy is diffused through a process of recognition of the poor circumstances in which there is an indigenous community and the debt for over 500 years of Mexican society has for this sector (Bastidas Delgado and Richer, 2001: 2).

In modern times, where it is increasingly clear responsibility for each of the people, where cooperation is becoming increasingly necessary and where it is not considered that the individual good necessarily leads to the common good, social approach is increasingly most needed, even in private projects. In this sense the social economy is an alternative approach consistent with the proposed socio-inter-cultural assessment. Precisely for the mentioned case, it is necessary to address an indigenous economy, understood as one form of social economy in Latin America, which starts from a vision of a plenty fulfillment life of human beings in their relationship with nature and its search for the good of all.

For example, for the case of *Wixarikas* is known that

...each family member contributes something to the party and also he has the right to be helped to open his land to plant, to help him clean the fields, to harvest and to help him hunt the deer (Torres, 2000: 162).

This gives a sample of a different economic dynamics of the mestizos. In itself the indigenous economy looks:

...to ensure to the indigenous peoples their well-being in all spheres of life, being this philosophical basis of welfare and lays the groundwork for the implementation of the indigenous economy (Consejo Indígena de Centroamérica, 2010).

The indigenous economy is composed of traditional practices to adapt to a particular environment which consist of the following features: a) the production that determines a given landscape according to the particular form of territory appropriation of each tribe worked with traditional techniques, b) distribution, where different mechanisms operate to the intermediation as reciprocity and redistribution c) consumption, characterized by the forms of matching d) work organization and e) the earth, seen from a different worldview of individual ownership (Lugo, 2007: 60).

However, it is necessary to clarify that the indigenous economy has particular characteristics according to the indigenous culture and has this relationship with other ethnic groups. The pre-Columbian elements, which consist of traditional practices to adapt to a particular environment, where there is no money to exchange, correspond to an economy that can be called traditional (Lugo, 2007: 60), but there are many elements that have been created from the relationship with the non-indigenous world, perhaps the oldest economic relationship of the latter has been trading. Trying to generalize,

Indigenous economies are composed of a traditional economy with a segment of a market economy which may be in descending from larger to smaller magnitude, depending on the case in question. Generally, the segment of the market economy behaves inter-cultural adaptations as goods produced with techniques or traditional labor organizations to sell them to the market or whose incomes are applicable to reciprocity or traditional complementarities (Lugo, 2007: 60).

To Lugo (2007: 60-61) the traditional economy consists of the following elements: 1) the production of traditional practices that determine a landscape, a product of particular forms of land appropriation, 2) distribution, where different mechanisms operate other than the intermediary of money, which in their different languages have to do with reciprocity, mutual aid, barter, community collaboration, etc., 3) consumption, which is characterized by finding ways of matching, 4) social indigenous organization, which determines to a greater or lesser extent the allocation of work, use and the enjoyment of the resources and the use of goods and

services production and 5) The land as a living being that belongs to itself, so that private property is always a matter of conflict in the legal framework in relation to non-indigenous population (Lugo, 2007: 60-61).

Barter for example, is one of the elements of the traditional economy that is not only currently used by many indigenous communities, but is re-emerging in different niches of society, for example in clubs and interest groups in local and international levels and has being questioned its inefficiency (Tocancipá Falla, 2008: 147). Based on the above, it can be understood why the idea that the indigenous people lack power to be used as leverage for their good living or to live together in a more harmonious way in Mexican society, requires a broader view that the providing common assessment tools, both private and social.

For all the above to take place it is necessary the real and true recognition of the social organizations in this case the government, communities and indigenous peoples. This public policy is highly relevant for evaluation in such type of contexts (Huot and Bussi eres, 2006:124)

4. SOCIAL EVALUATION

A social investment project seeks to meet social objectives through government targets or alternatives, used by support programs (Matos, 2005). Most important in this type of intervention is that the direct users and social beneficiaries must agree with the formulation posed, i.e., the project must be generated in a unidirectional way, in this case mestizo government to an indigenous community, but must be multidirectional.

However, regarding the social dimension, few evaluations go beyond indicators that describe the satisfaction of basic needs and are pending or without considering other socio-inter-cultural aspects such as inter-cultural equality, balance within and between generations, the level of social organization or the management capacity of a community or region, the formation of social networks, social and human capital, the response and societal organization facing market structures and their change processes (Mazabel-Dom inguez, Romero-Jacuinde y Hurtado-Cardoso, 2010).

In the present case is noteworthy that the indigenous areas in Mexico have juxtapositions between uses and interests implying that the soil in the worldview of their people and economic activities are predominantly non-indigenous (Korsbaek, 2009). Recent examples have involved some ethnic struggles against the mining exploitation and use of certain private interests on the uses that indigenous peoples want to make on the soil (Saliba, 2011; La Jornada, 2011; Zapateando, 2012). So the difference from the other evaluations is that the benefits, costs and externalities should be observed from different perspectives simultaneously. That is, in inter-cultural projects is not sufficient to make the formulation and evaluation from one perspective,

but it is necessary to put on the table all the criteria and viewpoints of the participating cultures involved.

This shows that the different etno-regions have conflicts and disputes regarding the agenda that economic actors that are not indigenous have for the use of what they consider their land. Thus, in addition to private mining projects, indigenous aspirations confront other companies in connection with new sources of energy, innovative technologies and media, which have also presented breaks, joints and disagreements, subject to further study. The problem that arises is that on the social valuation there are other elements which are perceived and then visible as a community harm that are difficult to quantify or to generate a weighting in monetary units. Hence the development approach of such projects must be preferably a qualitative approach.

5. EXTERNALITIES

Social research projects always involve a number of edges concerning the management of externalities not only unresolved, but are raised to the extent they are found in practice. Externalities occur when social or economic activities of a group of people have an impact on another or on the nature and the impact is not taken into account adequately by the first group (Jaime and Tinoco, 2006:105). Externalities occur when social or economic activities of a group of people have an impact on another or on the nature and the impact is not taken into account adequately by the first group (James and Tinoco, 2006:105). But this does not mean that their development is less valuable. Instead, discussions on the socio-inter-cultural perspective lead to generate new constructs that allow understanding that what happens in a concrete social reality.

Traditionally the evaluation of an investment project intend to build a starting point for determining the compensations that would probably be necessary to grant for counteracting the negative effects on the natural or social systems. However, this compensatory and corrective philosophy is not recommended for projects in which participate different cultures, because actions implying compensation and involving a party could be unacceptable to another.

In the treatment of externalities is important to mention that from the social approach is feasible to calculate the costs of the negative effect and then try to pay in corrective form is not precisely the optimal (Fontaine, 2008: 13), i.e. to internalize externalities is not the best philosophy in the social assessment, because when the groups are from different cultures there are inter-cultural situations that must be addressed proactively.

6. Economics and management of natural resources

The importance of this type of projects increases the finding that rural indigenous communities have been assigned the task of being providers of resources to urban areas and have been given the responsibility to preserve the environmental balance (Mozas Moral and Bernal Jurado, 2006:

127). Also an added feature with this type of alternative energy projects in indigenous communities is that at the same discusses issues of economics and management of natural resources. In this regard it should be noted that interest in the sources of new and renewable energy (SNRE) (Fuentes de Energía Nuevas y Renovables, FENR) was due to the energy crisis that increasingly is stress sing (Rodríguez Murcia, 2008: 88).

Within this discipline is the green economy, which unlike conventional economic theory, its objective is not the pursuit of efficiency, profitability and growth in purely monetary terms, but to try to support the sustainability of capital natural (Domínguez Torreiro, 2004:8). Therefore this type of project also is part of a natural resource economics that encompasses everything related to 1) the management and valuation of natural resources, 2) determining acceptable levels of negative externalities and 3) the calculation of positive externalities.

But despite that awareness of the global ecological crisis is an undeniable fact, the current economic systems difficult not only has the evaluation of these projects but also the incorporation of new methods of energy used to be more sustainable. What is clear is that the human dependence on ecosystems can be seen so clearly in subsistence economies linked to the natural environment, where human communities, including indigenous communities take directly from the ecosystems only what they need to live; of this, community's *Wixarikas* have great wisdom.

Recognition of this fact implies the assumption that the economic and social development will depend on the medium and long term, not only the proper maintenance of ecological systems that sustain and constitute the planet's natural capital but also the respect and attention given to the indigenous cultures from which there is too much to learn (Gómez and de Groot, 2007:5-6). Issues related to natural resources are analyzed both from an economic perspective and from the institutional framework with its rules, duties and obligations, formal and informal (Domínguez Torreiro, 2004: 6-7). Also should be considered certain forms of relationship that each culture has with nature.

7. Incorporating the environmental dimension in project analysis

In this type of projects in rural indigenous communities is difficult to ignore the environmental impact assessment, which involves the identification, analysis and evaluation of project impacts on the environment, natural and social, from the poli-relativism and multi-criteria even when they are not necessarily expressed in monetary units. The addition of this category involves considering a number of additional activities not normally considered and whose execution is required today.

To evaluate the environmental impact of a project on the economic environment it is possible to note that from the time of its construction and after commissioning and implementing, it will influence the environment where it will be installed by the effects produced on the existing and future natural, human and economic activities, during its operation and to the final stage of abandonment. In particular, the environmental evaluation is to gauge the future effects through a process to identify, interpret, predict and disseminate the project's potential effects on the economic and socio-inter-cultural environment in which it will be located and operated that would be reflected in the actual and future environmental changes.

8. Development or good living

Another element to consider in evaluating projects in indigenous communities is that in Latin America is running a renewal of the critique of conventional development under a process that offers several special features and it provides another approach to social assessment.

In this new situation points out that while many of the positions on the conventional development, and even many of the critical currents, they operate within their own knowledge of western modernity, the most recent Latin America alternatives are beyond those limits (Gudynas y Acosta, 2011: 72).

What is important here as it is in communities' *Wixarikas* assessment is that the positions of the 'good life' recover visions rooted in the knowledge of indigenous peoples' own knowledge. The positions of good living challenge to the development with its philosophy of progress and that in practice meant an adversarial relationship with nature.

Living well is not, then one more alternative development in a long list of options, but is presented as an alternative to all those positions (Gudynas y Acosta, 2011: 72).

The good life is a concept of public policy in construction, but generally recovers the idea of a good life, welfare in a broader sense and in the case of the social economy and social assessment as a general rule provides that a community lives well, without waiting for progress at the cost of the devastation of natural resources. As mentioned Kichwa leaders:

...is a holistic vision of what should be the goal or mission of every human effort, which consist of finding and creating the material and spiritual conditions for building and maintaining the good life, which is also defined as harmonious life that in languages such as *runa shimi* (*Quichua*) is defined as “*alli kausar*” or *sumac Kausai* (Hidalgo, 2011), 88).

From the above it is stressed that the evaluation of a project is different if it is part of any policy development or within the one presented to the approach of good living. Public policies are crucial in guiding the work of social evaluation.

9. *Wixarikas* indigenous communities

For the Huichol culture, also called *Wixarika*, be wise means knowing the nature (Iturrioz, cited by Juránková, 2007: 150). For this culture the mestizo world is an alter world coexisting with his mythical (Durín, 2005: 91).

Spirituality and religiosity influences the mode of being of the Huichol, in the way of seeing the world, in their view (Juránková, 2007: 151).

The word 'Huichol' derives from 'hueitzolme', a territorial area currently located in Nayarit, its language belongs to the dialect *totorame* from the family southern Uto-Aztecan (Wiegand and Fikes, 2004: 51-52). The *Wixarikas* inhabit the region Huicot comprising approximately two hundred and fifty thousand hectares shared by the states of Nayarit, Durango, Jalisco and Zacatecas. This area is located in the Sierra Madre Occidental in a broad band called the Big Nayar, but the weight that the desert located in San Luis Potosi has for them is crucial to their culture (Porrás Carrillo, 2006: 34).

In fact, the pilgrimage that according to the obligations imposed by the Huichol culture should make the huichol to the desert of San Luis Potosi is one of the key events in his life and one of the highlights and attractions of this indigenous people (Porrás Carrillo , 2006: 34)..

This type of migration on the *Wixarikas* allows in a greater perspective to understand the dynamics of their culture in their intensive interaction with 'the other' (Florentine Beimborn and Peñaflor Romandie, 2009: 15). It is generally a poor region with unpaved roads and sidewalks, electricity is very scarce and low since the problems of access to this territory makes difficult the installation of services and communications (Barrera, 2002: 45).

The altitudes of variegated terrain of mountains, plateaus, cliffs and canyons allocated from 400 to 3,000 meters above sea level, containing within it a variety of ecological niches, with a wealth biotic of untold wealth (Guízar Vazquez, 2009: 171).

In addition to the *Wixarikas* inhabit this region other ethnic groups besides mestizos: the *Coras*, the *Tepehuanos*, the *Tepecanos* and the *Mexicaneros* which congregate in total 56, 614 indigenous people (Guízar Vasquez, 2009: 171).The town *Wixarika* has settled agricultural activities from at least 900 years ago (Tetreault and Lucio Lopez, 2011: 170), traditionally are living in three communities, San Sebastián, Santa Catarina and San Andrés, who along with Tuxpan and Guadalupe de Ocotán are the five political territorial units were formed from the time of the Spanish Crown in the eighteenth century (Wiegand and Fikes, 2004: 51).

According to the latest Census of Population and Housing of the National Statistics, Geography and Informatics (Censo de Población y Vivienda del Instituto Nacional de Estadística, Geografía e Informática, INEGI), 44, 788 *Huichol* speakers live in these regions with an age greater than five years, of which 22, 129 are men and 22, 659 women (INEGI, 2010). According to INEGI

(2011) the *Huichol* language is in place 22 speakers in number of speakers before the *Chontal* and after the *Chatino*, but it is one of the groups with a higher percentage of monolinguals in Mexico (Juránková, 2007: 149).

The productive organization of the groups in this ethno-region has focused on primary activities of the agricultural nature; the breeding of cattle, both *Wixarikas* as other ethnic groups is the most relevant activity. Rainfed agriculture and forestry have also gained importance in recent years (Guízar Vasquez, 2009: 177). However, the above are not the only economic activities. The migration process is also strongly linked to its economy. An interesting fact is that there are several types of migrations in addition to the religious: The seasonal, shelter and the handcraft.

The seasonal is when the Huichol go to work as laborers and employees outside of the mountains in the dry season. Many of them move from one job to another without having the opportunity to return regularly to the mountains. The second type of migration occurs because eventually have to flee the violence towards the coast where there are groups that have been definitively established, both indigenous peoples as mestizo's townships. Handcraft migration is the third type of migration has to do with the height that today are taking the craft markets across the country, a number of passes *Wixarikas* spent full seasons on trading tour and for some this is already a form of life (Florentine Beimborn and Peñaflor Romandie, 2009: 15-16).

For the specific case of land use in the Nayar, the *Wixarikas* have sustained fighting. Among the *Wixarikas* there is a subtle and complex regional division of labor, based not only on specialized production as agricultural and manufactured goods, but also in a particular way to grow, produce and manufacture products for each group. This division of labor is wrapped itself in a class hierarchy and of a group, as well as relative territoriality, prompting constant disagreements and conflicts involving animosities between all groups involved, and even within each group: *Coras* against *Wixaritari*, *Tepehuanos* against *Coras*, etc. (Guízar Vasquez, 2009: 172).

Prolonged intra and inter-cultural conflict is cruder against colonization from the mestizo ranchers who have had the support of the state to advance the ethnophagic process resulting from the asymmetries among the indigenous and non-indigenous groups. The fact is that the territory *Wixarika* has been claimed more insistently every day since the colonial times and today. That claim is made in more sophisticated ways by the mestizo group, the current struggle is not only in the juxtaposition of mining regions with the sacred areas, but the mestizo group uses education, religion and technology, among others, to penetrate and change their world. These and other considerations socio-inter-cultural of the *Wixarikas* life cannot be neglected in the evaluation of an investment project.

10. Proposal for socio-inter-cultural evaluation

In this complexity described, the proposal for socio-inter-cultural evaluation lies in structuring the categories of analysis according to the macro-spheres and micro-spheres in the corresponding

categories to specific cases a) intra-societal, b) intra-cultural issues and c) cross-cultural issues. Figure 1 shows a diagram referring to the above:

Figure 1. Schema for socio-intercultural analysis

DIMENSIONS	INTRA-SOCIAL	INTRA-CULTURAL	INTER-CULTURAL
MACRO-SPHERA Political, social, economics	SOCIO-INTER-CULTURAL		
MICRO-ESPHERA Gender, class y ethnicity			

Source: Authors' construction

A. Evaluation from the macrospheres

To evaluate a project as presented is necessary to take into account the political, social and economic macro-spheres. In the case of communities *Wixarikas* maximum criteria come from a) trends in public policy, whether the development or the good life, which in turn imply what the State wants to do with the poor and the marginalized, that in most cases converge to generate the necessary synergies on the most needy; b) worldwide and nationally environmental trends that encourage alternative technologies and avoid those that add to global warming c) interculturalism, which the State wishes to do with ethnic groups that make up the nation, that is, to what extent and how they are targeted efforts towards indigenous peoples.

Perhaps these trends in public policy are the most important consideration in evaluating any investment project.

B. Evaluation from the micro-spheres

Since the talk is related to specific projects, the evaluation must consider the manifestations of the various stakeholders, local governments, and the *Wixarika* people here in this case and mestizo society that is located in the vicinity and possibly may also receive externalities of the projects. In this case it is important to consider other aspects of the specificity of the participating community, which can also guide the final decision, for example the demographic makeup in *Wixarika* is relevant.

C. The evaluation from the intra-social

This category includes the analysis of costs, benefits and externalities that have more to do with the affairs of society regardless of cultures and ethnic groups involved. In this case, the sustainable uses of the technologies, policies to address poverty regardless of ethnic group you

belong to the population in this State, among others, belong to the intra-social evaluation. The use of alternative energy in the communities avoid using harmful energies, here the problem lies in evaluating the potential environmental cost or benefit. This is because the contamination is considered a negative externality generated by the processes of production and consumption, in this case of electrical energy (Reyes Gil, Galván Rico & Aguilar Serra, 2005: 436).

On the other hand, the inclusion of the interests of future generations brings to rural indigenous communities opportunities for certain incentives from global policies for mitigation and adaptation to climate change through the mechanisms of clean development of energy (Pinto Silbato, 2004: 123). If to this problem is added the Mexican government's responsibility to have entered the Kyoto Treaty, the evaluation becomes immeasurable and the result tends definitely to the installation of the best solar power plants, regardless of whether there are cash flows to recover the monetary investment. That is, the financial investment is minimal compared to: a) the fight against the damaging effects of climate change, b) the opportunity for development of rural and indigenous communities and c) compensation to indigenous communities by the historical fact of the Spanish domain first mestizo domain later for more than five hundred years.

The presence of cutting sustainable projects is one of the intra-societal aspects that make complex this assessment, since the value of using alternative energy is more significant, regardless of the cultures involved. So that in the era we live projects of this type could have a differentiating feature from other social assessments.

D. The evaluation from the intra-cultural

In practice it results that the indigenous communities are not a uniform whole, for while some people refuse to have the benefits of alternative energy because they see certain dangers of acculturation, others prefer to apply in the household and production that would give them a better way of life. That is, not all *Wixarikas* manifested in consensus on intervention projects. In the case of mestizos is, not everyone agrees with *Wixarika* help a community, especially if there are others - indigenous or not - which also require benefits. Therefore, the adoption of technology in the rural indigenous area is a challenge, defining the most suitable methodology in relation to user involvement requires more socio-intercultural research *Wixarikas*.

The technology used by farmers *Wixarikas* is normally integrated into its socio-cultural structure and dynamics and it is from their perception of the environment that they develop a culturally specific technical system, so that any technological innovation disrupts their life the way they see the world and they values (Berrueta Soriano, Limón Aguirre, Fernández Zayas & Soto Pinto, 2003: 95). This raises many questions that are ultimately linked to externalities. How does or could disrupt the use of alternative energy to cultural technical system of the *Wixarikas*? How this technology would change their lifestyle, their way of seeing the world and their values? Does this technology allow a strong presence of the inhabitants and their cultural values?

When the electric energy gets to the community, some people who thought they would emigrate and not do because satisfiers could possibly be enough for people to stay, possibly altering their

migratory tradition. Another effect is that by the time of getting the electric power also they reach the mass media to disrupt cultural values. Preliminary assessment between costs and benefits is not easy to determine. The arrival of energy is also linked with the use of media and these processes of acculturation increases. How would these processes be? How much it is valued the displacement of a language in a culture and society? These are questions that cannot be solved simply.

E. The evaluation from the inter-cultural

The evaluation of inter-cultural projects must be understood in context by relating it to the contextualized political strategies. Inter-culturalism can't be thought from an instrumental logic, which favors the extension or universalization of a trans-cultural model with supposed good intentions. Neither can pass the same criteria used in different contexts. As mentioned by Diez (2004: 195):

The construction of a project refers to socio-historically situated processes and practices that shape and are configured in a field of dispute, in which there are correlations of variables between different forces of actors with different and frequently conflicting, interests.

In the evaluation processes are present, the formations, structures and resistances, relationships of social inequality and the struggle to transform them. Thus, in this form, public policy aimed at expanding rural indigenous energy is not always desirable because of the dynamic processes of acculturation that generally have the inter-cultural relations. But if it is accepted this policy as essential to survival and good life of communities, at least it should be noted the adoption of renewable energy solutions, as well the potential benefits would not be outweighed by the negative externalities that would make the investment an unsustainable project from the global point of view (Pinto Silbato, 2004:123).

Here it is necessary to evaluate the externalities that exist between cultures when the project enhances inter-cultural relations. Acculturation effects must be analyzed, especially those of non-indigenous society over *Wixarikas*, loss of cultural values, such as language, customs and in general the influence on their worldview. But how to assess externalities when the criteria are incommensurable? For example, in evaluating any investment project, the evaluator has to observe the possibility of soil contamination.

The problem is that, for the culture *Wixarika* land is sacred and should not be disrupted. To calculate an optimal point, in this case means that the indigenous people give up their principles and have to yield to mestizo's criteria: To disrupt a little bit the earth to the "level of acceptance." In summary, the solution becomes impossible. Let others decide for them is neither fair nor just, so it is more precisely at a crossroads.

11. In conclusion

It is conclude here that it is necessary to open research in line with the socio-inter-cultural assessment in the indigenous context, to address in more depth each of the raised externalities. Socio-inter-cultural evaluation of investment projects is a research methodology that is part of

the implementation of public policies, which extends beyond the application of quantitative techniques centered on financial interest in the private perspective.

In the way of transversal and cross analysis of macro and micro-spheres is proposed to study certain aspects of intra-societal, intra-cultural and inter-cultural characterized features of multicultural societies. As explained, the analysis of macro-spheres departs from precepts of the social economy and considers the specific aspects of the indigenous economy in which theories are contrasted with the development of the emerging proposals of living. In this methodology, it is clear that financial technical matters are reduced to the need for further qualitative analysis of externalities.

The complexity of the evaluation is increased when the projects in question are related to alternative energies that fall down and framed into ecological economics of natural resources, where the idea of sustainability in itself marks a significant difference in the ways of conduct evaluation in social investment projects.

In short, from the perspective of socio-inter-cultural economy, alternative energy projects in communities' *Wixarikas* could not be expected to pay monetary investment for a generation of mostly peasants, since their economic status would not allow it. However, the investment is justified because it would promote social and economic development of the community, but also if it is done through the use of renewable energy that would generate positive externalities to the world and the future of humanity. The latter value is fully justifying the project.

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Customer Satisfaction of Mainland Chinese Tourists in Cairns, Australia

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ABSTRACT

China has become a considerable international tourist generating region for Cairns, Australia. Cairns, a world-known tourism destination in Queensland, is famous for the Great Barrier Reef and Daintree rainforest. Recently, Cairns has received significantly increasing number of tourists from China. With survey data collected in 2012, this study provides insights into the socio-demographic profile, travel characteristics and customer satisfaction of Chinese tourists visiting Cairns. The study is based on the expectancy-confirmation model by Oliver (1980) and examines Chinese tourists' expectations and perceptions. A questionnaire was developed to collect the data required for the study, and distributed to a convenience sample of Chinese tourists visiting Cairns between April and October 2012. The results show strong correlations between the Chinese tourists' expectations and perceptions. In turn, findings indicate that their expectation-confirmation significantly influenced their overall satisfaction. Also, results of the analysis showed moderate levels of overall satisfaction with the destination and a need to improve service standards of tourism related business in the Cairns area. This study enables tourism businesses in Cairns to learn about visitors from different culture background and so, develop strategies that meet their needs and enhance their travel experiences.

Key words: Cairns, Chinese tourists, customer satisfaction, demographics, expectation, perception

Introduction

Mainland China has shown a strong economic growth in the last decade. Aligning with this, tourism has grown sharply (Lickorish & Jenkins, 1997; Boniface & Cooper, 2005). China is one of the top ten markets into Australia when ranked by visitor numbers and when regarding total inbound economic value (Tourism Australia, 2007). It is reported that China has overtaken Japan and is now Asia's leader of outbound tourism generating nation. In 2012, more than 82 million Chinese tourists visited overseas destinations, which increased by 16.7% as of 2011 (Huangfu, 2013). Having more disposable income provided through economic boom, the number is expected to reach 100 million by 2020 (Verikios, 2008).

Along with the increase of Chinese outbound tourism, China has become one of the major markets to Australia. According to Australian Bureau of Statistics, total arrival of Mainland Chinese tourists in year 2012 reached 626,000, making China Australia's second largest inbound market¹. Tropical North Queensland (TNQ) is famous for its world heritage Great Barrier Reef and Daintree Rainforest. By end of June 2012, China became TNQ's largest international tourism source market with 94,000 arrivals of 27% increase from the previous year and an increase of 21% to 226,000 stay nights (Tropical North Queensland Regional Snapshot, 2012). Cairns as the major tourism destination in TNQ received most of the Chinese tourists visiting the region. However, Cairns does not receive as many Chinese tourists as other regions in Australia though it has well-developed tourism, boasting easy access to the Great Reef, rainforest and an international airport. In the financial year June 2010- June 2011, TNQ only ranked fifth in arrivals of Chinese visitors, after Sydney (277,000), Melbourne (233,000), Gold Coast (118,000) and Brisbane (83,000) (Tourism Australia, 2012).

As a result, the Mainland China market has become increasingly important to the tourism industry in Australia, considering its rapid growth of visitation into Australia and strong economic growth. This study of visitor satisfaction regarding service quality is focused on Mainland Chinese tourists who were on holiday in Cairns. It is based on Oliver's (1980, 1981) expectancy-disconfirmation model.

Literature Review

According to WTO 1985, customer satisfaction is "a psychological concept that involves the feeling of well-being and pleasure that results from obtaining what one hopes for and expects from an appealing product and/or service" (cited in Pizam, 1994, p.327). Customer satisfaction has been widely explored by researchers (Chu & Choi, 2000; Gronroos, 2001; Li, Song, van der Veen, & Chen, 2011; Parasuraman, 1998; Vela, Wang, & Tyler, 2008). Pizam (1994) suggests that businesses that are customer-oriented are more likely to achieve the goal of satisfying customers in the past, present and future. Hasan and Kerr (2003) indicate that customer satisfaction plays a significant role in deciding purchases while service quality has a strong influence on satisfaction. Customer satisfaction involves two aspects: customer expectation and customer perception. Berry et al. (1990) assert that the customers, as the only judge of service quality, evaluate the service by comparing what they received to what they expected. It is suggested that a company will find that it is difficult to exceed or surprise customers' expectations by only being reliable because there is involvement of service (Atkinson, 1989; Bialowas & Tabaszewska, 2001; James, Fink, Bakstran, & Hatten, 2008; Johnsen & Ford, 2008; Laaksonen, Jarimo, & Kulmala, 2008). Any difference between expectation and perception by customers can lead to disconfirmation (Kamndampully & Duddy, 2001). Gronroos (2001) also

notes that customers often perceive what they are provided with and how those things or services are provided, which is more important to businesses.

To measure customer satisfaction, this study adopted the expectancy-disconfirmation model to explore Chinese tourists' satisfaction in Cairns (Figure 1). This model involves four elements: expectation, perceived performance, confirmation and satisfaction. It asserts that customers hold expectations toward products or services that they are to purchase. After the purchase and experience with the product or service, they compare their expectation with their experience. A confirmation forms when their experience exceeds the expectation. If it not exceeds, a disconfirmation comes into being.

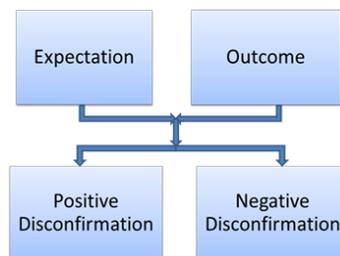


Figure 1: *Expectation-Disconfirmation Model*

There are two categories of variables included in this model, pre-exposure and post-exposure. They were measured by Likert scale. The pre-exposure variables include overall expectation measure, overall attitude, and behavioural intention measure. It generates people's overall judgement or overall disconfirmation based on a better-worse than expected comparison. The overall expectation measure examines overall belief about outcomes by asking the extent to which that they expected "to rest and relax". The overall attitude measures people's attitudes toward inoculation with questions involving business, incentive tour and promotion for the destination. The behavioural intention measure probabilistic intention toward 'do' what they decide to do. For example, the respondents were asked degree of expectation "to experience Western Culture".

Post-exposure variables include overall better-worse than expected measure and satisfaction measure. It measures people's emotion with references to their 'outright satisfaction, regret, happiness, and general feelings' about their decision to do certain things. The satisfaction measure includes a 6-item Likert scale (Oliver, 1980):

1. I am satisfied with my decision to do or not to do it;
2. If I had it to do all over again, I would feel differently about it;
3. My choice to do or not do it was a wise one;
4. I feel bad about my decision concerning what I did;

5. I think that I did the right thing when I decide to do or not do it;
6. I am not happy that I did what I chose to do.

In comparison with the increase of Chinese outbound travel, research into this market is relatively limited. There has been some researches into outbound travel motivation of Chinese tourists (Wong & Lau, 2001; Yu & Weiler, 2001); Yet, only a few studies have been conducted focusing on mainland Chinese tourists' satisfaction for their outbound travels. To attract more Chinese tourists, for both first-time visit and repeat visit, service quality plays an important role to ensure continuous development for tourism destinations (Pan, Noel, & Eric, 2006; Toy, Kerstetter, & Rager, 2002; Henning-Thurau & Kell, 1997). The Chinese tourists are from a very different but traditional oriental culture background. Such culture is very different from that of the tourism businesses in Cairns which are from Western culture and adopt managing strategies rooted deeply in Western culture. Thus, this study seeks to explore information that enables tourism businesses in Cairns to learn about visitors from different culture background and so, develop strategies that meet their needs and enhance their travel experiences.

Methods

Two surveys were conducted in 2012 among Chinese tourists (over 18 years) who travelled to Cairns. Satisfaction items used in the surveys were based on previous studies, e.g. Oliver (1980, 1981), Perkins, Waters, Baum and Basen Engquist (2009). Some additional items were drawn from conversations with randomly selected Chinese tourists. The survey includes 15 expectation items for travelling to Cairns, with '1' being 'not at all important' and '5' being 'very important'. Also, 18 perception items were included to measure respondent's satisfaction a 5-point Likert-type scale was used, with '1' being 'much worse than expected' and '5' being 'much better than expected'. The questionnaire also collected respondent's overall satisfaction evaluation and demographic information. A focus group was conducted in December 2011 to justify the items. Questionnaires were randomly distributed between April and October 2012 to Chinese tourists at the domestic departure lounge at Cairns airport. A total of 311 usable questionnaires were collected.

Data analysis included paired t-test to identify discrepancies between expectation and perception items. Factor analysis was conducted to explore areas of the respondents' interests in visiting to Cairns. Multiple-regression was used to determine influential elements upon respondents' overall evaluation of satisfaction. Cronbach's Alpha for satisfaction was 0.946 (>0.9).

Results

The paired t-test was conducted on 19 pairs of expectation and perception. The Pearson's Correlation coefficient report (Appendix 1) shows significance $p < 0.5$ for all the compared

groups except 'to go shopping' as the expectation versus satisfaction of 'trading hours of shops'. Thus, on average, the respondents' perception exceeded their expectation.

The paired-sample test (Appendix 2) performed on 13 pairs comparing perception with expectation showed $p < 0.5$ significance for: Western culture experience, aboriginal culture experience, relaxation and rest, business travel, new opinion about life gained during the travel, variety of optional tours relating to water activities, special Australian outdoor activities as attractions, variety of scenery, variety of animals only in Australia, simple process at the airport and Custom House, and elements relating to shopping including variety of goods, shopping atmosphere and professional level of shop assistance. Six aspects were non-significant: outdoor activities generally available elsewhere, location of smoking areas, trading hours of shops, and elements regarding dining including quality of food, environment and facility of dining places as well as professional level of restaurant staff. Within the 13 comparisons with significance of $p < 0.05$, there are three pairs where the perception value is lower than that of expectation. The first one indicates less variety of attractions in regard of special Australian outdoor activities than expected. The second one shows Chinese tourists found less scenery in Cairns than they expected. The last one identifies respondents' idea that they should have been able to see more animals than just Australian ones.

Nonetheless, with consideration of effect size there are only four pairs of comparisons which show that Chinese tourists' perceptions significantly exceed their expectations (Appendix 2). The figures indicate that respondents consider Cairns as a suitable for business travel and conference ($M=3.02$, $SD=1.27$) compared to their expectation of Cairns for just business travel ($M=2.29$, $SD=1.33$). This difference is considered as large size, 95% CI $[-.924, -.526]$, $t(209)=-7.18$, $p=-.56$. The comparison of expecting to see Cairns scenery ($M=4.12$, $SD=1.08$) and perception of variety of the scenery attractions ($M=3.38$, $SD=1.02$) again indicates a large effective size 95% CI $[.60, .884]$, $t(232)=-10.44$, $p=-.71$.

Based on above findings, it is observed that the majority of the Chinese visitors were on business travels with Cairns having exceeded their expectation. Compared to their expectation, most of the respondents perceived better scenery in Cairns but fewer animals only available in Australia. Also, they were satisfied with shopping atmosphere and the high professional level of shop assistants.

Factor analysis using principal axis factoring with Varimax rotation produced Kaiser-Meyer-Olkin (KMO) of $0.878 > 0.6$ and a Bartlett's Test of Sphericity is of great significance ($p < 0.05$), evidencing that the data can be explained by the factors which result in the analysis. Ten factors (with Eigenvalues exceeding 1) were identified (Table 1). In total, these factors accounted for over 69.38% of the variance in the questionnaire data detailing in Appendix

3. Table 1 *The Ten Factors*

	Factors	%of Variance
1	convenience access to quality destination services	31.31
2	likelihood of re-visit	8.12
3	personal and family refreshment	5.42
4	expense worth value	4.68
5	shopping experience	4.12
6	freedom to choose	3.69
7	friendly and professional tour guide	3.39
8	improvement for servicing staff	3.04
9	difference among service staff	2.92
10	business travel experience	2.70
	Cronach's α	0.94

Therefore, there were several aspects that the Chinese tourists were interested about Cairns. First, they paid considerable attention toward service standard, facility standard and attitude of servicing staff that they encountered. Second, they sought freedom to choose products at the destinations either servicing products or commodities in shops. Third, they considered Cairns as a business as well as holiday destination. Also, they focused on value for money.

Multiple-regression showed that influential elements on overall satisfaction (Table 2) On Step 1, items of expectation were the independent variables and overall satisfaction as the dependent variable, $R^2=.416$, $F(34, 114)=2.392$, $p=.000$ (<0.05). On Step 2, items of perceptions were added for the independent variables and accounted for an additional 26.9% of the variance compliance, $\Delta R^2=.269$, $\Delta F(38, 76)=1.708$, $p<0.05$. In combination, the predictor variables explained 38.7%, $R^2=.685$, Adjusted $R^2=.387$, $F(72, 76)=2.298$, $p=.000$ (<0.05). The f^2 with a magnitude of ($>.35$), can be considered to have a 'large' combined effect.

Table 2: 2-Step Multiple Regression

	Variable	B	B [95.0% CI]		sr ²
			Lower Bound	Upper Bound	
Step 1					
	To expect sex and romance	.325	.112	.579	.210
	To see Cairns scenery	.255	.046	.595	.166
	Convenient transport to travel around	.271	.032	.611	.157
	To make dream come true	.211	.009	.404	.148
	Casual life style in Cairns	.243	.008	.640	.145
	To experience different things	-.203	-.490	-.006	-.145
	Ideal climate and clean environment	-.229	-.562	-.005	-.144
step 2			2.818	7.056	
	Will feel differently if I can do it over again	.375	.152	.802	.188
	Service staff can meet all needs of the tourists	-.369	-.816	-.150	-.186
	Quality of food	-.355	-.828	-.120	-.172
	Various goods in shops	.301	.022	.652	.137
	Business travel	-.312	-.636	-.017	-.135

CI= confidence interval

$p < 0.05$

Result from the Multiple Regression shows great difference in Step 1 and Step 2. In Step 1, the influential elements were only based on expectation items. It shows that overall satisfaction of the Chinese tourists was largely influenced by their expectations for experience, scenery and climate as well as convenient transport at destination. When perception items were added in Step 2, none of the expectation variable held influence while the perception items predominantly influenced their overall satisfaction. Their satisfaction relied on their perceptions regarding quality and variability of dining and goods in shops. Also, they held strong opinions about the services that they received and about Cairns as truly suitable for business travel. Moreover, their belief was absolute to have a different experience when they could visit Cairns again.

Conclusion and Future Work

This study adopted Oliver's (1980, 1981) Expectancy-Disconfirmation model to explore the Chinese tourists' satisfaction in Cairns, Australia. The Paired T-Test shows that their perceptions generally exceeded their expectations. The Factor Analysis indicates that the respondents were interested in service standard, facility standard and attitude of servicing staff, freedom to choose products, and Cairns being suitable for holiday and business travel. The Multiple Regression result identifies different influential elements where Step 1 was only examined on expectation items and Step 2 on both expectation and perception items.

Noteworthy, this study is limited due to the limited time period for the data collection. Future studies may integrate areas such as value, travel motivation, national culture to further explore possible root causes of differences between the expectation and perception of respondents from different culture background.

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BRIDGING THE THEORETICAL, METHODOLOGICAL, AND EMPIRICAL GAPS OF MARKETING INNOVATION RESEARCH: A CASE OF SOCIOMATERIALITY BENEFITS FOR INFORMATION SYSTEM INNOVATION STUDY

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ABSTRACT

Despite the recognition of the importance of information system (IS) innovation in marketing arena, the field has been fragmented and adopting general organizational innovation theories and traditional IS concepts was inadequate to explain the dynamic evolution of IS innovation. This paper aims to enhance the development of research methodologies used in the IS innovation study. Major theoretical, methodological, and empirical gaps in the field are meta-analyzed by drawing on seminal works in the field. The adoption of sociomateriality is then recommended in order to bridge those gaps. Nevertheless, considering the theoretical and practical problems of sociomateriality, its applications should be done with cautions.

INTRODUCTION

After Orlikowski (2007) coined the term ‘sociomateriality’, this new worldview has been increasingly adopted by many scholars. This paper is an attempt to see the usefulness of the view in a marketing innovation research arena by focusing on an IS innovation study. It is argued here that sociomateriality may offer solutions to some challenging issues in the IS innovation field, but a researcher should still be cautious of limitations in the view.

This paper is three-fold. Firstly, the background and gap analysis in IS innovation study are explored. Secondly, how sociomateriality can bridge gaps in IS innovation study is explained. Then key limitations of adopting sociomateriality and a conclusion are presented.

IS INNOVATION—A DEVELOPING MARKETING INNOVATION FIELD ENFOLDING PROBLEMS

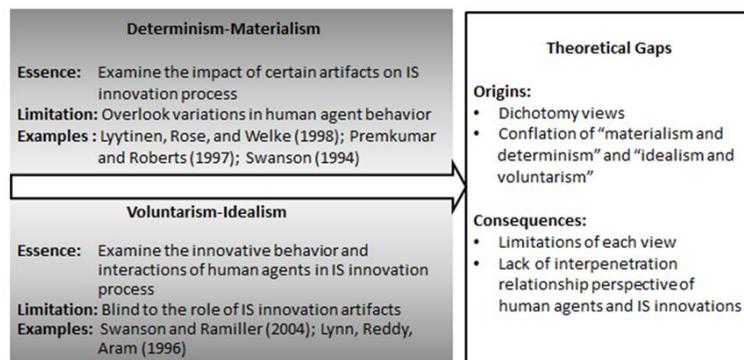
Swanson (1994) urged that despite the recognition of the importance of IS innovation, the field has been fragmented and adopting general marketing innovation theories and concepts was

inadequate to explain the evolution of IS innovation. This section draws on those seminal works and their followers (e.g. Fichman, 2004; Grover, Fiedler, & Teng, 1997) and identifies some gaps in theoretical, methodological, and empirical sides of the IS innovation field.

Theoretical gap: Deceptions in innovation determinism and voluntarism A list of IS innovation researches can illustrate that scholars generally adopt either a determinism (e.g. Lyytinen, Rose, & Welke, 1998; Premkumar & Roberts, 1997; Swanson, 1994) or voluntarism (e.g Lynn, Reddy, & Aram, 1996) viewpoint. Several works fall into the former category, as researchers act as a materialist who examines the impact of certain artifacts on IS innovation emergence/adoption (e.g. Premkumar & Roberts, 1997), development (e.g. Lyytinen, Rose, & Welke, 1998), and diffusion (e.g. Malmi, 1999) process. With critiques as the monism and the ignorance of human agent abilities to shape their environment of the viewpoint, other works adopt the voluntarism viewpoint where scholars look at a phenomenon through the idealist lens to examine innovative behavior of human agents in the IS innovation process.

Considering this dichotomy of the theoretical foundations, two main theoretical gaps are identified (Figure 1). Firstly, examining the determinism view, a scholar might not be able to capture variations in human agent behavior, while voluntarism perspective can make a scholar blind to the role of IS innovation artifacts. Secondly, the conflation of ‘materialism and determinism’ and ‘idealism and voluntarism’ in most of the works is problematic in itself (cf. Leonardi & Barley, 2008). Consequently, the conflation can lead to ontological and epistemological fuzzy boundaries where a researcher might not see the interpenetration relationship of human agents, social life, and innovations.

Figure 1 *Theoretical gap analysis*



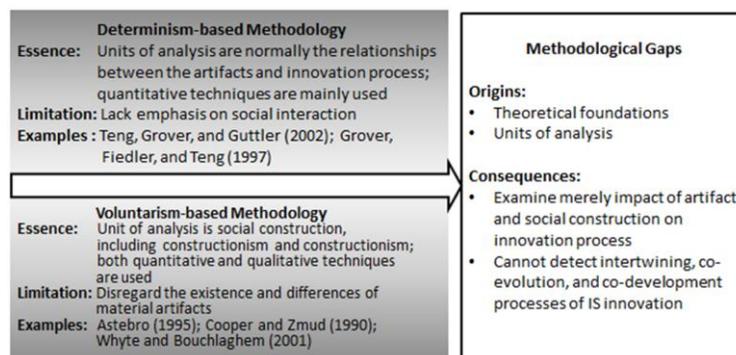
There are attempts to overcome the dichotomy by combining the two views (e.g. Yan Tam, 1996) and introducing a new concept based on a social-material assemblage view to IS innovation study. Nonetheless, it is argued here that those works still fall short in examining the interpenetration relationship. For example, Svahn, Henfridsson, and Yoo (2009) introduced social-material assemblage view to digital innovation study claiming that the concept helps appreciate tensions between different technological regimes in digital innovation. However, the authors only adopted the deterministic, and thus ignored the voluntaristic, viewpoint by treating sociomateriality as an independent variable later found to have a positive effect on resolving a recurring resistance of software engineers in a digital innovation process. Therefore, the problem on dichotomy has not been dissolved.

Methodological gap: Drawbacks towards the dichotomy

On the determinism side, research generally treats either innovations (e.g. Teng, Grover, & Guttler, 2002; Grover, Fiedler, & Teng, 1997) or other material artifacts as independent variables. Consequently, the units of analysis are normally the relationships between the artifacts and innovation process (see Grover, Fiedler, & Teng, 1997). Constructs are treated as measurable, and quantitative analytical techniques generally play a major role. On the voluntarism side, a study normally treats social construction as unit of analysis (Attewell, 1992). Interactions between human actors—social constructionism—(e.g. Astebro, 1995; Whyte & Bouchlaghem 2001) and the perception thereof—social constructionism—(e.g. Regan & O'Connor, 2000) are generally analyzed by using both quantitative and qualitative research techniques.

Benbasat and Barki (2007) found that IS innovation scholars have produced adequate knowledge on an impact of artifact and social construction on innovation process, and suggested them to go beyond those two notions. We argue that the methodologies of the two main streams of studies, determinism and voluntarism, may obstruct an adoption of the suggestion. Particularly, according to the dualism of theoretical foundations, the gap analysis (see Figure 2) indicates that the research methodologies serve as limitations for research findings in the intertwining, co-evolution, and co-development processes of IS innovation.

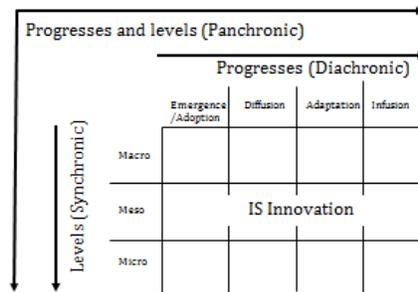
Figure 2 *Methodological gap analysis*



Empirical gap: Lack of panchronic view

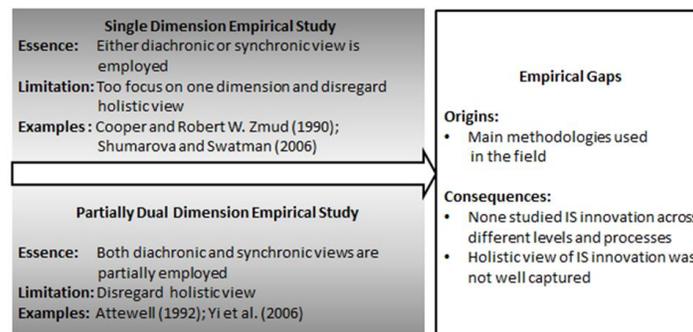
Clines (1995) and Gutiérrez (2000) indicated that there are three dimensions, namely, diachrony, synchrony, and panchrony, which should be empirically explored to understand a holistic view of a construct. While the synchronic dimension denotes a time-dimension of a study, the diachronic dimension offers scholars the viewpoint of a construct at one point in time but at different levels. Panchrony, on the other hand, combines the two former dimensions to suggest a holistic view of a construct. Figure 3 demonstrates one way to adapt the three dimensions to an IS innovation.

Figure 3 *Proposed three dimensions for IS innovation*



It is found that most IS innovation studies used only single dimension. For example, Shumarova and Swatman (2006) examined the diffusion process regardless of levels of study. Many studies, conversely, looked at only some parts of dual dimensions, synchronic and diachronic. For instance, Yi, Jackson, Park, and Probst (2006) studied innovation adoption on micro (individual) level and Attewell (1992) examined diffusion process on the meso (organizational) level. Nevertheless, none seemed to study IS innovation panchronically across different levels and processes. The empirical gaps found here (see Figure 4) corresponds with the methodological gaps defined above. Focusing only on either artifacts or social constructions, it is difficult for a scholar to empirically capture the holistic dimensions of IS innovation.

Figure 4 *Empirical gap analysis*



SOCIOMATERIALITY—A POSSIBLE GAPS BRIDGING WORLD VIEW

Orlikowski (2007) and Orlikowski and Scott (2008a; 2008b) proposed the sociomateriality world view and claimed that it helps scholars overcome the assumed view of “the individual entities that have some inherent and stable characteristics” (Orlikowski & Scott, 2008b: 6). The claim demonstrates linkage to ontological and epistemological limitations of IS research and might present solutions (Orlikowski, 2007). This section attempts to progress by illustrating the usefulness of the sociomateriality perspective in bridging the gaps of the IS innovation field.

Bridging the theoretical gaps

With the ontological priority of sociomaterial assemblages, the notion of entanglement (cf. Latham & Sessen, 2005; Pickering, 1995) becomes central to sociomateriality. The view sheds light on the embeddedness of artifacts in a specific social context such as human and material agencies which are reciprocally and temporally constituted (Pickering, 1995).

The ontological foundation of the “constitutive entanglement of the social and material in everyday life” (Orlikowski, 2007: 1435) offers a new world view that might help overcome two key theoretical gaps of current IS innovation study. By offering a highly relational world view where “entities have no inherent properties, but acquire form, attributes, and capabilities through their interpretation” (Orlikowski & Scott, 2008a: 455), sociomateriality reconciles the debate whether to study IS innovation in a deterministic or voluntaristic way. Accordingly, the taken-for-granted boundaries between IS innovations and human agents and organizational life are dissolved. Likewise, the conflation of ‘materialism and determinism’ and ‘idealism, and voluntarism’ will no longer be problematic. This is because the relational view of sociomateriality suggests that social actors and material artifacts saturate each other. So materiality or social construction has no absolute pre-deterministic status, and the notions of materialism, determinism, idealism and voluntarism no longer apply.

Bridging the methodological gaps

Although Orlikowski (2007) and Orlikowski and Scott (2008a; 2008b) did not explicitly propose a concrete research methodology for sociomateriality, origins and related concepts of sociomateriality exist, namely actor-networks (Callon, 1986; Latour, 2005), sociotechnical ensemble (Bijker, 1995), mangle of practice (Pickering, 1995), object-centered sociality (Knorr Cetina, 1997), relational materiality (Law, 2004) and material sociality (Buenza, Hardie, & MacKenzie, 2006), which IS innovation scholars can use to develop a methodology. This paper draws on those concepts and suggests some possible methodologies that can bridge the methodological gaps in IS innovation.

To understand the intertwining, co-evolution, and co-development processes of IS innovation, the unit of analysis should be ‘configurations of work practice.’ A contextual analysis method which has been employed in many works drawing on Latour’s actor-network theory (e.g. Cho, Mathiassen, & Nilsson, 2008) and Bijker’s sociotechnical ensemble (e.g. Koch, 2000) might be useful to see things in an entangled way in a certain work environment. It may also be beneficial for an IS innovation scholar to investigate a particular contextual analysis technique used by scholars in other related fields. For example, Riemer and Vehring (2010) investigated software usability and suggested such a technique called ‘contextmapping’ to help elicit concrete attributes of phenomenon (see Stappers & Visser, 2007). Additionally, ethnographic observation which has widely been used in many works with ontological priority of sociomaterial assemblages (e.g. Henriksson, 2009) might be used in conjunction with the contextual analysis in order to see more grounded understanding of practices related to the IS innovation process.

Bridging the empirical gaps

The sociomaterial assemblage perspective opposes the notion of permanent separation among social agencies at different points in time at different levels. The observation unites with Orlikowski and Scott’s (2008a: 455) suggestion that “people and things become what they are through their interpretation.” Consequently, the problem with boundaries of processes of IS innovation and the levels of study are dissolved and then a panchronic view of IS innovation becomes possible. This argument aligns with Wagner, Newell, and Piccoli’s (2010) paper illustrating the notion of sociomaterial assemblages, rationality, and performativity of sociomateriality, enabling them to see an enterprise system in different dimensions across time and space.

Figure 5 Viewpoint on the use of sociomateriality for IS innovation

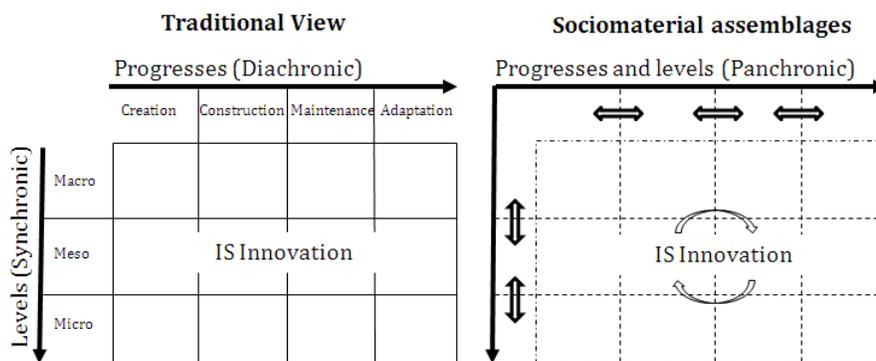


Figure 5 illustrates this paper’s view on the use of sociomateriality for empirical research of IS innovation compared to the traditional view. From the sociomaterial assemblages perspective, the concept of ‘temporary’ (Orlikowski & Scott’s 2008a; 2008b) is represented by the dotted lines. The two-headed arrows denote that IS innovation has ‘no inherent property’ (*ibid.*), so the boundaries are dynamic according to a specific context. The circle in the middle represents the

notion of ‘entanglement’ of artifacts and social life (Orlikowski, 2007). Therefore, it is argued here that with the key characteristics of sociomateriality, a scholar is conceptually able to empirically study IS innovation in a panchronic way.

CONCLUSION

This paper claims that the use of sociomateriality in the IS innovation field has a high possibility in enhancing the knowledge of the field by bridging the theoretical, methodological, and empirical gaps. Nevertheless, several empirical papers (e.g. Riemer & Vehring, 2010) and theoretical papers (e.g. Faulkner & Runde, 2010) identified the theoretical and practical problems of sociomateriality. With careful review of those limitations, it is argued that they do not outweigh the advantages of sociomateriality in bridging gaps in IS innovation study. However, further studies that fully employ the sociomateriality view with some caution are needed to confirm the usefulness of the view.

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IMPACT OF OWNERSHIP STRUCTURE ON FIRM PERFORMANCE

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ABSTRACT

The concept of ownership structure is not a new topic in the world of business. What is really new is trend of changes experienced in the ever changing business world due to attitude change of man. Therefore, this research seeks to ascertain the relationship between ownership structure and firm performance with a study of eighty workers in the public sector. Data was collected with a well-structured questionnaire and analyzed with descriptive statistics while hypotheses formulated were tested with t-test. The result shows that there is great correlation between the two subjects.

Keywords: Impact, Ownership Structure, Performance, Firm Performance, Workers Productivity.

INTRODUCTION

Business or organization may be operated under any one of several organizational structures. Each type of structure has certain advantages and disadvantages that should be considered. The descriptions of the structures below are provided to assist applicants and are not intended to be legal definitions with the force of law. Usually an attorney, accountant, financial advisor, banker or other business or legal advisors are contacted to determine which form is most suitable for a business or organization. Therefore ownership structure refers to the form of business ownership adopted to operate or run an organization or business. The extent of ownership is not fixed for all the companies. How much stock the founders keep depends largely on how much money they need to raise, how they plan to structure that financing, the intrinsic value of the business and what the long-term opportunities and upside are. Initially, no passive investor should want to own a majority of the business. The initial investment round should never exceed 35 percent to 40 percent ownership of the company. When it raises additional sums, it's a reasonable goal to double or triple the valuation for each round as long as it has been successful in meeting benchmarks and the company is making significant progress and distributed for a charitable purpose according to the terms and conditions of the trust agreement. A sole proprietorship is perhaps the simplest of all the different types of business structures. Unlike LLCs and corporations, there are no papers to file and no fees to pay in order to set up a sole proprietorship. You are the sole owner of your business and you simply have to begin business operations in order to create a sole proprietorship. In terms of the legal entities involved in a sole proprietorship, you and the sole proprietorship are the same thing. This means that you will pay

taxes on any business profit as income on your personal taxes, and if your business has any liabilities (like a court judgement or a past due debt), you are personally liable for them. A sole proprietorship is a business of one without corporation or limited liability status. The individual represents the company legally and fully. Common proprietorship structures include part-time businesses, direct sellers, new start-ups, contractors and consultants. The vast majority of small business starts out as sole proprietorships. These firms are owned by one person, usually the individual who has day-to-day responsibility for running the business. Sole proprietors own all the assets of the business and the profits generated by it. They also assume complete responsibility for any of its liabilities or debts. In the eyes of the law and the public, you are one in the same with the business. This form of business has several advantages.

A business that is carried on by a sole proprietor is owned by one person, who also usually runs and manages the business. There may or may not be people working in the business; these are referred to as employees of the business and the owner is the employer. This is the simplest form of ownership and numerically the most common. The sole proprietor receives all profits and is legally required to bear and satisfy all losses personally. The sole trader has unlimited liability to repay amounts owing, or debts of the business. The total amount of money and other assets brought into the business by the sole trader is the capital that the business owes to the owner and is called the owners' equity. The sole proprietor is free to run the business as he or she thinks best and is not answerable to a loss. Although such a business is inexpensive and easy to set up and run, additional finance may be difficult to obtain. The business name, if different from the owners own name, must be registered.

A partnership is like a sole proprietorship in that it is simply a business that is owned by two or more people. Similarly to a sole proprietorship, the owners of a partnership do not need to file any papers or pay any fees to set up a partnership, the partnership simply begins when you start a business with one or more other people. Also like a sole proprietorship, each partner will report their share of the business profits on their personal taxes as income, and each partner is personally liable for any debts, claims or other liabilities that the business is responsible for. These two types of business structures, sole proprietorships and partnership, are great for simple businesses where issues regarding personal liability are not a big concern. For example, a small business that provides a simple service to customers would probably not have to go through the procedures surrounding a corporation or LLC in order to gain the limited liability that comes with those business structures because the potential personal liability is small.

Although creating and maintaining a corporation or an LLC with probably be more complex and costly than forming a sole proprietorship or partnership, it may be worth it for your small business depending upon the type of work you plan on doing. Perhaps the main reason you would want to organize your business as a LLC or corporation is to shield yourself from any personal liability that may arise from your small business' dealings. Although Limited Liability

Corporations and corporations are alike in many respects, what truly sets a corporation apart from the other types of business structures is that a corporation is its own legal and tax entity. A corporation pays its own taxes on any profits that it keeps and the owners of a corporation only pay income taxes on monies they draw from the corporation in the form of salaries, dividends and bonuses. A LLC, just like a corporation, provides limited liability to the owners of the LLC for the business' liabilities, including debts, judgements and others. Where the LLC differs from a corporation, however, is in terms of taxes. Unlike a corporation, a LLC is not its own, separate tax entity, and the owners of the LLC must pay personal income taxes on their share of the profits that the LLC keeps during the tax year.

Objectives of the Study

The main objective of the study is to ascertain the relationship between ownership structure and workers' productivity. The study will also:

- (i) Determine the relationship between ownership structure and workers' productivity.
- (ii) Determine whether or not the ownership structure influence workers' actions and inactions.

Statement of Hypothesis

H₀ Ownership structure does not influence workers' productivity.

H₁ Ownership structure influence workers' productivity.

METHODOLOGY

The Study Area

The study area, Abeokuta (latitude 7.17025⁰N; Longitude 3.33696⁰E) is an urban town located 88 kilometers from Lagos and serves as the state capital of Ogun State. The town is traversed by Ogun River, which is the major river, as well as other smaller streams. The area has an estimated population of 536.739 (1996 projected figure by the National Population Commission). Many of the inhabitants are civil servants, traders, farmers and commercial artisans. The advent civil rule and democracy brought about an increase in commercial activities of the town sequel to the arrival and establishment of many corporate organizations in the town.

Source of Data: The primary data used for this study were collected with a well-structured questionnaire from sixty commercial bank employees who are stratified along different cadres and departments. Information obtained includes gender and ages of the respondents.

Sampling Technique: A stratified sampling technique was used to select the respondents. The respondents were stratified along different cadres, levels and departments of commercial banks.

Analytical Technique: The data collected through the questionnaires administered was presented with descriptive statistics while the hypothesis formulated was tested with correlation and t-test

Results and Discussion

Table 1: Sex

	Frequency	%	Valid %	Cumulative %
Valid Male	48	60	60	60
Female	32	40	40	100
Total	80	100.0	100.0	

Source: Field Survey, 2011

The table above shows that 48 (60%) of the respondents are male while 32 (40%) of them are female.

Table 2. Age Bracket

	Frequency	%	Valid %	Cumulative %
Valid 20 – 30	16	20	20	20
31 – 40	24	30	30	50
41 – 50	40	50	50	100
Total	80	100	100	

Source: Field Survey, 2011

The table above reveals the age brackets of the respondents, 16 (20%) of the respondents falls within the age range of 20-30 years, 24 (30%) of them are within age bracket 31-40, while the rest 40 (50%) are within the age range of 41-50.

Table 3: Marital Status

	Frequency	%	Valid %	Cumulative %
Valid Married	56	70	70	70
Single	16	20	20	90
Divorced	8	10	10	100
Total	80	100	100	

Source: Field Survey, 2011

The table indicates that 56 (70%) of the respondents are married, 16 (20%) are single while 8 (10%) are divorced.

Table 4: Educational Qualification

	Frequency	%	Valid %	Cumulative %
Valid Sch. Cert.	20	25	25	25
Diploma	20	25	25	50
HND	8	10	10	60
Bsc.	24	30	30	90
MSc/MBA	8	10	10	100
Total	80	100	100	

Source: Field Survey, 2011

The table above shows that 20 (25%) of the respondents are school certificate holders, 20 (25%) are diploma holders, 8 (10%) have Higher National Diploma, 24 (30%) have first degree, while 8 (10%) have Post Graduate Qualification.

Table 5 Work Experience

	Frequency	%	Valid %	Cumulative %
Valid 1-5yrs	8	10	10	10
6-10yrs	8	10	10	20
11-15yrs	20	25	25	45
16 & above	44	55	55	100
Total	80	100	100	

Source: Field Survey, 2011

8 (10%) of the respondents have between 1-5 years' experience, another 8 (10%) have between 6-10 years' experience, 20 (25%) have 11-15 years' experience, while 44 (55%) have at least 16 years' experience

Section B

Table 6: There are different types of ownership structures

	Frequency	%	Valid %	Cumulative %
Valid Not at all	8	10	10	10
To a slight extent	8	10	10	20
To a moderate extent	4	5	5	25
To a small extent	20	25	25	50
To a great extent	16	20	20	71
To an extreme extent	24	30	30	100
Total	80	100	100	

Source: Field Survey, 2011

The table above reveals that 8 (10%) of the respondents do not believe there are different types of ownership structures, 8 (10%) believe there are to a slight extent, 4 (5%) to a moderate extent, 20 (25%) to a small extent, 16 (20%) to a great extent while 24 (30%) believe it is important to an extreme extent.

Table 7: It facilitates the attainment of organizational objectives

	Frequency	%	Valid %	Cumulative %
Valid Not at all	8	10	10	10
To a slight extent	19	24.8	25	35
To a moderate extent	3	3.75	4	39
To a small extent	5	6	6	45
To a great extent	16	20	20	65
To an extreme extent	29	36.25	35	100
Total	80	100	100	

Source: Field Survey, 2011

It is evident from the table above that 8 (6.5%) of the respondents do not believe ownership structure facilitates the attainment of organizational objectives; 19 (24.8%) it is to a very slight extent, 3 (3.75%) to a small extent, 5 (6%) to a considerable extent, 16 (20%) to a great extent, while 19 (36.25%) believed to an extreme extent.

Table 8: Ownership structure can influence workers attitude to work

	Frequency	%	Valid %	Cumulative %
Valid Not at all	6	5	5	5
To a slight extent	8	10	10	15
To a moderate extent	10	15	15	30
To a small extent	16	20	20	50
To a great extent	10	15	15	65
To an extreme extent	30	35	35	100
Total	80	100	100	

Source: Field Survey, 2011

The table above revealed that 6 (5%) of the respondents don't believe that ownership structure can influence workers attitude, 8 (10%) believes it is to a very slight extent, 10 (15%) to a small extent, 16 (20%) to a considerable extent, 10 (15%) to a great extent while 30 (35%) to an extreme extent.

Table 9: Performance could be a function of ownership structure

	Frequency	%	Valid %	Cumulative %
Valid Not at all	4	5	5	5
To a slight extent	8	10	10	15
To a moderate extent	16	20	20	35
To a small extent	4	5	5	40
To a great extent	8	10	10	50
To an extreme extent	40	50	50	100
Total	80			

Source: Field Survey, 2011

The table above shows that 4 (5%) do not believe performance is a function of ownership structure, 5 (8.5%) believe it is to a small extent, 2 (3.5%) to a moderate extent, 3 (4%) to a considerate extent, 17 (27%) to a great extent while 26 (54%) believes it is an extreme extent.

Table 10: Ownership structure determines workers commitment to work

	Frequency	%	Valid %	Cumulative %
Valid Not at all	8	10	10	10
To a slight extent	12	15	15	25
To a small extent	4	5	5	30
To a moderate extent	16	20	20	50
To a considerable extent	4	5	5	55
To a great extent	16	20	20	75
To an extreme extent	20	25	25	100
Total	80	100	100	

Source: Field Survey, 2011

From the table above, 8 (10%) of the respondents believes ownership structure does not determine workers commitment, 12 (15%) opined it is to a very slight extent, 4 (5%) to a small extent, 16 (20%) to a moderate extent, 4 (5%) to a considerate extent, 16 (20%) to a considerate extent, while 20 (25%) said to an extreme extent.

Table 11: It influences worker welfare package

	Frequency	%	Valid %	Cumulative %
Valid Not at all	4	5	5	5
To a slight extent	16	20	20	25
To a small extent	8	10	10	35
To a moderate extent	4	5	5	40
To a considerable extent	8	10	10	50

To a great extent	16	20	20	70
To an extreme extent	24	30	30	100
Total	80	100	100	

Source: Field Survey, 2011

From the table above, 4 (5%) of the respondents does not believe ownership structure influences workers packages, 16 (20%) believes to a slight extent, 8 (10%) to a small extent, 4 (5%) to a moderate extent, 8 (10%) to a considerate extent, 16 (20%) to a considerate extent, while 24 (30%) said to an extreme extent.

Table 12: Test of Hypothesis

	Mean	Std	Correlation	P.val
Ownership Structure	3.00	1.150		
Firm Performance	4.50	1.575	0.43	0.00

Source: Field Survey, 2011

The table above shows that the mean and standard deviation of firm performance in the table. While the correlation is 0.43, the probability value is less than 0.05.

Table 13: Goal setting is important in commercial banks

	Mean	Std	Correlation	P.val
Ownership Structure	3.00	1.150		
Workers Productivity	4.68	2.147	0.058	0.00

Source: Field Survey, 2011

The table shows the relationship mean and standard deviation of relationship between ownership structure and workers' productivity. While the correlation is 0.058 and the probability value is 0.00.

SUMMARY AND CONCLUSION

This research is focused on the relationship between ownership structure and firm performance. The study actually investigates role(s) of ownership structure and organizational performance as well as individual workers performance. It is therefore concluded that ownership structure of an organization could influence the attitude of workers.

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Business Ethics Education from the Perspective of Lecturers of School of Business Administration in Thailand

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ABSTRACT

As Business Administration students will be our future business leaders, their ethical mind such as integrity, honesty, accountability and morality would be important. Teaching and learning business ethics in classroom would be indispensable to facilitate, enhance and cultivate moral and ethics to them.

A faculty survey on the teaching management of business ethics was conducted. Questionnaires were used as the tool for collecting data from all 222 full-time lecturers of a Business school in Thailand. The main objective is to identify how to teach business ethics effectively and efficiently in order to use as a guideline in managing and designing the business ethics course in the Bachelor of Business Administration Curriculum: 1) who should be the ethics teachers (individual person or teams of business faculty/ philosophy faculty/ special faculty with sufficient training/ successful businessmen/ priests), 2) what are the contents to be taught , 3) where (in classroom, outside, exposure) and when(year, semester), 4) type (stand-alone course, or integrate in other courses such as basic course, business core course, major required or elective course), grading/evaluating and number of credits (0 credit with grading S and U, / 1, or2, or3 credits with normal grading system) and adequacy of coverage and encouragement (in level of department, or faculty or university) and 5) methods of teaching(classroom lecture based on textbook/ news / articles/ case study, guest lecturers, ethical debate, role playing, business ethics exposure)

Key Words: Business Ethics, Education, Curriculum

I. INTRODUCTION

In Thailand, the fifty-six finance companies collapsed in 1997 was the starting point of the Asian financial and economic crisis, as poor corporate governance lead to the unreliable financial information presented on financial statements was identified as a main cause of the crisis. It brought into attention in business ethics issue, the regulators attempted to set new laws and regulations related to good governance: good and effective internal control and auditing, proper accounting information system in preparing and presenting the reliable financial reports, and managing the business for maximize the firm's value and public interest rather than the manager's self-interest. The Bank of Thailand, the Securities and Exchange Commission, and the Stock Exchange of Thailand attempted to form an ethics institute to teach business ethics to

executives (Bangkok Post, 1999). The important issue was how to do to make the businessmen have moral and ethical mind, behaviors, and decision making: produce defect-free products that are safe for use and/or consumption ,use the good quality that no poison or dangerous material, produce environmental friendly products, promote and encourage consumer to safe energy, reduce and eliminate pollutions and global warming, set reasonable price of product or service, don't advertise overqualified , don't violate others royalties and rights ,... etc. The consumer movement in Thailand became popularized in mid-year 2000 followed by several notable consumer protests against firms that were believed by some to have engaged in an unethical act. For example, in 2003, Thai consumers threatened to boycott Nestle for producing genetically modified products and in 2006, Shin Corporation, the parent company of one of the three national mobile phone service providers, was boycotted after it sold shares to its subsidiary company in Singapore by using some loophole of law for taking tax benefits, an act considered a breach of Thailand's national security (Racela, Olimpia C.,2012)

In the business ethics education viewpoint, most of the faculty members believe that ethics can be taught to business students to encourage and motivate their moral and ethical attitude, ethical behavior, and decision making. We also believe that ethical business graduates will become ethical businessmen in the work place.

II Research Objectives

The main objective is to identify how to teach business ethics effectively and efficiently in order to use as a guideline in designing and managing the business ethics course in the Bachelor of Business Administration curriculum. To investigate this business ethics education, the following questions will be concerned:

1) Who should be the ethics teachers (individual person or teams of business faculty/ philosophy faculty/ special faculty with sufficient training/ successful businessmen/ priests)?

2) What are the contents to be taught?

3) Where (in classroom, outside, exposure) and when (year, semester) should be taught?

4) What are types of course designed, grading or evaluating systems, and adequacy of coverage and encouragement? (stand-alone course, or integrate in other courses such as basic course, business core course, major required or elective course; grading/evaluating and number of credits :0 credit with grading S and U, / 1, or2, or3 credits with normal grading system ; coverage and encourage in level of department, or faculty or university)

5) What methods of teaching should be made?(classroom lecture based on textbook/ news / articles/ case study, guest lecturers, ethical debate, role playing, business ethics exposure)

Contributions

This research is expected to benefits to the following stakeholders:

1. Faculty members who teach business ethics, they will use the suitable techniques and methods for teaching, the coverage of complete and proper contents and details in the course.
2. Administrator of School of Business can design and manage the teaching and learning ethics course in the curriculum properly
3. Universities' administrator can arrange the effective activities in encouraging and promoting the moral and ethical attitude and behavior to students. Moreover, they can arrange the training course to the lecturers who will become the business ethics trainers.
4. Academics and regulators set the clearly and precisely rules and policy in developing and implementing the business ethics course in curriculum.

III Literature Review

3.1 *Ethics and Business Ethics: Definition and Significance*

The differences between meaning of morality and ethics are: Morality is “the set of standards of what is right and wrong or good and bad”; Ethics is defined as (1) “the study of those standards” (Shaw, 2005). (2) “the discipline dealing with what is good and bad with moral duty and obligation” (Merriam-Webster Dictionary, 2013), (3) “the attribute of the functioning of a good society, and important in particular to business” (Peter W Sheehan, 2001), (4) “ethics act as codes of moral principles that informs agents of what a good or bad behavior is” (Hellriegel et al, 2008; Smit et al, 2007). Ethics informs persons who act as agents of how to apply these rules and standards. Through ethics, agents can manage their affairs with others regarding responsibility, honesty, loyalty and decency at work. (Mira M. Alameddine, 2013) In the society, businessmen seem to be the agent of their company to produce and sell products or render services to satisfy the need of their customers.

Business organizations are also affected by ethics since it moderates their conduct with other corporations and guides them in their decision making. Business ethics builds on ethics standards to moderate business transactions. It involves the application of the standards of right and wrong/good and bad of business interaction, also guides business in identifying good moral behavior and then implementing that behavior without causing any harm to the stakeholders' interests (Rossouw, 2004). In addition, business ethics is the study of ethical values which regulate the business world (Ahmed et al, 2003). Business ethics regulates businessmen's behavior while participating in economic transactions to ensure that all parties not only serve their own interest, but also the public interest. Therefore, business and professional ethics are focus on the effect to 3 levels : (1) Society or Public, duty to society, serve the public interest ;(2) Organization or their professions, work to meet expectation or standards of professionalism, attain the highest levels of performance and meet the public interest requirement; (3) Individual or personal, serve individual basic needs: credibility, highest quality of their job/products/service, confidence, professional competence and due care, and professional behavior.

Business ethics education should be majorly concerned about moral truth in ways that address the importance of prime social issues such as the value of individual and social responsibility.

The unethical behaviors of people in society and unethical business practices effect business ethics which become the most important issue in society (Verstraeten,2000). Unethical behavior in business causes heavy dangers to all fractions of society (Crane,2010). The public’s loss of faith and respect to the ethical value of businessmen affects the neglecting business ethics of high importance. Moreover, global economic crisis on unethical business practices, rapid and constant changes in international trade and business activities gave added importance to business ethics, which in its turn has become important for academia. The higher needs for good business ethics education, the more researchers and educators realize and recognize the importance of searching the means for educating future businessmen through studies conducted with the objectives of developing the effective curriculums (Beltramini, Peterson & Kozmetsky, 1984).

3.2 Attitudes and behaviors of business students towards business ethics

The attitudes of people affect their behavior; it implies that if anyone has a negative attitude toward ethical behavior, then he is more likely to behave unethically at the workplace. (Crown & Spiller, 1998; Granitz & Loery, 2007; Mara M. Alameddine,2013). Many studies found that business students are more willing to cheat than other students (Rettinger & Jordan, 2005; McCabe & Trevino, 1995) because they have a loose attitude towards what constitutes cheating (Klein, Levenburg, McKendal & Mothersell, 2006).

Most literature reveals that different gender have different ethical attitudes and views. (Perryer & Jordan, 2002). It reveals that females are more concerned with ethical matters than males. (Arlow,1991; McCabe et al., 2006; Peterson & Albaum, 2006; Gill, 2009). In 1972, Hawkings and Cocanougher (as cited by Ibrahim 2012) concluded that business students are more tolerant of ‘fishy’ practices than non-business students. McCabe & Trevino (1993); Roig & Ballew (1994); Crown & Spiller (1998); Hosmer (1999);and Smyth & Davis (2004) conducted researches got the same conclusion that business students: 1) scored less than others on tests of moral reasoning; 2) are more likely to regard business ethics as trivial than other students;3) are more tolerant of unethical conduct; and 4) are more willing to cheat and approve of cheating than other students. Therefore, the image of business students is not positive.

However, there are some arguments that there are no significant differences between the attitudes of business and non-business students (Arlow, 1991; Beltramini et al 1984 as cited by Ibrahim 2012), and there are no conclusive studies indicating that non-business students have different perceptions of business ethics (Ford & Richardson, 1994; Borkowski & Urgas, 1992). Also, there is no significant difference regarding ethical behavior between those who have taken only one course and those more than one. Both share the same positive attitude towards ethical behavior. The number of courses doesn’t affect ethical conduct; thus, taking more courses does not necessarily make one more ethical. On the other hand, once anyone have sound ethical framework, they will follow it regardless of the number of courses taken. Moreover, taking ethics courses does improve their ethical conduct (Sleeper, Schnider & Webr, 2006).

3.3 The Relevance of Business Ethics to Education

The ethics can be taught is a belief of many academics and moralists. The people’s attitudes and behavior regarding ethical and social issues can be shaped, modified and refined through

education. Therefore, through education, the current business students will become ethical leaders and managers in the future. This belief is supported with many studies which indicated that students are able to learn ethics which they use later in their lives after having developed new ethical values (Velasquez, Andre, Sharks & Mayer, 2012). Moreover, White and Montgomery (1980) found that the best place that encourages the development of ethical values is colleges or universities. Business programs give more concern to ethics than other programs in order to prepare the business students for readiness and more active ethical life (Beltramini, Peterson & Kozmetsky, 1984). Moreover, some moralists believe that ethics can be taught if supported by good curriculum. ElZein and Alameddine (2012) presented a framework for ethics teaching. They found that if it is applied properly, students who had taken business ethics courses during their undergraduate will be ethical consciousness persons.

However, there are some arguments that ethics can't be taught but is a development whose virtues are acquired throughout upbringing and habitual acts. A study argued that teaching ethics at universities is ineffective and comes far too late (Peppas & Diskin, 2001) it should be taught and influenced by their family and society. Some research revealed that the longer students stay in school, the more they develop negative attitudes towards ethics or more willing they become to taking ethical risks (Ludlum and Moskaloinov, 2005; Amberla et al., 2010). However, other studies have revealed that the year or level of students don't have a major effect on the students' attitude and view of ethics (Ahmed et al, 2003; Du Plessis et al, 2011).

Education is an anchor that holds the community together as human beings, as co-participants and as members of society. Trust and values make civilizations of world societies not only possible, but make them just and honorable for everyone. Both education and businesses should have the courage "to be publicly true to our private values". Universities are especially important in supplying a sense of moral and social responsibility that requires a commitment to ethics to students. In pursuit of proper objectives, universities have to aim explicitly to foster a reflective culture that engenders self-confidence and social responsibility. There seems to be an attitude of resistance to the appreciation of 'proper ethical behavior' that runs deep in our cultures (Peter W Sheehan, 2001).

Colleges of Business in the U.S. have been engaged in a debate over how best to integrate ethics into their curricula. One recurring issue is whether ethics study should be (a) concentrated into a single course, or (b) integrated by each department throughout the curriculum. The American Assembly of Collegiate Schools of Business (AACSB) accredited program, faculty college-wide are "encouraged" to introduce ethical content into their courses. However, business ethics receives extensive, systematic attention in but a single introductory course, "Management and Society," only an elective for most business majors. The Colleges of Business currently utilizes no faculty from the Department of Philosophy, and the business faculties who teach this course have strong interest, but no special training, in moral philosophy and ethics. There are many reasons for the absence of a full-scale commitment to ethics education, a common phenomenon among business programs nationwide. One of the most important reasons is the continuing perception among many business faculty that ethics education is a "soft value" that must give way to the "hard skill" demands of the competitive marketplace.(William J. Maakestad, 2001)

Lindeman and Verkasalo (2000) found that business majors have positive attitude towards ethics,

believing that it should and is practiced in business. Although business student participants don't use role models in their decision-making, they are more committed to the fair treatment of others. This has relevance to the seniors' beliefs that customers should be treated ethically. It could be that after being exposed to ethical issues in their business major (Beltramini, Peterson & Kozmetsky, 1984), they are more conscious of ethical issues. Business major students share the same values as non-business majors. There is no significant difference whether positive or negative.

3.4 Ethics Education and Implementing Business Ethics Course in the Curriculum in Thailand.

In the business world, employers are satisfied not only the employees who are equipped with knowledge and skill, but also ethical mind, ethical behavior and ethical decision. It is important that the business school needs to implement the business ethics and professional ethics courses in their curriculum. It expects to increase their graduates' ability to discern the moral consequence of decision making effectively and enhance their moral and ethical sensitivity, and also expect that they are able to face ethical problems and have more potential to analyze the moral implications in the workplace.

Assumption Business Administration College--ABAC (Now is Assumption University) is the first international business school in Thailand and also the first business school which implement ethics course in the curriculum. ABAC's curriculum is composed of "Ethics" as a basic course with 3 credits and another "Ethics Seminar" as a require course for all students who must attend twice a semester, total sixteen times of the 4 year undergraduate curriculum with the "S--Satisfy" grade as a criterion for graduation in the Bachelor of Business Administration --BBA program. The course has been initiated by Rev. Bro. Dr. Martin Prathip Komolmas and integrated into the syllabus of undergraduate studies since 1975. Ethics course is aimed at understanding the nature of man, society, and the world, self-discovery, self-love, self-respect, self-actualization, relationship between man and man, man and society, and man and the world, possible problems of living together in the society and their analysis, and ways to live a meaningful and happy life. However, the business ethics is not a stand-alone course in BBA program, but it is integrated in other business and professional courses.

The implementation of business ethics, as a component of all courses across the BBA curriculum, is a work in progress at all higher education institution in Thailand. Although it would seem a natural and integral part of the curriculum with a long and strong tradition of teaching and learning. Nowadays, Business Ethics course is set as a stand-alone course in business administrative curriculum of Chulalongkorn University in Thailand; Business Concepts and Ethics: let the students understand the concepts of business and types of business organization, ethical theories and the role of social values, awareness and development of personal, social, professional, and business responsibilities and ethical behaviors. (BBA International Program, Faculty of Commerce and Accountancy. Chulalongkorn University, 2012). The curriculums in business school of other universities mostly integrated ethics and business ethics in the other business courses in conformity with the quality assurance requirement of Thailand's higher education Qualification Framework. Many courses offer indirectly to reflect business and professional ethics; for example Forensic, Fraudulent Financial Report, Fraud Auditing, Professional Ethics, and Good Governance and Corporate Social

Responsibility.

The Qualifications Framework for Thailand's higher education system is designed to support implementation of the educational guidelines set out in the National Education Act. It will help to provide appropriate points of comparison in academic standards for institutions in their planning and internal quality assurance processes. Evaluators involved in external reviews, and for employers, in understanding the skills and capabilities of graduates. The framework groups, there are five domains for the students' learning expected outcome, one out of five domains is Ethical and Moral Development. It focuses on the development of habits of acting ethically and responsibly in personal and public life in ways that are consistent with high moral standards, and ability to resolve value conflicts through application of a consistent system of values and relevant professional codes of practice. Moreover, a high level of ethical behavior in situations involving value conflicts and competing priorities, honesty and integrity with an appropriate balance of personal and group goals and objectives. In addition, provides a positive influence to others through example and leadership in employment or other group situations in family and community. (National Qualifications Framework for Higher Education in Thailand, Implementation Handbook 2006)

Business ethics become an integral part of every business courses include principles of marketing, management, accounting, finance and banking, information technology, hospitality and tourism management, human resource management, international management, strategic management, production management, industrial management and small business management. How does school of business manage, design and introduce business ethics into these courses? It is suitable to set a stand-alone business ethics or professional ethics course or integrated with others? How intensive should the business ethics coverage be and in which year of teaching and learning is proper? How does a faculty member who was not trained in moral philosophy approach the task of teaching ethics?

IV. Research Methodology

4.1 Population and Sample

Questionnaire was used as the tool for collecting data from all 222 full-time lecturers of undergraduate, business school in Thailand. Sample selected for this survey was convenience sampling. The number of respondents was 186 lecturers, representing 84%. The collected data were analyzed in terms of means, standard deviations and Analysis of Variance (ANOVA).

4.2 Measurement

The questionnaire is aimed at gaining knowledge on the management of teaching and learning of business ethics from the perspective of lecturers in the school of business, Undergraduate level. The questionnaire consists of four parts.

In part 1: course design; used yes or no as answer to identify the adequacy of the business ethics course offered in the BBA curriculum as a stand-alone, integrated in other business ; a basic / general education required course, a business core course ; non-credit with S and U grade ,

credit course with normal grading; how many credits will be suitable; which year's students should be taught; teaching and learning should be in class or outside, on-campus or off-campus; and which style of teaching and learning would be suitable.

In part 2: perception of importance, necessity, and suitability in teaching and learning business ethics : used six-point likert scale questions to determine the importance, necessity in designing the business ethics as a stand-alone course with 3 credits, perceived the importance of content in teaching, ranging from 0 to 5 : 'no, not important', 'very unlikely important' to 'very likely important', and 'no, not necessary at all', 'strongly disagree', to 'strongly agree'. The proper persons and suitable qualifications of business ethics lecturers, used five-point likert scale questions to determine the suitability level, ranging from 1 to 5: 'least suitable' to 'most suitable'.

In part 3: the efficient method of teaching: used five-point likert scale questions ranging from 1 to 5: 'strongly disagree', to 'strongly agree'. If lecture method is used, lectures should be by full time lecturers, guest speakers who are businessmen or priests; lectures based on textbooks, case studies, articles, or news. Otherwise, the methods should be project presentation, report, role play, debate, group discussion and analysis, or business exposure.

In Part 4: Personal data of the respondents; gender, major or field of teaching, teaching experience; and open end question for the comment and recommendation.

V. Research Finding and Discussion

The findings of this research are as follows: (1) Summary profile of respondents show that most of them are teaching in accounting major with an experience of more than 15 years (detail in Table 1), (2) Adequacy of business ethics education course design as a stand-alone, either business core course or general education course with 3 credits and offer the course to third year students, arrange ethics seminar and training with grading "S/U" twice a semester, and in addition, arrange an "Ethics Day" outside campus on some special occasion (detail in table2), (3) Perceived importance, necessity and suitability in teaching and learning business ethics are weighted at the most importance and necessity level; the most suitable teaching materials are real situations in business from articles/ news /journal; contents of the business ethics in teaching as a standalone with 3 credits; and the 3 most important contents are impact of professional on the business environment, real world examples of ethical business issues which are of significant difference among the different major faculty members, and responsibilities of business professions(detail in table3) (4) Perceived qualified persons are a team of lecturers who are expert in the particular topic and also business lecturers; qualification of business ethics lecturers are successful businessmen or having expertise in the specific business professions (detail in table4) and (5) Perceived efficient teaching methods of business ethics are weighted at the highest level; the efficient methods are (a)ethical questions and discussions from the actual situations which are of significant difference among the different major faculty members and different years' experience in teaching , (b)seminars by using speakers with experience in corporate or professional decision making, (c)analyzing from case studies, discussion of disciplinary pronouncements and findings, (d)ethical business exposure, (e)watching video/CD related to ethical or unethical business situations and discussions which are of significant

difference among the different years' experience in teaching, and (f) allow the students to do the social contribution activities. Furthermore, (g) the methods of brain storming form group activities and discussions are of significant difference among the different major faculty members, and (h) method of discussions in dummy situations in business are of significant difference among the different major faculty members, different years' experience and different gender (detail in table 5) .

Table 1- Profile of respondents

Variable		Percentage
Gender		
	Male -M	50.0
	Female-F	50.0
Teaching Experience		
	1-5 Years	29.5
	6-10 Years	21.3
	11-15 Years	11.5
	>15 years	37.7
Field of Teaching		
	Accounting	29.5
	Finance and Banking	4.9
	Management	16.4
	Marketing	24.6
	Others	24.6

Table 2- Perceived adequacy of business ethics education course design

Adequacy of Business Ethics Education Course design		Total (n)	Total (%)
Stand alone require course with 1 credit: if yes, teaching in which year			
	Yes	24	40%
	NO	36	60%
Stand alone require course with 3 credits : if yes , teaching in which year			
	Yes	38	63.33%
	NO	22	36.33%
Integrated with other business course: if yes , integrated in which courses			
	Yes	32	53.33%
	NO	28	46.66%
Business Ethics should be core course with 3 credits			
	Yes	25	42.37%
	NO	34	57.63%
Integrated Ethics course in general education with 3 credits			
	Yes	25	42.73%
	NO	34	57.63%
Arrange training and seminar and evaluation with S / U			
	Yes	41	69.49%
	NO	18	30.51%
Arrange some seminar training with 1 credit			
	Yes	23	40.35%
	NO	34	59.65%
Arrange 1 day "Ethics Day" on campus and grading with S/U			
	Yes	30	50.85%
	NO	29	49.15%
Arrange 1 day "Ethics Day" on campus and grading with grading system			

	Yes	13	22.03%
	NO	46	77.97%
Arrange 1 day "Ethics Day" outside campus and grading with S/U			
	Yes	24	40%
	NO	36	60%
Arrange 1 day "Ethics Day" outside campus and grading with grading system			
	Yes	12	20.39%
	NO	47	79.61%

Table 3- Perceived Importance, necessity and suitability in teaching and learning Business Ethics

Importance, necessity and suitability of Business Ethics Education	Mean	S D	ANOVA- on the basis of gender		ANOVA- on the basis of experience		ANOVA- on the basis of field	
			F	Sig.	F	Sig.	F	Sig.
Importance	4.7541	.53714	.522	.597	2.517	.067	.313	.868
Necessity	4.6721	.65119	.212	.810	.400	.754	.079	.988
Importance of Teaching Material	4.1311	.74356	2.022	.144	.900	.447	.880	.482
Text Book	4.0164	.95728	.523	.596	.462	.710	1.031	.399
Teaching material compose by lecturers/ Guest speakers	3.8689	1.05634	1.695	.195	.635	.596	1.422	.239
Articles/ news /Journal real situations in business	4.5082	.74438	2.766	.073	2.836	.046*	.243	.912
Contents if set as standalone course with 3 credits	4.3171	.61517	.879	.422	1.878	.144	2.192	.082
Moral and Ethics concepts and theory	3.9833	1.12734	.771	.469	1.297	.285	1.739	.155
Moral and ethics Development Theory	4.0000	1.01653	.444	.644	.859	.468	1.827	.137
Responsibilities of business professions	4.7167	.55515	.310	.735	.676	.570	.874	.485
Impact of professional on the business environment	4.8033	.44044	1.298	.283	1.504	.223	.364	.833
Real world examples of ethical business issues	4.7377	.57450	.150	.861	3.946	.013*	2.758	.037*
Code of Professional Conduct	4.4333	.88999	.294	.747	.383	.766	.511	.728
Statements on Responsibilities in Personal Financial Planning	4.0984	.96099	2.740	.075	.222	.881	1.893	.124
Application of professional standards to case studies	4.2131	.96807	1.206	.309	1.851	.148	.503	.733
Case study from Thai and foreign countries	4.4590	.82813	1.113	.337	3.507	.021*	.691	.601
Thai/ International Code of Professional Conduct and	4.3443	.91077	.374	.690	3.135	.032*	.604	.661

	Ethics								
	Ethics Expectations and their impacts	4.0667	1.03934	1.674	.527	2.382	.079	1.512	.211
	Ethics & Governance that affect the scandals of business	4.3770	.73403	.356	.703	.822	.487	.642	.635
	Ethical Behavior – Philosopher’s Contributions	4.2131	.89656	.684	.510	1.484	.228	.858	.495
	Discussion explanation of Rules for the Business Profession Ethics	4.0656	.99781	1.284	.287	1.140	.341	.826	.514
	Practical Ethical Decision Making	4.3443	.81415	1.486	.237	.310	.818	.834	.509
	Out of Classroom Research & Writing, no plagiarism	4.2295	.93797	1.311	.279	2.188	.099	.777	.545
	Ethical Good governance and accountability	4.4426	.76430	.935	.400	1.123	.348	.527	.716
	Rules/Law for the Business Profession	4.3115	.78615	.187	.830	2.537	.066	.018	.999
	Managing Ethics Risks and Opportunities	4.1967	.92772	.969	.387	3.496	.021*	1.027	.402

*P-value < 0.05

Table 4- Perceived qualified person and qualification of Business Ethics lecturer

Suitability and Qualification of Lecturers	Mean	SD	ANOVA-on the basis of Gender		ANOVA-on the basis of experience		ANOVA-on the basis of Field	
			F	Sig	F	Sig	F	Sig
Qualified Lecturers	3.9331	.64743	2.398	.102	1.084	.363	2.192	.082
Only one lecturer for the whole semester	3.1639	1.18575	.969	.387	.751	.526	1.965	.112
Team of lecturers who are expert in the particular topic	4.4667	.85304	1.138	.329	1.661	.186	1.270	.293
Full time Lecturers are trained in special ethics course and some guest speakers	4.3115	.86681	1.418	.253	.926	.434	1.071	.379
Invite the guest speakers for the whole sessions	3.8033	1.01357	1.372	.264	1.343	.270	1.928	.118
Qualification of Lecturers	3.8787	.71766	1.456	.244	1.425	.245	.774	.547
Business Lecturers	4.2623	.91107	.352	.705	.772	.514	1.213	.316
Philosophy Lecturers	3.6167	1.16578	1.035	.363	.814	.491	.346	.846
Psychology Lecturers	3.6833	1.03321	2.820	.070	.852	.471	.195	.940
Priests /Monks	3.4333	1.30665	1.323	.277	3.700	.017*	1.599	.188
Success Businessman / Expertise in the professions	4.3279	.92595	.785	.462	1.289	.287	.698	.597

*p-value < 0.05

Table 5- Perceived efficient teaching methods of Business Ethics

The efficiency of teaching methods for business ethics	Mean	SD	ANOVA-on the basis of Gender		ANOVA-on the basis of experience		ANOVA-on the basis of Field	
			F	Sig	F	Sig	F	Sig
	4.1010	.60863	2.277	.114	2.051	.117	2.158	.086
Theoretical lecture from ethics textbook	3.5410	1.00952	.386	.682	1.294	.285	.634	.641
Seminars using speakers with experience of corporate or professional decision making	4.5574	.69581	1.804	.176	2.226	.095	1.251	.300
Analyzing from case studies	4.4426	.69581	.619	.543	.849	.473	1.150	.343
Discussion of disciplinary pronouncements and findings	4.4098	.66776	1.487	.237	2.562	.064	1.344	.265
Ethical questions and discussion from the actual situations	4.5902	.64231	.487	.618	3.258	.028*	3.062	.024*
Reading, analyzing from assignment and writing individual report	4.0984	.90747	.310	.735	.702	.555	.358	.837
Assigning a related ethics topic, search and prepare report	4.1667	.69298	.668	.518	1.231	.307	2.803	.034*
Discussion of selected readings and online materials and writing the opinion related to ethical issue	4.0820	.84252	2.117	.132	.236	.871	.107	.980
Religion /moral concepts lecturer	3.9016	1.02802	2.568	.088	1.984	.127	.870	.488
Brain storming form group activities and discussion	4.0820	.84252	1.373	.263	2.019	.121	3.954	.007**
Watching video/CD related to ethical or unethical business situation and discussion	4.2623	.92919	4.313	.019*	3.460	.022*	1.843	.133
Discussion in dummy situation in business	4.0984	.96099	3.688	.033*	3.107	.033*	3.037	.025*
Let the students do the social contribution activities	4.2131	.89656	1.723	.190	2.024	.121	1.958	.113
Let the students participating with the religion activities, i.e. meditation, temple visit	3.6066	1.15872	.105	.901	.231	.874	1.111	.360

Role Playing	3.7213	1.14209	2.987	.060	.889	.452	1.279	.289
Ethical debates	3.6066	1.11473	.850	.434	1.635	.191	.362	.835
Ethical business exposure	4.3443	.75023	.877	.423	1.715	.174	2.191	.082

** p-value < 0.01 , * <0.05

The recommendation topics in teaching business ethics from faculty members are the code of professional ethics and business ethics of their particular field, business ethics in the real situation. In addition, suggestion of integration business ethics in the major courses of each major are: Accounting major: Auditing, Seminar in Auditing, Seminar in Accounting, and Managerial accounting; Finance and Banking major: Corporate Finance, Investment, Personal Finance, Corporate Strategy and Financial Policies; Management major: Introduction to business, Principles of management, Managerial Psychology , Business Research ; Marketing major : Purchasing, marketing research, and Psychology

VI. Limitations

The scope of this study is limited only the faculty members in school of business and data were collected only from private university in Thailand, and using the convenience sampling.

VII. Conclusion and Recommendations

The recommendations for the stakeholders are as follows:

1. Faculty members who teach business ethics, they should use the suitable techniques and methods from the real situation of their particular field.
2. Faculty members who teach business courses should integrate the business and professional ethics in the course in order to motivate, enhance the ethical attitude to the students
3. Faculties' administrator can design and manage the teaching and learning ethics course in the curriculum as a standalone major required course with 3 credits in order to make the students recognize to the important of the business and professional ethics.
4. Universities' administrator can arrange the seminar and training related to ethical business exposure, social contribution activities to encourage and promote the moral and ethical attitude and behaviour to faculty members and students. Furthermore, encourage and support in special training ethics course to faculty members that is " Train for the Trainer"
5. Educational Regulator should set the clearly policy related to the curriculum in teaching business ethics. Regulators act as the centre to crate the cooperation and networking among the institutions for participating and exchange the technique of business ethics teaching and the new knowledge. In addition, professional regulator should set the code of ethics in written form and it must agree with the international codes.

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A STUDY OF PURCHASE DEMAND OF BLACKBERRY AND IPHONE END USERS

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ABSTRACT

The mobile phone market worldwide has experienced the rapid scaling up of technology, to smart phone usage. This constitutes the next major growth point in the future mobile market. Hence, in order to maintain business competition in the mobile phone market, the enhancement or development of smart phone business will be an enormously important movement or action and then the manufacturers and wireless carriers who market mobile phones must endeavor to shape the consumers' purchase demands through advertising. Nowadays, customers have a variety of choices for buying mobile phones since various brands are available in the mobile markets all over the world. At the moment in Thailand, iPhone and Blackberry are exceedingly popular brands among consumers, teenagers and working age groups. Accordingly, this article compares the end users' purchase demand towards mobile phones between iPhone and Blackberry and incorporates a study of the influence of the advertising on consumers' feelings, attitudes, trust, and, finally, the overall demand of the customers.

Key words: advertising evoked feelings, attitudes toward brand, attitudes toward advertisement, cognitions, mobile phone, Purchase demand, smart phone, trust.

Paper type: Research paper

I. INTRODUCTION

During the past ten years, wireless mobile phones have become the extensive communication technology and several telecommunication businesses furnish services to millions of clients universally. These days, some electronic manufacturers diversify concentration into mobile phone production.

Industrialists market mobile phones through brochures and store displays at electronic retail outlets. Wireless manufacturers try to attach firsthand customers by advertising both brand names and specific models of products, each by means of exclusive features. Wireless telephones or smart mobile become probably the most obvious palpable constituents of a mobile service. They are also a tangible element of marketing. Smart phones are usually featured conspicuously in handset retail stores, mass advertisements in magazines and newspapers as well as company

brochures or pamphlets. This suggests to potential customers that such handsets may be more expensive than wireless service. Thus, selecting the telecommunication carrier may be a critical issue of the customer's decision to buy a wireless phone. Competing in the global mobile markets becomes a thought-provoking event. Nonetheless, very few academic research papers have hitherto studied the mobile phone-buying decision process and their competitive nature in the customers' minds. The purpose of this analytical paper is to explore this buying decision process.

Evaluating customers' purchasing intention on mobile phone, includes various complicated factors to account for, these may include macro- and micro economic conditions and the feelings of buyers when arriving at a purchasing decision. The macro-level mobile phone market is "Push driven." The Push-drive market is one in which the products design or characteristic is established before actually knowing consumer needs. Mobile phone market leaders usually know what kind of technologies and services consumers will want or want to see in the future. The possible forthcoming trend for mobile phones can be in the wireless phone that combines more features such as built-in cameras and MP3 music players. Currently, the enhancement of smart phones is leading the mobile market into a situation where the elementary need for communication is modified to contain new means of interaction, personal digital assistance and advanced applications. Analysts in minority foresee that the wireless phones may entirely converge as smart phones that have complete operating systems. Hence, communication is not only telephone or voice communication but also covers three more services i.e. 1) picture taking and text messaging, 2) internet services such as mobile e-mail services, social networking and web browsing and 3) different media services and the advanced features such as music, games, motion pictures, keypad for easy use of text messaging, touch sensitive and screen width.

One ought to investigate at micro-level, psychological courses of action concerned in purchasing decisions to comprehend why customers purchase specific brands and types of handsets. Advertising that consumers have seen may influence their purchasing decision.

If the users' minds think in positive ways such as, appreciating handsets with wide touch screens, the impression may affect consumers' attitudes on brand and perhaps on their purchasing behavior as well. Customers may think about and perhaps purchase the product since it works like the marketing message promised, to the customers. In the mobile phone market, both manufacturers and wireless service providers offer advertising and promotional campaigns to the customers. Service providers usually display a range of products from various manufacturers to appeal to different types of customers. The firms that could attract more customers' attentions would earn more competitive advantages than others. This study aims to investigate the effects of advertising on consumer purchasing intentions on smart phone and study through comparison the two brands (Blackberry and iPhone) of smart phone which are popular in Thailand.

II. RELATED THEORY

The Purchasing behavior of consumers may be influenced by advertising through various approaches. Commercial advertising may persuade persons to seek product variations, begin to experience and purchase the product finally and then develops into loyalty for particular products. Biehal et al (1992) stated that advertising can ameliorate to generate powerful brands and increase brand equity which can be describe as a recognition on brand among consumers. Brand equity can lead to customer loyalty.

Cognitions

Jengchung et al. (2008) point out that many researches in advertising in consumer behavior have focused on customers' cognitions, the thoughts or acquired knowledge of the consumers when exposed to advertising. Not every single advertisement works by convincing consumer beliefs about the brands or products. Some advertising primarily influences consumer emotions. All advertisements will affect at an emotional level, nonetheless most of them will perform at the cognitive level. Some researchers advise that cognitive beliefs comprise a critical factor that influences buying decisions since the beliefs and acceptances could affect the customers' determination of the products. Thinking and feeling are two different systems that provide independent effects. Feelings i.e. affection may stimulate the initial reactions toward an advertisement while the cognition or thought process may control later reactions. Previous studies also suggested that the affection plays an important role in purchasing decisions of the customers. In addition, advertisement can also lead to cognition. For example good after-sales service would support the customer to process advertising content in depth. Customers who are interested in an advertisement would be able to recall the ad-based figures from their memory better than those who are not.

Attitude toward advertising

Attitude is a conceptualized opinion that represents an individual's degree of like or dislike and measures or evaluates a thing in different ways. Fishbein and Ajzen (1975) stated that an attitude overall is a person's beliefs in a specific thing. Information, belief or opinion can be either positive or negative. An advertisement that is very convincing would enhance the customers to believe and gain confidence in a product, which in turn would influence the formation of a positive attitude toward that particular product.

A consumer's attitude toward advertising may lead to some direction of action such as buying the product, thus it may induce the actual purchase behavior. Attitudes toward advertisement directly influences purchase demand as mentioned in some studies.

Ad-evoked feelings

Ad-evoked feelings are immediately, often temporary moods that result from an advertisement. These are divergent from both cognitions and other attitudes. According to Hoch and Lowenstein (1991), the ad-evoked feelings may originate at unconscious level. Edell and Burke (1987) averred that observers may express advertisement evaluative terms like 'inspired' or 'affectionate', 'interesting'. These evaluative opinions or beliefs illustrate that, in addition to automatic affect-based responses, such opinions unswervingly affect the feelings toward the advertisement. Schwarz (1990) establishes that individuals sometimes incorrectly consider that momentary feelings are punctiliously considered cognitive or attitudinal reactions to a stimulus; thus, their purchase decisions are based on temporary feelings. Consequently, the essence of research of this paper advocates that transient feelings can influence purchase demand and contrast the ad-evoked feelings about the two popular mobiles.

Attitude toward brand

In addition to elaborate attitudes toward specific brands, there are a large numbers of handset manufacturers in the mobile phone marketplaces worldwide, and then different consumers have attitudes toward various brands of mobile handset. As stated by Jengchung et al. (2008) these attitudes may be as a result of the customers' own prior experience with such mobiles, as well as from their relatives and/or friends experiences, advertising may shape attitude toward the brands. This study article explore that purchase demand may be influenced and compared two brand attitudes.

Trust

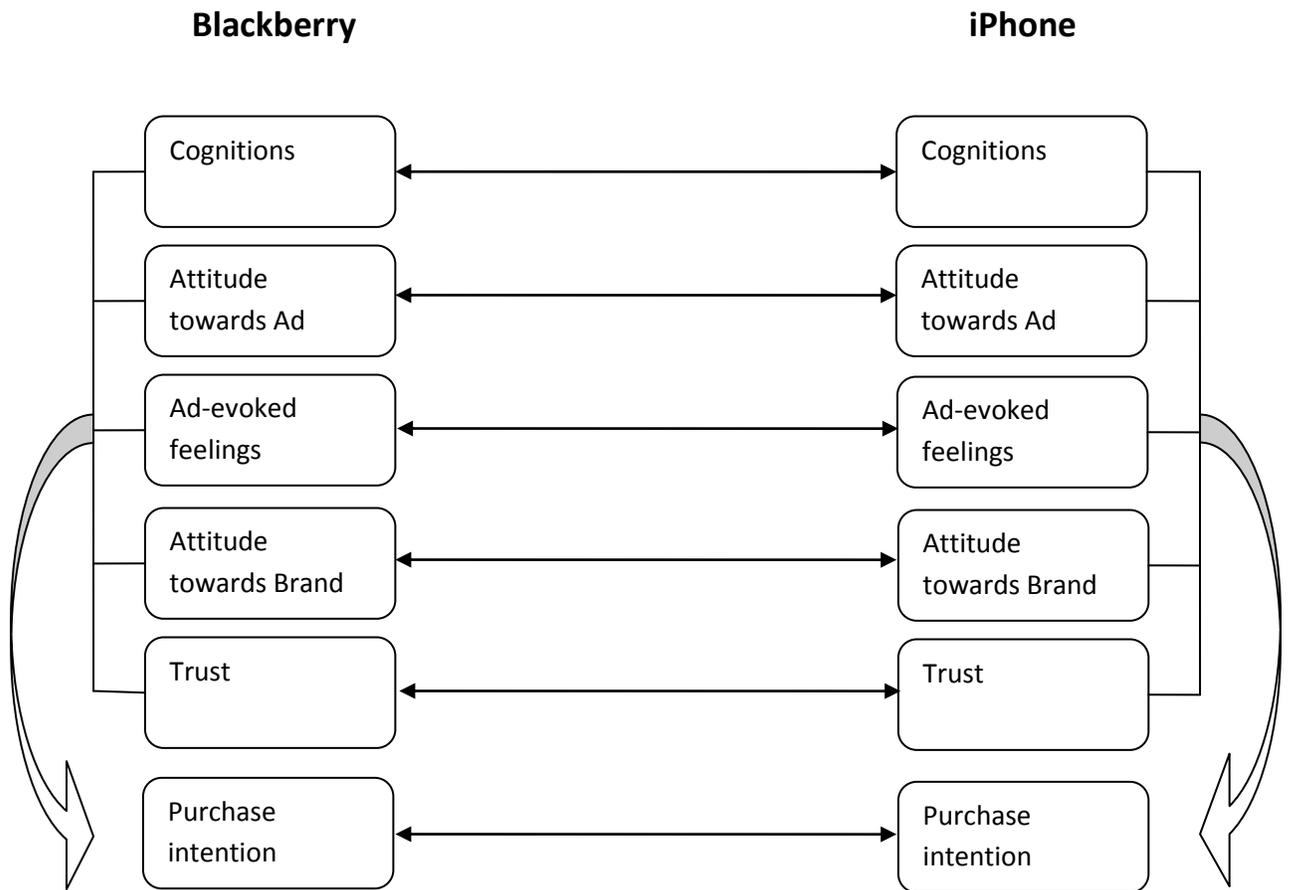
Generally trust consists of two exchange parties. The first party who trusts is referred to as truster or consumer while the other party is trusted and is referred to as the trustee or the supplying firm in this study. Arrow (1973), Lewis and Weigert (1985) mentioned that trust indicates uncertainty on the part of the truster about the reasons and behaviors of the trustee. Anderson and Weitz (1992) show that trust is the expectation that a supplying firm does not behave in an opportunistic way, even if the consumer cannot notice it. Subsequently, Ripperger (1998) argues that trust is a mechanism that absorbs uncertainty. Moreover, Moorman et al. (1993), Chaudhuri and Holbrook (2001) mentioned that the concept of trust is related with risk and is correlated with the importance of the exchange partner. On the other hand, Doney and Cannon (1997) affirmed that the opportunistic behavior in an event that makes consumers face social or economic hurt which would affect the trust of the customers finally.

Ripperger (1998) testified that trust is voluntary behavior because both exchange parties can determine whether to honor or betray the trust. Eventually as stated by Luhmann (2000), Mayer et al. (1995), trust can be applied with future events. In the words of Christina (2007), trust is described as the belief of a consumer in a purchase condition that can be characterized by certainty, vulnerability, sense of control and independent-mindedness of the transaction partners.

Purchase demand

Dodd, Monroe and Grewal (1991) defined purchase demand as that the readiness or enthusiasm and possibility for consumers to purchase a product. Yu Zhou (2009) mentioned that a customer's purchase decision involves both emotional and practical factors which affect his or her keenness or the likelihood for him or her to buy the product or service. However, the emotional factors play a big role. Lee (1990) averred that people influenced by Confucian philosophy have a keen wish to confirm their behavior with the patterns of their inference group.

III. METHODS



The above conceptual framework is designed to find out the differentiation of cognitions, attitude towards advertising, advertising evoked feelings, attitude towards brand, trust and purchase intention between the Blackberry and iPhone brands. Moreover, it is developed to investigate cognition, attitudes towards advertising, advertising evoked feelings, attitude towards brand. Trust has positive influence on the purchase intention of these branded smart phones.

Hypothesis 1

H₀1: There is no difference between the Cognition of Blackberry and the Cognition of iPhone.

H_a1: There is a difference between the Cognition of Blackberry and the Cognition of iPhone.

Hypothesis 2

H₀2: There is no difference between Attitude towards Advertising on Blackberry and Attitude towards Advertising on iPhone.

H_a2: There is a difference between Attitude towards Advertising on Blackberry and Attitude towards Advertising on iPhone.

Hypothesis 3

H₀3: There is no difference between Advertising evoked feelings on Blackberry and Advertising evoked feelings on iPhone.

H_a3: There is a difference between Advertising evoked feelings on Blackberry and Advertising evoked feelings on iPhone.

Hypothesis 4

H₀4: There is no difference between Attitude towards Blackberry Brand and Attitude towards Apple iPhone Brand.

H_a4: There is a difference between Attitude towards Blackberry Brand and Attitude towards Apple iPhone Brand.

Hypothesis 5

H₀5: There is no difference between Trust on Blackberry and Trust on iPhone.

H_a5: There is a difference between Trust on Blackberry and Trust on iPhone.

Hypothesis 6

H₀6: Cognition, Attitude towards Ad, Ad-evoked feelings, Attitude towards Brand and Trust on Blackberry has no positive influence on Purchase Intention of Blackberry.

H_a6: Cognition, Attitude towards Ad, Ad-evoked feelings, Attitude towards Brand and Trust on Blackberry have a positive influence on Purchase Intention of Blackberry.

Hypothesis 7

H₀7: Cognition, Attitude towards Ad, Ad-evoked feelings, Attitude towards Brand and Trust on iPhone have no positive influence on Purchase Intention of iPhone.

H_a7: Cognition, Attitude towards Ad, Ad-evoked feelings, Attitude towards Brand and Trust on iPhone have a positive influence on Purchase Intention of iPhone.

Hypothesis 8

H₀8: There is no difference between Purchase intention on Blackberry and Purchase intention on iPhone.

H_a8: There is a difference between Purchase intention on Blackberry and Purchase intention on iPhone.

Primary data was collected for analysis and was explained through a descriptive research approach. The author used judgment sampling and convenience sampling to test the respondents randomly. University students of one of the largest universities in Thailand were sampled in the existing study. The questionnaires were distributed to sampling units of 275 respondents. The sample survey was employed, and indicated a confidence level of 95 percent. For the investigation of accumulated data, the Statistical Package for Social Science (SPSS) program was applied.

The university students were chosen as the target population because of their knowledgeable standards in smart phone usage and applications. Furthermore, modernization of smart phone and conversion to latest models is fashionable among their ages. Buying practices are recurrently noticed within these institutional students' age groups.

Sampling Procedure

The university students were chosen randomly as respondents and the self-administered questionnaire was utilized for the current research. The following are the sampling procedures for this research.

- 1) **Simple Random Sampling:** To get the equal chance or probability of each respondent in the sample, the author employed the simple random sampling technique and distributed the questionnaires to the university students who are familiar with advanced technological smart phones.
- 2) **Convenience Sampling:** The data was gathered from the students who were willing and able to answer the questionnaires.

Closed-formed and open-ended questions were developed. Ravi and Pascale (2005) stated that fast decision making assisted the respondents by their being able to choose among several

given alternatives in the closed-formed questions. On the other hand open-ended questions were provided for opinions, real feeling assessments and feedback from the respondents.

The research of measuring attitudes is suitable to the Likert scale. The respondents simply directed their own attitudes by selecting how strongly they agree or disagree with Likert scaled statement of question.

For inferential analysis, Pearson Product Moment Coefficient Correlation (Bivariate) was applied to study the relation or influence between the variables and Paired Sample t-test was used to find out the difference between two variables in which the data was collected from identical twins or same person.

IV. RESULTS

The largest percentage of the respondents' age was 21-30 years old, 71% or 195 respondents, second were aged 15-20 years, 27% or 73 respondents and the rest, 2% or 7 people were from 31-40 age range, the lowest percentage among respondents' age groups.

The research finding showed 52% (143) of the respondents were female and 48% (132) of the respondents were male; from these (95%) 260 students were single and the reminder (5%) 15, were married.

The analysis of the research pointed out that 77% (213) of the sampling units from the bachelor degree and the remaining 23% (62) of the respondents were from the master degree level.

The result outcome illustrated that (49%) 134 persons of the respondents received total monthly incomes between 10,000 – 20,000 THB, (27%) 74 people acquired below 10,000 THB, other (13%) 35 students obtained 20,001–30,000 THB, (6%) 17 respondents earned 30,001 – 40,000 THB and the rest (5%) 15 people earned above 50,000 THB.

From the analysis of data, there is a difference between Cognition of Blackberry and Cognition of iPhone because the acquired knowledge from these smart phone advertisings is not the same. iPhone and Blackberry used the bar type mobile body and had different command control settings in their operation systems to operate. The Blackberry mobile phone used BB OS and iPhone used IOS. The developments of mobile phone technologies also had some differences: iPhone used IPS LCD (In Panel Switching Liquid Crystal Display) with white LED background system, and the iPhone has higher resolution in images, and the iPhone provided the LCD with touch screen technology. On the other hand, Blackberry used the Transmissive TFT LCD (Thin Flat Transistor Liquid Crystal Display) high resolution system and it used the touch sensitive optical trackpad system and Blackberry used the keypad for typing. Blackberry and iPhone both use using different mobile processors: Blackberry's is based on the XScale mobile processor and provides different speeds of the mobile processor while Apple uses the Apple A

series mobile processor with different speeds of mobile processors. Apple has Siri which is its voice command; consumers can control all settings, applications and they can get information from the Internet. Blackberry also has voice commands through voice dialing but iPhone's Siri application is more useful and better than Blackberry's voice dialing.

There is a difference between Attitudes towards Advertising on Blackberry and Attitudes towards Advertising on iPhone. Some consumers desire Blackberry and some prefer iPhone more than Blackberry. Blackberry advertising is more interested in advertisement creation and emphasizes the mobile phone's complements and it shows how smart Blackberry is. iPhone's advertising is more detailed about the phone itself. The advertising profiles two types of customers, first, the customer who wants to use the mobile phone in gentlemen style which is Blackberry, and second a customer who wants to use the mobile phone as an elegant mobile phone such as iPhone. The aims of consumers' using smart phone are also different, consumers choose the Blackberry because it looks smart and gentle, while Blackberry has high security systems in the Operation System. Consumers choose the iPhone because it seems that they are using smart advanced technology which is user friendly.

There is a difference between advertising evoked feelings on Blackberry and Advertising evoked feelings on iPhone. The Blackberry's loyal consumers desire the new products of Blackberry and they become the new technology's consumers. This is because they are Blackberry loyal fans and they accept that Blackberry is better than iPhone. The consumers of Apple's product iPhone accept iPhone as one of the smartest mobile phones in the mobile phone world and the consumers of iPhone like to use the Apple's IOS, so whatever mobile phone Apple produces, they become iPhone users.

There is a difference between attitudes towards Blackberry Brand and Attitudes towards Apple iPhone Brand. In a competitive technology-world brand name is most important and many people think about the latest technology history as well. Between Blackberry and Apple in the market share, many respondents favored iPhone over Blackberry, which means after 2012, iPhone has beaten Blackberry in the mobile market.

There is a difference between Trust on Blackberry and Trust on iPhone because Blackberry and iPhone use different mobile operating system, that's why they have different functions and systems. Many people look at the mobile phone's function and process. iPhone's processing time is faster than Blackberry, but for high security Blackberry is more secure than iPhone.

Cognition, Attitude towards Ad, Ad-evoked feelings, Attitude towards Brand and Trust on Blackberry has a moderate positive influence on Purchase Intention of Blackberry because some people like to use the Keypad for typing and Blackberry has a high security in its mobile operation system.

Cognition, Attitude towards Ad, Ad-evoked feelings, Attitude towards Brand and Trust on iPhone has a moderate positive influence on Purchase Intention of iPhone because iPhone has more advanced technology than other smart phones and IOS provides much information to consumers and consumers can understand it easily.

There is a difference between Purchase intention on Blackberry and Purchase intention on iPhone because cognition, Attitude towards Ad, Ad-evoked feelings, Attitude towards Brand and Trust on Blackberry and iPhone are not the same. Moreover, many people think about the mobile processing and mobile function, after that they decide to purchase mobile phone. So many respondent people choose the iPhone because iPhone's body is more attractive, have more functions, and have high technology.

V. CONCLUSION AND FUTURE STUDY

In the analysis of this research, Blackberry and iPhone are popular mobile phones in the market during the current years. Mobile phone purchase intention have different results on Blackberry and iPhone because the consumers have different cognitions, discrete attitudes towards brands and advertising, feelings evoked from the advertising give dissimilar tastes, trust is also not the same and they came from different industries, which is different usage application.

Moreover there are many different functions and systems which are according to the mobile operation systems and manufacturers. Different systems and functions can be attractive to different consumers, some people have loyalty on the brands and some people like to have more advanced technology mobile phones. Therefore, many people choose iPhone because iPhone uses the touch screen technology, look slim and smart, and provide more functions and user friendly applications. For the Blackberry, some people choose Blackberry because they want more smart design, more secure and Keypad for typing as many people have a problem with touch screen typing.

According to the research conducted, the analysis was about the user demand on Blackberry and iPhone which measured the purchase intention of the Blackberry and iPhone in the mobile market. The researcher suggests that further study in mobile market, can be done in terms of "the analysis of Android, IOS and BB" and "the most successful brand in mobile market". Because in recent years the Android operation system based mobiles are very successful and among the mobile brands there are many manufacturers which are based on the different systems and different mobile operation systems. Moreover, the research design can be applied for the future advanced technology products like iPad, sony and Samsung tablets. Finally it can also be suitable for comparative studies of purchase intention towards different products like smart phone vs. tablet PC of any different brand.

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An Investigation of Fits and Intrinsic Motivation on Employee's Performance: A Case Study of FMCG Organizations in Thailand

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ABSTRACT

The Fast Moving Consumer Goods (FMCG) industry is one of the biggest industries in the world in which most are multinational corporations. There are many FMCG multinational corporations in Thailand. Core activities of FMCG corporations are supply chain operations in which lots of business activities are relating to many tiers of suppliers and customers. As the cooperation among parties is human activities, the firm performance would certainly rely on the quality of the employees. The employee's perception of fits towards organizational environment is relevant to the level of efforts in performance. This research aims to study the relationship between perceived fits of employees in various dimensions and their working performances. In order to understand such relationship in depth, intrinsic motivation is incorporated into the model as mediating factors. Self-determination theory and work meaningfulness are emphasized as intrinsic motivating factors. The questionnaire survey was used and 210 sets of data were collected from Thai employees who work in FMCG firms. Structural Equation Modeling was used to analyze survey data. The significant relationship between fits, intrinsic motivation, and performance of employees were found.

Key words: Intrinsic Motivation, Performance, Self-determination Theory, Work Meaningfulness

Introduction

Organizations challengingly encounter with complex business environment nowadays because of the impact of borderless global market. Most organizations seek for new market in order to capture more demands of customers. The number of multinational corporations (MNCs) has been increased continuously in Thailand especially in Fast Moving Consumer Goods (FMCG) industry. These organizations have to compete with their great responsibility to succeed in global market. Performance of organization is an indicator of success and performance of organization is mostly driven by performance of employee. Moreover, FMCG firms need a large number of employees in performing supply chain operations in which lots of core activities are relating to many tiers of suppliers and customers. Performance of employee has been consistently an important work-related outcome of quality of employees. It is an important theme

in business and management research due to its critical impact to both organizational level outcome and individual level outcome (Morrison, 1994; Lado & Wilson, 1994). Many studies have investigated the antecedents of performance at individual level and person-environment fit is an interesting concept as an antecedent of performance recently (Adkins, Ravlin & Meglino, 1996; Kristof, 1996). Employees who fit well with organizational environment would perform better than those employees who do not. Various dimensions of person-environment fit were introduced in many studies with the aim of prediction of employee's performance but some found insignificant relationship of fits and performance. Therefore, this study aims to study the relationship between perceived fits of employees in various dimensions and their performances by having intrinsic motivation as mediator.

LITERATURE REVIEW

2.1 Person-environment Fit

Person-environment fit is an interesting concept of understanding attitude and behavior of employee in particular organizational environment because it is referred to the congruence and compatibility between the two such as person and organization (Chatman, 1989). Person-environment fit consists of various dimensions that can explain entire impact of organizational environment to performance of employee. Dimensions of person-environment fit are person-organization fit, person-job fit, person-group fit, and person-supervisor fit (Adkins & Caldwell, 2004; Kristof, 1996; Kristof-Brown, Zimmerman & Johnson, 2005). Person-organization fit explains the congruence between employee and organization in terms of value, goal, and norm (Chatman, 1989; Cable & Judge, 1995). Person-job fit is about the congruence between qualification of employee and demand of job (Edwards, 1991; Kristof-Brown, 2000). Person-group fit refers to the compatibility between employee and colleagues or work groups (Adkins & Caldwell, 2004; Werbel & Gilliland, 1999). Person-supervisor fit explains the compatibility between employee and immediate supervisor (Kristof-Brown et al., 2005). These dimensions of person-environment fit were simultaneously investigated in previous studies by hypothesizing relationship between fit and performance of employee but some studies found no relationship. They emphasized on each dimension of person-environment fit and investigated separately that might not explain the entire impact of organizational environment to performance of employee.

2.2 Intrinsic Motivation

Intrinsic motivation is the motivation that arises when an individual has performed activity in order to experience pleasant. The importance of intrinsic motivation that may explain why person-environment fit relates to performances was rarely emphasized in previous studies. Such that, two theories of intrinsic motivations are reviewed in this study which are self-determination theory (SDT) and work meaningfulness. Self-determination theory (SDT) explains the innate psychological needs of people and consists of three dimensions that are fulfilment of need for autonomy, fulfilment of need for relatedness, and fulfilment of need for competence (Deci, Connell & Ryan, 1989). Three dimensions are explained in working circumstance because they

refer to autonomy at work, good relationship with others, and desire for achievement. Self-determination theory with its three dimensions was examined in many previous studies with the emphasis of employee's fulfilment of needs and performance but few studies explained relationship between person-environment fit and performance of employees by having self-determination theory as mediator (Baard, Deci & Ryan, 2004; Gagne & Deci, 2005). Another intrinsic motivation is work meaningfulness, it is a psychological state of employee who experience meaningfulness at work by facilitating personal growth and work motivation (May, Gilson & Harter, 2004). Work meaningfulness concept is categorized into three dimensions which are positive meaning, meaning-making through work, and greater good motivation. Three dimensions explain a meaningful workplace where employee is encouraged and supported to achieve the integrated wholeness of life. Meaningfulness at work usually occurs from a particular job when an individual understands how work or job contributes to meaning of life (Vuori, San & Kira, 2012). Regarding to this, these two intrinsic motivation theories are incorporated into research model of this study.

2.3 Performance

Performance of employee has gained the attention in business and management research because performance of employee directly relates to organizational performance (Morrison, 1994). Performance refers to activities that are required and described in formal job description. Organization seeks for employee who performs at high level of effort and employee is effectively utilized in performing job. Performance is applied in earlier studies as a consequence of person-environment fit and they emphasized on quantity, quality and efficiency of performing job (Tsui, Pearce, Porter & Tripoli, 1997). But there are still inconclusive findings of relationship between person-environment fit and performance of employees, therefore, performance is investigated in this study as work-related outcome. From the literature review, the hypotheses were derived as following:

- H1:** Person-environment fit is positively related to self-determination theory and work meaningfulness.
- H1a:** Person-organization fit is positively related to self-determination theory and work meaningfulness.
- H1b:** Person-job fit is positively related to self-determination theory and work meaningfulness.
- H1c:** Person-group fit is positively related to self-determination theory and work meaningfulness.
- H1d:** Person-supervisor fit is positively related to self-determination theory and work meaningfulness.
- H2:** Self-determination theory is positively related to performance.
- H3:** Work meaningfulness is positively related to performance.
- H4:** Self-determination theory is positively related to work meaningfulness.

METHODS

Thai employees who are currently working in FMCG industry in Thailand was selected as research samples. Non-probability sampling and convenience sampling technique were applied in collection of data. Data was collected by using questionnaire survey and 250 sets of questionnaire were distributed. Two hundred and ten questionnaires were returned which were yielded a response rate of 84%. Each variable was measured by previously developed questions with 6-point Likert scale which were ranged from (1) – strongly disagree to (6) – strongly agree. Moreover, dyadic method was used to accurately collect data from focal employees and their supervisors. Supervisors answered questions about performance of their subordinates in questionnaire set A and employees answered questions about person-environment fit, self-determination theory and work meaningfulness in another set of questionnaire that was questionnaire set B.

Person-environment fit with twenty measurement items concerning person-organization fit, person-job fit, person-group fit and person-supervisor fit was adopted from Cable and Judge (1996), Lauver and Kristof-Brown (2001), Cable and DeRue (2002) ,and Scandura, Graen and Novak (1986). Examples of items are “The things that you value in life are very similar to the things that your organization values”, “There is a good fit between what your job offers you and what you are looking for in a job”, “Your personal values match your work group member’s value”, and “Your working relationship with your manager is extremely effective”. Self-determination theory was measured by fourteen items from Van den Broeck and associates (2008). Examples of items are “At work you feel that you work what you want to”, “At work you can talk to other about what really matters to you”, and “You have mastered the tasks at work well”. Work meaningfulness was measured by ten items from Steger, Dik and Duffy (2012). Examples of items are “You have found a meaningful career”, “You view your work as contributing to your personal growth”, and “You know your work makes a positive difference in the world”. Performance was measured by ten items from William and Anderson (1991). Example of items is “Employee’s quality of work is higher than average”.

RESULTS

The exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were performed to determine the degree of model fit as well as the sufficiency in the factor loadings. The results of these analyses were at satisfactory level and structural equation modeling (SEM) was proceeded to test hypotheses. The hypothesized model with distinct dimensions of person-environment fit showed a good fit to the data. The results were; $\chi^2/df = 2.772$, $p < 0.001$; GFI = 0.931, RMSEA = 0.92, NFI = 0.966, RFI = 0.941, IFI = 0.978, TLI = 0.961 and CFI = 0.978. Consequently, the standardized path coefficients of this model supported almost all of the proposed hypotheses. As shown in Figure 1, the results supported hypothesis 1a. The relationship between person-organization fit and self-determination theory is positive and significant ($\beta = 0.14$, $p < 0.01$).

Similarly, the relationship between person-organization fit and work meaningfulness is positive and significant ($\beta = 0.18, p < 0.001$). The results also showed that another three dimensions of person-environment fit that are person-job fit, person-group fit, and person-supervisor fit were positively and significantly related to self-determination theory ($\beta = 0.26, p < 0.001$; $\beta = 0.09, p < 0.01$ and $\beta = 0.40, p < 0.001$), supporting part of H1b, H1c and H1d. But these three dimensions of person-environment fit were not significantly related to work meaningfulness. Both self-determination theory and work meaningfulness are positively related to performance of employee ($\beta = 0.27, p < 0.05$ and $\beta = 0.77, p < 0.001$), supporting H2 and H3. Moreover, the relationship between self-determination theory and work meaningfulness is positive and significant ($\beta = 0.39, p < 0.001$), supporting H4.

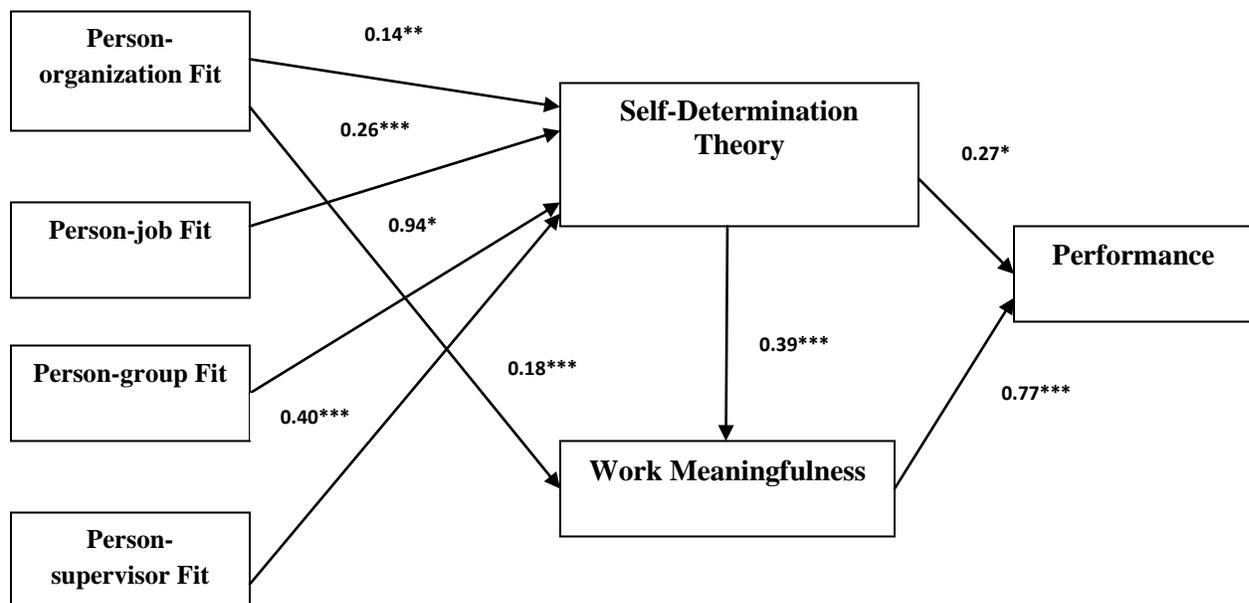


Figure 1: *Structural Model of Person-Environment Fit*

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

CONCLUSION AND FUTURE WORK

This study revealed the multidimensional construct of person-environment fit that there is a significant and positive relationship with performance of employee by having intrinsic motivation which are self-determination theory and work meaningfulness as mediating effects. It showed that dimensions of person-environment fit should be integrated and investigated together in order to better explain the entire organizational environment and performance of employee. The findings also suggested that when employees perceive that they are compatible with organizational environment such as organization, job, work group,

and supervisor, their fulfilment of need for autonomy, relatedness, and competence will be met together with their lives will become meaningful. Accordingly, the level of quality, quantity and efficiency of their performances will increase. Some dimensions of person-environment fit which are person-job fit, person-group fit, and person-supervisor fit were not found to be related to work meaningfulness but person-organization fit showed the significant relationship to work meaningfulness. Employees may feel that their lives are more meaningful when employees perceive that they are congruence with organization in the sense of values, norms and goals. Moreover, fulfilment of need for autonomy, relatedness, and competence are the predictors of work meaningfulness of employees. However, future study should incorporate additional consequences of fit such as organizational citizenship behaviour and organizational commitment because fits may result to other work-related outcomes and this would greatly contribute to this area of research and understand behaviour of employee better.

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Examining the association between customer satisfaction and repurchase behavior in fashion retailing

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ABSTRACT

In general, when customers are satisfied with a product, service, and/or brand, the possibility of customer repurchase is expected to be stronger. However, previous research indicates that this relationship between customer satisfaction and customer repurchase is difficult to predict. This current research aims to examine this issue within the fashion-clothing retail context by proposing five mediating variables to add further predictive power: information sharing, customer trust, customer commitment, perceived product value, and perceived in-store service value. Fashion-clothing retail shops in Bangkok, Thailand, were chosen as the context for a survey of 374 existing customers. Structural equation modeling was used for data analysis.

The findings indicate that satisfied customers will have a higher chance of repurchase when the customers' trust toward the retail shop is higher, which in turn results in higher commitment with the shop. Specifically, two types of mediation—partial and complete—are found. When either customer trust or customer commitment mediates the customer satisfaction-repurchase relationship, partial mediation is supported. However, when the customer satisfaction-repurchase behavior relationship is first mediated by customer trust and then mediated by customer commitment, complete mediation is supported. More specifically, the customer satisfaction-repurchase relationship is reduced to non-statistical significance in the latter situation. Variance in repurchase behavior increases from 17% in the non-mediated model to 38% in the fully mediated model.

With respect to this current research, the findings indicate modest implications for fashion retail managers. While the idea of trust and commitment are the key foci for managers, the findings also demonstrate the complex effect of moderating variables. Accordingly, there is a need to further develop theory in explaining and predicting the impact of customer satisfaction on repurchase behavior in fashion retailing. In addition, while the findings from the quantitative survey did not support a significant mediating effect of perceived value, the in-depth interviews indicated that this construct plays a substantial role. Accordingly, perceived value should be further investigated in future research.

Keywords: *customer satisfaction, repurchase behavior, information sharing, customer trust, customer commitment, product values, in-store service value*

INTRODUCTION

How to attract customers to repurchase products or services is a question that retailers pay considerable attention to. This attraction lies in that when customers return, retailers will have lower costs due to a decrease in marketing costs and a higher sales volume of increasing purchases. Consequently, retailers can make more profit which leads to greater competitive advantage (Mittal & Kamakura, 2001; Voss, Godfrey & Seiders, 2010; Wen, Prybutok & Xu, 2011). With respect to the importance of customers' repurchase, previous research generally recognizes the major role of customer satisfaction (Curtis, 2009; Cooil *et al.*, 2007; Gustafsson *et al.*, 2005; Mittal & Kamakura, 2001). This is because when customers have higher satisfaction from shopping at a particular shop, they often return to buy products at the same shop (e.g. Kim *et al.*, 2012; Mittal & Kamakura, 2001; Tsai *et al.*, 2006).

In addition, Tsai *et al.* (2006) indicate that satisfied customers are more likely to continue purchasing products and services from the same shops than dissatisfied ones. The repurchasing of satisfied customers can provide many benefits to the retailers including customers' willingness to pay premium price and the recruitment of new customers through positive word of mouth and good recommendations (Curtis *et al.*, 2012; Hume & Mort, 2008).

However, academics and practitioners have found diverse results in terms of the explanatory and predictive power of satisfaction on repurchase response. Specifically, the extant research has reviewed and found various degrees of the association between customer satisfaction and repurchase behavior from a statistically positive and significant relationship to insignificant effects (Mittal & Kamakura, 2001; Seiders *et al.*, 2005; Tuu & Olsen, 2010; Voss, Godfrey & Seiders, 2010). As a result, customer satisfaction-repurchase behavior relationship may need additional explanatory variables in order to enhance the explanation and prediction power of satisfaction on repurchase response. Therefore, the research problem is to investigate the

relationship between customer satisfaction and repurchase behavior. In response to calls for deeper insight into the relationship, the research question of this research is: How do mediating variables impact the relationship between customer satisfaction and repurchase behavior?

Specifically, this research reviews the literature and develops a conceptual framework and hypotheses for empirical research. From the literature review, the effect of satisfaction on repurchase behavior is proposed to be mediated by five following variables: *information sharing, customer trust in the shop, customer commitment to the shop, product value, and in-store service value.*

Moreover, this research focuses on shoppers of fashion-clothing retail to understand customer repurchase behavior. This is because fashion clothing is categorized as shopping products in which customers are more involved when making purchases (Hourigan & Bougoure, 2012). In other words, when shoppers buy fashion clothes, they tend to spend time in searching for information about the products and comparing prices as well as the benefits between different shops before deciding to purchase the products. As a result, the patterns and reasons to repurchase fashion clothing can be observed and investigated from fashion-clothing retail shoppers.

This study, therefore, proposes to: 1) develop a modified conceptual model for the study of the relationship between customer satisfaction and repurchase behavior in fashion-clothing retail shops in Thailand, and 2) investigate the mediating variables on the relationship between customer satisfaction and repurchase behavior. Practitioners may then use the findings from this research to make decisions on the market strategies that practitioners should develop in order to improve customer repurchase rate.

LITERATURE REVIEW AND RESEARCH HYPOTHESES

2.1 Customer Satisfaction and Repurchase Behavior Relationship

Generally, repurchase behavior is the concept of customer purchasing again after an initial purchase has been made (Akhter, 2010; Seider *et al.*, 2005; Voss, Godfrey & Seiders, 2010). Seider *et al.*, (2005) define repurchase behavior as a customer purchases his/her product from the same shop where he/she ever bought it before. Regarding customer satisfaction, it means the overall pleasure perceived by the customer from shopping at the shop (e.g. Akhter, 2010; Curtis, 2009). Research on the relationship between customer satisfaction and repurchase behavior has been consistently conducted over the years (Wen, Prybutok & Xu, 2011). There are two main views among scholars in terms of the customer satisfaction-repurchase behavior relationship (Mittal & Kamakura, 2001; Olsen, 2007; Seiders *et al.*, 2005; Voss, Godfrey & Seiders, 2010). In general, several researchers have reported that customer satisfaction has a strong effect on customer repurchase rate (e.g. Bolton *et al.*, 2000; Curtis *et al.*, 2012; Ercis *et al.*, 2012; Kim *et*

al., 2012). When customers are satisfied with a particular shop, it is likely that they would purchase products from the same shops again.

Likewise, in the fashion-clothing retail, Curtis (2009) and Curtis *et al.* (2012) studied respondents who purchase jeans and found the positive relationship between customer satisfaction and repurchase behavior. However, the studies also indicate that this relationship is difficult to predict because there are many factors that affect the relationship. For example, customers could be very satisfied with their experience and quality of the service from a particular shop, but would not actually repurchase due to different factors such as high price.

In contrast, some studies found weak or negative relationship between customer satisfaction and repurchase behavior (e.g. Cronin & Taylor, 1992; Hellier *et al.*, 2003; Mittal & Kamakura, 2001; Sandvik *et al.*, 1997; Van Doorn & Verhoef, 2008). Cronin and Taylor (1992) indicate that although a significant relationship between customer satisfaction and repurchase behavior exists, this relationship appears to be weak because path coefficient is 0.36 ($p < 0.05$) for this relationship. According to Reichheld (1993), the researcher conducted a study on automobile owners and supported Cronin and Taylor's (1992) study that customer satisfaction-repurchase behavior appears to be weak and complicated. Reichheld (1993) indicates that although 85-90% of customers are satisfied with the chosen brand, only 40% of customers repurchase the brand. Therefore, Reichheld and Sasser (1990) indicate that although regular customers are typically satisfied, satisfaction does not universally translate into repurchase behavior.

In addition, Jones and Sasser (1995) similarly state that satisfied customers can still switch shops, and therefore higher customer satisfaction does not guarantee higher customer repurchase rate. Moreover, current evidence suggests that satisfaction has no direct effect on repurchase behavior under certain situations, for example, impulsive buying and when customers are offered with better promotions from other shops (e.g. Seiders *et al.*, 2005; Verhoef, 2003; Voss, Godfrey & Seiders, 2010).

As seen from previous studies, there are actually mixed results concerning the relationship between customer satisfaction and repurchase behavior. While a few researchers argue that the relationship is weak or is not significant at all, most researchers generally indicate a very strong relationship between the two constructs. When the degree of overall pleasure of shopping products and services at a shop is high, the level of customer repurchase rate also increases. Consequently, when retailers identify customer repurchase as a key factor of firm profitability, it is possible to provide customer satisfaction as the independent factor that leads to higher repurchase rate. Therefore, there is a possibility to propose the first hypothesis as follows:

Hypothesis 1: Customer satisfaction has a positive association with repurchase behavior.

2.2 Mediating Variables

2.2.1 Information Sharing

Information sharing refers to the information shared to their customers by the shops (Godfrey, Seiders & Voss, 2011; Prasad & Aryasri, 2008). Leeman and Reynolds (2012) define information sharing as the formal or informal sharing of meaningful and timely information during the relationship between retailers and customers. In this study, information sharing is proposed to be a mediator between customer satisfaction and repurchase behavior because previous research have indicated a statistically positive relationship among the customer satisfaction, information sharing, and repurchase behavior

First, this research found a positive relationship between customer satisfaction and information sharing from the shops to their customers (e.g. Godfrey, Seiders & Voss, 2011; Prasad & Aryasri, 2008, 2011). For example, Godfrey, Seiders, and Voss (2011) indicate that sellers usually exchange product information (i.e. new arrival, discount, promotional offer) with satisfied customers because satisfied customers are more open to receive the information from the shops, have better response, and are willing to exchange useful information about products and services than dissatisfied ones. As a result, the researchers suggest that there is a positive association between satisfaction and the degree of shared information with the shops.

Second, existing studies generally indicate that the information sharing is positively and significantly associated with customer retention (Duncan & Moriarty, 1998; Lages, Lages & Lages, 2005; Wirtz & Miller, 1977).

Although previous research indicates a statistically positive relationship of information sharing on both customer satisfaction and repurchase behavior, no known research has investigated information sharing as a mediator on customer satisfaction-repurchase behavior relationship in the fashion-clothing retail. Therefore, it is possible that the relationship between customer satisfaction and repurchase behavior can be mediated by information sharing. As a result, the second hypothesis is proposed as follows:

Hypothesis 2: Information sharing mediates the relationship between customer satisfaction and repurchase behavior.

2.2.2 Customer Trust in the Shop

Customer trust has been defined as “a willingness to rely on an exchange partner in whom one has confidence” (Moorman *et al.*, 1992) and as “one party’s confidence in an exchange partner’s reliability and integrity” (Morgan & Hunt, 1994). This research found positive relationships

among customer trust, customer satisfaction, and repurchase behavior. Geyskens, Steenkamp, and Kumar (1999) state that satisfying shopping experience could contribute to perceptions of trust. In other words, satisfaction is an antecedent to trust (Garbarino & Johnson, 1999; Ercis *et al.*, 2012; Twing-Kwong *et al.*, 2013; Curtis, 2009). Customer satisfaction is viewed as an essential construct for created customer trust (Ercis *et al.*, 2012). In all, this research proposes that the more customers trust the fashion-clothing shops, the more he or she feels the need to go back to buy fashion clothing from the same shops. It could be concluded that trust could mediate the relationship between customer satisfaction and repurchase behavior. Therefore, this research proposes the third hypothesis as follows:

Hypothesis 3: Customer trust in the shop mediates the relationship between customer satisfaction and repurchase behavior.

2.2.3 Customer Commitment to the Shop

Existing literatures define commitment as a desire to maintain a relationship (Morgan & Hunt, 1994), a pledge of continuity between parties (Dweyer *et al.*, 1987), and the sacrifice or potential for sacrifice if a relationship ends (Anderson & Weitz, 1992). In addition, commitment refers to an enduring desire to continue the relationship with a shop (Twing-Kwong *et al.*, 2013). The importance of customer commitment for explaining customer satisfaction-repurchase behavior relationship has been recognized in the service and retail studies including fashion-clothing retail (Curtis, 2009; Curtis *et al.*, 2012; Ercis *et al.*, 2012). With regard to satisfaction-customer commitment relationship, previous research indicates that satisfaction is related to commitment (e.g. Curtis, 2009; Ercis *et al.*, 2012). In general, satisfied customers tend to commit to sellers and are willing to improve and sustain an affective bond with the shop that make consumers feel satisfied and enjoyable (e.g. Ercis *et al.*, 2012; Nusair, 2007). For customer commitment-repurchase behavior relationship, several studies show that committed customers have a much stronger behavior to repurchase in a regular shop than general customers. (e.g. Curtis, 2009; Morgan & Hunt, 1994; Wong & Sohal, 2002). Based on the association among these variables, it seems plausible to hypothesize that customer commitment could be proposed as a mediator between customer satisfaction and repurchase behavior.

Hypothesis 4: Customer commitment to the shop mediates the relationship between customer satisfactions and repurchases behavior.

2.2.4 Customer Trust and Customer Commitment

There is ample theoretical and conceptual support that trust is a direct antecedent of commitment in customer-retailer relationship (e.g. Garbarino & Johnson, 1999; Moorman, Deshpandé &

Zaltman, 1993; Moorman, Zaltman & Deshpande, 1992; Morgan & Hunt, 1994; Nusair, 2007). Fullerton (2011) indicates that in a buyer-seller relationship, customer commitment cannot be developed without customer trust. In retailing industry, customer trust is essential to the development of effective relationship between customers and retailers (Morgan and Hunt, 1994). The rationale is that over time, customers would become committed to the retailers that they trust (Nusair, 2007). According to the literature review, trust and commitment therefore lead directly to higher repurchase rate and customer trust is a major determinant of customer commitment. Furthermore, trust influences customer commitment and repurchase behavior based on the retailer who is perceived to be most trustworthy. Therefore, this research proposes H5 as follows:

Hypothesis 5: Relationship between customer satisfaction and repurchase behavior is first mediated by customer trust and then mediated by customer commitment.

2.2.5 Perceived Shopping Values

Perceived shopping value is defined as customer's overall assessment of the utility of a product based on perceptions of what is received and what is given (Zeithaml, Berry & Parasuraman, 1996). In the apparel retail context, customers' perceived value actually focuses on shopping values (Davis & Hodges, 2012; Sweeney & Soutar, 2001; Terblanche & Boshoff, 2004). Perceived shopping value includes product and in-store service values (Davis & Hodges, 2012; Seo & Lee, 2008; Terblanche & Boshoff, 2004). Therefore, perceived shopping value in this research is composed of product and service.

This research found that customer's perceived shopping value and satisfaction are correlated. Previous research shows that perceived value is positively influenced by customer satisfaction (Cronin *et al.*, 2000; Sweeney, Soutar & Johnson, 1999). In addition, the positive relationship between customer's perceived shopping value and repurchase behavior is found (Patterson & Spreng, 1997; Sweeney & Soutar, 2001). It could be concluded that perceived shopping values are the consequences of customer satisfaction, which lead to higher repurchase rates. This research expects that the relationship between customer satisfaction and repurchase behavior could be better explained by customer's perceived product and service values. Hypotheses are therefore proposed as follows:

Hypothesis6: Customer perceived product value mediates the relationship between customer satisfactions and repurchase behavior.

Hypothesis 7: Customer perceived in-store service value mediates the relationship between customer satisfactions and repurchase behavior.

In accordance with the literature review above, this research proposes the research hypotheses and developed conceptual model as shown in the Figure 1.

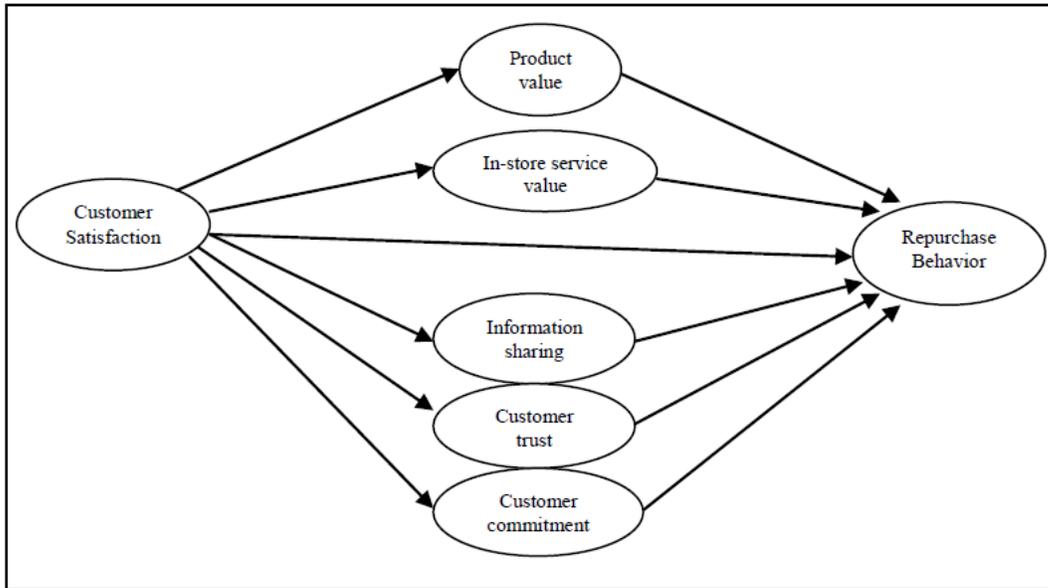


Figure 1 The developed conceptual model in this research

RESEARCH METHODOLOGY

3.1 Measures

The measurement scales were adopted and adapted from existing measurement scales after considering consistency and relevancy in definition and importance in meaning. All five latent variables were measured using seven-point Likert scales with “strongly disagree” and “strongly agree” anchoring the scales. First, *customer repurchase behavior* was measured using a combination of six items from a repurchase behavior scale developed by Curtis (2009) and Voss, Godfrey and Seiders (2010). Second, *customer satisfaction* items were adapted from Vesel and Zabkar (2009) who modified the items to measure satisfaction level of retail customers. Third, regarding *information sharing*, all four items were adapted from Rachjaibun (2007). Original items were adapted to measure customer’ perceived information sharing level in hotel industry because there were consistency and relevancy in information sharing definition and meaning between this research and Rachjaibun’s study. Fourth, for 5 items of *customer trust in the shop* and 4 items of *customer commitment to the shop* were adapted and adopted from Wong and Sohal (2002). Finally, for *product value* and *in-store service value*, all measures items were adapted and adopted from Terblanche and Boshoff’s (2004) items.

3.2 Sample and Survey Method

This research distributed questionnaires in Bangkok, Thailand in order to increase the representative of sample. The sampling method was a convenience sample. The questionnaires were collected daily from 500 shoppers during 3 periods: peak hours of shopping (11 am. to 1 pm., 2 pm. to 4 pm., 5 pm. to 7 pm.). This research approached the shoppers every 10 minutes at the sampling areas. As this research aims to understand repurchase behaviors of fashion-clothing retail shoppers to receive qualified shoppers, this research also asked shoppers the following screening questions: 1) In the past 12 months, have you bought clothes by yourself?, 2) Have you ever bought clothes from the same shop?, and 3) Are you between 18 and 49 years old?

The questionnaire contained three sections. The first section included characteristics of fashion clothing shops. The second section included survey questions related to purchases and five latent variables. All items were measured on a 7-point Likert Scale that ranged from (1) strongly disagree to (7) strongly agree. The last part included demographic questions. After screening data and preliminary analyses, there were 364 useable questionnaires for analyzing Confirmatory Factor Analysis and Structural Equation Modeling.

3.3 Data Analysis

Descriptive statistics were performed to profile the respondent demographic questions. Following the two-step approach recommended by Anderson and Gerbing (1988), a confirmatory factor analysis (CFA) with maximum likelihood was first performed to estimate the measurement model, which determined whether the manifest variables reflected the hypothesized latent variables. Once the measure was validated, a structural equation model (SEM) was used to determine the relationships among customer satisfaction, repurchase behavior and its mediators and moderators by AMOS.

4. Results

4.1 Descriptive Statistics

All respondent numbers and percentage classified by location and entire respondents are shown in Table 4.3. Regarding gender of the entire participants, females are accounted for 66.8% and males for 32.2% of the participants. Most of the participants are 18-27 years old (44.2%) and have income in the range of less than 10,000 – 20,000 Baht (45%). A large portion of the sample has a bachelor's degree (62.6%). The occupational composition of the respondents is as follows: Students, 32.1%; Office worker, 30.7%; Government official, 18.7%; Professionals, 9.1%; and Business owner, 9.6%.

4.2 Measurement Model

Before CFA analysis, the measurement items were developed to receive final items by eliminating measurement items and latent factors that did not make the model fit well. The elimination criteria were factor analysis, reliability, and construct validity. Factor analysis was conducted to identify factor loading and also to eliminate some items with high cross-loadings or low loading. The criteria for item elimination were high cross-loadings (>0.4) or low loading (<0.5) (Hair *et al.*, 2010). This study eliminated nine items: RB4, CS1, CS5, TR4, TR5, COM4, QUAL2, QUAL3, and PRICE3 due to high loading on an incorrect variable. Table 1 presents the final scales with high factor loading (0.54-0.96) and high reliabilities as well as Cronbach's alpha that ranges from 0.82-0.95. The results indicate high internal consistency among the scales within each factor.

Also, all average variance extracted (AVE) were greater than 0.50 indicating convergent validity (Anderson and Gerbing, 1988). Regarding construct correlation, results of the correlation analysis provide support for the discriminant validity as presented in Table 2. Discriminant validity was evident since the AVE, ranging from .58 to .85, exceeded all squared correlations for each pair of constructs, ranging from .001 to .44. Then, CFA was used to confirm all the final scale items if they were good measurement models. The results indicate that all measurement models provided a good fit to the data according to the fit index suggested by Hair *et al.* (2010). Hair *et al.* (2010) suggest that p value should be more than 0.05, GFI and AGFI ≥ 0.90 , RMSEA < 0.05 , CFI and NFI ≥ 0.90 .

Table 1 Factor loading, % of variance and Cronbach's alpha of final scales

Items	Measurements	Factor loadings	% of variance	Cronbach's alpha
RB				
RB 1	You often buy fashion clothing from the shop.	0.59	58.82	0.82
RB 2	You own several pieces of fashion clothing from this shop.	0.66		
RB 3	You have visited this shop many times in the last 12 months.	0.56		
RB 5	You use this shop to buy most of your fashion clothes.	0.86		
RB 6	You usually go back to buy fashion clothing from this shop.	0.78		
CS				
CS 2	You feel happy with shopping at this shop.	0.64	72.22	0.86

Items	Measurements	Factor loadings	% of variance	Cronbach's alpha
CS 3	You are satisfied with products and other things from this purchase.	0.98		
CS 4	You enjoy visiting at this shop.	0.98		
INF				
INF 1	This shop usually sends you useful fashion clothing information.	0.91	75.15	0.88
INF 2	This shop usually informs the values or benefits that you get as a customer.	0.79		
INF 3	This shop often asks for your opinion about your experience of shopping fashion clothing in this shop.	0.89		
INF 4	The shop usually asks for your opinion about quality of service.	0.77		
TR				
TR 1	This shop is reliable.	0.81	66.04	0.83
TR 2	You can trust that this shop can do as promised.	0.77		
TR 3	This shop is very honest.	0.86		
COM				
COM 1	The relationship between you and this shop is important.	0.85	85.53	0.91
COM 2	You give importance to the relationship between you and this shop.	0.88		
COM 3	You like to tell others that you are a customer of this shop.	0.73		
PRO				
QUAL 1	Fashion clothing of this shop is good quality fabric.	0.54	69.96	0.88
QUAL 4	Fashion clothing of this shop has high quality.	0.66		
PRICE 1	The price of fashion clothing in this shop is worth the money.	0.93		
PRICE 2	Fashion clothing at this shop offers value for money.	0.96		
PRICE 4	You feel that the price of fashion clothing in this shop is cheaper than other shops.	0.66		
SER				
SER 2	Salespeople of this shop are very willing to serve you.	0.76	72.11	0.90

Items	Measurements	Factor loadings	% of variance	Cronbach's alpha
SER 3	Salespeople of this shop provide you prompt service.	0.91		
SER 4	Salespeople of this shop are polite to provide services.	0.87		
SER 5	Salespeople of this shop are very friendly to customers.	0.79		

Note: RB: repurchase behavior, CS: customer satisfaction, INF: information sharing, TR: customer trust, COM: customer commitment, PRO: perceived product value, SER: perceived service value, INV: shopping involvement, SEEK: variety-seeking behavior

Table 2 Construct correlation matrix

	1	2	3	4	5	6	7	8	9
1.RB	1	0.01	0.03	0.04	0.10	0.09	0.02	0.05	0.00
2.CS	0.12*	1	0.00	0.08	0.03	0.02	0.01	0.01	0.04
3.INF	0.16*	-0.02	1	0.08	0.24	0.11	0.12	0.00	0.00
4.TR	0.21**	0.29**	0.30**	1	0.32	0.25	0.29	0.06	0.03
5.COM	0.32**	0.18*	0.48**	0.56**	1	0.44	0.24	0.12	0.07
6.PRO	0.30**	0.02	0.33**	0.50**	0.67**	1	0.23	0.12	0.09
7.SER	0.14*	-0.07	0.35**	0.54**	0.50**	0.44**	1	0.16	0.00
8.INV	0.21**	0.12*	0.04	0.25**	0.35**	0.31**	0.41**	1	0.00
9.SEEK	0.05	0.21**	-0.08	-0.18**	-0.27**	-0.25**	-0.10	0.18*	1

** $p < 0.01$, * $p < 0.05$.

Note: Values below the diagonal are correlation estimates among constructs, diagonal elements are construct variances, and values above the diagonal are square correlation

4.3 Structural Equation Modeling

4.3.1 Unmediated Relationship of Customer Satisfaction and Repurchase Behavior

In order to test the first hypothesis, that is, customer satisfaction has a positive association with repurchase behavior, the SEM was first conducted without the mediating effect. The result of the first SEM indicated a good model fit with $\chi^2 = 10.812$ with 15 degrees of freedom ($p = 0.766$), RMSEA = 0.02, GFI = 0.99, AGFI = 0.97, CFI = 0.99, and NFI = 0.99.

As this study expected, it was found that customer satisfaction is statistically significant and positively associated with repurchase behavior ($\beta = 0.25$, $p < 0.01$). Therefore, H1 is supported. However, the squared multiple correlation revealed that 17% of the variance in the repurchase behavior was explained by customer satisfaction. That is, the explanatory power of satisfaction on repurchase behavior was 17%. This finding implies that customer satisfaction alone cannot fully explain repurchase behavior.

4.3.2 Mediating effect

The five mediators were assessed to determine whether the mediators mediate the relationship between customer satisfaction and repurchase behavior according to three criteria suggested by Baron and Kenny (1986) and Hair *et al.* (2010). As presented in Figure 2, SEM results indicated a good model fit with $\chi^2 = 222.95$ with 224 degrees of freedom ($p = 0.62$), Goodness-of-Fit (GFI) = 0.98, Adjusted Goodness of Fit (AGFI) = 0.95, Comparative Fit Index (CFI) = 0.99, Normed Fit Index (NFI) = 0.98, and Root Mean Square Error of Approximation (RMSEA) = 0.02. The results did not support the mediating effects of information sharing, product value, and in-store service value, but supported the mediating effects of customer trust and commitment. This is because the statistical tests presented insignificant relationship of information sharing, product value, and in-store service value in customer satisfaction-repurchase behavior relationship. As a result, the mediating effect tests of the three variables did not meet the mediation requirements according to suggestions by Hair *et al.* (2010). Therefore, H2, H6 and H7 are not supported whereas H3 and H4 are supported in this study.

This study found that when either customer trust or customer commitment mediates the customer satisfaction-repurchase relationship, the partial mediation occurs. However, when the customer satisfaction-repurchase behavior relationship is first mediated by customer trust and then mediated by customer commitment, complete mediation occurs. Particularly, the customer satisfaction-repurchase relationship is reduced to non-statistical significance ($\beta = 0.06$, $p > 0.05$). Variance in repurchase behavior increases from 17% in the non-mediated model to 38% in the fully mediated model. Thus, this study supports H5. This means customer satisfaction-repurchase

behavior relationship is fully mediated when relationship is first mediated by customer trust and then mediated by customer commitment.

In summary, this research found statistically significant mediating effects of customer trust and commitment in the customer satisfaction-repurchase behavior relationship. This study indicates that satisfied customers repurchase because of trust and commitment toward the shop. More satisfaction in shopping experience at the fashion-clothing shop leads to more trust in the shops, which in turn results in higher commitment to the shops. Consequently, customers repurchase fashion clothing from the same shops. If customers feel satisfied without trust and commitment, it is possible that they can switch and purchase from another shop. Customer trust and customer commitment to the shops, therefore, are the key factors to increase repurchase rate. The results of hypotheses testing are summarized in Table 3.

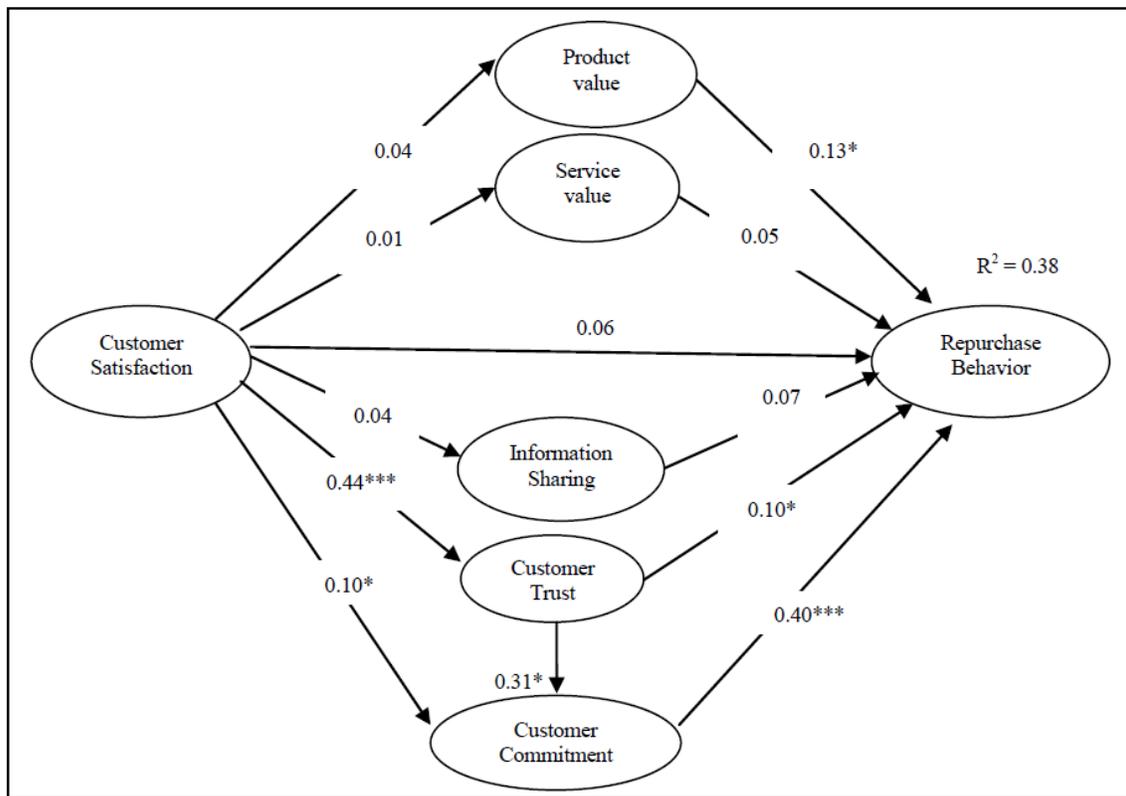


Figure 2 Hypotheses testing results for the conceptual model

Table 3 The results of hypotheses testing

Research Hypotheses	
H1: Customer satisfaction has a positive association with repurchase behavior.	Supported
H2: Information sharing mediates the relationship between customer satisfactions and repurchases behavior.	Not supported
H3: Customer's trust mediates the relationship between customer satisfactions and repurchases behavior.	Supported
H4: Customer's commitment mediates the relationship between customer satisfactions and repurchases behavior.	Supported
H5: Relationship between customer satisfaction and repurchase behavior is first mediated by customer trust and then mediated by customer commitment.	Supported
H6: Customer perceived product value mediates the relationship between customer satisfactions and repurchase behavior.	Not supported
H7: Customer perceived in-store service value mediates the relationship between customer satisfactions and repurchase behavior.	Not supported

5. Discussion

This research aims to investigate the relationship between customer satisfaction and repurchase behavior in the fashion-clothing retail. Statistical results support H1, H3, H4, and H5 but do not support H2, H6, and H7. As expected, the research found that customer satisfaction-repurchase behavior relationship is significantly positive but relatively complex. As mentioned, variance in repurchase behavior increases from 17% in the non-mediated model to 38% in the fully mediated model. This implies that the relationship can be better explained through mediating variables. Moreover, there are many factors affecting customer satisfaction-repurchase behavior relationship such as customer characteristics and situational factors. This research indicates that customer trust and customer commitment to the shop are significant mediators of the customer satisfaction-repurchase behavior relationship.

Although previous studies indicate a statistically positive relationship of information sharing and perceived shopping values on both customer satisfaction and repurchase behavior, statistical

results in this research do not support these variables as the mediators of customer satisfaction-repurchase behavior relationship. Even though the survey questions in this study were carefully designed, they may have been inadequate to measure information sharing and perceived shopping values of fashion-clothing retail customers because original statements were developed to measure information sharing in different research contexts. Therefore, the questions may not correspond with customer satisfaction and repurchase behavior in this research. As a result, this may have been the cause of the differences in the findings between this study and previous research.

This research offers the following theoretical implications: 1) overall research results support a positive and significant relationship between customer satisfaction and repurchase behavior in the fashion-clothing retail context; 2) the findings extend the existing literature (e.g. Curtis, 2009; Curtis *et al.*, 2012; Seiders *et al.*, 2005) by being the first study to investigate the mediating effects of information sharing and perceived shopping values on customer satisfaction-repurchase behavior relationship in the fashion-clothing retail; and 3) the research provides a fully mediated model that enhances the explanatory power of the customer satisfaction-repurchase behavior relationship. Furthermore, the research also provides beneficial implications for practitioners by providing key foci (i.e. customer trust in the shop, customer commitment to the shop) that could help increase customer repurchase rate.

6. Limitations and Recommendation for future research

There are a few limitations in this study. This research studied customer satisfaction-repurchase behavior relationship in the fashion-clothing retail, and therefore the generalizability of the findings may be limited. Future research could therefore study customer satisfaction-repurchase behavior relationship in a wider range of retail industries to present different repurchase reasons and patterns. In addition, this research eliminated nine measurement items including Repurchase Behavior (RB4); Customer Satisfaction (SAT1, SAT5); Customer Trust in the Shop (TRUST4, TRUST5); Customer Commitment to the Shop (COMMIT4); Quality Value (QUAL2, QUAL3); and Price Value (PRICE3) due to the lack of either reliability or discriminate validity or a combination of both. All of these eliminated items could be redesigned and possibly be reliable and valid for other research contexts.

For future research, a reinvestigation on the conditions of significant and insignificant effects of the perceived shopping values on the customer satisfaction-repurchase behavior relationship should be conducted because the in-depth interview results and the literature review reveal an expected impact of the perceived shopping values. Also, future studies should explore the role of different types of perceived shopping values. A new conceptual model, as a result, may provide a better insight into the reasons why satisfied customers repurchase from the same shops. In addition, there is a need to further develop theory in explaining and predicting the impact of

customer satisfaction on repurchase behavior in fashion retailing. Apart from the mediators, future research should include factors that have the moderating effect on customer satisfaction and repurchase behavior to enhance the understanding of this relationship.

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The Effects of Global Economic Crisis on Tourism Mobilities in the Developed and the Developing Countries

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ABSTRACT

It is widely known that the effects of global economic crises on the basic economical indexes differ between the developed and the developing countries. Similarly, it is expected that global economic crises will have different effects on tourism mobilities in that countries. The aim of this research is to determine the effects of global economic crisis on tourism mobilities in the developed and the developing countries. For this purpose, tourism indicators -such as number of tourists, tourism income and tourist expenditures, number of beds and establishments and, average expenses per capita for number of visitors- of last 22 years (from 1992 to 2012) were analyzed. Mobilities which take place in the indicators of the developed and the developing countries is compared to each other. Nominal - cardinal data, comparative ratio and trend analysis are used for this study.

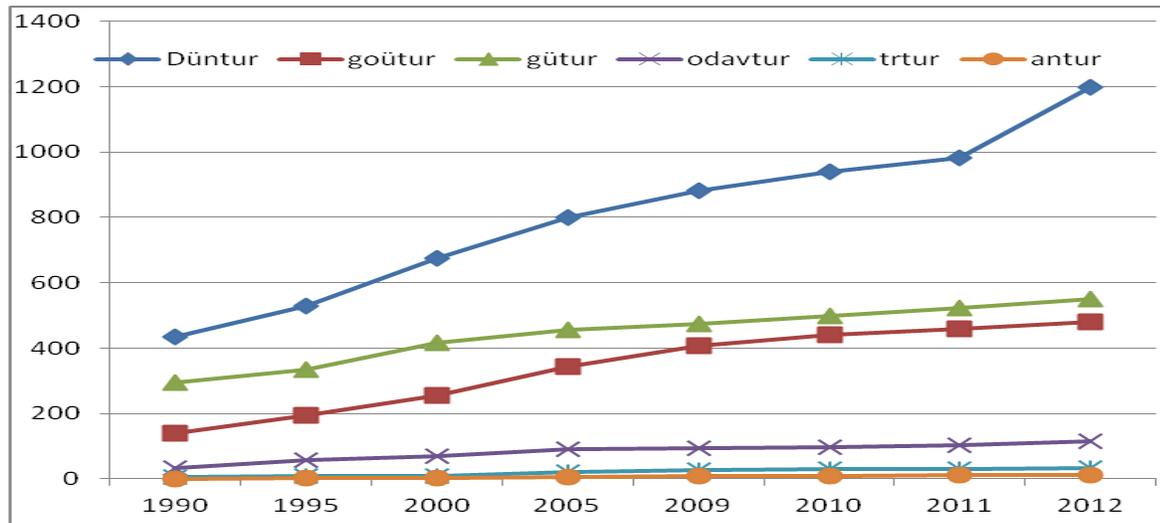
Key Words: Global economic crisis, tourism mobilities.

1. Introduction

In this study, we have examined the last quarter century of tourism sector with a constructivist evaluation and the inclination it has. We have taken the number of tourists, tourism income and expenses, facility-bed numbers as the main axes and have based the study on nominal data and the analysis of proportion and index calculations.

2. The Effects of Global Economic Crisis on Tourism Mobilities in the Developed and the Developing Countries

Firstly, the inclination of the change in the numbers of tourists, income and bed capacities in the



world, in Turkey, and in Antalya can be seen with its the most general status of nominal data in Figure 1,2,3.

Figure-1. The World, Regions, Turkey, and Antalya Tourist Numbers According to Years (millions of people)

World tourist number in blue (Düntur) was 435 million people in 1990, it was multiplied by 2.7 and rose to 1 billion 200 millions of people in 2012. Turkey tourist number is seen in light blue in the bottom (trtur). It rose from 6 millions of people in 1990 to 37 millions of people in 2012, multiplying by 6.2. Antalya tourist number is seen in orange in the bottom (antur) multiplied 10 times and rose from 1 million of people in 1990 to 10 millions of people in 2012. The green, claret, and violet colors indicate the numbers of tourist that went to developed countries (gütur), developing countries (göütur), and the Middle East and Eastern European countries (odavtur) respectively.

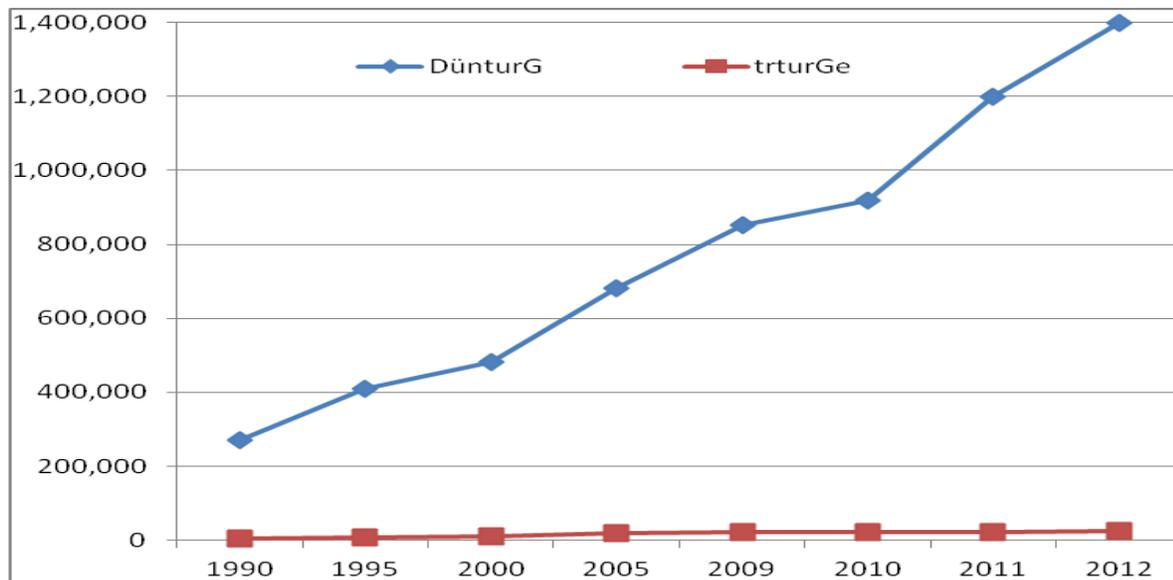


Figure-2. The World and Turkey Tourism Income Changes (million of USD)

As seen in blue in Figure-2, the world tourism income (DünturG) was 270.16 billions of USD in 1990 and it multiplied 5.2 times until 2012. Turkey tourism income (trturGe) was 5.1 billions of USD in 1990, and it multiplied only 4.6 times until 2012.

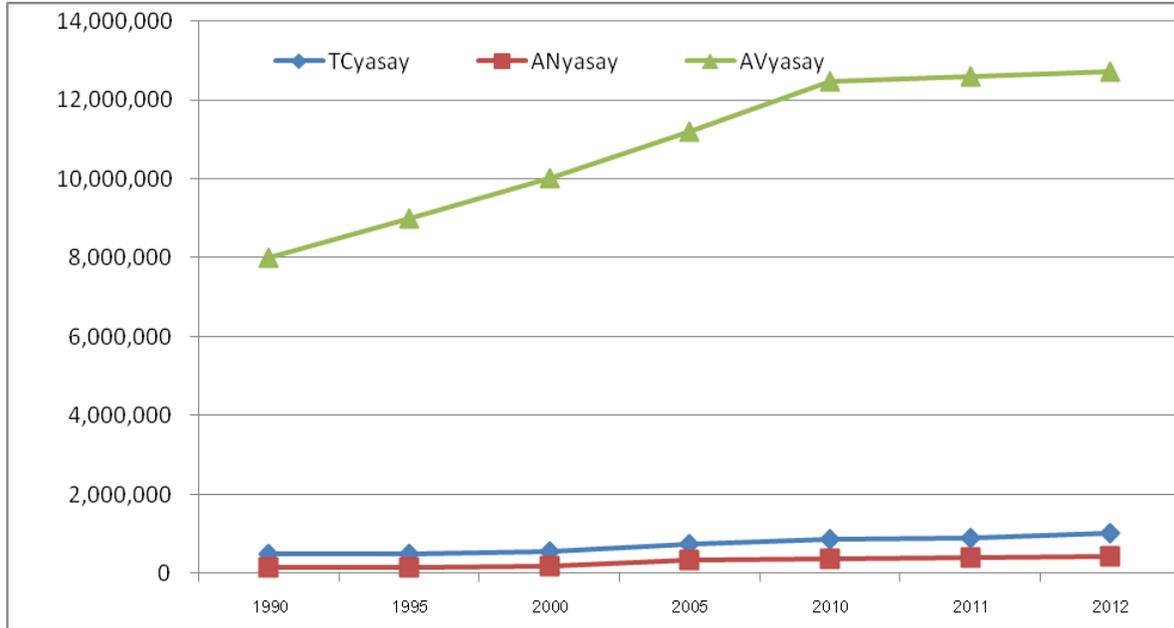


Figure-3. Europe, Turkey and Antalya Bed Capacity Changes

The number of beds in Europe (AVyasay) is indicated in green in Figure 3. The number of beds in Europe was 8 millions in 1990 and it grew 60 per cent in 12 years. The number of beds in Turkey (TCyasay), seen in blue, was 500 thousands in 1990 and it has a growth of 200 per cent until 2012. The number of beds in Antalya (ANYasay), seen in claret, was 145 thousands in 1990 and it increased 300 per cent until 2012. In other words, in the capacity of bed numbers Turkey had a 3 times more increase while Antalya had 5 times more.

The number of beds in the world is almost two times more than the number of beds in Europe. When we evaluate all the nominal data in a sum, we can see that, between the years of 1990 and 2012, the world and Europe increased the bed number capacities 60 per cent, multiplied tourist numbers 2.7 times and tourism income 5.2 times. Although Turkey multiplied its bed capacity more than 3 times and Antalya multiplied its 5 times, and Turkey multiplied the tourist number 6.2 times and Antalya multiplied its 10 times; the tourism income multiplied only 4.6 times. That means Turkey increased its bed numbers much more than Europe and the world, and its tourist number in a higher speed. However, it fell behind the world and Europe in the speed of increasing total tourism income. This situation can be seen clearly from the tourism inclination per person in Turkey and the world in Figure 4.

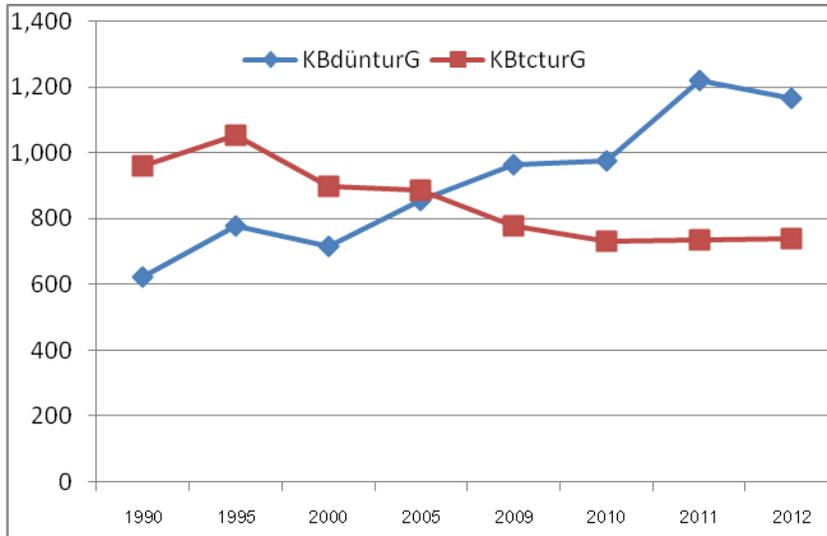


Figure 4. Tourism Income Per Person in Turkey and the World

In 1990, tourism income per person was 620 USD in the world, 970 USD in Turkey. In 2012, tourism income per person was about 1170 USD in the world, 750 USD in Turkey.

The tragic inclination in Turkey's tourism income that occurred between the years of 1990 and 2012 had its actual breakpoint in 2005 and since then it has not improved. Those who are responsible for this negative situation in Turkey are the ones that determine and apply the central and sectoral economy and tourism policies.

The findings that were obtained via the proportion analysis that is based on cardinal data is shown in Figure 5. The inclinations of tourism income and tourist numbers in Turkey, in developing countries, and in the world between the years of 1990 and 2012 are examined proportionally.

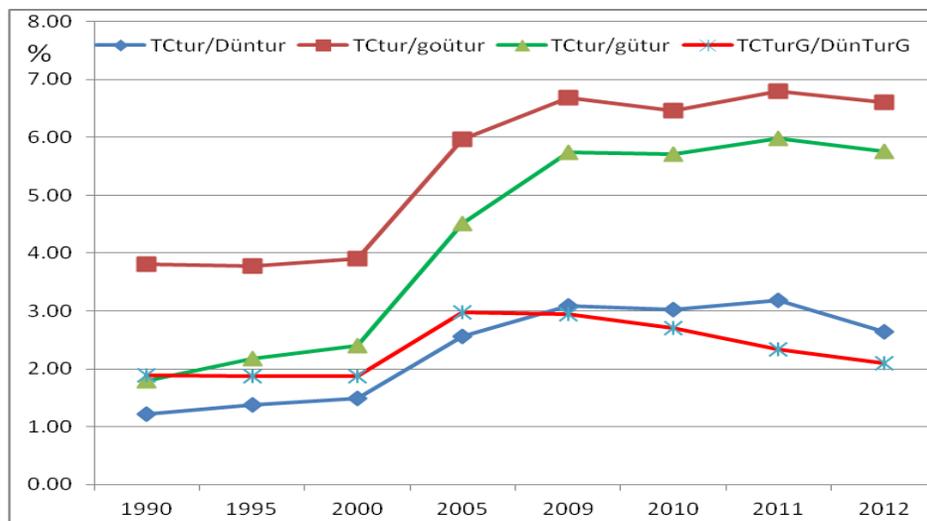


Figure 5. The Proportion of the Number of Tourists, Tourism Income, and the Number of Beds in Turkey to the World.

In Figure 5, the proportion of the number of tourists that come to Turkey to the world (TCTur/Düntur) is indicated in blue. This proportion was 1.22% in 1990, 2.65% in 2012.

The proportion of the number of tourists in Turkey to developing countries (TCTur/goütur) is seen in claret. This proportion was 3.8% in 1990, and it rose to 6.6% in 2012. Similarly, the proportion of Turkey's tourist number to developed countries (TCTur/gütur) is indicated in green. It was 1.8% in 1990 and increased to 5.8% in 2012. In short, between the years of 1990-2012 there is a growth in the number of tourists that come to Turkey.

The ratio of Turkey's tourism income in the world between 1990 and 2012 (TCTurG/DünTurG) is indicated in red in Figure 5. This ratio was 1.9% in 1990 and rose to 3% in 2005. After the year of 2005, there occurred a serious fall in the tourism income of Turkey and consequently the proportion of Turkey's tourism income in the world's tourism income decreased to 2% in 2012. As seen here, 2005 was a year when significant breakpoints happened in tourism sector in Turkey.

In this study, from now on 2005 will be the base year and more detailed analyses according to this reference year will be presented.

To make long term proportional analyses compared to a referenced (taken as basis or base) is essential to a profound examination of the topic that is being dealt with. Therefore, the growth rates that are calculated for consecutive periods or the ratio analyses that shows the proportion in the in the sum are useful for the explanation of the specific aspects of the topic. The aim of this type of reference analyses is to understand the topic with its different dimensions. The numbers of tourists, tourism income-expenses sums and bed numbers for Turkey and the world are evaluated according to nominal and cardinal data, and then the same data are examined compared to the base year 2005 and in greater details.

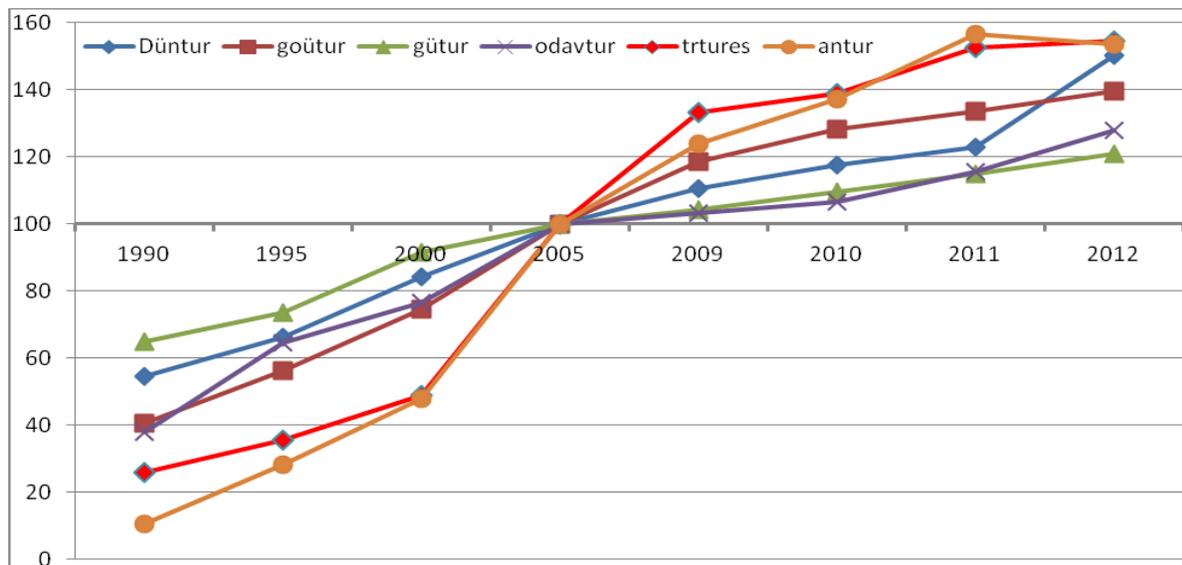


Figure 6. The Growth Inclination of Tourist Numbers in Turkey and the World (2005=100)

The growth inclination of tourist numbers in Turkey and the world is seen Figure 6. The number is taken as 100 for 2005. The number indicated in orange is for Antalya (antur) and it was worst

in 1990. Until 2005 it multiplied 10 times. The number indicated in red is for Turkey (trtures) which is the second lowest in 1990, and multiplied about 4 times in 15 years between 1990 and 2005. For the ones following, the growth ratio is comparatively low: the one indicated in blue is for the world tourist number (Düntur), the green one is for the developed countries tourist number (gütur), the claret one is for the developing countries tourist number (goütur), and lastly the violet one is for the Middle East and Eastern Europe tourist number (odavtur). That is because, between 1990 and 2005 the growth rates were 60% for the developed countries and the world, 150% for the Middle East and Eastern European countries. However, between 2005 and 2012, a general improvement occurred and a similar growth was seen, which is about a 150% rise in the tourist numbers of Antalya, Turkey, and the world.

The bed capacity of Antalya and Turkey increased in a lot higher speed than the world average compared to the capacity in 2005. However, due to the problems related to environment, market, and rivalry in the sector, which was integrated with the domestic growth and inflation related foreign currency, it could not reach the expected level of income rise and started to go down.

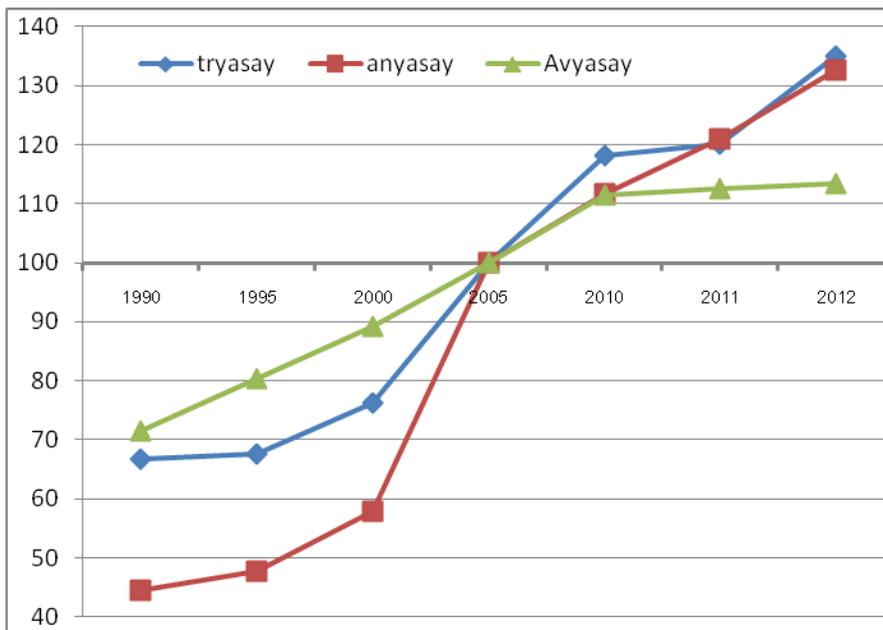


Figure 7. The Growth in the Bed Numbers of Turkey, Antalya, and Europe. (2005=100)

In Figure 7, the number of beds in Europe (Avyasay), indicated in green, grew in a comparatively constant pace between 1990 and 2010, while it was quite stable between 2010 and 2012. Compared to 100 in 2005, it was 70 in 1990 and a little over 110 in 2012. That is to say, it could grow about 10% in 2012, compared to 2005.

Whereas, the bed capacity of Antalya (anyasay), indicated in claret, was 44 in 1990 and 133 in 2012, which means a 33% growth compared to 2005. This growth is three times as great as the one in Europe. In Turkey, even greater increases occurred especially between 2005 and 2012.

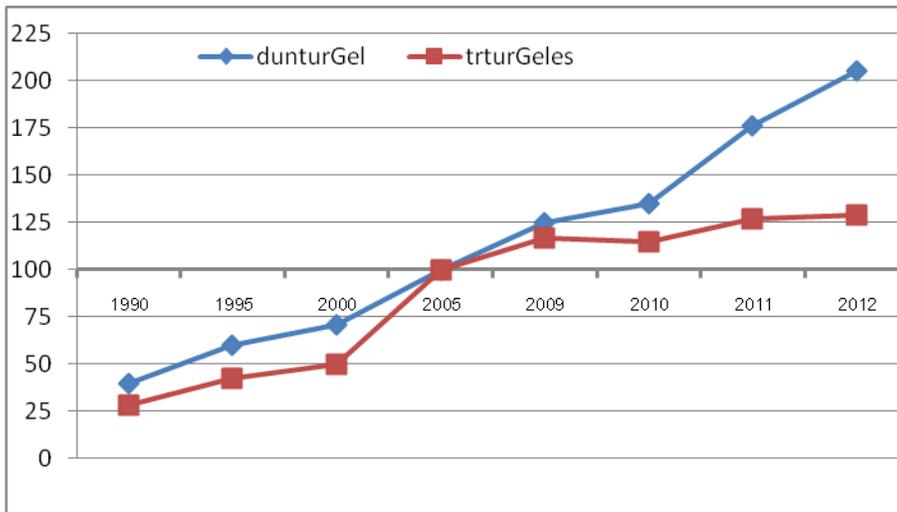


Figure 8. The Inclination of Income Growth Rates in Turkey and the World (2005=100)

When the tourism income indexes of Turkey and the world (trturGeles) were calculated, 2005 taken as the basis, the huge gap between the two income growth paces can be seen more clearly according to nominal data. The world tourism income (dunturGel), indicated in blue, was 100 in 2005, 40 in 1990, and 205 in 2012. This shows that the growth in the world's tourism income is 5.13 times compared to 1990, 2 times compared to 2005. In Turkey, where a much higher rise occurred for the bed and tourist numbers than the world average, tourism income was 100 in 2005 and 28 in 1990. Turkey's tourism income grew 4.6 times compared to 1990, 29 % compared to 2005. Contrary to 1990-2005 period, since 2010 an income growth gap has occurred to the detriment of Turkey.

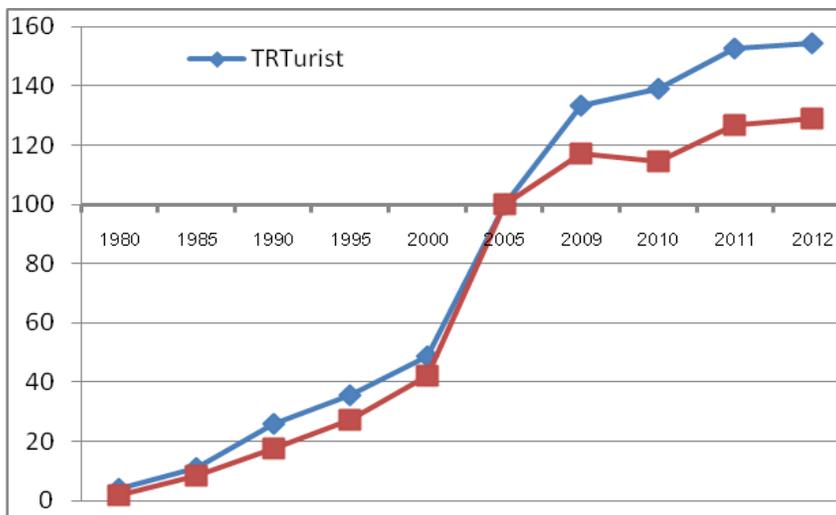


Figure 9. The Number of Tourists that Come to Turkey and Tourism Income (2005=100)

Although the amount of increase in the tourist number is almost equal to income rise between 1980 and 2005; after 2005, the tourist number growth speed increased while income growth speed decreased, even reversed in some years. Therefore the gap between them grew to the detriment of Turkey as great as never happened before. There is not a sustainable aspect of this situation which is seen clearly in Figure 9.

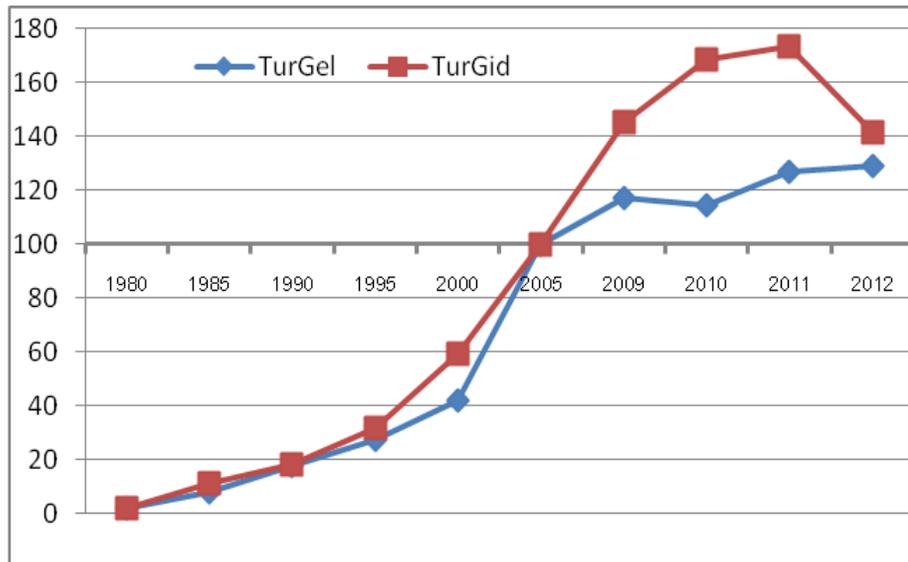


Figure 10. The Change in Tourism Income and Expenses (2005=100)

The negative course in Turkey's tourism income growth pace in the last four years, together with the negative changes which have taken place in the last years between Turkey's tourism income (TurGel) and tourism expenses (TurGid) lines, indicated in Figure 10, produced a manifold deteriorated tourism performance chart.

While the growth paces of tourism income and tourism expenses were completely parallel between 1980 and 2005, serious increases occurred in the expenses every year between 2005 and 2012. For instance, tourism income growth rate was 25 % and tourism income growth rate was about 70 % in 2011. In the last year, although the expenses growth rate seriously shrank it still went 10 points higher than the income growth rate.

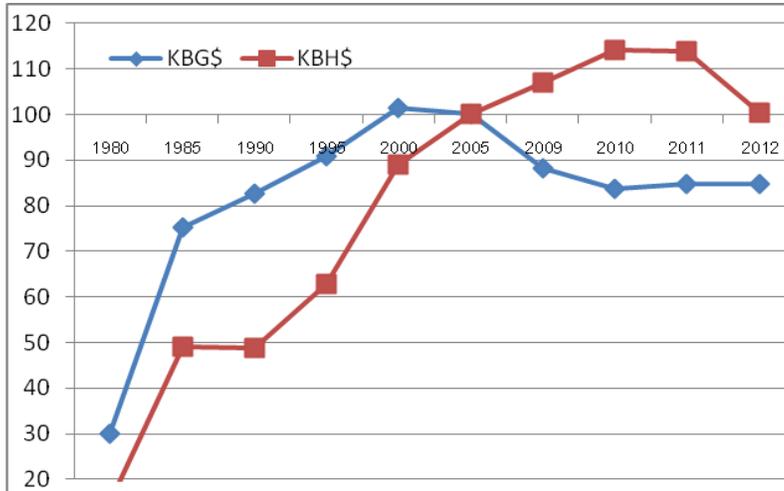


Figure 11. The Change in Tourism Income and Expenses Per Person (2005=100)

Before 2005 when changes in the tourism income and expenses lines which are to the detriment of Turkey started to take place, tourism income per person (KBG\$) growth rate was always higher than tourism expenses per person (KBH\$) growth rate every year in Turkey. Whereas, during the period of 2005-2012, an increasingly adverse gap showed up between the two lines. In 2012, the expenses growth rate decreased a little.

For the years between 1980 and 2012, the numbers of tourists that come to Turkey and Antalya, tourism income and expenses, and tourism income and expenses per person, and index values which were calculated according to the basis year 2005 can be seen in Figure 12.

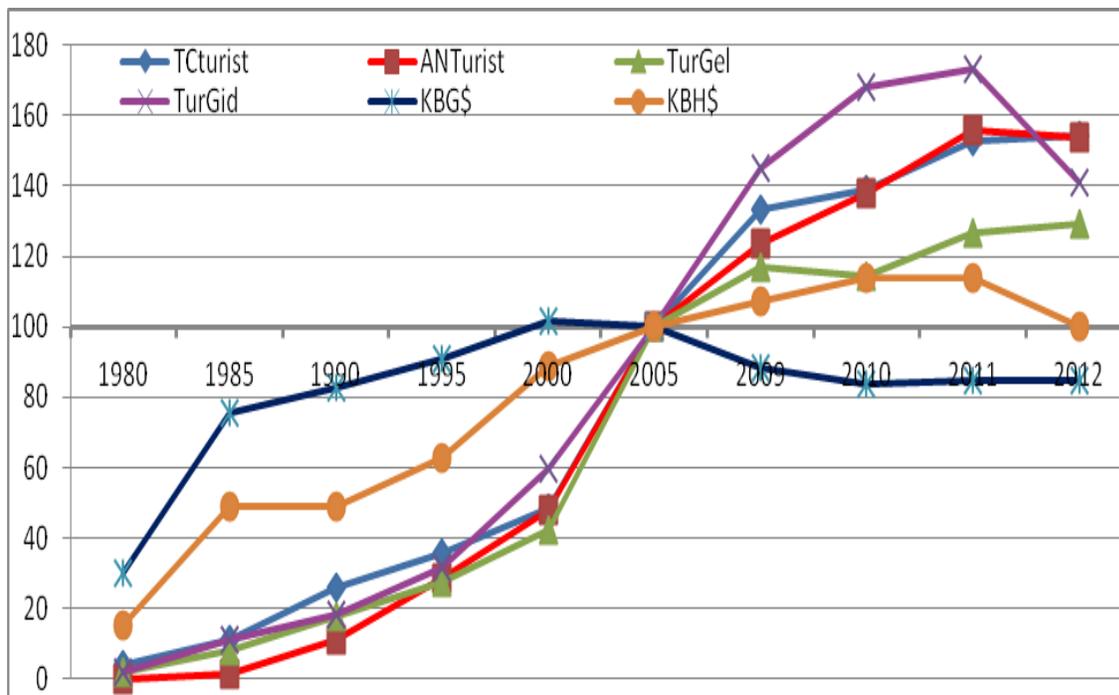


Figure 12. Changes in the Tourist Numbers and Tourism Income and Expenses Of Turkey and Antalya. (2005=100)

Considering the number for 2005 100, according to this reference in 1980, Antalya tourist number (ANTurist) indicated in red is about 0, Turkey's tourist number (TCTurist) indicated in blue is 4, Turkey's tourism income (TurGel) indicated in green and Turkey's tourism expenses (TurGid) indicated in violet are both 2, expenses per person (KBH\$) indicated in orange is 15, tourism income per person (KBG\$) indicated in dark blue is 30.

After 32 years, the growth multiplications are 154 times for ANTurist, 38.5 times for TCTurist, 64.5 times for TurGel, 70.5 times for TurGid, 6.7 times for KBH\$ and 2.4 times for KBG\$. However, compared to 2005, tourism income per person (KBG\$) decreased 18% in 2012. When we look at the year of 2012 in Figure 12 with the aim of grouping, we can clearly see that total tourist numbers and income-expenses sums comprise a group of 40%, while expenses per person makes a separate group of as low as -10%.

3. Results

When Turkey's tourism performance is compared to developed countries is considering the present situation, it can be remarked as a frustration especially after 2005. That is because the added value production power of the sector is being reduced swiftly. This structure, too, does not have a sustainable aspect. Since 2005 Turkey's tourism sector has become one of the sectors whose national added value production power is constantly damaged. Especially expensive TL and inconsiderate investment incentive policies have a great effect on this. In other words, those who are responsible for pushing the sector into this situation are public policy makers and appliers. Domestic entrepreneurs, employees, and suppliers are forced to lose perpetually because of those policy makers and appliers. It is essential for Turkey to reconsider tourism policies and adjust specific policies to increase the tourism income if it wants to keep the profitability and sustainability of the sector.

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An Evaluation of the Financial Performances of Food Production Enterprises: a Case of Turkey and England

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ABSTRACT

The purpose of this research is to determine the financial performances of food production establishments in the developed and the developing countries. In this context, in order to estimate the so-called effects, the financial statements of 13 years (from 2000 to 2012) are analyzed. These statements show the financial structures of food production firms that are based in Turkey and England, 25 firms that constitute the food index in Istanbul Stock Exchange (ISE) and another 6 firms that constitute the food index in London Stock Exchange (LSE). In the period which has been analyzed, macro-economic indexes such as economic growth rate, gross domestic product and, unemployment rate and the changes which take place in the financial structures of the firms are compared to each other. The financial situations of the firms are examined using the ratio analysis method. The relationship between the data which was obtained from the ratio analysis and the macro-economic variables is produced after being analyzed with the methods of statistics, econometric, and operations research.

Key Words: Financial performances, food production.

1. Introduction

Is there any impact of the level of economic development of the country of operation, financial structure of businesses prior to the crisis and during the crisis on food enterprises? The aim of this study is to determine whether there are differences of financial and operational structures and performances of the food enterprises during the crisis and non-crisis periods. In this context, publicly-held food enterprises both in Turkey and UK prior to the crisis and during the crisis, some of the key financial indicators are examined. Thus, comparative analyses of the behavior of companies in a particular fiscal period are maintained.

In this study, financial indicators of the largest 5 companies representing food sectors that are operating in stock exchange are examined both in Turkey and UK. The period between the years 2004-2012 is selected that the compatibility with each other with a valid, useful and meaningful data sets. The analysis is carried out with 3 main stages. In the first stage, GDP per capita growth in Turkey and the UK, food sector turnover and turnover on the size of the growth trends are discussed. In the second stage, food sectors turnovers, the net debt and net asset growth (growing) throughout the period examined separately for Turkey and the UK. The third stage focuses on the turnover, net debt, capital expenditure and net asset growth index calculated in the base year of 2009 again for both countries. The findings were evaluated at each stage.

2. GDP and Growth Trends in Food Enterprises in Turkey and the UK

Improvements or deterioration in the economic climate condition, affected the sectors depending on flexibilities they have, while it is effected the enterprises based on their efficiency and productivity. Berkmen et al. (2009) suggested that countries with a strong financial condition are less affected by the crisis in their research they conducted to identify the effect of different crisis in developing countries and emerging markets.

When the periods of 1983-1988 and 2003-2008 viewed where economic climate conditions were better in relative terms, the sectors that benefit the most are the real manufacturing sectors first period and financial sectors in the second period.

The periods of 1989-1991 and 1997-1999 which are relatively disturbed economic climate, the condition was tried to be improved with the balance of payments and time-saving policies and tried to be reproduced with better conditions and sectors and companies have adapted it. However, the global financial crisis that started in the second half of 2008 and is currently pursuing the effects quashed economic climate conditions seriously.

More imports from developing countries, increasing world population and changing food habits in emerging countries, increasing world demand due to the high import has resulted a sharp increase in food prices (Kray 2008). Under this economic climate, measuring and evaluating of the food industry and their representative companies, how it effects financial and operational structures, behaviors and performances and the behavior and performance is important. This influence whether it creates a difference in developed and developing economies is also an important problematic. Because the price elasticity of food products is relatively low and that is a well-known fact.

Another fact is that developed and developing economies, the share of food in total expenditures show a serious difference. For example, in the UK, the share of food in total expenditure is around 10%, while this ratio is approaching 30% in Turkey. The thesis of “these rates are much more affected by the economic conditions” worth investigating. On the other hand, it is also important to measure and evaluate the sensitivity of the food companies the changes in economic climate conditions.

In this study, samples of Turkey and the UK had been comparatively studied to analyze how the food companies have changed in financial and operational terms according to changing economic climate conditions.

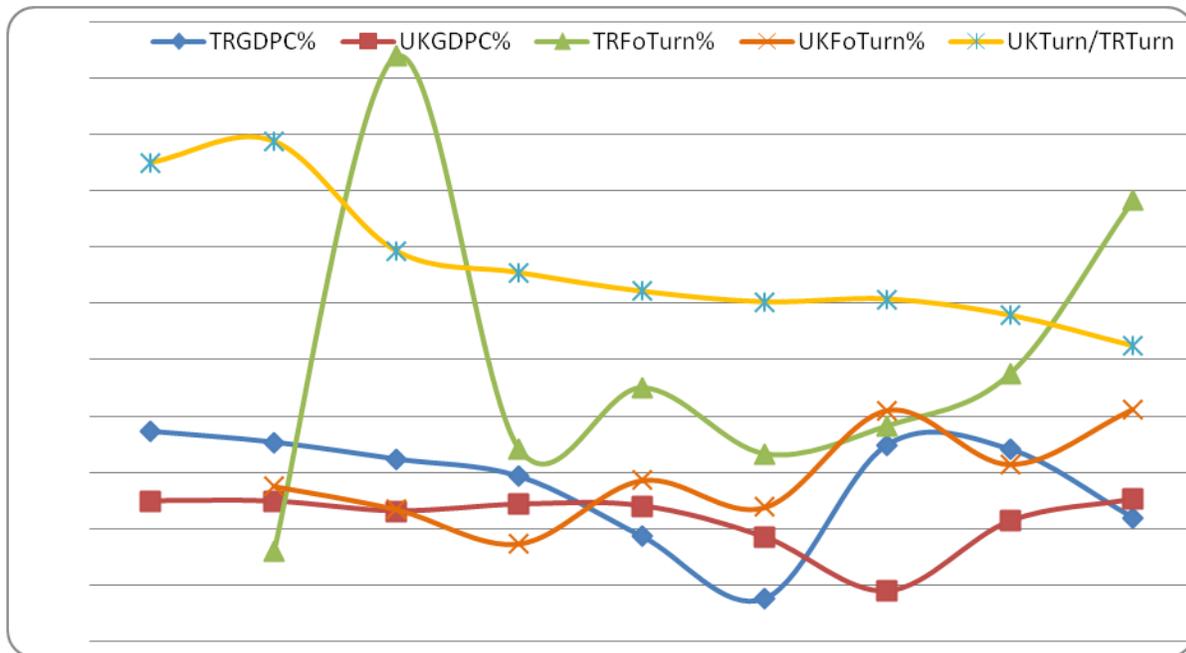


Figure-1. TR-UK GDP and Food Growth Inclinations

TR GDP growth (TRGDPC%) in and UK GDP growth (UKGDPC%) in Figure 1 shows the real data per person. The course of GDP growth volatility of Turkey is far above the UK's during the period between 2004 and 2012. For the period between 2004 and 2008, the inclinations for the GDP growth rates for both countries are in inverse proportion. When the total turnover growth is compared for the companies of the two countries included in this study (TRFoTurn% and UKFoTurn%), the volatility followed a very high level of course for Turkish companies. General growth inclinations for both countries' food companies are in accord with each other during this period. Taking 2009 as the reference year, turnover growth of the both Turkey and the UK food companies followed a higher level of course in the last three years compared to the pre-crisis period. For example, compared to pre-crisis period, while Turkish food companies reached 25 % higher turnover, the UK food companies had a 50 % increase in their turnover in the last three years.

The chart that shows the proportion between TR and UK food companies' total turnovers (UKTurn/TRTurn) indicate the inclination of the dimension gap between them for during the period. This gap was 36 times in 2005, and decreased to 16 times in 2012. This situation proves that the turnover depth of Turkish companies increased increasingly during the period.

3. Inclinations of Financial Indicators for TR – UK Companies

In this part, several company inclinations which are focused on basic financial indicators are examined for the period of 2004-2012. Those indicators are turnover, net debts, and net assets. The interaction between these financial indicators and state GDP and total turnover is also shown.

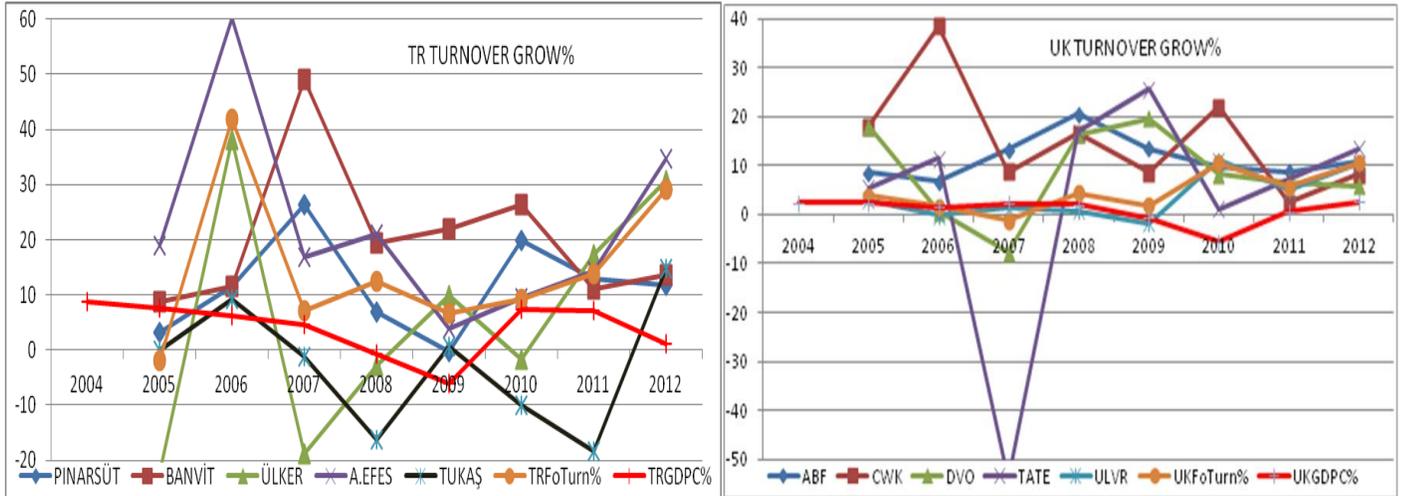


Figure 2. TR - UK Comparisons of Turnover Inclinations

Separate annual turnover growth for TR food companies (on the left chart) and the UK food companies (on the right chart) are indicated in Figure 2. TR food companies showed a performance of two times as great turnover growth rates as the food companies in the UK, both individually and as a group. However, when the countries are compared in their GDP growth rates, both countries' companies had both a high level of growth performance.

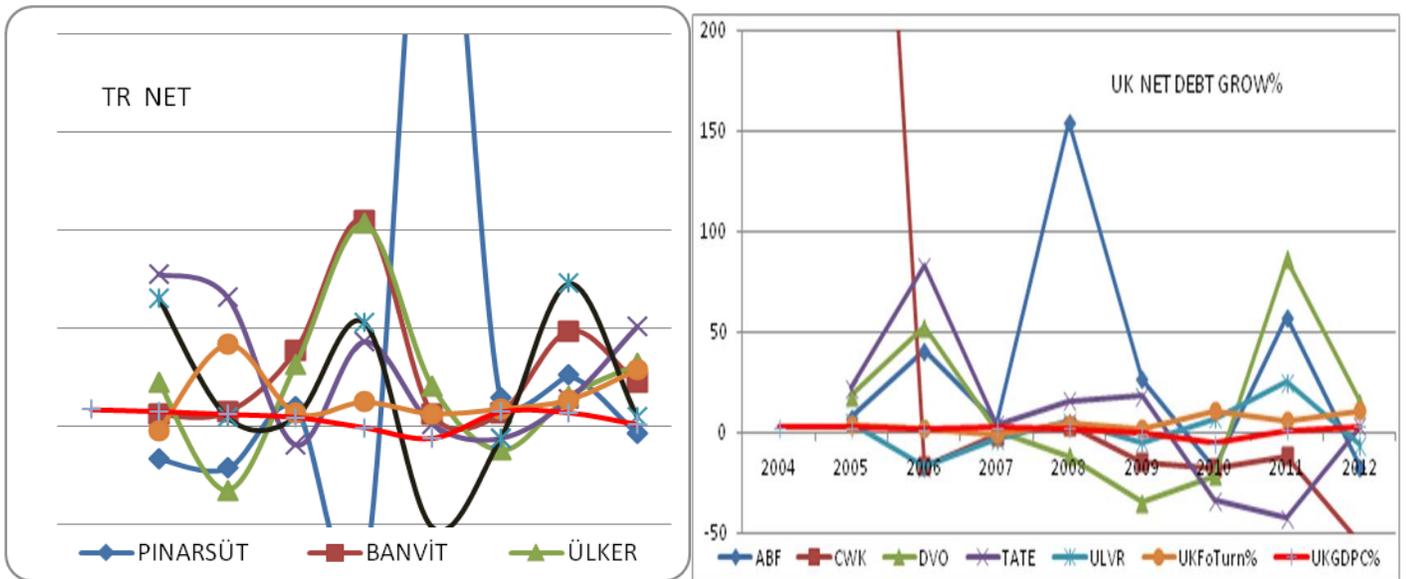


Figure 3. TR - UK Comparisons for Net Debts Inclinations

Separate annual net debts growth for TR food companies (on the left chart) and the UK food companies (on the right chart) are indicated in Figure 3. Turkish food companies' debts inclinations were in a course of high level compared to the UK's before and after the crisis. In 2012, the net debts growth of the UK companies became negative while Turkish companies raised the level of their debts.

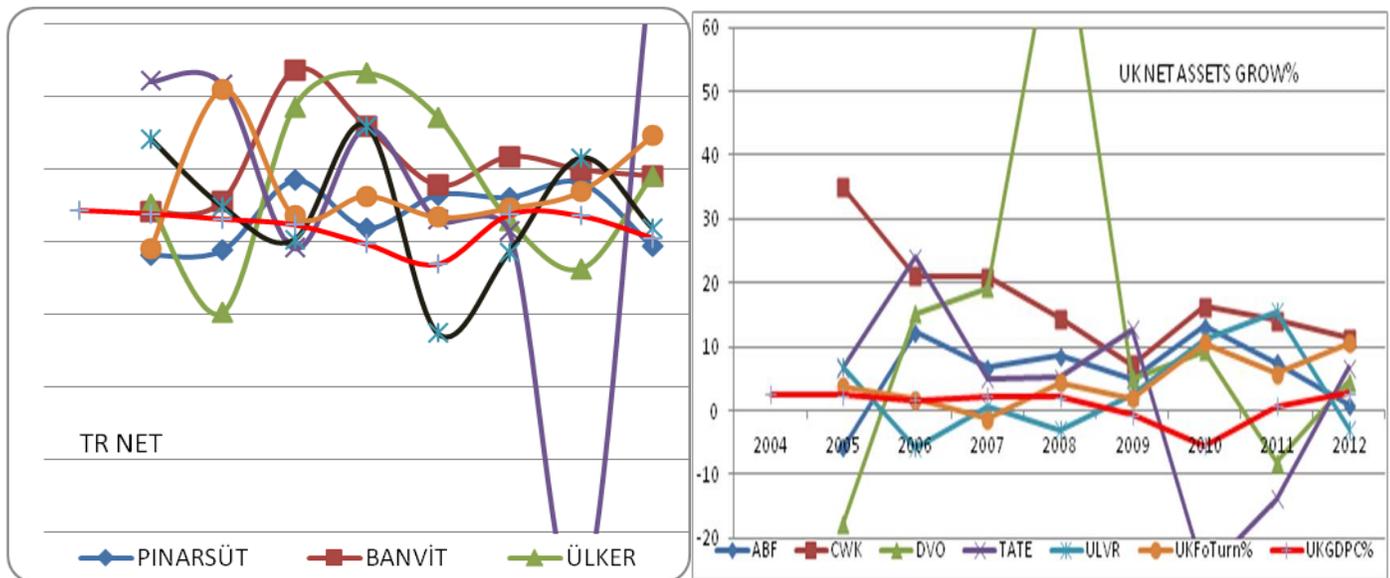


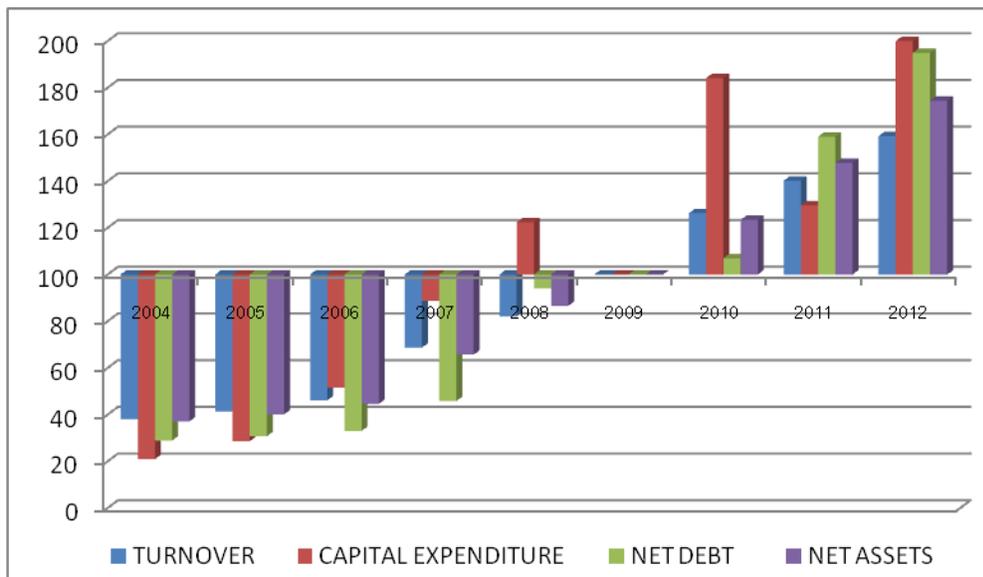
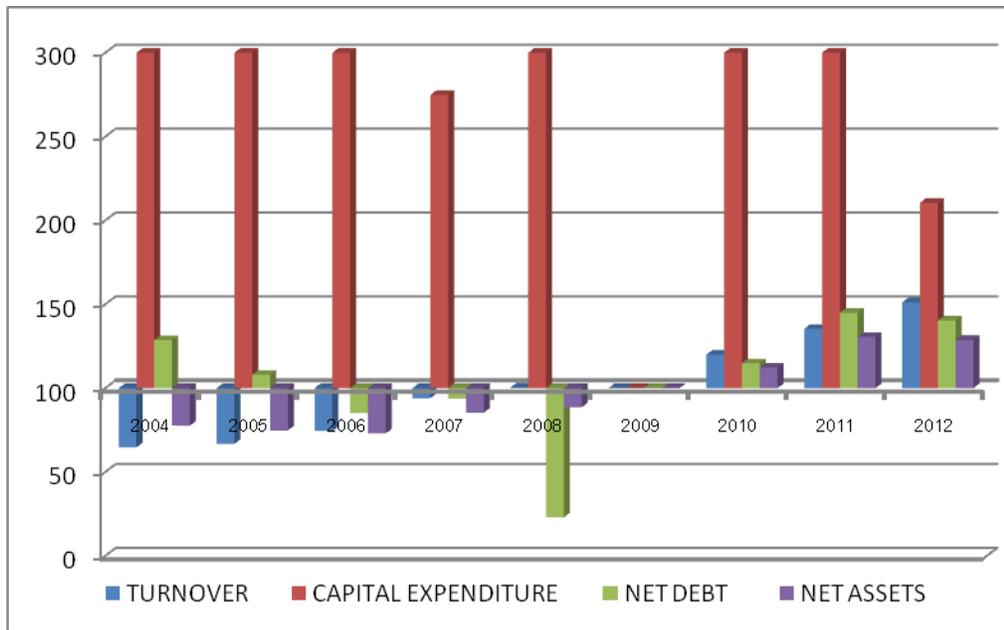
Figure 4. TR - UK Comparisons for Net Assets Inclinations

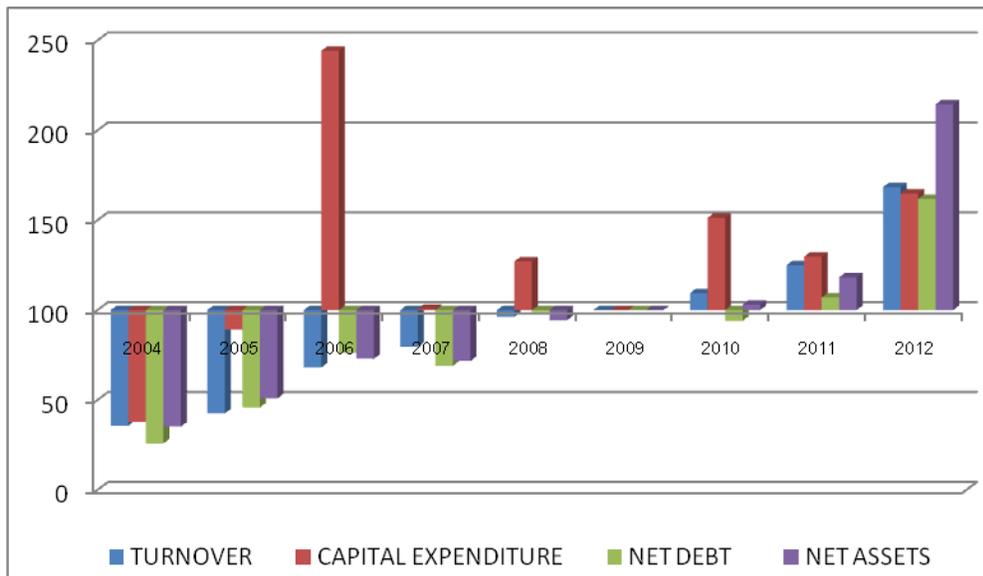
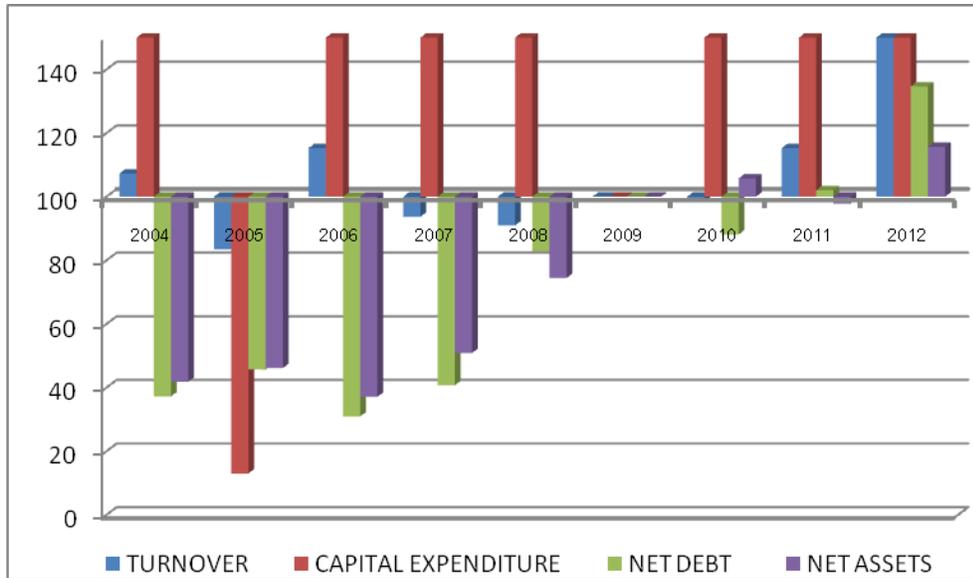
Separate annual net assets growth for TR food companies (on the left chart) and the UK food companies (on the right chart) are indicated in Figure 3. Net assets growth inclinations were much higher for Turkish food companies than the UK companies. Especially during the period after the crisis, net assets growth inclinations kept moving away from the UK companies.

4. Changes in the Financial Indicators for Food Companies in Turkey and the UK

In this part, we examined the inclinations for turnover, net debts, capital expenditure and net assets for the food companies which are active in Turkey and in the UK. In this examination, 2009, which was the year when the economic crisis was deeply felt, was considered as the basis and index values for other years were calculated.

The inclinations of Turkish food companies which are indicated with these index values are presented in the set of charts below:





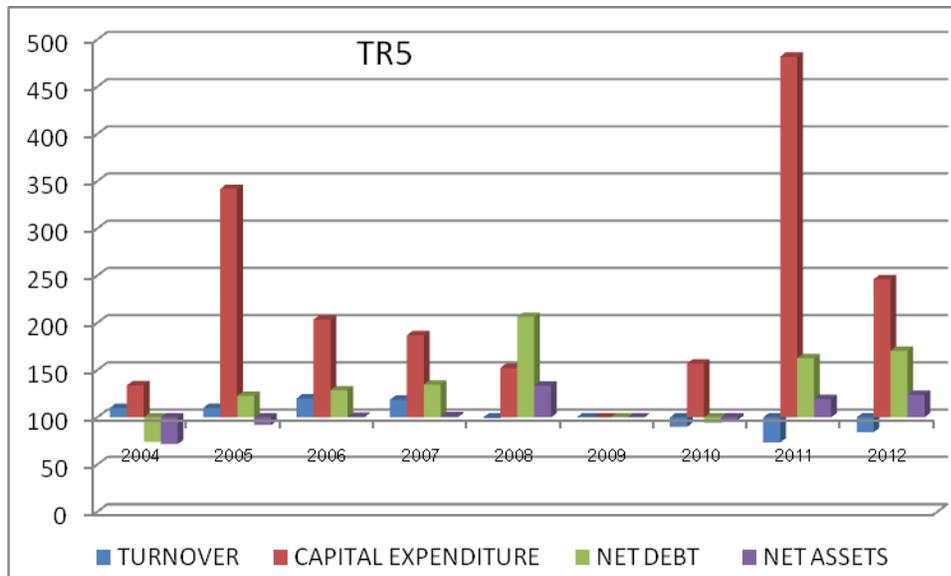
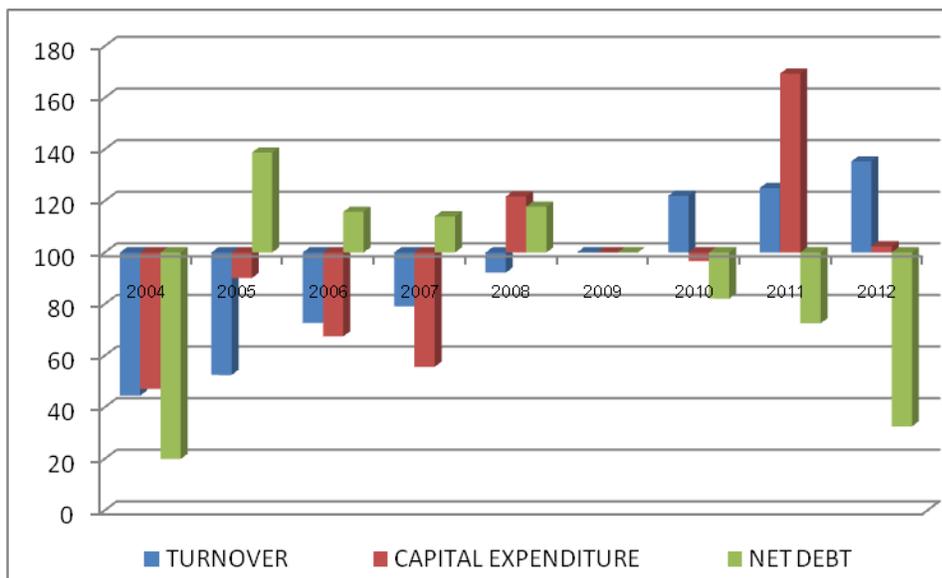
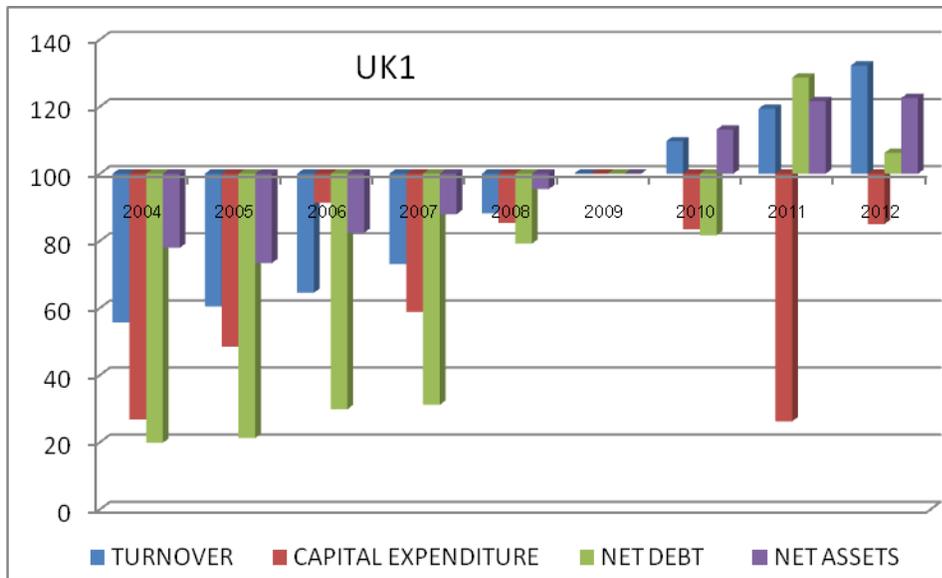


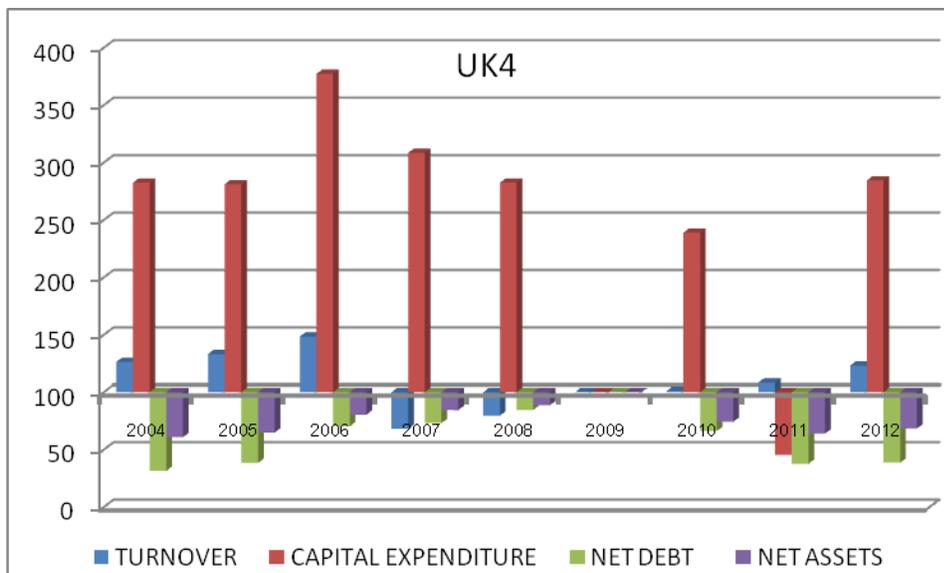
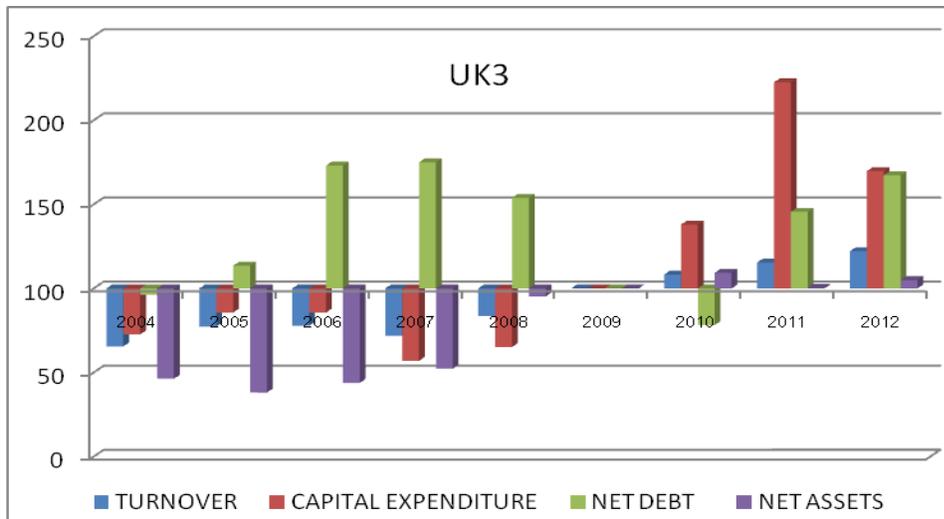
Figure 5: The Financial Indicators of the Active Food Companies in Turkey

The turnover growth rates for after 2009 were higher than before crisis period for all the companies except for one.

In 2009, capital expenditure structures are similar for the first, the third and the fifth companies. For others, capital expenditure inclination is low before the crisis and high after the crisis. When we evaluate net debts, the second, the third and the fourth companies had a similar structure before and after crisis which means there were less debits before crisis while it remained less in and after the crisis. The first and the fifth companies kept their debt rates higher than the reference year which is 2009. For 2009, the first four companies' net assets structures are in accord with each other while the fifth is differing on that. Although the first four companies had a lower net assets structure before the crisis year compared to that year, they increased their net assets after that year. Whereas the fifth company kept its assets in the same level before 2009 compared to that year and even had a little increase. Likewise, it continued this custom after 2009. That is to say, the crisis did not create a big change in the asset management for the fifth company.

The inclinations for the UK companies that were examined in this study are shown below:





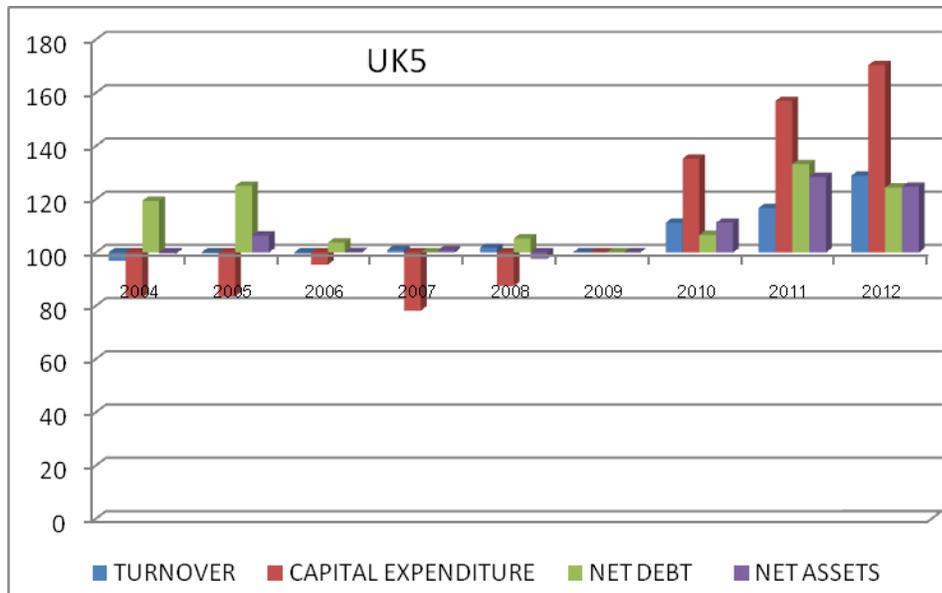


Figure 6: Financial Indicators for the Active Food Companies in the UK

Four financial structures of the UK companies are in accord with each other before and after crisis. This accordance, as included in the literature, shows that developed countries are comparatively less affected thanks to their depth.

All of the UK companies have similar structure of turnover before and after the crisis compared to 2009. That is also similar to Turkish food companies. That means, compared to 2009, companies had lower turnovers in 2004-2008 while they increased their turnovers after 2009.

In capital expenditures, the second, the third and the fifth companies have a similar structure while the other companies have individual inclinations. That is to say, compared to 2009; the second, the third, and the fifth companies made less expenditure before crisis while they preferred to raise their expenditures after crisis. The first company always had a lower expenditure before and after 2009, compared to the crisis year. The fourth company showed a completely opposite inclination, and having a constant investor identity it made more and more expenditures before and after the crisis year. That means, there is a heterogenic structure of capital expenditure for the UK food companies compared to the crisis.

The UK companies had different structures for net debts, just like capital expenditure, compared to the crisis year. For example, the first company had half of the net debts of 2009 in 2004-2008, and it borrowed more after the crisis. However, the fourth company had half of debts before and after the crisis compared to 2009. The fifth company, as completely opposite of the fourth, had an increasingly higher level of debts for all the periods compared to 2009.

The UK companies had a generally similar structure with Turkish companies when it comes to net assets. That means, net assets were lower before 2009 and higher after it, compared to 2009. Only exception for this is the fourth company. This company had 25 % less assets during the whole period compared to the net active level of 2009.

5. Conclusion

The turnover growth of food companies had a different and positive course of progress during the years between 2004 and 2012, compared to GDP growth in Turkey and the United Kingdom which is examined in this study. Furthermore, in the same period, the 50 % gap between Turkey's food turnover and the UK's companies' turnover seems to have been closed.

Taking 2009 as the reference year, turnover growth of food companies in Turkey and the UK has been showing a different course of change. For example, while the average growth rate of Turkish companies was 20 % during the period between 2004 and 2008, it was below 10 % for the companies in the UK. In and after 2009, Turkey's food companies' distribution is 20 % thanks to the turnover growth they have managed while the UK companies have a 5 % grouping.

Moreover, there are some serious basic differences between net debts inclinations of Turkey and of the UK during the period between 2004 and 2012. For example, considering the net debits level of 2009, before that, Turkish companies had a higher level of debit inclination while the UK companies kept their debits in a low level except for 2006. On the other hand, after 2009, the grouping for Turkish companies is in a comparatively low level while the UK companies preferred a comparatively higher level of debits.

In the same period, the food companies in Turkey and in the UK showed a similar structure in net asset growth.

In economy, generally, the dimension of impact from the crisis is different for developing countries and for developed countries while the food companies of developing countries and developed countries show a similar structure because of the low level of price elasticity of demand. Even though there are some differences in details in the financial indicators of the food companies in Turkey and in the UK, we can say that there is a general accord with the crisis for both of them. Yet again, for example, total turnover growth rate for in and after 2009 was two times greater for Turkish companies than for the UK companies.

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SUSTAINABILITY AS A STRATEGY OF RESPONSIBLE AND COMPETITIVE DEVELOPMENT

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Abstract

The aim of this paper is to analyze a competitiveness strategy based on sustainability to lead the way to a model of responsible and competitive development. The analysis takes as its starting point the assumption that the maturity of a sustainable business strategy positively affects competitiveness. The used method is the critical analysis. Among other results of this analysis concludes that the current business strategy seeks a system ecologically appropriate, economically viable and socially fair to reach sustainable equilibrium. This strategy based on sustainability must be promoted by the institutions and strengthened by the capabilities and resources that each company counts on to develop advantages to foster the overall development and achieve the maximization of benefits from the tangible and intangible perspectives.

Keywords: Business, competitiveness, development, strategy, sustainability.

JEL: F63, L1, Q01, Q56.

Resumen

El objetivo de este artículo es analizar la estrategia de la competitividad en función de la sustentabilidad para dar la pauta a un modelo de desarrollo responsable y competitivo. El análisis tiene como punto de partida el supuesto de que la madurez de una estrategia sustentable en los negocios afecta positivamente a la competitividad. El método empleado es el análisis crítico. Entre otros resultados de este análisis se concluye que la estrategia empresarial actual busca un sistema ecológicamente adecuado, económicamente viable y socialmente justo para llegar al equilibrio sustentable. Esta estrategia basada en la sustentabilidad debe ser impulsado por las instituciones y fortalecido por las capacidades y recursos con los que cuenta cada empresa para desarrollar ventajas que impulsen el desarrollo global y logren la maximización de beneficios desde una perspectiva tangible e intangible.

Palabras clave: Negocios, competitividad, desarrollo, estrategia, sustentabilidad.

1. Introduction

Today's enterprises face a daily challenge to survive by growing material needs, natural resource scarcity and inequalities. Making sustainability a key role as a global strategy may be based on economic prosperity, ecological balance and the common good. Globalization in business has

become more complex the panorama, increased competition, access to new markets, development of new technologies have led businesses to focus efforts on building an identity that will strengthen their skills.

According to Porter (1995), these strengths are based on competitive advantage, which exists when there is an equivalence of distinctive competencies of a company, so the customer particular needs allow generating a competitive advantage. Another factor that makes complex business world is the interest of the owners to maximize their profits in the shortest possible time, forgetting prosperity at the expense of society and the environment. Agency theory helps to clarify some aspects related to the problem of the relationship between people, environment and resources, which examines the situations of delegation of authority and decision making and joint interests opposed to individuals that have to be overcome to reduce moral hazard.

The industry in general is embedded in social and environmental spheres. Therefore the companies are concerned to finding a balance that allows the supply and enrichment from the system is of utmost importance. Therefore, it is the responsibility of caring for the environment and society, living in balance to ensure economic sustainability for the future. The challenge for governments is to design rules that enable sustainable development, maximizing the social and economic welfare and environmental care. These rules are based on planned restrictions that structure business integration.

Sustainability is the way to find economic, ecological and social balance, resulting in prosperity and capitalization of new resources. In the theory of resources and capabilities, the notion of competitive sustainability is referred to the equilibrium (Barney, 1994, Barney and Zajac, 1994, Rumelt 1984), which is the way to observe the competition in terms of windfall profits. In an environment like today's highly competitive and globalized, it is necessary to analyze the sustainability bearing in mind that among competitive players there is only one winner and many losers. With a sustainable strategy the short and long term benefits are maximized having greater tangible and intangible profits. Instead the purpose of competitiveness is the economic optimization, leaving aside the social and environmental factors, contrary to what is proposed by the sustainability.

A sustainable strategy ensures the success of organizations and ensures its permanence over time.

2. Background

In the early '70s awareness of the seriousness of the degradation of environmental friendliness manifested itself in the United Nations Conference on Environment in Stockholm in 1972, where it was coined the term sustainable development. The Brundtland Report by the United Nations Organization (1987), proposes the restoration of ecological balance, rebuild what has been damaged by the economic and material progress and build the natural bases that make the development model of industrial society something enduring. Economic development on which the report reflects, analyzes what causes poverty, inequality, injustice and environmental damage. It highlights the common good and ecological health as the absence of both is directly related to environmental degradation of the countries.

The term sustainable development gained acceptance as a result of the United Nations Conference on Environment and Development (1992, 8) which states "Sustainable development is one that meets the needs of present generations without undermining the ability of future generations to meet theirs". Lezama and Graizabord published in 2010, "The great problems of Mexico," where they explain: Sustainable Development in Mexico departs from the modernization process in the review process and the Institutional transformations. The General Law of Ecological Equilibrium and Environmental Protection records clearly these principles.

The Reform of the Organic Law of Federal Public Administration of 1992 transformed the Secretary of Urban Development and Ecology (SEDUE) in Secretary of Social Development (Sedesol) and created the National Institute of Ecology (INE) and the Federal Environmental Protection Attorney (Profepa) reflecting directly the search for modernization. The National Institute of Ecology (INE) was able to create the regulatory framework, and make the lines to be followed by environmental policy. The Federal Environmental Protection Attorney (Profepa) became responsible for that which was established as a legal and normative principle and that the policy defined as its strategy, objectives, goals and actions, leading to the award of the ecological equilibrium, that it was actually obeyed and fulfilled . These institutional changes taking place in Mexico resulting from the global debate triggered by the Brundtland Report anticipated the Rio Summit.

The signing of the Free Trade Agreement (NAFTA) which entered into force on the first day of 1994, and the addition of Mexico to the Organization for Economic Cooperation and Development (OECD) the same year. Both events brought intense legislative, normative and institutional activity. Environmental standards of various kinds were created with the deliberate purpose of government to be part of the agreement that brought to do commercially to the U.S., Canada and Mexico "(Lezama and Graizabord, 2010, p.47).

3. Definition of the problem

The competitive strategy led to harmful social and environmental that over the years has become economic problems. This is a model in which the competitive survive and the weakest die in failed. From this point, it is proposed a sustainable strategy based on the theories of institutions, resources, industry and corporate social responsibility.

4. Justification

The supporting sustainable strategy based on the fact of having limited natural resources, which before and at the time of exhaustion would cause economic, ecological and social demand for them. Sustainability is an economic development strategy that benefits all three factors increasing satisfaction levels and strengthens the future prospects.

5. Hypothesis

H0. The maturity of a sustainable strategy positively affects business competitiveness, with positive results in the economic, ecological and social development.

6. Objective

To analyze the competitiveness strategy based on sustainability strategy to lead the way to a model of responsible and competitive development.

7. Theoretical frame of reference

The theory based on the industry, resource-based theory and theory of the institutions establish the theoretical frame of reference for government business set up a complex framework based on the studies of Porter (1985), Wernerfelt (1984), Barney (1991) and North (1990). This framework presents the overall picture for business development and its relationship with the environment. The development of society is not unique and exclusive to the institutions, the business-environment relationship first take an important role in the development of society, reflected in the economy and the standards of quality of life.

Barney (1991) mentions that organizational resources are assets, capabilities, attributes which are controlled by the organization to devise and implement strategies that improve its efficiency and effectiveness. These resources are heterogeneously distributed among the organizations, being valuable, rare, inimitable and not substitutable. From the point of view of resource-based view Wernerfelt (1984) mentions that maintain a competitive advantage built on its resources.

A competitive advantage exists when there is equivalence between distinctive competencies of a firm (Porter, 1985). According to Peng (2006) there are three competitive strategies: differentiation, costs and focus or segmentation. The strategy of differentiation is based on distinguishing between competing firms. The strategy of cost, the company offers lower prices to consumers. The focus is characterized by identifying a market segment in which specialization is the right strategy to capture the niche market.

In the relationship with the environment, the institutions are presented as "humanly planned restrictions that structure human interaction" (North 1990, p.3) represented as rules of the game. It defines dynamic capabilities as "the organization's ability to integrate, build, and reconfigure and align competencies to market changes" (Teece, Pisano and Shuen, 1997, p.521). Organizational capacity and dynamics given by Winter (2003) as a high level capacity which gives the direction of the organization a set of alternatives to achieve valuable results. In turn, he mentions that dynamic capabilities are those organizational capabilities acting to create the conventional capabilities.

The capabilities of the entrepreneur are a fundamental part of strategic development, which will provide sustainable competitive advantages. As it is known (Simon, 1947) there are different capacities in all humans, that can limit maximum utilization of resources according to the bounded rationality. Penrose (1959) states: "A company needs reserves for operation, the displayed subject to a restricted and cumulative development process. It has been suggested that the competitive strategy requires the exploitation of the capabilities, internal and external firm-specific "(Penrose, 1959, p. 94).

Based on this framework it can be established the sustainability strategy as an alternative to responsible and competitive development. The International Union for Conservation of Nature mentioned in the XVIII General Assembly (1990): Sustainable development is a process of economic and social improvement that meets the needs and values of all stakeholders, keeping future options and conserving natural resources "and" Sustainability: a strategy for the care of the planet (International Union for Conservation of Nature, 1990, p.33).

In 2007, mankind consumed resources equivalent to one and a half planet according to the factor of bio-capacity, jeopardizing the provision of resources for future generations. This situation places the sustainability strategy as a solution to the problem in the bud. In collaboration with industry, institutions and society, the implementation of a sustainable strategy is to achieve optimum level which may not be exposed to future generations, as shown below:

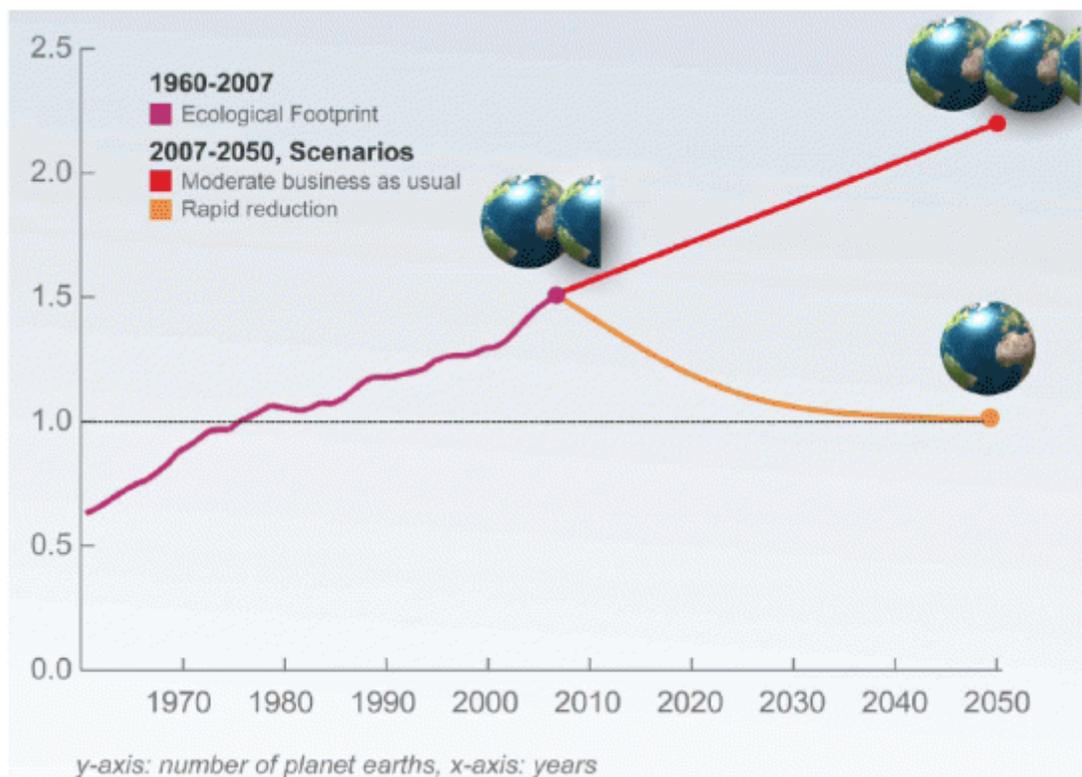
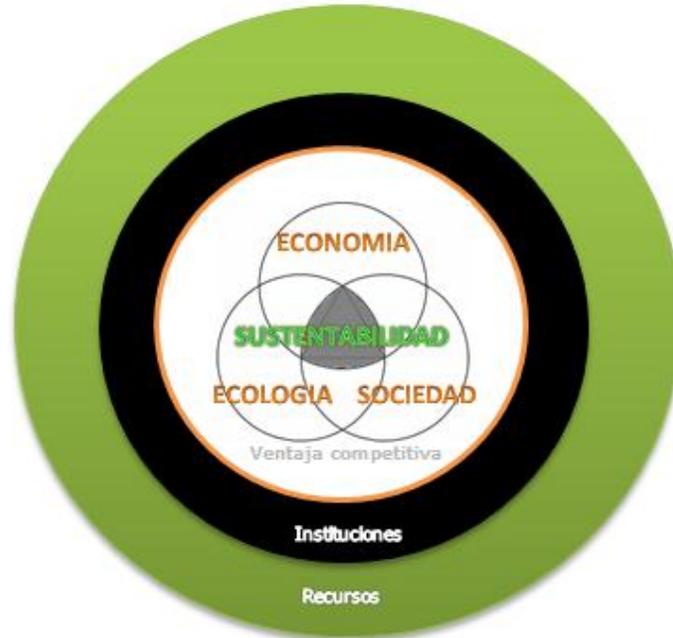


Figure 1: Bio-capacity.

Source: World Wide Fund For Nature (2010), captured from <http://www.footprintnetwork.org/press/LPR2010.pdf>

Making an analysis it can be established the strategy of sustainability as balancing economic, ecological and social interaction with the theories of the resources, institutions and industry, as illustrated in the figure 2 below.



La sustentabilidad como equilibrio económico, ecológico y social en interacción con las teorías económicas de los recursos, las Instituciones y la ventaja competitiva. **Fuente: Elaboración propia.**

Figure 2. Sustainability is balancing economic, social and ecological interactions with economic theories of resources, institutions and comparative advantage.

Source: Own elaboration.

Sustainability suggests a close relationship between business and client entity in which you can be set more than a transaction of mutual benefit of the parties and ensure customer loyalty. The concept of sustainability currently is living with the social responsibility of business organizations that have integrated their strategies voluntarily beyond compliance with laws and regulations of the country, comes from a positive social development through the creation of values and a responsible business conduct.

Sustainability is constituted as an unavoidable necessity for the future survival of the company. Most of today's problems revolve around the wealth, accumulation, inequality, generating new demands for goods, as a synonym for the equilibrium distance, which lie in the ignorance of the subsidiary principle of efficiency social.

8. Competitiveness in terms of sustainability from a perspective of indicators.

The analysis of development indicators helps to assess the factors that make up the function, to give a comparative result between different actors evaluated. To assess the competitiveness are measured product or service variables creating the offering value to the organization compared to competitors, the position of these variables is the level of organizational competitiveness. Among them are the cost, speed, reliability and customer satisfaction. The model of Systemic Competitiveness developed by Esser (1996), provides a framework with a medium to long term

vision and dynamic interaction between actors, which should be directed not only to optimize efficiency potential at different system levels, but also in mobilizing social capacities for creativity aimed to develop competitive advantages.

Analyzing the sustainable development indicators show the performance of the industries based on economic, social and environmental factors. The first factor based on economic development is focusing on a framework of quality, environmental audits, introduction of clean technologies and sustainable use of resources. The social factor analyzes the development of employees and their participation in society, creating an atmosphere of wellness based on the values of the company. The last of the evaluation factors of sustainability is the environmental factor which is set to analyze the impact of the company with its environment.

Different organizations have developed different indicators to assess the impact of implemented strategies. Here are some indexes of competitiveness and sustainability:

A. Competitiveness index

Growth Competitiveness Index was introduced by Jeffrey D. Sachs and Andrew Warner and developed with the assistance of John McArthur for the Center for International Development at Harvard. It measures the ability of a national economy to achieve sustainable economic growth in the medium term. Business Competitiveness Index (2003) was created by Michael Porter from the Institute for Strategy and Competitiveness at Harvard Business School. Evaluates the effectiveness with which an economy uses its resource base.

B. Sustainability indexes

Dow Jones Sustainability Indexes (1999) are the first global indexes tracking the financial performance of leading sustainability-driven companies worldwide. ISE-BOVESPA (2005) is a pioneering initiative in Latin America, designed to create an investment environment compatible with the needs of contemporary society for sustainable development and to encourage companies to be ethically responsible. Environmental Sustainability Index Yale University (1995) was developed by Yale University to set the benchmark for the ability of nations to protect the environment. These indicators permit comparison across a number of issues that fall within the following five broad categories: Environmental systems, reducing environmental stress, reduce human vulnerability to environmental stresses, social and institutional capacity to respond to environmental challenges and global management.

It can be noted that the indexes of competitiveness and sustainability are very clear, assess objective factors which are given a weighting. As mentioned earlier, the competitiveness indexes assess primarily economic, while sustainability focus primarily on the environmental factor, worrying at the forefront of the social aspect, to have positive results in the economy.

Then there is the Most Sustainable Global Companies Ranking (2012) published by Corporate Knights that analyses productivity factors of carbon dioxide, diversity leadership, responsibility

for payment of tax, it is important to note that in the issue of sustainability, responsible business can make a lot without big investments by having a social, economic and environmental culture, being a good example the Brazilian firm Natura Cosméticos S.A. See Table 1.

Table 1. Ranking of most sustainable global companies 2012.

Company	Rank	CO2 productivity	Leadership diversity	% Tax paid	Country
Novo Nordisk A/s	1	\$68-585	17.65%	80.45%	Denmark
Natura Cosméticos S.A.	2	\$284.661	0.00%	73.90%	Brazil
Statoil Asa	3	\$6,508	40.00%	100.00%	Norway
Novozymes A/s	4	\$4,229	18.75%	91.87%	Denmark
ASML Holding Nv	5	\$70.094	15.38%	80.54%	Netherlands
BG Group Plc	6	\$3, 308	7.14%	99.83%	United Kingdom
Westpac Banking Corporation	7	\$152.948	30.00%	100.00%	Australia
Vivendi S. A.	8	\$129.114	33.33%	68.67%	France
Umicore S. A./m.v.	9	\$24,360	20.00%	74.67%	Belgium
Norsk Hydro Asa	10	\$4,520	33.33%	100%	Norway

Source: Corporate Knights, <http://global100.org/index.php>.

The Most Sustainable Global Companies Ranking 2012 it is observed how the firms are evaluated on the ecological role of carbon dioxide, which creates major problems in greenhouse pollution, the social role based on gender diversity and social responsibility in paying taxes. It is a clear example that corporate responsibility is ever-increasing to society, contributing in different ways.

On a macro level Yale University has developed the Environmental Sustainability Index by assessing the environmental systems, reducing stress, reducing human vulnerability, social and institutional capacity and overall management. The results of the evaluation are presented in pentagons. Then it is presented the evaluation of index for Finland, the United States and Mexico which will be analyzed against the global competitiveness index published by the World Economic Forum, which provides competitive factors based on institutions, infrastructure, macroeconomic environment, health and primary education. Higher education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness, market size, business sophistication and innovation.

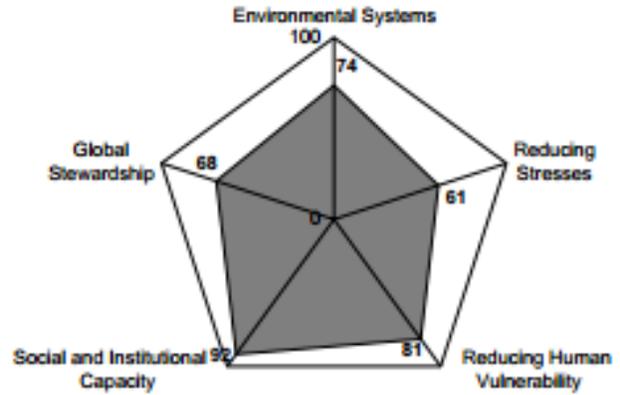
C. Environmental Sustainability Index (Finland)

ESI 2005: Appendix B

Country Profiles

Finland

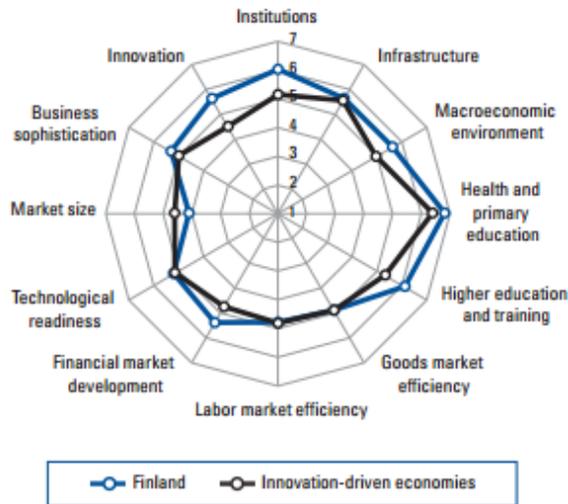
ESI:	75.1
Ranking:	1
GDP/Capita:	\$23,700
Peer group ESI:	55.4
Variable coverage:	75
Missing variables imputed:	1



Source: Environmental Sustainability Index (2005).

http://www.yale.edu/esi/b_countryprofiles.pdf

Global Competitiveness Index (Finland)



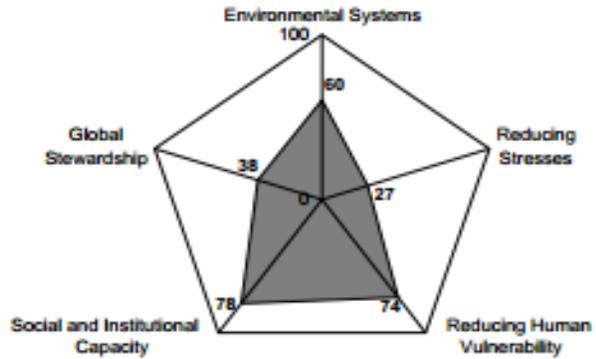
Source: World Economic Forum,

http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2010-11.pdf

D. Environmental Sustainability Index (United States)

United States

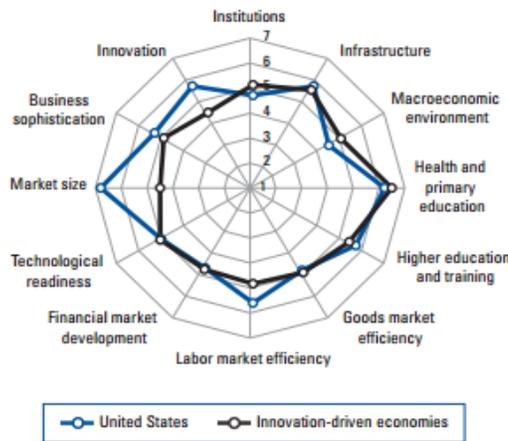
ESI:	53.0
Ranking:	45
GDP/Capita:	\$32,483
Peer group ESI:	55.4
Variable coverage:	73
Missing variables imputed:	0



Sources: Environmental Sustainability Index (2005)

http://www.yale.edu/esi/b_countryprofiles.pdf

Global Competitiveness Index (United States)



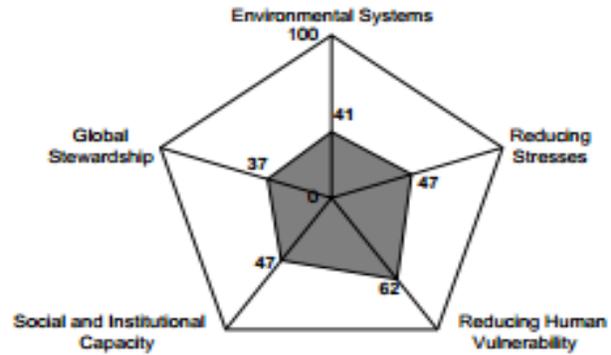
Fuente: World Economic Forum,

http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2010-11.pdf

E. Environmental Sustainability Index (México)

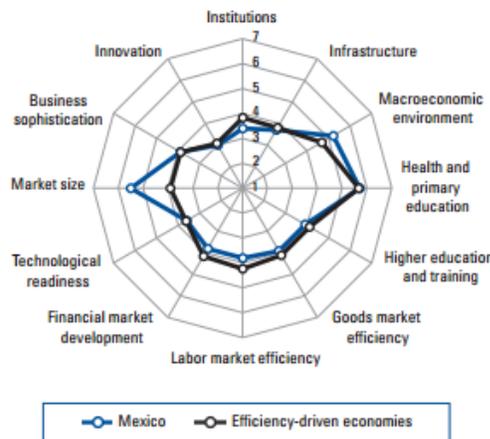
Mexico

ESI:	46.2
Ranking:	95
GDP/Capita:	\$7,945
Peer group ESI:	52.1
Variable coverage:	74
Missing variables imputed:	1



Source: Environmental Sustainability Index (2005).
http://www.yale.edu/esi/b_countryprofiles.pdf

Global Competitiveness Index (México)



Fuente: World Economic Forum,
http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2010-11.pdf

Competitiveness is based on economic variables reflected in indicators such as gross domestic product. A company can deplete forests, pollute the air showing positive competitiveness indicators but not reflecting a sustainable strategy. It can be observed the U.S. case which is among the five most competitive countries and the sustainability index is in the place 45. This reflects the lack of concern for social and environmental factors, which make the difference between sustainability and competitiveness. In contrast, the levels of competitiveness in Finland are among the top ten and sustainability is at number one according to the indicators mentioned above.

Taken at a micro scale by reference to the same factors evaluated, it can be observed that the strategy is sustainable and have positive results in the appearance of responsibility and

competitiveness. The most competitive companies have the best economic, social and environmental issues in the long term, ensuring sustainability; this presents a strategy where competitiveness is measured in terms of sustainability.

9. Conclusions

The current business strategy seeks an ecologically appropriate system, economically viable and socially just to reach sustainable equilibrium promoted by the institutions and strengthened the capabilities and resources that each company has to develop advantages that promote the overall and global development, with the results of maximizing benefits from tangible and intangible perspective.

At the end of the analytical study it can be observed that the maturity of a sustainable business strategy positively affects competitiveness, having positive results in the economic, ecological and social. It also is emphasized that the development should not only aim to optimize the system efficiency, but also social and environmental capabilities development and to generate a social, ecological and economic stability.

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Development of the Uranium Industry in Kazakhstan and its Impact on Economy

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ABSTRACT

This paper analyzes the development of mining and metallurgical complex of Kazakhstan and the example of uranium industry development. Kazakhstan declared its ambitious plans to build a competitive economy. One of the main priorities for development of Kazakhstan is entering into the number of 50 competitive countries of the world. For that Kazakhstan tries to improve competitiveness of all spheres of economy. We suggest considering the development of rare-earth industry as the factor of competitiveness of national economy by the example of uranium. Kazakhstan has 15% of uranium reserves against the world resource. In the country about 19,450 tons of uranium was extracted in 2011, and it is planned to raise the extraction by 2018. Also uranium extraction in Kazakhstan in 2012 was raised by 7.5% up to 20.9 000 tons. Kazakhstan remained the leader of the world uranium extraction industry providing about 37% of the general world volume of uranium extraction, which was 55.7 000 tons of uranium according to preliminary data [URL, 2012]. Explanation of “national competitiveness” plays a very important role for further consideration to the development of the country in the context of the development of national competitiveness. Some economists consider the country's competitiveness as a macroeconomic phenomenon, driven by factors such as interest rates and budget deficits. Others express the consideration that competitiveness is the result of excess of cheap labor. Another point of view on this question links competitiveness with the presence of the rich natural resources.

The concept and methods of evaluation the competitiveness

The first most holistic theoretical propositions on the driving forces of competition appeared in the middle of the XVIII century in the classical school of economic thought. Competition was treated in the concepts of that time as the force limiting spontaneous struggle of anaging individuals and promoting activation of the economic life of society.

The earliest representatives of classical political economy and, above all, Petty W., Pierre L. de Boisguillebert [URL, 2013] tied implementation of the principle of social justice with operation and development of competitive relations, arguing in this respect an understanding of the capitalist system as the eternal and natural. The theory of classical competition was summarized by Smith A. in his work "An Inquiry into the Nature and Causes of the Wealth of Nations" [Smith, 1776], where he first proved that competition leads to optimal allocation of labor and capital. It must balance private interests and economic benefits, and in this sense, Smith A.

identified competition with the "invisible hand" of the market – an automatic equilibrium mechanism. On the example of price competition, he proved a number of important provisions, which later became the postulates of the doctrine of "the maximum satisfaction of demands".

Adam Smith laid the foundations of the theory of international competitive advantages, developed the theory of absolute advantage, which justified profitability of the international trade for all economic agents involved in the process.

The other most prominent representative of the classical political economy is Ricardo D., who considered competition as a necessary condition for market-based pricing. In his work "Principles of Political Economy and Taxation" [Ricardo, 1999] Ricardo built a theoretical model of perfect competition. The main focus was concentrated on how the system is functioning in the long term.

Competition from the positions of economic growth represents the contest of the old with the new: new products, new technologies, and new sources to satisfy the needs of types of organization.

John Maynard Keynes in his work "The General Theory of Employment, Interest and Money" [Keynes, 2003] in terms of development of competition justifies the need for government intervention in the market economy. The analysis of content of organizational forms of competitive relations shows that their development and improvement is represented as by technical and technological conditions and by formation of public regulators, including those in the form of state institutions.

Competition as a multi-dimensional economic category can be considered in different ways. In the narrow understanding competition can be characterized as a contest between independent economic entities for the limited economic resources. Competition as a way of managing is a system of actions of economic agents in the market, and contest between the two in order to provide better opportunities for their products to satisfy the diverse needs of customers.

The Austrian economist Friedrich August von Hayek [Hayek, 1976] considers competition not only as a contest for more profitable application of capital, but also as a procedure of opening of such factors which without reference to it would have remained unknown to anyone, or at least unusable.

It is widely accepted definition of competition given by Porter M. [Porter, 2005], the well-known researcher and professor of the Harvard Business School, "Competitive strategy should be based on a comprehensive understanding of the structure of the industry and the process of its change. In all sectors of the economy whether it operates only in the domestic market or in the foreign as well as the essence of competition is expressed by five forces: the threat of appearance of new competitors, the threat of emergence of substitute products, the ability of suppliers of components to bargain, and the ability of buyers to bargain; rivalry of existing competitors with each other. The value of each of the five forces varies from industry to industry and determines, ultimately, the profitability of the industry". [Chaziachmetov, 2010]. The parameters of each of these forces and their interaction affect competition in any production system.

The approach to the competition proposed by Porter M. can be applied equally as to the industries related to the production of goods, as to industries providing services. The basic principles are valid for all types of businesses, including banking. Porter brought together all the activities in the so-called value chain, in other words, every type of activity of the company is contributing to the formation of the final value of the product.

Thus, competition is treated in the economic theory as a mechanism of regulation of social production, as a form of mutual rivalry of the subjects of the market economy and the process of moving forward [Chaziachmetov, 2010].

In today's world, national competitiveness has become one of the principal concerns of governments and industries in every country. However, in spite of all the discussions, debates and publications on this topic up to date there is no coherent theory explaining the essence of national competitiveness. Moreover, there is no universally accepted definition of competitiveness relating to the country. And if the concept of competitive company is perfectly clear, the concept of competitive countries is the opposite [Porter, 2005].

Below are given few definitions of competitiveness of nation such as:

- the ability of domestic producers to sell their products, the ability to increase or retain market shares sufficient to increase and improve production, and living standards [URL, 2008];
- the ability to achieve high GDP per capita and a deserved standard of living in the country [URL, 2013];
- competition law, administrative procedures, taxes and monetary, financial, commercial, legal, educational, social, environmental and judicial systems [URL, 2009].

Some economists consider the country's competitiveness as a macroeconomic phenomenon, driven by factors such as interest rates and budget deficits. Another popular explanation of national competitiveness lies in differences of management practices in different countries, including the relationship between management and labor. The problem here is that each industry requires a different approach to management.

It is clear that each of these definitions is incomplete, and neither of them is sufficient for rational explanation of the competitiveness of an industry within the country borders.

The only reasonable concept of competitiveness at the national level is productivity. The main goal of any government is to achieve a high and constantly rising standard of living of its citizens. The ability to achieve this goal depends on productivity, which in turn is provided by the involved labor and capital of the country. Productivity is the volume of product produced by the unit of labor and capital. Productivity depends on the quality and properties of the products (determining the price which can be set on it), and the production efficiency. Productivity is the main indicator that determines the long-term standard of living in the country, influencing on the per capita income. Productivity provided by human resources determines the level of wages, productivity (efficiency) of the use of capital, determines the income obtained by the owner.

The standard of living in a particular country depends on the ability of domestic businesses to achieve a high level of productivity and keep on this increase. The steady growth of productivity requires constant development of the economy. National businesses must constantly improve production in existing industries by improving the quality of products, giving them desirable consumer characteristics, improving manufacturing technology, improving production

efficiency. They should develop necessary qualities to compete in the increasingly complicating industrial segments in which the productivity tends to be higher. And, finally, they must develop the ability to compete in principally new and complex areas [Porter, 2005].

Based on the above, the socio-economic development of society and the standard of living of population of any country depend on how successfully the problems of quality and competitiveness of products are solved. Researches in this area are important in the elaboration of development strategy of the country in terms of foreign economic liberalization and expansion into new markets.

The country's competitiveness in the international market is a complex mechanism of realization of competitive advantages through the effective use of available resources in order to increase production and sales of goods and services in the global market.

Many determinants drive productivity and competitiveness. Understanding the factors behind this process has occupied the minds of economists for hundreds of years, engendering theories ranging from Adam Smith's focus on specialization and the division of labor to neoclassical economists' emphasis on investment in physical capital and infrastructure, and, more recently, to interest in other mechanisms such as education and training, technological progress, macroeconomic stability, good governance, firm sophistication, and market efficiency, among others. While all of these factors are likely to be important for competitiveness and growth, they are not mutually exclusive—two or more of them can be significant at the same time, and in fact that is what has been shown in the economic literature. This open-endedness is captured within the GCI by including a weighted average of many different components, each measuring a different aspect of competitiveness. These components are grouped into 12 pillars of competitiveness [Schwab, 2012].

Theoretical aspects to strengthen competitiveness of Kazakhstan

Strengthening of competitiveness of national economy is a very pressing issue. In this connection the problem of priorities of competitiveness strengthening takes on special importance.

Stake on innovation is the central element of the Strategy of development of our country for the period till 2020. This fundamental principle is laid down in the President's Message "New Decade - New Economic Growth - New Opportunities of Kazakhstan." [Nazarbaev, 2012]. That innovative industrialization and the development of innovative human resources should be a key factor to ensure the well-being of the country in the future. This is the basic paradigm of development in the coming decade.

The President set clear objectives to innovation development in the new decade, which would increase the competitiveness of Kazakhstan and bring it to a new level of socio-economic development. In general, our country embarked on the innovative course back in 2003. As part of the Strategy of Industrial and Innovation Development for the period till 2015, the necessary conditions for innovation have been established. The institutional system has been established such as: National Innovation Fund, Center for Engineering and Technology Transfer, Science Foundation, the Committee on Science, financial institutions of development. "Support of innovation". Act has been adopted.

The planned transition to an active introduction of innovations and building of innovative economy specified in the President's message is virtually no-alternative way to the future in the present conditions [URL, 2010].

Typically, the project management approach has been introduced in the operating activity of large national companies, such as "KazMunaiGas", "Kazatomprom", "Kazakhstanemirzholy", and «Kazgiproneftetrans», financial institutions, including banks «Halyk Bank», «ATF Bank», foreign companies or companies with foreign participation. Unfortunately, to date, even the named organizations do not make full use of the opportunities and resources, and project management is not fully project-oriented.

At the level of the national economy the following problems should be solved:

- government regulation of the system project management market;
- improvement of the legal and regulatory base promoting to development of project management;
- development and implementation of a national project management standard;
- certification, including international, of project managers;
- certification, including international, of organizations on the level of use of the methodology and tools of project management;
- development of theoretical and educational system of project management;
- Integration of Kazakhstan into the global project management system.

The project management community in Kazakhstan takes efforts to develop a Kazakhstan's national system of project management. In our view, it should compile and use the world experience. Many countries and organizations have recognized that creation of their own standards is quite expensive and therefore widely use techniques available in the world.

At the same time, it is necessary to take into account national peculiarities of socio-economic development of the country, management of current trends, phenomena, processes. The national standard can be easily adapted to targets of a particular organization that gives an opportunity for all participants to communicate in the same language.

In this case a risk to equip a single document with the best of global practices and overload the document with foreign experience can take place. More rational would be to use already tested model and introducing into it national components, taking into account national peculiarities of socio-economic development, management, current trends, phenomena, processes. The purpose of the National Standard is to ensure adaptation to international requirements and compliance of Kazakhstan businesses with standards. In this case, local companies have the opportunity to be evaluated by international organizations for the use of project management tools. As an example of such pilot evaluation LLP "Manghistau atomic energy complex-Kazatomprom" can be brought which successfully passed the 3 class certification requirements [URL, 2012].

One of the conditions for strengthening competitiveness is the diversification and modernization of the economy.

Under current conditions there is virtually no free niches available in world markets on any product, except, occasionally appearing new products. But as soon as new products appear on the market, many other manufacturers immediately start to develop their production, and in a year or two intense competitions emerges on the market. The conclusion is that Kazakhstan to enter the global market with own products must have the goods of higher quality and lower prices than its competitors. This is achieved through a cheap and highly skilled labor force, no capital intensity,

high-performance, high-level management, extensive technological expertise and tradition in the production of necessary goods.

On the basis of these conditions, if we plan to enter the world market with products of manufacturing industry, it is essential to diversify the economy through the development of high-tech industries with high added value, which do not require large capital investments and are energy-saving. Unlike the countries of East and Southeast Asia, Kazakhstan cannot rely on cheap labor. These industries are mainly manufacturing of consumer goods - clothing, footwear, consumer electronics, and food. Today, however, we cannot expect that Kazakhstan with such products can easily enter foreign markets and be successful. It turns out that in Kazakhstan cannot produce anything except for its majesty - raw materials. However, all is not so hopeless.

Firstly, each product produced in the area of high degree of fabrication, should only be done on the basis of high technology and high added value, i.e. through productivity growth which is not due to cheap labor, which is deficit for Kazakhstan, but extensive use of scientific and technological progress, especially in technology, new products.

Secondly, to achieve the first will be necessary to grow a new generation of highly qualified personnel with training, including training abroad, mainly in the developed European countries, which will take a long time.

Thirdly, take a wide range of measures aimed at attraction of strategic foreign investors for production of high-tech products with high added value, operating in Kazakhstan as a separate legal entity, as a joint venture with local private businesses. The milestone is creation of a favorable business and investment climate, marked limitation of government intervention in the economy, deregulation of the market, provision of free market entry and exit, establishment of comfortable environment in the market, maintenance of the best macroeconomic balance and stability, especially stability of the tax system, laws of the country, predictability of economic policy of the government, etc., which makes them willing to come to the country for a long time, work efficiently, and invest in the non-oil sector of the economy of Kazakhstan. Investors should feel themselves in Kazakhstan more comfortable than in Russia and in other competing countries.

Finally, the government should create a special agency for foreign investments, support of local exporters to promote products to foreign markets, promote the emergence of private marketing centers in Kazakhstan, studying the international markets conditions and serving private companies.

It is necessary to organize the system work with the private businesses to train entrepreneurs to the conditions of the development of business in competitive markets, and strengthen ties with foreign firms, investors, banks, and to improve the management level and competitiveness of products in the international market, etc. [Esentugelov, 2001].

As well the institutional problems of competitiveness of the national economy are under consideration. Significant changes take place in the understanding of the role of institutions of government regulation to solve the problems of competitiveness. Terms of accelerated economic development are prerequisites for improving the efficiency of use of the institutional capacity of

the countries, transition to innovation – resource-saving development model, to a knowledge economy.

The economic transformations of the last ten years, typical for almost all countries, set the speed and content of institutional transformation processes. The uneven implementation was due to national peculiarities of each country, specialization in the global market. The transformations have affected the institutions of government regulation. The latter include legislation, standardization, civil society, finance, information and information technology, national traditions, science and education.

Practice showed that stability and efficiency of the processes, speed and compliance of transformation of institutions with the content of the processes of market reforms were ambiguous. In this situation, the need for rethinking of many approaches to the management of processes is obvious.

However, stability analysis of socio-environmental-economic problems showed that the effect of transformation of government regulation institutions on the content of socio-economic processes, competitiveness of the national economy requires systematic approach in terms of the new institutional economics [Conference, 2007].

Ways to boost development of rare earth industry

Analyzing and considering the rare-earth industry of Kazakhstan as the factor of competitiveness of national economy, we could be convinced that this industry plays important role on our economy.

In order to receive maximum profit for the country, and also positive effects from this industry, the state is to take into account the specificity of the industry and develop it.

Felix Wulis, chief executive director of ENRC PLC marked high prospects of mining and metallurgical complex of Kazakhstan. Also in this connection he marked successful implementation of weighed state policy. The strategic course of the President of the country permitted to implement a range of important programs directed to acceleration of MMC development. The government has developed the Program of Forced Industrial-and-Innovative Development for 2010-2014, which includes the field program of MME. Within its frames the system of stimulation of companies which are setting the second, third and fourth stages of processing is implemented. Today big enterprises, which previously exported raw materials, carry on active investment policy. Modernization of production and introduction of the most modern technologies permit transferring new levels. ENRC projects are the bright evidence of these trends.

The industry needs technological modernization based on the trio “people-processes-technologies”. For that, it is required to continue stimulating companies to expand investment activity, modernization of its production, introduction of advanced technologies and production of products of high level. In addition to technological modernization, it is required to invest in human capital, set the system of training of employees in management of new production technologies.

ENRC makes strong contribution to development of domestic MMC and rare-earth industry during all its activity. For this company, development of assets in Kazakhstan had always a key significance that is why they always invest in their expansion and support. From the moment of its formation, ENRC contributed over USD \$6 billion to only development and modernization of facilities, and total cost of basic projects of the program of capital expenditures of the Group is USD \$10.9 billion. Today ENRC implements such big projects as construction of new ferroalloy plant “Transnational Company “Kazchrome”, anode plant at Kazakhstani Electrolytic Plant, concentrating plant and plant on production of direct reduced iron at Sokolovsko-Sarbaiskiy Mining-and-Concentrating Production Enterprise. The Company has completed reconstruction of power unit No 2 and now is keeping reconstruction of the power unit No 6 at Eurasian Energy Corporation [The International Business Magazine, 2012].

In opinion of Mahadevan V., general director of Areselor Mittal Temirtau JSC, the future is in realization of investment projects directed to improvement of labor safety, ecological safety of production, raising our competitiveness in world markets and increase of production of products with high added value. That will positively tell on not only positions of the company, but welfare of our employees and residents of the region.

Also as of this moment their basic task is development and expansion of production of own iron-ore and coal raw material for the purpose of increase of volumes of extraction and improvement of its quality. For realization of these tasks, the assistance of the government regarding issuing quotes for attraction of qualified foreign work forces is required. That will contribute to transfer of knowledge to local employees and also timely performance of investment projects. Also the state is to take measures in development of internal market of metal products in order to sell more metal in the market of Kazakhstan. On its part, the company supports development of local small and middle size enterprises in order to purchase more goods and services in the Kazakhstani market [The International Business Magazine, 2012].

Tokhtarov O., the Chairman of the Management Board of SAT & Company, marks that MMC is the most important sector of domestic economy which plays significant role in implementation of the state program of Forced Industrial and Innovative Development. The maximal processing of raw material within the country, transfer to basic metals, and production of products of high limits with participation of private business are required for development of our industry.

Now creation of the national innovative system acquires some definiteness and certain nature. Special actuality lays in the concept of planning of industrial and innovative development of economy on the basis of rational placement of production and infrastructural facilities. Without any doubt, all that will permit to raise efficiency of state investment policy, carry out the balancing of purposes and available resources, develop principles of infrastructural development and forecasting social and economic indices.

In the MMC, modernization and technical renewal of production, introduction of modern technologies, energy- and resource saving, provision of technical and ecological safety, reduction of losses and rational use of mineral resources, are actively held, that will permit to transfer to

the following levels. New productions with high added value are created and existing ones are developed, problems of Kazakhstani contents are solved in an integrated manner.

Along with that, there are weak sides as well. Development of science and introduction of science-driven technologies is kept at slow pace, and diversification of economy has not become general national idea of the country and actual priority for all bodies of the power.

Development of the uranium industry, its impact on the economy

Kazakhstan has become the leading producer of uranium all over the world: in 2009 28% of the world products, in 2010 33% and in 2011 35%. Development of uranium industry gave possibility to Kazakhstan to involve foreign companies for cooperation in this sphere. For example, the number of foreign companies contributing to the uranium industry in Kazakhstan includes the Canadian company “SXR Uranium One Inc.”, Japan company “Marubeni Corp.”, Chinese company “Guangdong Nuclear Power Group”, British company “New Power Systems Ltd.”, American trading company “Nukem” [URL].

Building its relations at the world level Kazakhstani uranium industry has improved its investment attractiveness.

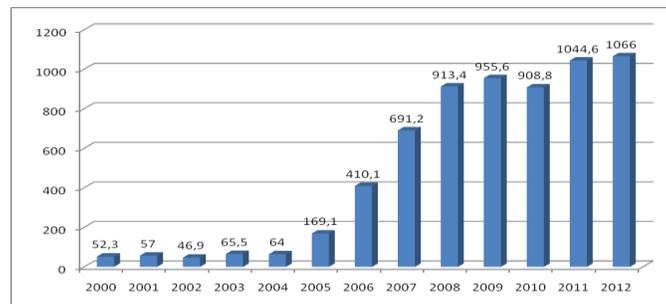


Figure 1 – Investments to uranium in 2000-2012, \$ mln. [URL, 2010-2011]

It has historically occurred that enterprises extracting and processing uranium had strategic significance for state safety of the former USSR. These enterprises were located in geographically remote places and was town forming. Around the enterprise, small towns were designed and erected with well-developed autonomous infrastructure including all aspects of full life activity of the man: schools, hospitals, parks, kindergartens, sport stadiums, houses of culture, food shops, etc. During the period of the USSR dissolution and the process of formation of independent states, the uranium industry on the whole underwent the crisis of development: rates of extraction, processing and sale of the products reduced. That could not help telling on the social sphere of small towns where enterprises of uranium industry were located. Means for construction of new, development and support of current activity of existing social objects were allotted according to the leftover principle. The consequence of that was crisis of management of social sphere that brought to reduction of volumes and decline of quality of rendering services to the population, closing of a range of existing objects and also cessation and conservation of objects of social infrastructure being under construction.

In 2004 the Management of Kazatomprom NNC made a decision to conduct restructuring of the system of uranium industry management. The basic purposes of restructuring were reduction of costs and optimization of the management system. As a result the holding structure with

principle company Kazatomprom NNC JSC was formed. New modern forms of management introduced by the Holding Management brought to resurgence of the uranium industry on the whole. One of the most important decisions made as a result of restructuring the company was allotment of non-profile kinds of activity, including social sphere management, from the number of production enterprises. For that purpose, the specialized company on social objects' management "Kazatomprom-Demeu" was created [URL].

The project of SARECO (Joint Enterprise of Kazatomprom NNC and Japan Company "Sumitomo Atom") production of rare-earth concentrates can be noted. This is a sole enterprise in the country which strategy includes development of high-technology fields of metallurgical industry on the basis of rare-earth metals. The project will provide non-waste use of mineral resources and ecologic safety.

The plant in Stepnogorsk is a complex of thermal and hydrometallurgical processing of different types of raw materials, which has embodied results of work of Kazakhstani, Japan and European scientists and engineers. The plant is projected and built taking into account of ecologic standards. And used technology and control systems provide careful relation to the environment.

SARECO plant is designed for production of 1.5 tons of TREO (sum of REM oxides), with increase of production facilities up to three thousand tons of TREO in 2015 and up to five to six tons of TREO per year by 2017. The significant part of produced products will be REM of so called heavy group which is of the high lack and demand at present time. The basic target market of SARECO is Japan market [URL].

Analyzing the above, we can build the following dependence between competitiveness of national economy and development of uranium industry.

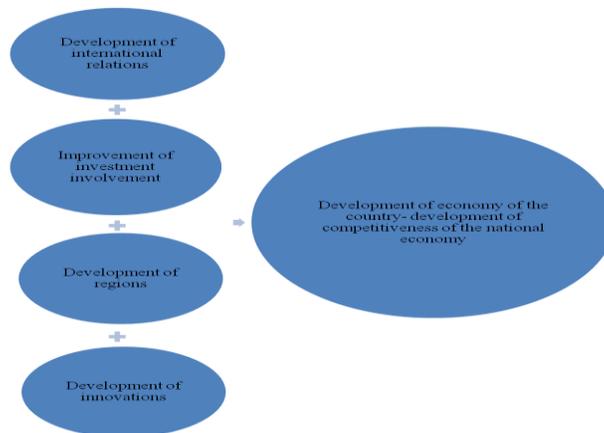


Figure 2 – Interaction between the national competitiveness and development of uranium industry

The analysis of interaction between GDP of the country and investment and production in uranium industry is given.

Table 1 – Indexes of GDP, investments and production

obs	GDP	INVESTMENT	PRODUCTION
2000	18292.4	52.3	1752
2001	22152.1	57	2022
2002	24636.5	46.9	2709
2003	30832.8	65.5	2946
2004	43150.1	64	3712
2005	57123.7	169.1	4362
2006	81003.5	410.1	5281
2007	104853.5	691.2	6637
2008	133440.7	913.4	8521
2009	115306.1	955.6	14020
2010	148052.4	908.8	17803
2011	188050	1044.6	19450
2012	200797.3	1066	20900

Note – compiled by Reviews

For defining the interaction, the test by Least Squares method was held.

Table 2 – Least Squares Methods

Dependent Variable: GDP				
Method: Least Squares				
Date: 05/23/13 Time: 00:16				
Sample: 2000 2012				
Included observations: 13				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
INVESTMENT	82.38947	23.39797	3.521223	0.0055
PRODUCTION	3.940082	1.452135	2.713303	0.0218
C	15605.39	6599.062	2.364789	0.0396
R-squared	0.955017	Mean dependent var	89822.39	
Adjusted R-squared	0.946020	S.D. dependent var	63824.50	
S.E. of regression	14828.70	Akaike info criterion	22.24569	
Sum squared resid	2.20E+09	Schwarz criterion	22.37606	
Log likelihood	-141.5970	F-statistic	106.1526	
Durbin-Watson stat	1.371645	Prob(F-statistic)	0.000000	

In this table the coefficient of determination, which shows what share of variation of the resulting index is connected with variation of factor indices, is one of indices of interaction of indices. In our case R-squared = 0.955017. The definite coefficient is very close to 1, on the basis of that we can say that the connection between GDP and investments and production of uranium industry is very close.

Development of the uranium industry gives positive effect on economy of the country. That, in turn, tells on raising the competitiveness of the country.

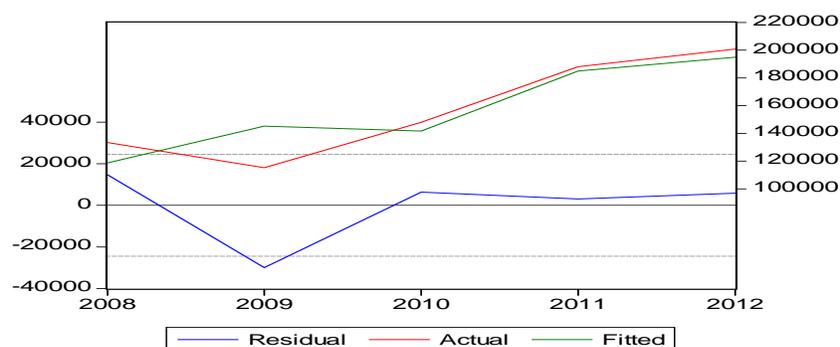


Figure 6 – Residual graph

Building its relations at the world level Kazakhstani uranium industry has improved its investment attractiveness and development of innovations.

The investments and production of uranium industry has a directly effect in the GDP of our country. For the further development of the rare metals industry in the country should create a favorable climate for attracting foreign investment; the adoption of a separate law on rare earth industry or the development of rare earth industry in Add-ons for existing legislation; do not forget the national as well as the companies in this industry of social responsibility and development of programs for the social support of companies; Government support for companies in the industry; the development of innovation, exchange of experience of foreign colleagues.

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I. MANUSCRIPT STRUCTURE

1.1. Manuscript Structure for Research Paper

- **Manuscript Title:** Development of the uranium industry in Kazakhstan and its impact on economy.
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- **Abstract**

This paper analyzes the development of mining and metallurgical complex of Kazakhstan and the example of uranium industry development. Kazakhstan declared its ambitious plans to build a competitive economy. One of the main priorities for development of Kazakhstan is entering into the number of 50 competitive countries of the world. For that Kazakhstan tries to improve competitiveness of all spheres of economy. We suggest considering the development of rare-earth industry as the factor of competitiveness of national economy by the example of uranium. Kazakhstan has 15% of uranium reserves against the world resource. In the country about 19,450 tons of uranium was extracted in 2011, and it is

planned to raise the extraction by 2018. Also uranium extraction in Kazakhstan in 2012 was raised by 7.5% up to 20.9 000 tons. Kazakhstan remained the leader of the world uranium extraction industry providing about 37% of the general world volume of uranium extraction, which was 55.7 000 tons of uranium according to preliminary data [URL, 2012]. Explanation of “national competitiveness” plays a very important role for further consideration to the development of the country in the context of the development of national competitiveness. Some economists consider the country's competitiveness as a macroeconomic phenomenon, driven by factors such as interest rates and budget deficits. Others express the consideration that competitiveness is the result of excess of cheap labor. Another point of view on this question links competitiveness with the presence of the rich natural resources.

- **Keywords:** uranium; industry; Kazatomprom; competitiveness; national economy; business; entrepreneur; investment; innovation; resource; international market; strategy of development.
- **Abbreviations:** ENRC PLC; MMC; MME; SAT; NNC JSC; SARECO; TREO; GDP; SXR.

Introduction: The first most holistic theoretical propositions on the driving forces of competition appeared in the middle of the XVIII century in the classical school of economic thought. Competition was treated in the concepts of that time as the force limiting spontaneous struggle of managing individuals and promoting activation of the economic life of society.

Analyzing and considering the rare-earth industry of Kazakhstan as the factor of competitiveness of national economy, we could be convinced that this industry plays important role on our economy. In order to receive maximum profit for the country, and also positive effects from this industry, the state is to take into account the specificity of the industry and develop it.

In 2004 the Management of Kazatomprom NNC made a decision to conduct restructuring of the system of uranium industry management. The basic purposes of restructuring were reduction of costs and optimization of the management system. As a result the holding structure with principle company Kazatomprom NNC JSC was formed. New modern forms of management introduced by the Holding Management brought to resurgence of the uranium industry on the whole. One of the most important decisions made as a result of restructuring the company was allotment of non-profile kinds of activity, including social sphere management, from the number of production enterprises. For that purpose, the specialized company on social objects' management “Kazatomprom-Demeu” was created.

Related Works: International Business Dictionary.(2011) Almaty, p.255. Proceedings of the international conference.(2013). Development of rare-earth industry in Kazakhstan by industries: resources, production, investment. London: Brunel University.

- **Methods:** the methodology that uses elements of systemic, structural-functional approach: general scientific and dialectical (analysis, synthesis, deduction, induction, analogy, comparison, logic, history, organization, grouping, image, etc.) and private-academic (faculty of mathematical, statistical, econometric, chronological, historical, etc.)

Results: Key messages and conclusions can be used for further study of factors of competitiveness of Kazakhstan, when a report is run on the competitiveness of the

national economy, the rare metals industry as a factor in the development of the national economy and the continued growth of the industry.

- **Conclusion and Future Work:** Building its relations at the world level Kazakhstani uranium industry has improved its investment attractiveness and development of innovations.

The investments and production of uranium industry has a directly effect in the GDP of our country. For the further development of the rare metals industry in the country should create a favorable climate for attracting foreign investment; the adoption of a separate law on rare earth industry or the development of rare earth industry in Add-ons for existing legislation; do not forget the national as well as the companies in this industry of social responsibility and development of programs for the social support of companies; Government support for companies in the industry; the development of innovation, exchange of experience of foreign colleagues.

- **Appendices** (if applicable / any)
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Impact of leadership and Politics on Organizational Cynicism among Banking sector employees in Pakistan

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Abstract

This study aims to investigate the various factors to gauge the organizational cynicism in an organization. Being one of the relatively well established industry in Pakistan, the authors have attempted to study the defined variables in the banking sector of Pakistan. To investigate further, data is collected from a sample of employees from the largest and premier Islamic Bank in Pakistan. Primary data is sourced through a structured questionnaire from around 150 Meezan Bank and other Bank's employees. Results indicate that organizational cynicism takes place when there becomes a communication gap between the different tiers of management. This results into differences and agency costs amongst different tiers of management. The paper also advocates that merely announcements are not enough in developing environs as implementation is as essential as the policy formation. Strategies discussing improvement and policies tend to enhance employee's trust back on the organization and ultimately lead to winning of strategic objectives set by directors and management alike.

Key Words: Organizational Cynicism, Politics and Leadership, Banking sector employees in Pakistan. Meezan Bank

Introduction

Leadership has remained a key focal point and an active area of scientific investigation for over half a century in the corporate World, with scholars developing different perspectives on antecedents, processes and outcomes. Conspicuous in its absence has also been a conceptualization of leadership from a political perspective, despite appeals for such a theory and the widely acknowledged view of political processes in organizations. A political perspective on organizations has become an increasingly accepted view in recent years. Indeed, if we can accurately characterize organizations as "political arenas" (Mintzberg, 1983, 1985), then it seems quite reasonable that we should be interested in the antecedents and consequences of the political behavior exhibited by the players inhabiting organizational environments. Certainly, some work has focused on the development of a more informed understanding of political behavior in organizations (Ferris & Judge, 1991).

Researchers agree that the basic factors, causing cynicism in organizations are the leaders and the politics revolving around in the organization. The environmental Politics is implementing both negative and positive reactions when emerged (Davis and Gardner, 2004). In organizations, environment also plays a pivotal role in determining employees' reactions. Politics is viewed to be played and impacting from higher to lower and lower to higher that negatively affect the organization, be it positive and negative. It remains the job of top management to keep reviewing the various factors that are leading towards the environmental change. The politics between peers give negative effect on the organization. Due to previous research, it's proved that politics plays a vital role in negative and positive reactions on employees of organizations that is more enhanced and studied vitally in this research.

Cynicism is derived from a Greek word called the *Cynics*. Cynicism can be well defined by the following researcher's point of view (Hobbs, 2008). They have studied cynicism as the perception of pessimistic piece of mind. Cynicism is well defined by them as an outlook focused on restricted empirical work. That is occurred due to the distrust or lack of belief on the organization as it might be able to fool its employee's any time. The organizations are basically lacking the integrity that arises in the environment by the cynical attitudes and behaviors of the employee's of the organizations.

In this research, it is proved that the top level management may be instrumental in creation of cynical attitudes of the working employee's. It also says that the organization is facing a dynamical disaster due to its top level management attitudes. (Bummer, 2004) suggested that one can be encouraged by influencing and reducing cynicism. If properly surveyed and analyzed the factors causing cynicism in organization and the actions are been taken for the remedy of it, it is possible that the employees trust and interest can be achieved back in towards their jobs. He further argued that through transmission of positive signals, top management may take the organization to new heights and create a culture of best practices across different business units.

In banking sector, employees usually view issues such as frustration stemming from the workload, conflicting and puzzling signals from the top management and sometimes organizational policies. The purpose of this research is to investigate the variables to lessen the frustration level amongst the various strata of employees while gathering information on the cynicism generating in a typical bank or a financial institution. The benefits of this research will be to determine few factors responsible for increasing in cynicism within the given organization. Through this research, we may provide effective and efficient suggestions and solution to prevent the organization from increasing rate of cynicism. On the other hand, positive messages may actually lead to higher productivity and yield positive results in terms of increased market share and profitability. This research may also identify the factors, helping the organizations to minimize the mismanagement by the top managers of the organizations. By the help of this research paper, the board of directors of an organization may also be helped in over viewing the loop holes and drawback of their weak decisions made in past in respect to provide better environment. The research also proves that behaviors, attitudes and environment play a vital role in the developing of the organizational culture.

LITERATURE REVIEW

CYNICISM:

There are many factors implementing cynical environment in organizations. We are focusing on two basic factors in this study; politics and leadership. As these both factors are interlinked in the cause of cynicism in an organization.

Organizational cynicism may also be defined as feelings of an individual that might result or indicate intense dislike, lack of respect accompanied and patronizing the recipient. (Treadway, et al. 2004). The first and far most characteristic of leader is directing and setting goals that are to attain (Kan & Parry, 2004). The relationship of leaders to subordinate is an opportunity full, manipulating, involving political skill to achieve the strategic and tactical objectives of any given organization (Treadway et al., 2004). Without the influence of individuals or groups, the practical occurrence of leadership appears to be a far fetched dream (Kan & Parry, 2004). Leadership is not merely charisma and as such need not to be a person of extraordinary or exceptional caliber, having convincing power for the followers to follow (Parameshwar, 2005). But, leadership is a combined influence of a manager to subordinate and subordinate to manager, making it an effective two way communication (Kan & Parry, 2004).

Previous researches have investigated on organizational cynicism in different countries to determine the significance of cynicism. The negative effects of manager attitude are strongly affected (Dierdorff, et al., 2009) due to mismanagement/miscommunication. Employees have the negative effect that comes out at cynical factors. The behavior of organizational leaders may be justified from organization to organization (Davis and Gardner, 2004). Due to the organizational environment, it is easy to evaluate the leaders' behavior towards the organizations with organizations to factorize leaders behavior. The negative effect of cynicism on leaders may be exhibited through the organization in terms of reduced performance and efficiency (Bummer, 2004). Cynical factors have a vast effect on the leaders of the organization. This appears to be the key reason as to why the leaders cannot manage the jobs and responsibilities accordingly effectively and professionally. If the nature of work is changed, it's possible that violation in means of psychological contract ends. (Cartwright and Holmes, 2006). However, its proved by the psychological review, if the employees are just appointed for their qualified field of specialization rather than making them do work they are not qualified for, the work out put level will increase and the ratio of violation in respect to employees to ward the organization will decrease instant in reaction.

LEADERSHIP

As part of the development of our model of a political theory of leadership, we may also define the real meaning of leadership and organizational politics. Firstly, as we refer to leadership concept, the widely used proposed by House (1995) of general leadership is followed. He defined leadership as "the trait(s) which gives purpose, meaning, and guidance to collectivities by articulating a collective vision that appeals to ideological values, motives and self-perceptions of followers." House further argues that the outcome of such behavior are heightened awareness of organizational values, unusual levels of effort and the foregoing of self-interest of followers for the good of the collective.

It's important for leaders to have a sound to their under employees (Cronin, 1984). Politics and work outcomes are important relation that serves perceived organizational support.

(Hochwarter, et al., 2003). Leaders play an important role in changing management and their visions. (Rubin, et al., 2009). Leaders are aware of their problematic, significant, contribution in history. They do recognize the crises but are unwilling to face them due to intolerable conditions (Parameshwar, 2005). The basic concern of leaders is to identify themselves (Cronin, 1984). Leadership is a process of supporting that defines a vast meaning to leadership than mono directional events (Kan & Parry, 2004). The various researchers have proved that the complaining leaders are actually disincentives are greater than their incentives to an organization. (Cronin, 1984). In an organization, it's difficult sometimes for all the employees to achieve the support of organization in means of interaction with the top level management even in political environment. (Hochwarter, Kacmar, Perrewe, & Johnson, 2003). Leadership is itself and creative activity. (Cronin, 1984). Understanding the interaction between social networks and their individuals, the leadership phenomena results, not only experiencing but also reflecting leadership has implicit theories. (Holmberg & Akerblom, 2001). The effectiveness of leadership is in actual accountable when it is been teaches on willingness rather than imposed. (Cronin, 1984). Unethical requests are complied with organizational citizenship reducing cynicism. (Anderson & Bateman, 1997). Leadership is such an act that if taught impresses an arrogant attitude. (Cronin, 1984). The individuals of the organization, questions the organization for safety and protection of their well-being, since the political perception have been negatively reacted. (Hochwarter, et al., 2003). Leadership is a form of training that preoccupies the methodology, skills, & work is done properly. (Cronin, 2008).

ORGANIZATIONAL POLITICS

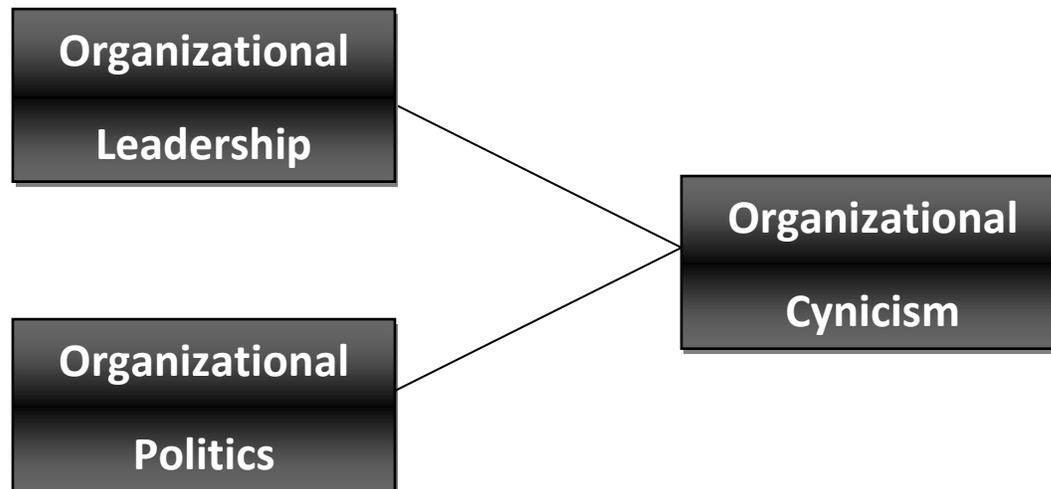
Politics have garnered an undesirable reputation over the course of the last 20 years (Gandz & Murray, 1980). To the average individual, the term organizational politics is likely to conjure a host of reprehensible images that include (but are not limited to) backroom manipulation, behind-the-scenes maneuvering, and self-serving posturing.

When political leaders act to their motives, their ability, manner of act, possess in favorable light. (Treadway, et al., 2004). Work environment can be made better by subjectively experiencing the Psychological affect comes to the climate of the well beings. (Rego, Cunha, 2008). As a matter of fact, it's the responsibility of top management to capture the downfalls and drawbacks of the leaders that might can effect the banking sector organizations. (Fernandez, Jikcho, & Perry 2010). Leadership is an in born talent cannot be developed. (Cronin 1984). The ethical issues of organizational politics address the need of normality. (Rego & Cunha, 2008). Leadership is such an ability that can rather not be inherited than most likely learnt. (Cronin, 2008). The past experience of the leaders engages their abilities or non-abilities and motivates them to out source their political behavior. (Ammeter, et al., 2002). In Improving the organizational performance, amalgamate outcome of leaders is in need. (Fernandez, Jikcho & Perry 2010). The political environment is creating a cynical behavior amongst the organizations, and are been recognized even in the neutral perceptions. (Davis, & Gardner, 2004). The characteristics of good leaders are to collectively bring up the likelihood to the political behaviors in an organization. (Ammeter, Douglas, Gardner, Hochwater & Ferris, 2002). The level of trust can be must measurable with the refusal and diffuse political factors of the leaders and political systems. (Rodgers, 1974). The relationship amongst the top and lower level management, if organized well reflects the

interpersonal promoting relations and the welfare of the leadership with in the organizational behavior. (Fernandez, Jikcho & Perry, 2010).

Theoretical Frame Work

Relationship between Organization Leadership and Organizational Politics



This diagram is based on hypothesis indicate that Organizational Cynicism is dependent variable and it has a direct relationship with Organizational Leadership and Organizational Politics.

RESEARCH DESIGN

The purpose of our research is hypothesis testing and hypothesis is developed through review of other research work on same topic. We are testing relationship of organizational cynicism between leadership and politics. The investigation type of our study is correlation as we are finding relationship between dependent variable organizational cynicism and contributing independent variable leadership and politics. The extent of researcher interference is minimal and study setting is natural or non-contrived.

Research Methodology

This section discusses the methodology adopted for the research. It includes discussion about questionnaire and participants.

a) Questionnaire

Questionnaire was used as instrument for data collection. It contains three sections having 20 items. A five point Likert Scale was used to measure the variables. Total number of 250 questionnaires were distributed and out of which 103 were received back making response

rate as 60.8%.

b) Population and Sample

Population for present study includes employees of Meezan Bank. Convenient Sampling technique was used and questionnaires were distributed among the employees of Rawalpindi and Islamabad branches.

Attribute		Frequency	Percentage
Gende	Male	69	69%
	Female	31	31%
Age	18-25	30	30%
	25-35	31	31%
	35-45	24	24%
	Greater than 45	15	15%
Tenure	0-1	14	14%
	2-3	25	25%
	3-4	26	26%
	4-5	35	35%

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ing for social science (SPSS) software by using correlations and regression analysis. Correlation analysis shows dependency of organizational cynicism on leadership and politics. Regression analysis is used to find out the strength of dependency.

Table 1: Regression Analysis

REGRESSION

	Beta	t	Sigma
Organizational Cynicism		3.723	.000
Organizational Politics	.411	4.611	
Organizational Leadership	.232	2.606	

N = 100, (Dependent Variable=Leadership and Politics)

R square = .259

Adjusted R Square = .243

F = 16.914

T =3.72

The regression analysis indicates value of .259 for R Square which shows that organizational cynicism has a significant impact on organizational politics and organizational leadership. It also shows the fitness of the model. The value of F = 16.914 which is significant at 0.000. The β value of Organizational Cynicism (.411) is significant at 0.000 which shows that organizational cynicism has a strong and positive affect on organizational politics and organizational leadership in banking sector of Pakistan.

DISCUSSION

We have attempted in this article to find factors of cynicism in the banking section. The cynicism in dimension of politics and leadership in the organizations have bad impact in the organizations. The leaders pay less attention toward low levels, only making strategies that are not effective, the main purpose is to implement them. The effective and efficient leaders always increase productivity, focused on work human resources and low levels. The politics in organizations also creates a cynicism in the organizations. The leaders are cynical about change are reward as low and poor performance and low productive.

The effect of cynicism is another question, we answered, that there is a negative phenomena as organizational prospective. The low productivity trend in the organization kicks off by this phenomenon. The some other outcomes are low performance, low down moral, lack of interest in work, poor commitment and frustration toward employees. The team work also affected to

cynicism, the employees have not trust on one another, their leaders and even on themselves.

There are some steps which are taken to avoid or reduce the level of cynic behavior from employees. To increase the incentives, providing the friendly environment, to improve technology in the working areas of organization. The cheapest and best technology is internet facility. These steps play an important role in the reduction of cynicism in present situation of government sector. These steps have greater value to increase goodwill of organization, the cost of reducing cynicism seems more but reality is the reduction of this behavior has low cost and maximum advantages.

The organizations will play more effective role for the development of country. The effective organizations plays effective role and low level of cynicism increase the effectiveness.

The productive organizations have very low cynic behavior toward their employees. The cynicism in even productive organizations changes them in to unproductive units. The general public also effect from the cynic behavior of organizational employees.

In conclusion the organizational cynicism presents in government as well as private sectors. The research shows that this is a big challenge in the creativity of effectiveness of organizations. There is variety of models available to understand the cynical behavior of people and also its effect on other people. Some process involved like leadership, politics, power distribution or procedural justice. The research on cynicism is a good opportunity for the researchers to express themselves. This research helps us to understand this phenomenon in the modern organizations. We have also focused the effect of this trend and reasons for this phenomenon and also the steps or solution to reduce or overcome this behavior in the organizations.

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Influence of Role Model on Pakistani Teenager's Purchase Behavior

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Abstract

Reason of this study is to discover out the influence of role model on purchase behavior of Pakistani teenagers, by introducing the concepts of direct (father and mother) and vicarious (favorite entertainer and favorite athlete) role models into the consumer behavior literature. Questionnaire was used to gather the data from students of the different universities of Islamabad and Rawalpindi. Results show that purchasing behavior of teenager is highly influenced by their role models. Statistical result shows that vicarious role models including favorite athlete and favorite entertainer are more influential in purchase behavior than the direct role models including father and mother. Specifically, it focused on role model influence on teenagers purchase behavior. This study will give good amount of information to marketers in understanding the ever-growing market of teenager consumers

Introduction

Role model is a person who serves as an example of the values, attitudes, and behaviors related with a role. For example, a father is a role model for his children. Role models can also be personnel who differentiate themselves in such a way that others respect and want to follow them. For example, a woman who becomes a flourishing brain surgeon or airline pilot can be illustrated as a role model for other women. This study includes concepts of direct (father and mother) and vicarious (favorite entertainer and favorite athlete) role models into the consumer behavior literature. The teenagers market in the Pakistan represents an incredible prospect for marketers.

By Federal Bureau of Statistics (Pakistan) teens represents 40.07% of total population in 1998 and will increase dynamically in next 10 Years. Teenagers are second most important market and perhaps more important future market. The teenage population is increasing and beyond in number. Teens are tremendously significant target market for marketers because, they pursue their parent's expenditure pattern, can influence expenditure in the future. Teens also influence in an important way the family expenditure, by communicating their favorite products. Teenagers may capture up with trends than possibly than any other age cluster. They not only set trends for one another, but may influence the population as trendsetters at huge. A greater thoughtful of teens' role model influences can help organizations and their advertising agencies more efficiently target and converse to this growing market. This study will interpret the superior understanding of teenagers as end user. Specially, it focuses on role model influence on teenagers purchase behavior. This study will give good amount of information to marketers to understand the ever-growing market of adolescent consumers.

Literature review

Prospective crowd of people that is talented to have a strong impact on the utilization intention and behaviors of persons (Bush and Martin, 2000). Role models can vary from direct models such as parents, peers, relatives to vicarious role models such as celebrities (Bush and Martin, 2000). For marketers it is pretty significant to have such market information that involves purchasing decisions take into description due to influence of direct or indirect role models. Miller, Rome and Georgia (2005) said in their article role model always root a strong impact on individual. Role models both positive and negative are significant power on upgrading. I think it is an honorable to be a role model to one individual or may be more than that. If you are given an opportunity to be a role model, I believe you should always obtain it because you can influence a person's life in a positive perspective, and that's what I want to do. That's what it's all about" (Tiger Woods).

Socialization is the procedure by which we study about others attitudes, principles and way of life and finally come to originate our own. Individual discover, between other ways, by observing and experiencing the actions of others. This is what makes us social beings. It is called social learning theory (Hogben and Byrne, 1998). "A role model today is mainly frequently equated with 'a sign of accomplishment and is occasionally conflated with being a 'star' or an 'idol'" (Carrington & Skelton, 2002). Study suggests that as children become youngsters, they rely less and less on parental role models and as a substitute turn to friends, teachers, coaches and others. According to Doan and Eccles (1994), youngsters /adolescents love individualities in their heroes that were openly associated to them (e.g. understands me, does things for me), while grown-up youngsters were more expected to approve of their heroes because of the kind of standards and character they have. Artistes, sportspersons and mothers have superior impact on youngsters buying activities as compared to father's impact. Social marketing post like dangers of smoking; brutal drugs and alcohol, toward youngsters may be very valuable if delivered by media or sport superstar (Latif, Saleem & Zain-ul-abideen, 2011).

Saleem (2008) told in his article that teenagers market in the Pakistan indicate an immense expect for marketers. Stated by Federal Bureau of Statistics in Pakistan adolescence Represents 40.07% of Total population in 1998 and may enlarge energetically in next 10 Years. A great number of teen population is jobless (97.5% Male, 88.3%, Female Federal Bureau of Statistics), so a greater part is reliant on parents. Teenagers may influence with trends than probably any further age group. They are not only set trends for one another, but may also set the trends for the population at great level. Advertisers, retailers and marketers are also conscious of the truth so they center of attention is to build brand loyalties in teenagers (James and McNeal, 1992). Even though the family is considered an vital driving force in end user socialization, and parents are favored about two times as much as and other basis of end user information but through study it is found that for both genders, peers symbolize the most essential part of such decisions. If we look on brand compassion during making buying decisions we get to know while wearing clothes brand names seems to be very vital for youngsters and which mostly depends on your social friend circle. (Lachance, Beaudoin and Robitaille, 2003) Persuasion of peers varies across different manufactured goods categories (Makgosa and Mohube, 2007). Bush, Martin and Clark (2001) found that teachers and sportsperson role models were found to have the maximum force on teenager's marketplace information. Learning suggests that parents and celebrities both have control on young end users buying behavior but visibly, Celebrities have additional impact on teenagers buying actions than parents. Therefore, marketers focusing young customers should

think using celebrities as models to respond their products and brands (Run, Butt & Nee, 2010). Study of result shows that both Direct and Vicarious role models have huge impact on teenagers buying activities in conditions of influencing youngsters to switch or change their choice about particular brand, compared to influencing teenager consumers to reside trustworthy to one exacting product supplier (Martin & Bush, 2000). The result suggests that there is a comparatively high level vicarious role model persuasion of television celebrities and artiste between adolescents. In the same way, regression study shows that vicarious role models are absolutely impacting teenager's buying activities, particularly their switching behavior and reaction to special dilemma (Makgosa, 2010). Youngsters also point out that they believe television performers and superstars as their role models and they give

importance to their beliefs when making buying choices (Makgosa, 2010). Research uncovered that artistes, sportspersons and mothers have superior persuasion on adolescents buying actions as compared to father's influence (Latif, Saleem & Zain-ul-abideen, 2011). Teenagers symbolize a massive market for advertisers. Bush, Martin and Bush (2004) found that sportsperson role models are known as significant influencers to teens. These influencers are not only central in helping enlarge positive word-of-mouth about a product or brand, but also for ornamental brand faithfulness. We, as human beings are repeatedly learning about our surroundings and a segment of this learning is associated to what we use and when and how we use it. As a result, learning is a vital concept in consumer purchasing action it can be defined as, "Alterations in approaches or actions are based on experience and assessment."

We found consistently about products and services available and corrected our utilization patterns to what we learning. Yet, we occasionally obtain knowledge that does impact our utilization models for several times. Mahsud, Yaser and Chaudhry (2011) told that television is a mostly accepted means of communication all over the world. The impact of television is capable to inculcate is because of different plays, films and musical programs etc which are televised daily. Dramas and films give us different guidelines to think and different trends to pursue, people have begun to follow those trends for children, and it can also be 'third parent'. For teen ages or young age group, it is a friend who tells those regarding different fields of life, different features of life. Now if we look at sports and sports superstars in case of buying choice making we came to identify that they are main glasses of today's media civilization. Sports superstars have been looked upon as role models for decades, and with the scientific advancement in telecast and interactive media in some respect.

TV dramas influence the general character construction pattern. Over the years, advertisers have paid well-known athletes millions of dollars to hold up their products. Some of the large amount normally engaged advertising spokespersons today are famous sportspersons such as Michael Jordan (Nike, Hanes, Gatorade), Tiger Woods (Wheaties, Buick, Target), Shaquille O'Neal (Radio Shack, Nestles, Burger King), Venus Williams (Reebok), and so on. Teenagers indicate a huge market for advertisers. Athlete role models are perceived as vital influencers to adolescence. These influencers are not only important in helping to boost positive word of-mouth concerning a product or brand, but also for attractive brand loyalty. It is extremely significant that advertising managers be aware of the impact of these celebrity athletes and think utilizing these influencers in their messages (Bush, Martin and Bush, 2004). But a fundamental issue for sports marketers and advertisers is whether or not young women can be influenced by sports superstar and whether these observations of sports celebrities vary to women's from those

of men Yue & Cheung (2000) said in relations with family & peers, adolescent people have often inferior connections with superstars. Authenticity, celebrity reverence has become ordinary thing between young people all over the world, so they may influence on shaping the feelings and activities of teenagers while making buying decisions.

I in fact accept as true that we have reached the position where technology has become one of necessity division of today's world, and I am pretty sure that we have approved the point of no revisit in our connection with technology. Direct and vicarious role model peruse their parents' expenditures so family (father and mother) decisions and manners also play significant role while making buying behavior (Martin, Craig, and Alan. Bush, 2007).Saleem (2008) in his article about impact of role model on teen agers buying objectives and actions tells us that factors that peruse consumers' choice of product differs between different age groups, more specially teenagers affected more superior than other age groups by their role models. If we look at buying behavior of teen age girls we come to identify by screening literature that in direct role model teenage girls are attracted by their mothers in addition, vicarious role models, such as celebrities, can influence both mothers and their youngster daughters' utilization behaviors (Gavish, Shoham and Ruvio, 2008). Young people idolize celebrities and they believe them more famous than common individuals (Ferle & Chan, 2008). Renowned models of human being education are cognitive psychosomatic and the social learning, which has been used largely to clarify how consumers make utilization-related, decisions (Moschis & Churchill, 1978). The social education procedure is the more particular attainment of consumption-related behaviors. Through familiarity to social models, the consumers acquire the knowledge, skills, and temperament needed to make buying decisions (Ward, 1974). Supporters of societal learning theory suggest that individual customers expand consumption-related behaviors and actions through learning experience.

These understandings can occur in a range of ways as customers are uncovered to a large no of effects and discoveries, and are of high necessary in shaping the actions of teenagers (King & Multon, 1996). Forces that influenced youth, buying attitudes plan are now becoming an essential of end user research. Within social studying theory, it is designed that individuals develop ordinary behaviors and attitudes by modeling the activities of others (Bandura, 1986).

An adolescent's brain development is not complete. Commonly the last part of the brain to build up is the frontal cortex or the part of the brain that assists in decision-making and impulse organize. This may express many teens to make selections quickly or impulsively without a lot of significant thoughts (Reyna & Farley, 2006). Teenagers tend to be careful and are likely to change brand partiality faster than any other age group, as they have a high need to be establish by their societal group (Blackwell et al., 2001). They are often attracted by a variety of features while adopting their own set of self-worth, standard of living and usage patterns. These groups of consumers have a variety of needs such as, a need for belongingness, independence, endorsement, and conscientiousness, as well as having the need for trialing (Solomon, 2005).

On the other hand, study results recommends that parents have small designed supervision of children in their responsibility as customers and they seem to accept as true their children to learn from surveillance and duplication (Blackwell et al., 2001). A variety of things jointly with parents, social group, siblings, and sportspersons and media superstars can influence these decisions. Youngsters are mostly associated with family and peers and often they form less

significant connections to celebrities. Between youngsters media celebrities influence was found to be a stronger sign of acquisitiveness than peer. (Ferle & Chan, 2008). In relations with family & peers, young people have often-secondary relations with celebrities. In realism, celebrity love has become universal thing between young people all over the world (Yue & Cheung, 2000). So they may influence to shaping the thoughts and behavior of youngsters.

Teenager choose vicarious role models that are, alike to him or herself. This tendency directs youngsters to select vicarious role models of a comparable competition and gender (Basow & Howe, 1980). It is significant to grant the product to the correct people because they will be the foundation of your message in the public network channel (Ritson & Elliot, 1999). Therefore, the writing on role model influence recommends that parents, teachers, television celebrities, and sportspersons can be role models. Commonly speaking, we can split these in to two categories: Direct and vicarious. Teenagers may select vicarious role models as opposed to the allocated role models of parents, and vice versa. Youngster may hold in consumption activities that their parents may not support as on way of affirming their independence (Bristol and Mangleburg, 2005).

Hypothesis

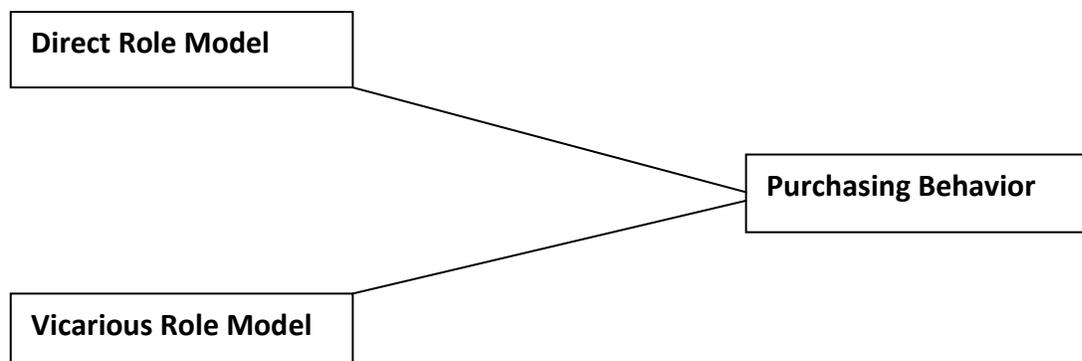
H1: There is a relationship between role model and teenager's buying behavior.

H2: Vicarious role models (favorite entertainer, favorite athletes) influence teenagers purchase behavior extensively more than direct models (father, mother).

Research Model

Figure: 1 Relationship of purchasing behavior with direct role model and Vicarious Role model.

Research model shows the relationship of two independent variables (direct and vicarious role models) on dependent variable that is (purchasing decisions) of teen-agers.



Research Methodology

The data was collected using a questionnaire. The questionnaire contains 12 items. Likert scale is used to capture information. The questionnaires were personally administered from 140 respondents out of which 126 were received back making response rate 90%.

Population Sample

Population of sample includes students of different universities of Rawalpindi and Islamabad. Data was collated from a sample of 126 respondents. The sample characteristics are described in the following table:

Attribute		Frequency	Percentage
Gender	- Male	72	57.1%
	- Female	54	42.8%
Residence	- Islamabad	48	38%
	- Rawalpindi	52	41.2%
	- Lahore	15	11.9%
	- Others	11	8.7%
Household income (in thousands)	- 15-25	11	8.7%
	- 26-35	29	20.6%
	- 36-45	47	37.3%
	- Others	39	30.95%
Role model	- <i>Father</i>	35	27.7%
	- <i>Mother</i>	14	11.1%

	- Favorite athlete	24	19.0%
	- Favorite entertainer	53	42.06%

Statistical Analysis

SPSS (Statistical programming for social science) was used to analyze data by regression and correlation analysis.

Results

Table: 1 Regression Analysis

	Beta	T	Sig
Vicarious role model	.380	2.723	.009
Direct role model	.293	2.177	.025

N = 126 (Dependant variable is purchasing behavior)

R square = .25

Regression analysis shows that value of R square is .25, which means that total variation caused by independent variable in purchasing behavior is 25%, while 75% variation remained unexplained.

Table: 2 Correlation Analysis:

Correlation analysis shows that vicarious role model and direct role model are correlated with the purchase behavior of teenage

	Purchasing behavior	Vicarious role model	Direct role model
Purchasing behavior	1	.450**	.356*

Discussion

Result shows that purchasing behavior of teenager is highly influenced by their role models. Statistical result shows that vicarious role models including favorite athlete and favorite entertainer are more influential in purchase behavior than the direct role models including father and mother. These results support Ferle and Chan (2008) that teenager copy media celebrities and celebrities are positive predictor of materialistic values among them. Results are also consistent with the earlier research of Bristol & Mangleburg (2005), that reference group, i.e. media and family communications have influence on teenager purchaser behavior. Future research could occupy a more coverage of teenagers our research is limited to a convenience sample of respondents. Increasing of sample size can improve the generalization of the results. Second, more variables which are also influential in purchase behavior like peers influence, social impact etc., could add to future research for better results.

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Internalization of Organizational Culture : A Theoretical Perspective

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ABSTRACT

This study investigates internalization of organizational culture: a theoretical perspective. The study examines the following objectives; to ascertain whether organization can achieve its control through internalization of organizational culture, to determine if internalization of organizational culture influences employee commitment and to establish the differences between internalized and non-internalized of organizational culture. The study was carried out in a theoretical perspective where effort was made by the researcher to constructively achieve the objectives of the study by in-depth secondary data analysis. The study discovered that in order to achieve control through organizational culture, it is necessary to be able to influence (internalize) the processes that create, sustain and change the individual elements of organizational culture. In addition, the study revealed that by committing to the culture, individuals enhance their social "survival" and decision making abilities and they pledge allegiance to some larger purpose and "consciousness" The study recommends that organizations should forestall their stability by making sure that control mechanism is in-built to their organizational culture design and functions. Finally, they should adopt best practices of total reward strategies in order to motivate and boost the employee commitment.

INTRODUCTION

Internalized beliefs and values are often emphasized in cultural theory, yet empirical work often focuses only on the attribution of values and beliefs to organizational leaders. The framework presented here argues that organizational culture is more concerned with shared sensemaking as a whole rather than just shared internalized beliefs and values. People choose to behave based both on what they personally prefer and what they believe will lead to valued outcomes.

Admittedly, there are advantageous synergies, particularly pertaining to commitment and intrinsic motivations, to be gained from the match between cultural meanings and internalized personal beliefs and values (Sathe, 1985; Schein, 1985). These synergies led Sathe (1985) and Schein (1985) to argue that the essence of culture is the sharing of those more taken-for-granted norms, internalized values and beliefs.

Organizational Culture

Organizational culture is a concept that bridges the gap between individual- and group-level phenomena (Louis, 1985). Organizational culture is shared and maintained at the group level of analysis but operates primarily by facilitating the individual level act of sensemaking. As Van Maanen and Barley (1985) note that "while a group is necessary to invent and sustain culture, is that culture can be carried only by individuals". Organizational culture refers to the shared perceptions of organizational work practices within organizational units that may differ from other organizational units (Van den Berg and Wilderom, 2004). It is the interdependent set of shared values and ways of behaving that are common to the organization and tend to perpetuate themselves (Kotter and Heskett, 1992 cited in Ogaard Larsen, and Manburg, 2005). Schein (1992) defines it as a pattern of basic assumptions invented, discovered or developed by a given group as it learns to cope with its problems of external adaptation and internal integration.

Organizational culture affects the way in which people consciously and subconsciously thinks, make decisions and ultimately the way in which they perceive, feel and act (Lok and Crawford, 2004; Hansen and Wernerfelt 1989; Schein, 1990). Schein (1992) proposed three levels of organizational culture. These are basic underlying assumptions, values, artifacts and behaviour. Organizational culture can be described as bureaucratic, role task or control oriented (Lashley, 1999; Ninsiima, 2003). Organizational culture has in the last two decades drawn a lot of focus from researchers for various reasons; some of these reasons include the noticeably direct effect it has on the performance, survival and longevity of an organization. Lok and Crawford, (2004) also suggested that organizational culture can exert considerable influence in organizations particularly in areas such as performance and commitment.

Internalization

Loewald (1962) uses internalization as a general term for the creation of inner experience through 'certain processes of transformation by which relationships and interactions between the individual psychic apparatus and its environment are changed into inner relationships and interactions within the psychic apparatus'.

Moore and Fine (1990) define internalization similarly as the 'process by which aspects of the outer world and interactions with it are taken into the organism and represented in its internal structure'; incorporation, introjection and identification are its three principal modes. Sensorimotor, perceptual, memory, symbol formation, imagistic and lexical processes encode aspects of objects and interactions with them creating mental structures that 'assume the functions originally supplied by others'.

According to Walrond-Skinner (1986), internalization is a 'process whereby the individual transfers a relationship with an external object into his internal world'. Internalization is taken to encompass incorporation, introjection and identification mechanisms that create permanent internal mental representations out of objects and events.

In a seminal work devoted entirely to the concept of internalization, Schafer (1968) integrated much of the work done by his predecessors and introduced important refinements: 'Internalization refers to all those processes by which the subject transforms real or imagined regulatory interactions with his environment, and real or imagined characteristics of his

environment, into inner regulations and characteristics'. Schafer's definition places emphasis on the subject's activity by specifying the following: (1) it is the subject who does the work of transformation or replacement, though possibly in response to environmental pressure; (2) environmental influence or pressure may be in whole or in part imagined by the subject; and (3) not everything internalized has the objective character of being a 'regulation'.

On the other hand, Meissner's (1981) reformulation of internalization underscores the central role of external relationships: internalization, then, is any process of transformation by which external relationships, object representations, and forms of regulation become part of the inner psychic structure and thus part of the 'inner world'. By this concept of internalization, we refer to the movement of structural elements, derived from sources in reality, in the direction of integration with that part of the psychic structure which is seen as central to inner identity – the ego (Meissner 1981). Schafer's orientation is relatively introverted (in that the subject is given primacy), while Meissner has extroverted leanings (the object has primacy).

However considering all the authors' viewpoints, internalization is summed as an integrative process or a systematic integration process of learning (acquired knowledge) and assimilation of that knowledge or skill for a purposeful goal. In the midst of internalizing culture organization come across some encounter like culture wolves or devourer, resistant, adapter and assimilator. Then the following words complement the act of internalization:

Incorporation emphasizes 'zonal' or oral aspects of internalization, while introjection is used for ego aspects of the same processes. Loewald (1980) further draws the important distinction between construction of inner models or schemata of the external world (regulating our orientation to it) and the 'taking in' processes subsumed under identification, incorporation, introjection and 'instinct's turning round upon one's own person'. He uses internalization to imply both the processes involved in the creation of an internal world as well as the structural outcome of processes that make the schematic representation of externality possible.

For Loewald (1980), internalization implies a transformation of object cathexis (the investment of libidinal energy in the object) into narcissistic cathexis (investment of energy in the self), thereby generating intrapsychic coherence and integration. With the dissolution of the Oedipal complex, the ego does not repress or turn away from the complex but rather 'assimilates' it to itself. This assimilation is carried out in a manner analogous to physiological processes – that is, through transformation of relationships into elemental forms and the 'internal restructuring' of those elements.

Loewald (1980) also asserts the process of identification merges or obfuscates subject and object, erasing ordinary and apparent differences. Identification is viewed as a 'way-station' to internalization, since internalization is marked by the 're-differentiation' of relations or identifications with the object and transformation of those object relations into an 'internal, intrapsychic, depersonified relationship'. When internalization is complete, the subject's identity with the object is renounced, resulting in 'emancipation' from the object.

Thus, the individual is enriched by the relationship to the object and is no longer burdened by identification or fantasy relations. Although definitions of internalization have retained some semantic consistency since first introduced by Freud, controversies regarding whether the subject

or object should be given primacy (among other conceptual differences) have contributed to divergent theories of internalization or even new paradigms.

Moore and Fine (1990) conceive of incorporation as an undifferentiated level of internalization in which confusion of self/object distinction is associated with fantasy of oral ingestion, swallowing, or destruction of an object. Chessick (1993) sees incorporation and introjection as 'archaic prototypes of identification' and incorporation as a 'form or model of introjection' in which fantasy 'follows the model of oral ingestion and swallowing'. For Meissner (1971), incorporation is considered 'the most primitive, least differentiated form of internalization in which the object loses its distinction as object and becomes totally taken into the inner subject world'.

Schafer (1968) conceived of **introjection** as a type of internalization distinct from identification where the introject is an 'inner presence with which one feels in a continuous or intermittent dynamic relationship'.

To Modell (1968), **identification** refers to the 'representation of an external object that has been taken into the ego to form a permanent element within the total personality' and is a 'complex amalgam of the memories of perception and fantasies condensed and telescoped from many developmental phases'. Moore and Fine (1990) point out that identification's generic sense refers to 'all the mental processes by which an individual becomes like another in one or several aspects', noting that psychoanalysts generally reserve the term for more advanced or mature forms of internalization.

STATEMENT OF PROBLEM

In many organizations today culture is neglected, underutilized, abandoned and haphazardly nurtured to the workforce who in many occasion undermined the efficacy and efficiency of it in organization wellness or well being. As a result, a lot of uncontrollable behaviour or actions, mishaps occurrence emanate that destabilize the operation of them. In this scenario, culture are viewed or schemed as non-internalized, private (not shared) and the disposition affect the performance and growth of the organization. Thus, the attributes inherent in ill-felted culture increasingly diminished the flexibility, collaboration and adaptability to change and usher in rigidity and lack of standardization.

Organization that does not internalize the culture is always in disarray, confusion, pandemonium and poor performance. First, an employee are easily controlled when they understands the culture than when they are not. Also the employee are committed when they know or apprehend that the culture favour them, they are recognized, they are part and parcel of the system and are participatory to decision than when they are not. Admittedly, even in a multi-cultural dimension the organization can easily co-ordinates their workforce when the nurture them or incorporate them than when they are not. These assumptions will anchor our perspective to the significant of organizational culture internalization.

Employee commitment in organization is lacking, this has led to unsatisfactory quality of service, most employees focus is on selling their service and the attraction and fulfillment of one time sales only, yet in today's competitive market customer choice has increased and it has become difficult for companies to assume that there exists an unlimited customer base prepared to maintain patronage.

OBJECTIVES OF THE STUDY

This study intends to achieve the following objectives.

1. To ascertain whether organization can achieve its control through internalization of organizational culture.
2. To determine if internalization of organizational culture influence employee commitment.
3. To establish the differences between internalized and non-internalized of organizational culture.

REVIEW OF THE LITERATURE

Achieving Control through Internalization of Organizational Culture

Schein classifies three distinctly different levels of analysis in organizational culture; artifacts, espoused beliefs and values and basic assumptions. However, the levels indicate a deeper understanding and importance of the organizational culture. Artifacts are a superficial level of analysis, ripe with contents that need not have anything to do with culture. They are easily available for analysis, but say very little about the basic assumptions on their own. The beliefs and values are harder to get at but offer deeper insights into what governs behavior than artifacts. The basic assumptions are, usually, unconscious assumptions or values, so basic and taken for granted as to effectively narrow the range of possible actions taken in a situation pertaining to the relevant assumption. Such is the power of these unconscious governing assumptions, and this is where culture draws its ultimate power as a concept from an organizational control point of view.

According to Schein (2010) the source of the power of organizational culture comes from the basic human need for cognitive stability. The mind needs a stable frame of reference as we try to make sense of the world we live in. Organizational culture, by way of the basic assumptions, provides this cognitive framework, and in this sense, provides us with a sense of stability and security. Conversely, this is also why change on the level of basic assumptions is very difficult. Change on this level destabilizes our cognitive frameworks, which induces large quantities of basic anxiety. As such, organizational culture can appropriately be thought of as a cognitive defense mechanism.

Therefore, the management of organizational culture, as explained in Schein's terms (2010), is the management of the values and motivations. Ouchi (1979) speaks of, when explaining the characteristics required of a control mechanism able of handling the conditions of organizations in a knowledge economy. The views on organizational culture are so many and so diverse, that it is necessary to define exactly what is meant when using the term. Martin's (2001) model of the analysis of organizational culture offers an important step forward for the less abstract and more pragmatic approach to culture. Culture is approached through different theoretical perspectives that have certain research oriented implications, which can lead to an overemphasis on things that in the application of the subject are less important. This is most obvious, and most counter-productive, in the discussion that arises when the discussion falls on what culture is, and if it is shared or not. Martin cuts through this cloud of disagreement by presenting a model that contains the three big perspectives simultaneously. In this model, culture is indeed shared, but that does

not mean that cultural members are in agreement on everything. It is a concept that denotes that when sharing some basic assumptions, makes you a member of that culture. It is of no importance to your membership whether or not you disagree on other subjects. In this way, cultures exists in conceptual peace with subcultures and culture can be thought of as incompletely shared systems of meaning (basic assumptions), in which different coalitions develop over time, leading to different cultural-group compositions as the organization develops.

In order to achieve control through organizational culture, it is necessary to be able to influence (internalize) the processes that create, sustain and change the individual elements of organizational culture. To that end, Hatch (1993) has developed a cultural analysis model focusing on organizational culture as processes, and trying to bridge the theoretical gap between competing perspectives (symbolic-interpretive and functional) by presenting a model for the dynamics of organizational culture.

In this model Hatch builds on Schein's original model from 1985, by using the same three analytical elements as in Schein's model (artifacts, beliefs & values and assumptions) while adding symbols to the mix. At the same time, the model is presented in circular shape, rather than the linear presentation of Schein's model, ordered by analytical depth. Hatch does not disagree with the governing characteristics of basic assumptions, but the model is intended to highlight the dynamics between the elements as to describe how culture is changed as well as sustained. The four processes influencing on four elements of the model are: **manifestation** that refers to the proactive process by which assumptions are revealed in values, and the retroactive process by which new values introduced to the culture can over time manifest themselves in basic assumptions; **realization** that refers to the proactive process of beliefs and values influencing on the productions of artifacts, and the retroactive process of artifacts, usually from sources outside the culture, can influence the values; **symbolization** that refers to the prospective process of adding additional meaning other than the literal to an artifact and the retrospective process of enhancing the literal meaning of one artifact over others, giving some artifacts more attention than others; and finally **interpretation** that refers to the process of evoking ones broader cultural frame of reference, in the form of basic assumptions, when interpreting symbols.

The basic premise of how changes to individual elements occur is in line with Schein's thinking. Basic assumptions are the product of a learning process, in which an assumption that proves successful over time becomes gradually more ingrained (Schein, 2010).

Thus, the term control or organizational control is defined for the purpose of this study as *a* process by which an organization influences it subunits and members to behave in ways that lead to attainment of organizational objectives.

Control can be viewed as the way three elements are coordinated:

- ✚ The direction of work. What needs to be done, by whom, in what order, to what degree of precision or accuracy, and in what period of time.
- ✚ The evaluation of work. How each worker is supervised, his output evaluated, to determine which worker (or groups of workers) is performing well and which workers are performing to a substandard.

- ✚ The disciplining of work. How each worker is rewarded or punished in relations to the evaluation of the instructed direction of work (Edwards, 1979).

The different overall approaches to control as well as the historical development of the mechanisms and systems applied to achieve control and the effects of these mechanisms on control processes lead to the following categorization:

Simple Controls

During the development of the modern economy the control mechanisms have gone through a significant change as business owners and managers have sought to solve the problems arising from the main problem of the capitalist/labor relationship (from a capitalist viewpoint); how to transform purchased labor power into actual labor with a minimal loss of potential labor power. Control was personal and direct, as foremen often intervened directly in the work process, and could hold the power to hire and fire workers or discipline them in other ways. This form of organization required only a simple form of control, as the organization was never bigger than it would allow the entrepreneur and his small group of foremen to keep personal supervision of most if not all activities, and thus did not demand any elaborate award/punishment schemes, loyalty programs and so forth. Reward and punishment was direct and timely precise, hence the name direct control, although this form of control is also known as entrepreneurial control (Edwards, 1979).

Simultaneously as production facilities grew a lot bigger, the need for ever greater coordination arose with the increasing complexity of the products being produced as well as with the scale of production. The efficiency of simple controls declined with the emergence of these factors and as the increasing complexity of production and the increasing need for coordination raised the cost of production disruptions such as strikes a new way of maintaining control over the process of work was needed (Edwards, 1979).

Hierarchical Control

The failures of simple controls as the size of production facilities grew saw an increase in worker resistance, in the form of massively increasing union organization as well as worker militancy. Workers slaved under poor conditions and the lack of the entrepreneur's personal touch, rewarding hard work as well as punishing lingering behavior, only worsened the situation. The hierarchical control mechanisms were in a sense a physical extension of entrepreneurial control, in so far as management attempted to recreate the conditions of entrepreneurial control by hiring foremen and supervisors (Edwards, 1979).

In an attempt to quench the worker resistance and the growing public resistance over the shady sides of the concentration of capital Big Business introduced welfare plans, company unions and co-management and worker committees for the resolution of work disputes and such. The welfare plans sought two things. First, to create a more loyal worker by portraying the image of a corporation with a genuine interest and concern for its workers well-being and secondly, to increase the workers enrolled in the welfare plan's dependency on the corporation. In both cases the objective was to reduce worker resistance and stabilize working relationships (Edwards, 1979).

Technical Control

The next step in business' attempt to control worker resistance as well as minimize the problem of transforming purchased labor power into actual labor, was the technical control possibilities that followed the introduction of mass production.

But the new production facilities with more advanced, stationary, machinery that was preprogrammed to a certain pace of work meant that the workers no longer dictated the pace. A worker could either fulfill the job or be fired for not meeting the required output from the machinery. Technical control is structural control in the sense that it is built into the structure of the work flow design of the production facilities as well as the machinery, and in that sense it represents a shift in power.

The preset pace of the machinery would also represent an effective way of undermining worker organization and coordination. The machine speedup meant that it required the workers full attention. There was no time to have a chat with the workers next to you but it also meant that workers became chained to very stationary machinery. Where workers had been walking around the production facility fetching tools, delivering materials and so on, and in that process having a lot of contact with other workers, they were now barely in contact with the workers in their immediate surroundings. Under this new situation workers had much less opportunity to discuss grievances with the respective foremen, pay-rates and so forth.

Technical control was also introduced for low level white-collar staff. For this to work, companies routinized and standardized the jobs of the white-collar labor force as much as they could, resulting in a decreased difference between the lower levels of the white-collar labor force and the blue-collar workers (Edwards, 1979). Although it addressed the first element of control, the direction of work through labor deskilling and the breakup of tasks in to minute pieces, it failed to address what had been the central issue throughout the history of the large businesses: the arbitrary reward and punishment taking place at the hands of foremen wielding immense power. Although technical control took away the foremen's right to direct the work (and the need to, for that matter), the foremen still retained the right to punish and reward as they pleased.

Bureaucratic Control

Bureaucratic control is categorized as being structural control just like technical control because it is embedded in the structure of the company. But in contrast to technical control, which is embedded in the workflow and machinery designs, bureaucratic control is embedded in the social and organizational structure of the company (Edwards, 1979).

A major difference between bureaucratic control and the previous control systems is the focus on homogenizing vs. dividing the employed labor. Until bureaucratic control the emphasis was on deskilling workers and creating a situation in which it was easy to replace the worker, by simplifying each task as much as possible and having as few job categories as possible (Edwards, 1979).

Bureaucratic control emphasizes diversity. Through numerous job categories, in which a very large number of job titles exist, several pay grades within each job title, to the individual bonus, seniority bonus etc. This diversity lessons labor power to resists the business control by

removing the sense of belonging to the same group. The picture of a clear dichotomy of workers and management has been eroded by the introduction of bureaucratic controls emphasis on diversity. 'We' now refers to the company, not the workers. To further the erosion, the nature of the bureaucracy has seen a dramatic increase in the number of workers with some sort of management responsibility, hovering in between roles (Edwards, 1979).

At the core of Bureaucracy is the institutionalization of power. It takes away power from foremen and vests it in company policy and rules. It is no longer your immediate supervisor telling you what to do and why, it is the company. Your immediate supervisor is merely enforcing the rules, not making them up.

Bureaucratic control systematically rewards certain behaviors that support the control system itself. While workers in the previous systems where by and large free to behave as they saw fit, within the parameters of getting the job done, the bureaucratic control system seeks to mold the behavior of the worker. There are three specific types of behavior that are systematically encouraged by bureaucratic control:

- Orientation to rules; a high degree of awareness of the rules, and a high probability to following them.
- Being dependable and predictable. Getting the job done in a reliable and dependable fashion, even when the job falls slightly outside the rules.
- Internalization of organizational goals and values. An encouragement for workers to actively identify themselves with the organization.

The required behavioral trait differs at different job levels however. The lowest job levels tend to be fairly routinized in character and therefore orientation to rules is stressed on this level. The middle level jobs tend to be less routinized in character and workers are rewarded for being dependable and predictable. At the higher levels jobs organizations reserve rewards for those showing loyalty and commitment to the organization through an expressed internalization to the organizational goals and values (Edwards, 1979).

A deeper concern with the totalitarian characteristics of bureaucratic control was, and is, the seemingly growing dissatisfaction of workers losing their autonomy as rules came to govern everything from the direction of work, evaluation of work, reward and punishment of work and even the workers behavior at work. One way of looking at it would be to say that while workers have achieved a lot of what they were fighting for under the previous systems, it did not suffice. Once free from the arbitrary rule of foremen, blessed with greater job security and in some companies even the outlook of lifetime employment, workers have set their sights on the next point in the horizon; Workplace democracy. Once given some consideration in some matters of reasonable direct importance to the employee, the workers start asking why they are not consulted when in other matters, not necessarily pertaining directly to the workers requesting influence. Once competence is shown (or believed to have been shown) in, say rearranging the work area, and after participation has become a conscious, officially sponsored activity, participators may very well want to go on to topics of job assignment, the allocation of rewards, or even the selection of leadership. In other words, management's present monopoly of control can in itself easily become of source of contention.

The organizational control field has undergone a tremendous development in conjunction with the technological and social developments. As technological advances have increased the complexity and intricacy of production facilities, as well as advances in the business science has led to even greater knowledge, so too has the job-characteristics of today changed massively, each stage of development requiring a change in the mechanisms of control.

Internalization of Organizational Culture Influence on Employee Commitment

Beside the theoretical implications, if commitment to the values and simple compliance to the values produce the same intended behavior from the employees, in practical terms it matters little while in theoretical terms, it matters a lot. First; it is difficult to be sure of any lasting effects if there is no commitment and internalization. Second; the changes management undertake in trying to change values and assumptions are costly, expensive and the whole operation is very complex. And it will fail miserably, if the observed behavior is not due to commitment, as the new initiatives will be tailored to the scenario of commitment. If an individual's beliefs and values match those operating in the culture, we can say that the individual is committed—identifies with and is emotionally attached to the organization (Sathe, 1985). The commitment generated by culture is, however, is the result of more than just satisfying intrinsic motives. Organizational culture also engenders commitment as a result of the importance of the sensemaking system to all members of the community of experience. By committing to the culture, individuals enhance their social "survival" and sensemaking abilities and they pledge allegiance to some larger purpose and "consciousness".

A committed employee according to Meyer and Allen (1997) cited in Rashid, Sambasivan and Johari (2003) is the one who stays with the organization whatever the circumstances and shares the company goals. Thus having a committed workforce would be an added advantage to an organization.

Commitment helps workers to identify with the organization's rules rewards and values. Silverthorne (2004) found that there is a relationship between organizational culture and commitment whereby bureaucratic organizational culture had the lowest level of employee commitment. Organizational culture that supports employee control and autonomy in work processes by reducing hierarchy is able to enhance intrinsically motivated and self directed behaviors among employees; employees can then focus offering good service and hence customer retention. When top management reduce on slow decision making, the hierarchical management style and routine in work processes, employees can work better and get more results in an environment where they feel informed and involved, similarly high client retention rate indicates that the client derives satisfaction from the provided services, hence would see no reasonable cause to incur switching costs to get another service provider. A satisfied client will talk good about the service provided, this word of mouth is likely not only to attract new clients but also cement the already existing business relationship, increase client patronage and thus client retention (Strauss et al, 2001)

Regardless as to what business leaders may be trying to implement in their companies any employee interacting with customers is in a position either to increase customer retention or put it at risk. Employees in such positions should therefore be supported by the organizational culture effectively and efficiently. Organizational commitment is the employee's psychological attachment to the organization. Organizational commitment refers to the employee's attachment to the employing organization – namely, the commitment to the entire organization as the

employee perceived it (Morrow,1993) and the organization support for the employee (Whitener,2001). According to Buchanan (1974) organizational commitment is the emotional connection to a particular organization, which is characterized by three major parameters in the individual's attitudes towards the organization. It is the identification which means internalization of the organization's goals and value. Organizational commitment reflects the individual relationship with the organization, and that this relationship is significant in explaining the individual's behavior in the organization, and that this relationship is significant in explaining the individual's behavior in the organization.

Affective Commitment is defined as the employee's positive emotional attachment to the organization. An employee who is affectively committed strongly identifies with the goals of the organization and desires to remain a part of the organization. This employee commits to the organization because he/she "wants to".

Continuance Commitment develops out of the perceived cost (benefit against loss), and requires that the employee be aware of these benefits and losses. Therefore different workers who encounter identical situations may experience different levels of continuance commitment (Meyer and Allen,1997; Mottaz, 1989). Also it was found that continuance commitment is not the commitment desirable for an organization, and stresses that while employees who perceived the cost of leaving the organization as heavy prefer to stay, their contribution to the organization is not as positive.

Normative Commitment leads employees to stay in the organization due to a sense of loyalty or duty, and because they feel that this is the right thing to do (Meyer and Allen, 1997). Normative commitment develops out of internal pressures that result from norms that encourage extended commitment to the organization. Individuals derive these norms from socialization processes in the family and surrounding culture, which include experiences that stress loyalty towards a particular organization. The individual undergoes a process of internalization of norms and expectations, in which he or she learns and later is aware of the expectations of the family, culture and organization that leads to internalization of loyalty to the place of work and commitment to act in a manner that fits the organization's goals and interests (Dunham,1994).

Ketchand and Strawser (2001) found that organizational commitment had been identified to have significant relationships with job satisfaction, job involvement, stress, occupational commitment, and motivation. However, the results of the studies examining the relations between these variables have been equivocal (Begley and Czajka, 1993). Mathieu and Zajac, (1990) found that individuals who have a high degree of commitment to their organizations experience greater amounts of stress than those who are less committed.

Differences between Internalized and Non-Internalized of Organizational Culture

Accordingly, two levels of analysis are to be distinguished: The first regards culture as the basic unit of analysis and is concerned with intercultural or between-group differences; the second is focused on individual clients and is interested in not only intercultural but also intracultural or within-group variation. An appreciation of the distinction between cultural differences and individual differences within a culture is crucial to multicultural composition. Yet, within-group

variation has been a much neglected construct in multicultural psychology, counseling, and development (Ibrahim, 1991; Sundberg, 1981).

In this vein, Internalized culture may be defined as the cultural influences operating within the individual that shape (not determine) personality formation and various aspects of psychological functioning. Individual cognition, for instance, is influenced by internalized cultural beliefs. Internalized culture must be distinguished from cultural group membership. It should be pointed out that cultural group membership per se is not a psychological variable, but internalized culture is just as in themselves age, sex, and socioeconomic class are not psychological variables, but psychological maturity, gender, and class identification are. In effect, culture has been translated from an anthropological concept to a psychological or individual-level concept.

Differences in internalized culture arise from differences in enculturation. The concept of internalized culture explicitly addresses both between-group and within-group variations in cultural processes (Carter, 1991), for a review of empirical research on cultural values). It enables us to better deal with findings that there may be more similarity among members of comparable socioeconomic statuses across groups than among members of different socioeconomic statuses within the same group. Very often cross-national or cross-ethnic differences decrease or even vanish when socioeconomic class is controlled. Consider too subcultural differences within the same cultural group, between men and women, old and young people, or the rich and the poor. The evidence suggests that men and women in different groups are socialized differently (Pearson, Turner, and Todd-Mancillas, 1991). It supports the contention that they have different internalized cultures and that, in a psychological sense, they belong to different subcultural groupings. Moreover, individual differences in internalized culture would be found among men and women alike. The same argument applies to the old and the young, as well as to the rich and the poor.

The idea of culture internalized is not new. Subjective culture analyzed by Triandis (1972) is also culture internalized. It refers to the characteristic ways people in each culture view the human-made part of their environment (ideas, social standards, and so forth). Among the concepts used to delineate subjective culture are worldview, cognitive map, life space, behavioral environment, and mazeway. A pattern of similar responses by members of a cultural group constitutes one aspect of the group's subjective culture. That is, subjective culture is a culture-level, not individual-level, construct. It is of limited utility for understanding individual worldviews and hence of limited importance to counselors. That no two individuals, even if they are from the same cultural group, share the same worldview requires assessment procedures that are more suited for counseling (Ibrahim, 1991).

In giving emphasis to individual differences, internalized culture differs from anthropological concepts of culture. Kluckhohn (1954) distinguished two frames of reference, "inwardness" and "outwardness" in relation to the concept of culture: "For complete rigor, one might need to speak of Culture A (the logical construct in the mind of the anthropologist) and Culture B (the norms internalized in individuals as manifested by patterned regularities in abstracted elements of their behavior)". The rigor of this distinction is less than complete, however. Culture is logically also a construct "in the mind of the anthropologist" not to be equated with what actually exists in the

mind of the individual member of a cultural group. It is focused on inward "patterned regularities," corresponding to the outward norms of Culture.

Understandably, the focus on patterned regularities is common to cultural anthropologists, whose business is to construct conceptual models of the total culture (Culture A). These patterned regularities are assumed to be more or less shared in the collective minds of individuals belonging to a cultural group virtually all anthropologists are agreed that culture is shared. However, in what form and to what extent culture is shared remains one of the enduring issues in culture theory (Rohner, 1984). A closely related issue concerns how cultural boundaries may be defined.

Given that the counselor's business is to work with individuals, singly or in groups, it is essential to avoid equating the internalized culture existing in the mind of the client with notions of shared patterned regularities held by theorists. Informed by these notions about a cultural group, counselors are vulnerable to activate automatically expectations and judgments about clients from that group that is, to apply knowledge about a group to make judgments about individuals (Murphy, 1977). But there is a danger of overgeneralization and even stereotyping. The form and extent of a client's sharing of the patterned regularities must be investigated empirically and not taken for granted. Indeed, such investigation is part and parcel of counseling assessment. Of special importance is the sensitivity to discrepancies, tensions, and conflicts, which may exist side by side with conformities, between the client's beliefs and values and those shared by members of his or her cultural group. Furthermore, these discrepancies, tensions, and conflicts are not to be viewed necessarily in a negative light. They may be the driving forces for adaptation, creativity, and change. A major advantage of relying on the concept of internalized culture, then, is that it helps to sensitize counselors against overgeneralization and stereotyping.

This brings us to the domain of acculturation research. Broadly speaking, however, acculturation is the process which may be bidirectional whereby members of a cultural group learn and assume the behavior patterns of another cultural group to which they have been exposed. Increasingly, modern life in diverse geographical settings is characterized by cultural inter-penetration and cross-fertilizations; hence, to varying degrees acculturation cannot be avoided. If enculturation, which involves presumably only one culture, is complex, so much more acculturation must be. New dimensions of cultural processes have to be explored. How do people adapt when they are confronted with cultural forces alien to their culture of origin? Under the condition of cultures in contact, often in conflict, both the strengths and weaknesses of a culture may be brought into sharper focus and nakedly revealed. Equipped with the concept of internalized culture, we may translate the research problem into one of investigating acculturation as a psychological phenomenon at the individual level. This requires, as a first step, the identification and measurement of acculturation variables pertaining to individuals. In studies of immigrants, for example, a crude index of cultural exposure is the ordinal generation of the individual born in the host culture. A more refined index would include measures of the quantity and well as the quality of exposure.

Olmedo (1979) advocates a psychometric perspective to the measurement of acculturation. Three main categories of items have been used in the construction of scales for measuring individual acculturation: linguistic (e.g., language proficiency, preference, and use), socio-cultural (e.g., socioeconomic status and mobility, degree of urbanization, family size and

structure), and psychological (e.g., cultural value orientations, attitudes, knowledge, and behavior). The use of psychological scales, in particular, shifts the emphasis in ethnicity studies from ethnic group membership (in itself not a psychological variable) to ethnic identity and loyalty. Olmedo concludes that acculturation is measurable with reasonable reliability and validity; that it is a multidimensional process, as the linguistic, sociocultural, and psychological measures appear to be largely independent of one another; and that there may be a remarkable degree of heterogeneity in the level of individual acculturation.

Expecting to find externally or spatially located cultural boundaries is absurd once we go beyond acculturation and encounter the phenomenon of bicultural and multicultural minds. They differ from acculturation in that no one culture is regarded as the host or dominant; assimilation, a unidirectional process, is not the object of interest. Rather, different cultural systems are internalized and coexist within the mind. Bi-enculturated or multi-enculturated persons are not merely exposed to and knowledgeable of, but have in-depth experiences and hence competence in, more than one culture. In short, the internalized culture of these persons embodies a plurality of cultural influences of diverse origins.

Bienculturation in childhood or an employee corresponds to simultaneous bilingual acquisition; acculturation corresponds to successive bilingual acquisition, in which second-language learning takes place after a first language has already been firmly established. Fully bienculturated individuals correspond to balanced bilinguals. Intercultural value conflicts correspond to linguistic interference. Finally, the thesis of cultural determinism corresponds to Whorf's (1956) hypothesis of linguistic determinism, according to which language determines the shape of thought.

Studies of individuals enculturated to more than one culture can inform us on how different cultural systems can be integrated, or fail to integrate, within single minds a fascinating question by any standard. If indeed culture shapes cognition, then how is the cognition of the bienculturated individual structured? Does bienculturation or, better still, multienculturation inoculate one against culturocentrism? How are intercultural value conflicts handled? Would a new supracultural identity emerge, or would multiple identities, perhaps with little permeability among them, be the result? Creative synthesis and compartmentalization represent, of course, only two of the many possibilities. In reviewing the literature on the psychological impact of biculturalism, LaFromboise et al. (1993) emphasize the alternation model of second-culture acquisition. According to this model, people are able to gain competence within two cultures without losing their cultural identity or having to choose one culture over the other. It is an additive model of cultural acquisition corresponding to code switching in bilingualism. In this regard, bienculturated individuals would have a distinct advantage.

Bienculturated and multienculturated individuals constitute a valuable resource for intercultural understanding. They are in a specially advantageous position to interpret intercultural events, because they are equipped with alternative cognitive maps. To this extent, they may be better inoculated against culturocentrism. They may more effectively serve as agents for combating racism and promoting intercultural understanding. LaFromboise et al. (1993) suggest that ethnic minority people who acquire bicultural competence will have better physical and psychological health than those who do not. Inherent in multiculturalism is the dialectic tension between two

tendencies: diversity and unity. Diversity without unity leads to factionalism, and unity without diversity is boring uniformity.

The concept of internalized culture compels us to recognize individual differences in internalized culture, arising from differences in enculturation. Even among members of the same cultural group, no two individuals would be expected to have an identical internalized culture. The uniqueness of the individual is reaffirmed. Closely related to internalized culture are two psychological concepts that hold a promise to liberate us from the rigidity of looking at people solely in terms of their cultural membership. The first, cultural identification, acknowledges that individuals may differ widely in the extent to which they identify with the cultural heritage of their group or those of other groups. The second, cultural orientation, reaffirms a measure of autonomy in individual preference for various cultural patterns. It is a concept of special significance to the identity of bienculturated and multienculturated individuals. A great opportunity is present for them to articulate a supracultural value system, such that value judgments and moral reasoning are no longer anchored to a single culture (LaFromboise, 1993). Cultural identification and cultural orientation are thus instrumental to the development of self-identities and worldviews (Meyer et al., 1991). The more integrated the individual's identity is, the more likely healthy coping patterns will be present (Murphy, 1977).

CONCLUSION

Organizational culture, by way of the basic assumptions, provides this cognitive framework, and in this sense, provides us with a sense of stability and security. In order to achieve control through organizational culture, it is necessary to be able to influence (internalize) the processes that create, sustain and change the individual elements of organizational culture. The four processes influencing elements includes, manifestation, realization, symbolization and interpretation.

By committing to the culture, individuals enhance their social "survival" and decision making abilities and they pledge allegiance to some larger purpose and "consciousness". The individual undergoes a process of internalization of norms and expectations, in which he or she learns and later is aware of the expectations of the family, culture and organization that leads to internalization of loyalty to the place of work and commitment to act in a manner that fits the organization's goals and interests.

The concept of internalized culture explicitly addresses both between-group and within-group variations in cultural processes. A major advantage of relying on the concept of internalized culture, then, is that it helps to sensitize counselors against overgeneralization and stereotyping. Acculturation as a multidimensional process, both in linguistic, sociocultural, and psychological measures shows that there is remarkable degree of heterogeneity in the level of individual acculturation. In short, the internalized culture of these (Bi-enculturated or multi-enculturated) persons embodies a plurality of cultural influences of diverse origins. Bi-enculturated and multi-enculturated individuals constitute a valuable resource for intercultural understanding. They are in a special advantageous position to interpret intercultural events, because they are equipped with alternative cognitive maps.

RECOMMENDATIONS

1. The organization should forestall their stability by making sure that control mechanism is in-built to their organizational culture design and functions.
2. They should adopt best practices of total reward strategies in order to motivate and boost the employee commitment.
3. They should ensure that internalization framework is all encompassing (fixing both the inter and intra culture) elements in order to achieve a positive synergy in survival and competitive advantage.

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The Factors of Marketing Mix that Affect the Consumers' Behavior of Coffee Consumption in Bangkok Metropolitan

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ABSTRACT

This research is a survey research with an objective to study the factors that influence the marketing mix of consumers who use the services of coffee shops in Bangkok metropolitan. The sample groups are 400 consumers of coffee shops who were given questionnaires used to gather data. The research results found that questionnaire respondents believed that the general marketing mix factors affected consumers at the highest level in physical condition. The consumers recognized the importance of the lighting of the shops and the convenience of the seating ($\bar{X} = 4.56$). On the process, consumers recognized the importance of the correct taking of orders ($\bar{X} = 4.46$) and on the products, consumers recognized the importance of the variation of the products ($\bar{X} = 4.52$). On the other hand, what affected the least on consumers was the channels of distribution ($\bar{X} = 3.29$). The buying behaviors of the sample groups revealed that the important reasons for coming to use the services of coffee consumption was to use the shop as a meeting point at 52.00 percent. The frequency of the consumption was once every 2 – 3 days. The quantity of the consumption was 1 cup every day. On the relationship, at significance level 0.05, it was found that personal education characteristics affected the behavior of using the services at the coffee shops of consumers in Bangkok metropolitan.

Keywords: marketing mix, consumers' behavior, coffee consumption

Introduction

Coffee is an important economic plant and is having an important role as agricultural goods with highest trading of the world (Pendergrast, 2009). Coffee has a component called caffeine which refreshing property in human beings. At present, coffee is a the most popular drink globally (Villanueva,& Other, 2006). Coffee was discovered in the 9th century by Muslims in southern Ethiopia. Later, coffee was brought into Europe and America until it has been widely spread with its continued refreshing property as resulted from caffeine, which in turn make coffee a part of living as a daily drink for a number of people. Even in various meetings and seminars, coffee is still the favorite drink in comparison with other kinds of drink.

Kasikorn Research Center (2544) administered a research on coffee drinkers of Asean countries and found that there were only a very small number of Thai coffee drinkers when compared to

people of other countries of Asean; with the Philippines at 423 cups per person per year, Malaysia at 347, Vietnam at 336, Laos and Thailand at 233, and Indonesia the least number at 176 cups per person per year. In Asia, in Japan people drink coffee at 500 cups per person per year. In the United States, people drink coffee at an average of 700 cups per person per year. On the other hand, the number of Thai coffee drinkers has a tendency to rise continuously from the integrated marketing of foreign brands in Thailand. Coffee shops become a favorite meeting place for business people and students. Therefore, coffee shops spring up in tremendous numbers and the trend is still growing which brings about a high competitive condition (AphinyaSakyaphinan, 2548)

Coffee can be served in various formats, hot coffee, cold coffee, and others. Coffee is a drink to reduce sleepiness or anxiety. Coffee shop business becomes very competitive since coffee shops have been opened up in a number even in gas stations. There are many different coffee brands both foreign and Thai brands. Moreover, the trend for coffee drinking keeps rising. The places for coffee distribution have been adapted to suit the needs of Thai people's daily ways of life and the motivation from businessmen who try every marketing tactic to gain attention from more and more Thai coffee drinkers. Coffee shop business is a permanent business and needs small capital. With all the reasons as mentioned, the researcher has become interested in studying the influential factors of the marketing mix of consumers who use the services of coffee shops in Bangkok metropolitan and apply the research results in specifying strategies of coffee business management in the future.

Research Objectives

In a study on The Factors of Marketing Mix that Affect the Consumers' Behavior in Using the Services of Coffee Shops in Bangkok Metropolitan, the researcher has the following objectives:

- (1) Study personal characteristics that affect the consumers' behavior in using the services of coffee shops in Bangkok metropolitan, and
- (2) Study the factors of marketing mix that affect the consumers' behavior in using the services of coffee shops in Bangkok metropolitan.

Expected Benefits

1. Identify personal factor variables affecting consumer behavior of coffee consumption in Bangkok metropolitan
2. Identify marketing mix affecting consumer behavior of coffee consumption in Bangkok metropolitan
3. Apply the research results in planning marketing strategies for coffee shop business

Research Methodology

In a study of the Factors of Marketing Mix Affecting Consumer Behavior in Using Services of Coffee Shops in Bangkok Metropolitan which is a survey research using

questionnaire as a tool to gather data and random sampling from coffee consumers in Bangkok metropolitan by selecting sample groups from indefinite population with calculation of formula of Cochran (1977) with an error at a significant level of 0.05. The sample groups is 384 samples (adapt to 400 samples)

Sample Size Estimation

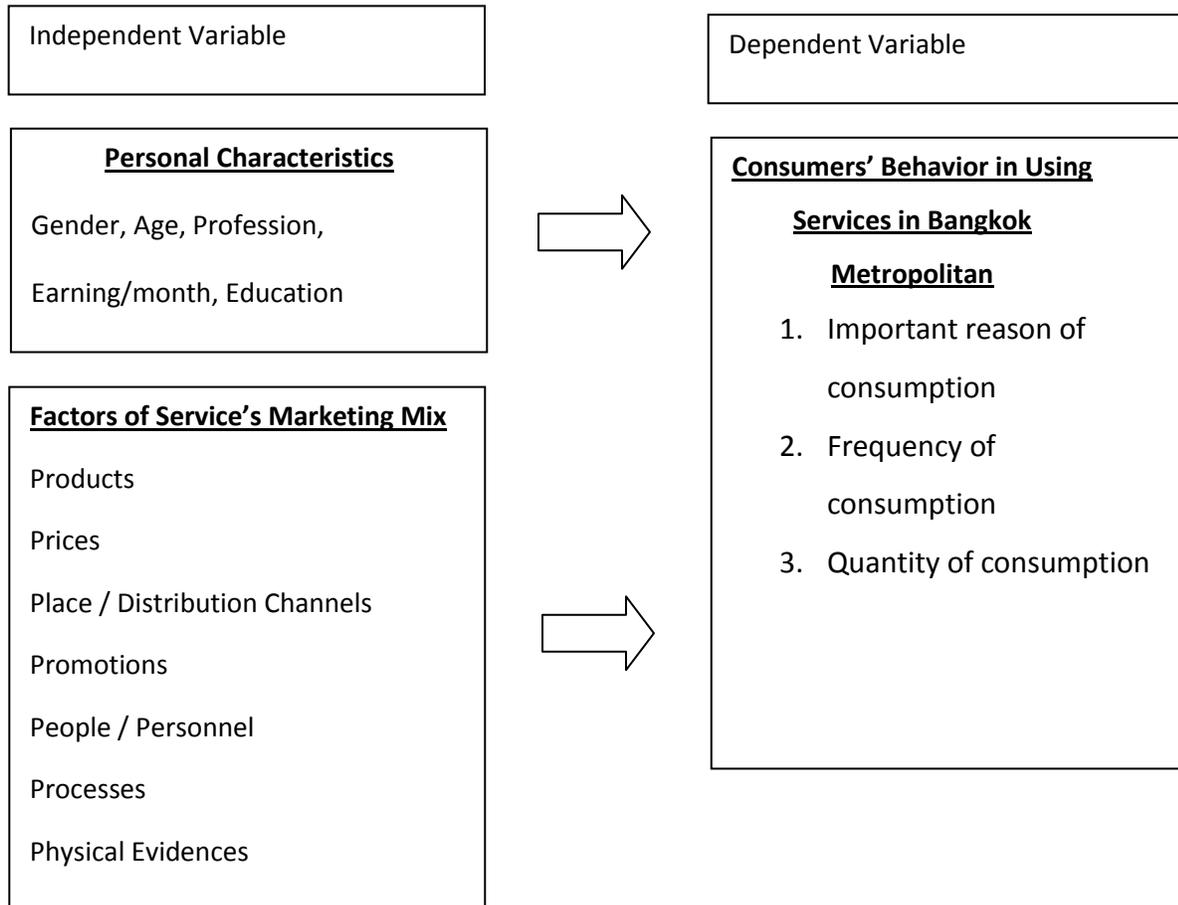
$$n = \frac{P(1-P)Z^2}{E^2}$$

When

- n = represents number of samples
- Z = represents reliability value at a level of 95%, Z value = 1.96
- P = represents proportion value to be studied, highest value at 0.50
- E = represents error value allowed by the researcher in this study = 0.05

The Conceptual Framework

In A Study of Factors of Marketing Mix Affecting Customers’ Behavior in Using Services of Coffee Shops in Bangkok Metropolitan, the researcher specifies the framework for literature review as follows:



The Research’s Conceptual Framework

Hypotheses

Hypothesis 1 Personal characteristics have effects on consumers' behavior in using services of coffee shops in Bangkok metropolitan

Hypothesis 2 The Factors of marketing mix have effects on consumers' behavior in using services of coffee shops in Bangkok metropolitan

Concepts and Theories on Marketing Mix

Marketing Mix or 4P's means controllable marketing variables which the company uses to give satisfaction to target group or "controllable marketing variable set which the company mixes together to respond to customers' needs in the market's target group" (Kotler, 1997, p. 92).

The concept on marketing mix has important role in the market because it is a merger of all marketing decision to use in the management so that business can correlate with the needs of the target market. We call the marketing mix "4P's" in which the 4 elements work together to communicate effectively the marketing information to general receivers of the information in addition to advertisement or promotional activities on Product, Promotion, Product variety, Sales promotion, Quality, Advertising, Design, Sales force, Feature, Public relations, Brand name, Direct marketing, Packaging, Sizes, Services, Price, Place, Warranties, List price, Channel, Returns, Discounts, Coverage, Allowances, Assortments, Credit terms, Locations, Payment period, Inventory, Transportation, and Marketing Mix. Kotler(1997) explained the meaning of marketing mix or 4P's as follows:

1. Product means something presented for purchasing by the business to respond to the customers' needs for the customers' satisfaction. The product for selling may or may not be substantial. Products consist of goods, services, thoughts, locations, organizations, or individuals, to which can be explained to consumers the information such as product brands, types and colors of packaging, goods contents, sizes, shapes, and logos. These characteristics can communicate meanings and understanding to information receivers. Producers have to develop products according to the needs of the target market. In case the products are in bad quality and not in line with the market needs, it will not be able to motivate the consumers' behavior, no matter how much budget was dumped into advertisement.

2. Price means something to represent and determine value of products in a form of money. Consumers use price as a part of estimation of quality and value of the products as they expect to receive. The appropriate determination of price with the product is in part a motivation of purchasing. Sometimes, the setting of a high price may mean a motivation for some groups of consumers to buy a product since it they feel the pride of purchasing or the using of expensive products. Some other times, the excessive advertisement of specifications until no one can tell the differences can deter purchasing. Price, therefore, is a factor that leads consumers to make decision to buy.

3. Place or channel of distribution means a structure or channel after the consumers know the product information from an advertisement until they are interested and want to try using the product but if they can not conveniently find the product, most of the time, they give up the intention and change their mind to buy other brands that are easier to find. Distribution can be divided into 2 parts as follows:

3.1 Channel of distribution means the path of product and/or the right on product is transferred to the market. The process for channel of distribution is thus consisted of the producer, the trader, consumer or industry user. Channel of distribution may or may not include the traders.

3.2 Physical distribution means activities related to the moving of products from producers to consumers or industry users. Therefore, product distribution includes:

- 3.2.1 Transportation
- 3.2.2 Storage and Warehousing
- 3.2.3 Inventory management

4. Promotion is an information communication between sellers and buyers to build attitude and buying behavior. The communication may be personal selling or non-personal selling and consisted of advertisement, promotion, publicity of information and public relations. Therefore, marketing promotion is consisted of 5 tools as follows:

4.1 Sale Promotion means supporting activities apart from sale advertisement by personal selling; and, publicity of information and public relations which can motivate interests, trials, or purchasing. The final customers or other people in the channel of sale promotion are of 3 types as follows:

4.1.1 Consumer motivation or Consumer promotion is the promotion that directs to final consumer who buys a product for personal use or home use. The product that consumer buys for final use is called consumer product.

4.1.2 Trade motivation or Trade promotion is to motivate the effort in selling of trader to push the product to consumer and it may be in a form of an advertisement to motivate trader such as wholesaler and retailer, to motivate buying or re-selling the product to customer.

4.1.3 Sales force motivation or Sales force promotion is the motivation of salesman to put more effort in selling and the sale promotion that directs salesman to use push strategy. The target group is a group of salesmen. The objective is to reward each salesman's ability to sell, a competition among salesmen, such as bonuses to reflect specific sales amounts.

4.2 Personal selling is an activity to publicize information and motivate the market by using personnel. The work in this item involves:

- (1) Personal selling strategy
- (2) Sales force management

4.3 Publicity and public relations whereas publicity is the presentation of opinion about products or services without expenses, and public relations means the effort to plan by an organization to build positive attitude towards the organization for a specific group of people. Publicity is an activity of public relations.

4.4 Direct marketing or Direct response marketing is a communication with the target group to get direct response or it means the various methods used by marketing promoters to promote products directly to buyers and draws immediate response. This tool consists of:

- (1) Telephone sales;
- (2) Direct mailing sales;
- (3) Catalog sales; and
- (4) Telephone, radio, or newspaper sales with motivation for response such as coupons.

4.5 Advertising is an activity in publicity of information about an organization and/or service products or concepts to which expense will be paid by sponsors. Advertising strategy is related to:

(1) Creative strategy

(2) Media strategy. Advertising becomes an important part of our daily life since it is everywhere and also becomes an obstruction. Advertising is a communication between producer and consumer persuading the target group to buy goods and services. American Marketing Association(AMA) mentioned (Marketing Definition, Chicago. 1982, p. 9) that the definition of advertising in 2 aspects as follows:

1. Advertising does not have to cost or pay for the media every time, for example, the media may give it for free in the case of advertising for public service.
2. The important aspects that advertising must have are as follows:
 - 2.1 Persuasion. Every advertisement has an objective to have an impact on consumer attitude or behavior.
 - 2.2 Advertisement is an important tool in marketing. In conclusion, advertisement is a communication that aims to persuade to get response and success in marketing objectives.

We now look at the 3 new elements of the services marketing mix - people, process and physical evidence - which are unique to the marketing of services.

5. **People:** People are a defining factor in a service delivery process, since a service is inseparable from the person providing it. Thus, a restaurant is known as much for its food as for the service provided by its staff. The same is true of banks and department stores. Consequently, customer service training for staff has become a top priority for many organizations today.

6. **Process:** The process of service delivery is crucial since it ensures that the same standard of service is repeatedly delivered to the customers. Therefore, most companies have a service blue print which provides the details of the service delivery process, often going down to even defining the service script and the greeting phrases to be used by the service staff.

7. **Physical Evidence:** Since services are intangible in nature most service providers strive to incorporate certain tangible elements into their offering to enhance customer experience. Thus, there are hair salons that have well designed waiting areas often with magazines and plush sofas for patrons to read and relax while they await their turn. Similarly, restaurants invest heavily in their interior design and decorations to offer a tangible and unique experience to their guests

Theories on Consumer Behaviors

Consumer Behavior means consumer behavior includes seeking, buying, applying, evaluating, and using of product and service, expecting it to respond to the needs of the consumer (Schiffman&Kanuk, 1994). Kollat and Blackwell (1968) gave a definition of consumer behavior as an action by a person relating to receiving and using of product and service including the process of decision making before that which in parts specified the taking of that action. Engel, Kollat and Blackwell (1968), explained the meaning of consumer behavior as an action taken by a person in direct relation to receiving and using of product and service including the process of decision making before that which in parts specified the taking of that action. Schiffman and Kanuk (1987), gave a meaning of consumer behavior as a behavior done by a consumer in seeking, buying, using, evaluating, or consuming products, services, and concepts which consumer expect that they would respond to their needs. It was a study of decision making of consumers in using existing resources including money, time, and energy in consuming products and services keeping in mind what to buy, why buy, when to buy and how often to buy.

Engel, et al. (1968) gave a meaning of consumer behavior as an action of a person relating directly to providing and using products and services which included the process of decision making before that and in parts specified that action.

A study of consumer behavior has to start with an analysis of consumer behavior to search for or research on the behavior of buying and using of the consumers to know the character of the needs and the behavior of buying and using of the consumers. The results will help marketing planners to be able to plan marketing strategy to provide for appropriate consumer satisfaction.

Discussion

From the study of the research, the Factors of Marketing Mix of Consumers Using Services of Coffee Shops in Bangkok Metropolitan, it is found that questionnaire respondents are mostly male (60.00 per cent), aged between 24 – 32 years old (52.25 per cent), status as married or lived together (62.25 per cent), education at graduate level (64.00 per cent), profession in private sector (36.75 per cent), and earning in range 25,001 – 35,000 baht per month (35.50 per cent).

On the other hand, from the study of the consumers' behavior in coffee consumption in Bangkok metropolitan, it is found that the important reason of the coming to use the service of coffee consumption is to use as a meeting point, 52.00 per cent, agreeable with the research done by Phiriya Wijakkhanabhan (2000) on Marketing Factors Affecting the Selection of Services of Franchise Fresh Coffee Shops in Bangkok Metropolitan which found that most consumers' objective in coming to use the services was to enjoy a cup of coffee, a snack, and recreate with friends. The frequency of the consumption was 2 – 3 days per time, 27.00 per cent. The quantity of consumption per day was 1 cup, 65.75 per cent, agreeable with the research done by RujakornPholpherm (2001) on A Study of Behavior of Fresh Fried Coffee Consumption which found that the quantity of consumption was only 1 cup per day. The questionnaire respondents believed that the marketing mix that affected the consumers at a highest level was of three aspects as follows: Physical aspect, of which consumers placed most significance on the bright

lighting of the shop and the convenience of the seating in the waiting area agreeable with the free study of KantatheeraPhermphian (2010) on Appropriate Marketing Strategies for Small Coffee Shops in the Area of Higher Educational Institutions in Chiang Mai Province, which found that the shop's atmosphere was usually filled with soft music and cozy lighting would affect in inducing customers into the shop, appropriate lighting was a good atmosphere; Process aspect, of which consumers placed most significance on the correct taking of orders agreeable with the free study of KantatheeraPhermphian (2010) on the same topic, of which it was found that the service included a waiter waiting to take orders for the customer to ask for details; and Variety aspect, of which a study done by Preeyabhorn Tibpaya (2010) on Influences on Consumer's Behavior on Fresh Coffee Consumption and found that the questionnaire respondents place most significance on the taste of the coffee and the variety of the coffee as much as the price aspect which the consumers place their significance on the appropriation of the price and the quality agreeable with the research done by KantatheeraPhermphian (2010) and WorasitChinrangsikul (2009) on The Factors Affecting Consumers' Behavior in Fresh Coffee Consumption which found that coffee consumers place most significance on appropriation of price to quality and quantity factor.

On distribution channel, consumers thought that place of distribution with convenience in travel was most important. On promotion, consumers thought advertisement via different media was most important and on personnel, consumers thought the polite clothing of waiters was most important which was agreeable with the research done by WongsakornKhampherm (2010) on The Factors Influencing the People's Usage of the Services of Vietnamese Food Shops, Muang District, Chiang Mai Province, which found that the questionnaire respondents thought that the waiters' polite, clean, and good looking clothing was most important. The marketing mix affecting coffee consumers in Bangkok metropolitan the least was the distribution channel of coffee.

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Regional Development and Sustainability: Cultural Tourism in the Southern Region of Jalisco

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Abstract

This study aims to determine the potential of cultural tourism in the municipalities that comprise region 6 of the State of Jalisco, territorially delimited in the South of Jalisco. These municipalities are tested first to identify the demand for cultural tourism to determine the profile of the cultural tourist under the assumptions that tourists especially motivated by culture tend to travel longer distances than most tourists. It discusses the motivations and satisfactions of cultural tourists in order to establish the potential market in accordance with the characteristics of the target market in the southern region of Jalisco. Any operation of cultural tourism companies should make the strategic diagnosis, which explains the use of SWOT analysis as a tool for strategic planning of cultural tourism enterprises. Finally, we propose some development strategies of cultural tourism in this region of Southern Jalisco.

Keywords: Regional development, tourism companies, Southern Jalisco, Cultural Tourism

JEL: D20, L200, L230, O100, O120, O130, Q010, Q500, Q560, Q570, R300, Z100

1. Introduction

There is an increasing awareness of the importance of culture, arts, festivals, natural and cultural heritage sites and folklore. Cultural diversity is the basis of cultural and heritage tourism. Cultural tourism has been at the center of the tourism industry in Europe and now other countries are beginning to develop their own activities (Nzama, Magi, & Ngcobo 2005). Cultural tourism is a tourism product in itself and can give significant contributions to regional economic development. Development implies the design, marketing and promotion of new cultural and

heritage tourism products and activities while creating a safe and user-friendly atmosphere for visitors and local communities.

Despite the fact that the Southern Region of the State of Jalisco in México is considered one of the most culturally rich in manifestations and expressions in Latin American literature, painting, etc., cultural tourism is almost non-existent. Local communities tend not to be actively interested in cultural tourism related issues and do not understand what the benefits could be. Moreover, there exists a lack of reliable data on cultural tourism for the Southern Region of Jalisco.

Cultural tourism is neither common nor universal. Although organizations, government or communities may not consider cultural tourism as part of their core interests, they appreciate and understand the consequences and possibilities of tourism (Jamieson, 1998). There is also scarce data and information on practice of cultural tourism activities. Social dynamic changes occurring in the Southern Region of Jalisco, make it difficult to obtain useful information as a reliable input for the design, implementation and effectiveness of cultural tourism policies.

The objective of this study is to address the lack of cultural tourism activities and infrastructure in the Southern Region of Jalisco. An aim of this exploratory study is to collect inputs on whether the Southern Region of Jalisco can be transformed into a cultural tourism destination. The concept of cultural tourism can be formulated after understanding the cultural activities offered by a community, considered as an asset to the regional economic development. Cultural tourism is an option to create employment, to improve the quality of life and to implement poverty eradication initiatives.

As a marketing strategy, cultural tourism is one of the latest buzzwords to attract visitors to cultural sites. Cultural tourism destinations offering cultural products and services linked by geography, townships, folklore, history, celebrations, art experiences and performance can be marketed to local and foreign visitors. Cultural tourism in the Southern Region of Jalisco can offer potential benefits to regional economic development and to visitors as well, because of the presence of adequate resources. An integrated approach involving all stakeholders must be inclusive and participative to ensure sustainable, holistic and efficient cultural tourism ventures.

The term of cultural tourism is heavily influenced by professional approaches referred to a concept rather than to a particular set of objects, articles or products. The World Tourism Organization (WTO) defines tourism as comprising the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes (WTO, 2000:4). Cultural tourism is defined as the movements of persons for essentially cultural motivations, which includes study tours, performing arts, cultural tours, travel to festivals, visits to historic sites and monuments, folklore, a pilgrimages (WTO, 1985).

The concept of cultural tourism encompasses a wide range of views embracing a full set human expressions and manifestations that visitors undertake to experience the heritage, arts, lifestyles, etc. of people living in cultural destinations. Heritage tourism is usually considered to

be cultural tourism. Heritage tourism: refers to tourists visiting places of traditional, historical and cultural significance with the aim of learning, paying respect to recreational purposes (Nzama, et al., 2005).

The term cultural tourism encompasses historical sites, arts and craft fairs and festivals, museums of all kinds, the performing arts and the visual arts and other heritage sites which tourists enjoy visiting in pursuit of cultural experiences (Tighe, 1985). Heritage tourism as a synonym of cultural tourism, is an experiential tourism related to visiting preferred landscapes, historic sites, buildings or monuments and seeking an encounter, involvement and stimulation with nature or feeling part of the history of a place (Hall & Zeppel, 1990).

A cultural tourist is a person who stays more than 40 kilometers away from home for at least one night and has attended a cultural venue, which will include visiting an art gallery, museum, library, music concert, opera and a cinema (Australian Bureau of Statistics, 1997). Hall (1998) defines cultural tourism as tourism that focuses on the culture of a destination, the lifestyle, heritage, arts industries and leisure pursuits of the local population.

Cultural tourism is related to the cultural aspects that includes the customs and traditions of people, their heritage, history and way of life. The International Council of Monuments and Sites (ICOMOS) defines cultural tourism as “a name that means many things to many people and herein lies its strength and its weakness” (McKercher and Cros, 2002:24). Cultural tourism theory is only beginning to debate issues of gender specialization (Aitchson, 2003).

Cultural tourism refers to travel that is directed towards providing opportunities and access to visitors for experiencing the arts and crafts, museums, heritage, festivals, music, dance, theaters, literature, historic sites and buildings, landscapes, neighborhoods and special character of local communities. Cultural tourism relates to the temporary short-term movement of people to cultural destinations outside the place of residence and work, and where their activities at these destinations or facilities cater for their recreation needs (Keyser, 2002). Cultural tourism associates the word "tourist and cultural attraction" with the tangible and intangible cultural heritage. Cultural tourism is the attendance by inbound visitors to one or more cultural attractions such as festivals, fairs, museums, art galleries, history buildings and craft workshops (Bureau of Tourism Research, 2004).

Ivanovic (2008) and Cooper, Fletcher, Fyall, Gilbert & Shepherd (2008) sustain that the greatest motivator for travel is to understand culture and heritage, both emerging as contributing to economic development. Ivanovic (2008) argues that cultural and heritage tourism is a recent development in tourism activities and along with ecotourism are emerging as the predominant forms of tourism thereby replacing sun-lust mass tourism. Cultural attractions and events play a key role in cultural tourism and hospitality destinations to entice visitors (George, 2001). Cultural tourism is traveling to experience and to participate in vanishing lifestyles that lie within human memory (Goeldner & Ritchie, 2009).

The aim of cultural tourism policy is to influence and attract visitors (Williams and Shaw, 1991:263). Tourists with special interest in culture corresponds to the segment of "cultural tourism", ie., size and value are directly attributable to the country's cultural values that

encourage tourists to take a trip. Tourists with occasional interest in culture belong to other tourism segments (CESTUR). A special program of incentives for tourism related to culture or values must recognize contributions that tourism can have for culture and vice versa, to capitalize on the positive and generate synergies for the development of both sectors.

Within the designing and developing process, cultural tourism may take many forms. Sharma (2004) adds to the cultural resources debate advocating the economic benefits of developing programs, resources and facilities for the benefit of local communities, creating a balance between the economic imperatives and positive and negative impacts.

Cultural tourism activities may have an economic impact on regional development by creating employment and improving the standards of life. Hanekom, & Thornhill (1983:110) describe the activities of cultural tourism as consisting of phenomena such as formulation of policy making, planning and organizing the structure, methods and procedures, recruiting, training, developing and motivating personnel, budgeting and financing operations. The philosophical principles of the tourism discipline must be reconsidered to re-evaluate the fundamentals of cultural tourism.

Cultural and heritage tourism can be considered as a dynamic activity developed through physical experiences, searching and celebrating what is unique and beautiful, represented by our own values and attributes which are worthy to preserve and to pass down to descendents in such a way that communities can be proud of them.

2. Theoretical background and literature review

Theory building and development are needed in order to be used as a foundation for an explanation and understanding of the normative model of cultural tourism for the Region of Southern Jalisco. Theory for cultural tourism has been developed to explain, analyze, evaluate and predict the related phenomena (Moulin, 1989, 1990). However, a cultural tourism theoretical framework to sustain practice and activities requires availability of data on infrastructure, resources and skills.

Easton (1979) developed a normative model of cultural tourism emphasizing the external environments serving the inputs that may influence goal-achievement, such as political, economic, socio-cultural, legal, environmental, educational, health, statutory policies, demographics and technological environment, although the numbers and types of possible environments may be unlimited (Ferreira, 1996:403). Each environment requires the adaptation of the conversion mechanism (Easton, 1965: 131-132; Ferreira, 1996:403).

After the goal is achieved, the inputs formed by the original external environment generate new needs to be satisfied by achieving a new goal (Easton, 1965:128-129; Ferreira, 1996:404; Cloete and Wissink, 2000:39). An opposing argument underlies conserving and protecting the integrity of the cultural tourism resources, by monitoring overcrowding, overuse of the resources and environmental pollution (McDonald, 1999).

Cultural and heritage tourism brings significant economic benefits and development to cultural and heritage sites, townships and communities. An empirical research conducted by Besculides, Lee and McCormick (2002) using a benefits-based approach to examine the perceptions of cultural tourism by Hispanic and non-Hispanic residents, showed that Hispanics felt strongly that living along a cultural tourism byway provides cultural benefits and has greater concern for its management.

The philosophical approach to cultural tourism of the stakeholders, providers and policy makers shapes the values and norms of the normative model oriented to develop effective policy around cultural tourism. Local communities developing and promoting cultural and heritage tourism may need as a frame of reference for an effective implementation of local and national policies. Cultural and heritage tourism products and services development and promotion require planning and implementing on the basis of policies. Philosophical principles of cultural tourism are required to sustain the design and implementation of a normative model aimed to promote regional economic development policies. The literature on cultural tourism policy is relevant in developing a normative framework. There is a need to develop a policy framework for cultural heritage tourism.

The cultural tourism theory “Creative cities” recommends investing in cultural and heritage goods. Ximba (2009) analyzed and examined the “variables and principles such as understanding of cultural tourism, development and conservation of culture, provision of cultural facilities, participation in cultural tourism, application of tourism policies and practices, and the benefits of cultural and heritage tourism”. Cultural tourism is based on the participation in deep cultural experiences, whether, intellectual, psychological, aesthetic or emotional (Russo, and van der Borg, 2002) and, as specialized cultural tourism. focuses on a small number of geographic sites, townships, cultural unities and entities.

The normative model enables the arrangement of data and information on cultural tourism activities in such a way as to provide the bases to develop a theoretical framework for cultural tourism. Normative theory is concerned with phenomena and questions regarding the role assumed by government and in general, the public sector (Hanekom & Thornhill, 1983:71).

A normative model of sustainable cultural tourism developed by Ismail (2008) proposes a normative input-output model with an implementation mechanism to ensure sustainable cultural tourism facilitating initiatives for regional development by creating employment and poverty alleviation. The approach of sustainable cultural and heritage tourism development is aimed to improve the environment by meeting the needs of the present communities without compromising the ability of future generations to meet their own needs (WCED, 1987:8). Sustainable cultural and heritage tourism development requires the best-practices (Magi & Nzama, 2002) to meet the needs of present guest visitors and host local communities while protecting and fostering enhanced opportunities for future generations.

A sustainable cultural tourism contributes to community development if the tourism stakeholders and businesses are efficient, fair and environmentally oriented. MacDonald and Lee (2003) examined the cultural rural tourism within a framework considering the roles of culture

in community-base partnerships. Their findings suggest that culture in rural tourism development is a valuable resource and community-based partnerships may be very effective.

Cultural tourism enhances local community identity and esteem. It provides the opportunity for greater understanding and communication between people of diverse backgrounds (Lubbe, 2003). Sustainable cultural and heritage tourism development is based on the assumption that resources and facilities are finite, limited, some of which are not renewable, experience degradation and exhaustion, cannot continue to grow to meet the needs of mass tourism and a growing population (SARDC, 1994).

The practice of sustainable development of cultural and heritage tourism requires sharing the benefits between the visitors and residents of local communities on a permanent basis. To overcome some problems associated with cultural tourism development, it is necessary to take advantage of all the opportunities, know-how, financial support, community co-participation, etc., in order to maximize the benefits. Community participation in cultural and heritage tourism development should become a core practice of a people-centered approach, to incorporate them in the decision-making process in the development of cultural and heritage resources and to share all the benefits (Magi & Nzama, 2008).

Participants in cultural tourism activities expect to get enjoyment, satisfaction or fulfillment from the experience (Shivers 1981). McKercher and Du Cros (2003) evaluate a cultural tourism typology represented by five benefit-based segments tested against a variety of variables: trip, demographic, motivational, preferred activity, awareness, cultural distance and activity. s. They found differences between the groups and suggested that the model presented may be effective in segmenting the cultural tourism market.

Co-participation in decision-making, ownership and benefits of all stakeholders involved in sustainable cultural and heritage tourism is the core of the encounter, experience and enjoyment of resources and opportunities available to the tourist or leisure seeker (Torkildsen 2007).

Cultural and heritage tourism may be a tool to preserve the culture of host communities. The sustainable cultural and heritage tourist policies must focus on and regulate activities and best-practices oriented to the restoration, enhancement and conservation of resources for both present and continuing future use and enjoyment by visitors and local people (Keyser, 2002). The level of maintenance, conservation and preservation of resources is related to the level of cultural tourism infrastructure and facilities.

The research undertakes an in-depth literature search to extract a set of normative criteria for cultural tourism and conducted an empirical qualitative survey. From the results of this research, finally a normative model of cultural tourism was designed. The aim of the normative model for sustainable cultural tourism is to facilitate the analysis, design and formulation of cultural tourism policy initiatives. Cultural tourism theory based on normative criteria focuses on formulation, design and implementation of cultural tourism policies. The political external environment influences the governmental tourism policy which in turn, may have an impact on the development of a normative model for cultural tourism. Cultural tourism theory based on

normative criteria is necessary for the formulation of cultural tourism policies oriented towards the improvement of regional economic development.

The aim of any cultural tourism policy oriented to the regional development is to influence and attract visitors (Williams and Shaw 1991:263-264) through the generation of demand and the provision of tourism services. Richards (1996) conducted international research on demand and supply of cultural tourism, and found a rapid increase in both the production and consumption of cultural and heritage tourism attractions.

The normative criteria incorporated in the model may be the framework of reference of the external macro environment which in turn may influence the social cultural tourism policy. Social cultural tourism factors which influence the external environment can be determined by implementing an appraisal system which benefits all the stakeholders. The implementation of the normative framework for cultural tourism is dependent on the commitment of tourism stakeholders, government agencies, communities, etc., to play their corresponding roles.

Thus, the stakeholders in cultural tourism, communities, government agencies, municipal governments, etc. hold the responsibility to implement initiatives to develop infrastructure, cultural facilities, cultural tourism attractions, accommodation facilities, etc. The normative model is appropriate to describe, explain and analyze the activities of cultural tourism in order to design, develop, promote and implement policies oriented towards to create employment and improve better quality of life conditions. A normative model of cultural tourism can be useful to develop strategies and formulate policies to frame the execution of some relevant proposals, recommendations and projects. A normative model for cultural tourism in the Southern Jalisco, flexible and dynamic as a tool, assists in providing the methodological criteria and procedures, policies and strategies to promote regional economic development.

3 Methods

Research on a normative framework for cultural tourism is deemed necessary to address the current dysfunctional economic development of the Southern Region of Jalisco. A systems approach can be used for the purpose of analyzing and developing a normative framework for cultural tourism (Bayat and Meyer, 1994:83-10). The aim of the normative model for cultural tourism is to analyze the strengths, weaknesses, threats and opportunities in all factors such as infrastructure, facilities, skills, etc. and above all the design and implementation of cultural tourism policies on the Southern Jalisco.

The normative framework is designed as a tool for aiming to change the current situations, policies and strategies into a more dynamic, functional and flexible proposal for regional economic development. The use of a normative model for cultural tourism requires qualitative and quantitative methods of analysis as an approach to conduct research. An analysis of the macro external environment includes the microenvironment, macro environment and marketing environment, representing external forces influencing the decision making processes and goal achievement such as economic, social, political, public policies, demographic, legal, technological, etc.

The micro-internal environment of a normative framework for developing, promoting and sustaining cultural tourism influence suppliers, distribution channels, customers, competitors, community values, local politics, legal requirements, etc. The guiding principles and policies developed by federal and local governments may be the core criteria for designing and developing the normative framework of reference for cultural tourism on the Southern Jalisco.

The goal of the normative model for cultural tourism is to attain effective and efficient criteria and performed to design, develop, maintain, promote and enhance the development of cultural tourism. The feedback mechanism of the normative model senses any possible deficiency and deviation of the ongoing outputs coming from the de normative model of cultural tourism in relation to the macro and micro environmental variables and factors.

Determination of the demand of cultural tourism

A. Mexican tourism in the hierarchy of the countries of the world in the year 2004.

When you start with the twenty-first century, you can note that tourism is of utmost importance for economic development and the cornerstone for the development of services with a value estimated at 476 000 million (dollars?pesos?) (See table 1). It is therefore a powerful tool to promote development of villages in terms of leverage.

Mexico ranks seventh among the main recipients of international tourism, after France, Spain, United States, Italy, China, UK and Austria (See table 2).

Table 1: Mexico's Tourism related information

Mexico	2004			2014		
	Growth			Growth		
	Relative	Absolute	Growth	Relative	Absolute	Growth
Personal Travel & Tourism	17	130	133	16	137	124
Business Travel	14	-----	131	12	---	39
Public expenditure	12	58	168	11	62	145
Equity Investments	11	93	2	7	94	3
Visitor Exports	16	113	9	12	115	15
Other exports	11	15	27	9	15	19

Travel and tourism demand	12	---	34	10	---	13
Tourism and travel industry	14	108	91	11	103	68
Tourism economy	11	99	52	10	70	14
Tourism industry employment	22	115	89	19	110	68
Tourism economy employment	14	75	42	8	52	4

1. 2004 Real growth adjusted for inflation.
2. 2005-2014 annualized real growth adjusted for inflation

Total 174 countries and 13 regions (largest / highest / the biggest one) is number one, (the smallest / most under / the worst) is number 174. 13 are aggregate regions without hierarchy.

Source: World Travel and Tourism Council. Mexico travel and tourism merging ahead

A study by the World Travel and Tourism Council (WTTC) based on eight indicators of Tourist Competitiveness Monitor (Financial Infosel, 2004) and applied to 212 countries, puts Mexico in the 70th place. The eight indicators are prices, human tourism, infrastructure, environment, technology opening to tourism, social and human resources.

The price index considers "the costs that consumers pay for hotel products and services ... taxes on purchases of goods and service utilization."

The human tourism index takes into account "the people's participation in tourism activities."

Table 2: Place of Mexico in list of 212 countries

Index	Place of Mexico in list of 212 countries
Tourist Opening	54
Prices	66

Human Resources	70
Technology	71
Social	72
Human Tourism	89
Environment	92

B. Economic Impact of Tourism sector in Mexico

According to the latest official information available from the Government of Mexico (Bulletin Quarterly Tourism) the number of international tourists to Mexico in 2003 showed growth rates marginally below those which were recorded during the previous year, representing a significant reduction for the indicator in 2003. A consideration of the total number of international tourists in 2003 (more border placement) reveals a contraction (-5.1%) resulting from the collapse of border tourists, going from 9.8 million tourists in 2002 to 8.3 million tourists in 2003, a reduction of 15%. In 2010, the country received 18.7 million international tourists, down by 5.1% over 2002. The main reason for the negative balance in the number of tourists is due to the increased immigration enforcement at the border with the United States, caused by exogenous factors such as the recent conflicts in the Middle East, the Mexican narco-war the severe acute respiratory syndrome.

Although there were a lower number of international tourists, compared to 2002, the inflow of hard currency received in 2003 allowed to record historical figures as the result achieved in 2003 is the highest level seen in the last four years. Tourists in hospitals, are those who generate more foreign exchange for our country, so no border tourism presented a positive change that led to the outflow of hard currency to grow, by increasing the total expenditure of international visitors to Mexico, resulting in a significant increase in the surplus of passengers. The segment of tourist inbounds ended in the year 2003 with 10.4 million, 4.8% higher than the levels presented in 2002. Spending increased from 8, 858 million dollars from 2002 to 9, 457 million dollars in 2003, a level which represents an increase of 6.8%. Within this segment, the inward tourism contributed 70% of total deposits, 23% were the hikers and the remaining 6% were recorded as cross-border tourists (Tourism Quarterly Bulletin). The cruise segment recorded an increase in currency in 2003 to 35.9 over the previous year.

There was also a reduction in the flow of tourists and visitors -Trans fronterisos international outside Mexico than in 2003, accumulated a 18.6% drop. The total expenditure incurred by Mexicans abroad showed a surplus in the tourism balance of \$ 3.204 million for 2003, 14.5% more than in 2002.

In 2003, a recorded figure of 47.9 million tourists arrived at national hotel rooms, which means an increase of 1.3% compared to the previous year. In 2003 domestic tourism increased to 8.2%, with the average stay of tourists being overnight, targeting especially the beach

destinations, while the fate of cities recorded lower occupancy rates . The interior cities and large cities respectively showed a contraction of 2.8 and 1.5 percentage points compared to the levels recorded in 2002, while the border cities showed a good performance by recording an average occupancy of 60.2%, which is 6.3 percentage points higher than that of a year earlier.

In 2004, it is expected that travel and tourism generates in Mexico 8.40.200 million pesos equivalent to U.S. \$ 73.3 billion in economic activity (total demand). The direct impacts of this industry include:

+681, 354 jobs, representing 2.4% of the total.

186,800 million Mexican pesos equivalent to U.S. \$ 16.3 billion of gross domestic product, equivalent to 2.7% of the total.

However, because tourism touches all sectors of the economy, its real impact is greater. The economy of this sector directly and indirectly represents:

+2, 865.740 jobs representing 10.0% of total

+ 643 200 million pesos of gross domestic product, equivalent to 9.4% of the total.

+ 299 900 million Mexican pesos equivalent to U.S. \$ 26.2 billion of exports, goods or services and 13.8% of total exports

+ 168 300 million Mexican pesos equivalent to 14.7% billion of capital investments or 10.7% of total investments.

+ 40 300 million pesos equivalent to U.S. \$ 35.5 billion of government expenditure or 5.1% of participation.

C. Growth

For 2004, tourism projects in Mexico

+ Real growth of 11.1% of total demand.

+ 9.3% of the domestic product of the tourism industry sector, 186 800 million Mexican pesos equivalent to U.S. \$ 16.3 billion of gross domestic product for the industry directly, and 10.7%, 643.2 thousand million pesos of gross domestic product, equivalent to 9.4% of the total, for the economy of tourism in general (direct and indirect costs).

+ 8% in employment in the tourism industry with direct impact only, or 681.354 jobs, and 9.9% or 2,865,740 million jobs in the tourism economy in general, direct and indirect impact.

In the next ten years, tourism in Mexico is expected to reach an annualized real growth:

+ 7.1% of the total tourism demand for lograr2, equivalent to 340 000 million (U.S. \$ 167.4 bn) in 2014.

+ 55% of the total of total domestic product of the tourism sector up to 422 900 million pesos equivalent to U.S. \$ 124.6 billion to the economy of tourism in general.

+ 3.1% in employment in the tourism sector to reach 921, 832, those who work directly in the industry and 5.8% to 5.02955 million jobs in the tourism economy in general for the year 2014.

+ 7.9% in exports of visitors rising to 382 300 million pesos, equivalent to 27.3 billion dollars for the year 2014.

+ 9.9% in terms of capital investment to increase to 604,700 million pesos, equivalent to 43.2 billions of dollars in the year 2014.

+ 2.3 & in terms of increased public expenditure to reach 70.6 thousand million pesos equivalent to \$ 5 billion in 2014.

In Mexico, cultural tourism figures have not been determined accurately. Only the National Institute of Anthropology and History (INAH) has estimated to have attracted to the spaces under their custody 16.4 million visitors in 2002. The domestic visitors accounted for about four-fifths with a total of 13.2 million and international tourists for one-fifth with 3.2 million. However, among domestic visitors we do not distinguish between national tourists and national residents of the cities where the sites are located.

Culture is in sixth place as the main motivation for domestic tourism and the fourth for international tourism. It is estimated that tourism especially motivated by culture in Mexico accounts for 5.5% of domestic passengers and 3% for international. In 2011 there were almost 120 million tourists with activities related to culture in Mexico. The travel expense related to cultural tourism demand is greater than the national average, because of an increase of their daily intake based on the activities around cultural heritage and longer stays hotels and therefore greater than in other tourism segments.

3. Profile of tourists with cultural statement

Tourists especially motivated by culture, tend to travel longer distances than most tourists. To carry out a cultural incursion, personal investment is needed on the part of the tourist, who expresses greater interest in learning and engages in the life of the place visited, which requires more time than a scenic trip; the more the culture of others is visited, the more curious are the effects on the tourists.. Main cultural tourism activities are those related to tangible heritage, very popular among tourists especially motivated by culture, representing 48% of all national tourist activities and 63% of all international tourist activities. The intangible elements are by their very

nature, more difficult to identify although its influence is manifested in a general sense by impregnating the culture by the visited tourist.

In the case of activities from tangible and intangible heritage, the archaeological sites (27%) are a favorite of international tourists especially motivated by culture. As for the intangible heritage, they prefer to see the traditions and customs of the communities (9%). For their part, Mexicans prefer to attend activities related to intangible assets (52%) among its outstanding regional cuisine tasting (13%). The tangible heritage related activity preferred by Mexican tourists is the observation of architectural monuments (18%). This relates to the interest, rather than didactic aesthetic appreciation of most of the cultural travelers (Cestur, 2011).

4. Motivations and satisfaction of cultural tourists

For both domestic and international tourists, the attributes relating to architecture and living culture are key motivators. The place of these factors between nationals and foreigners is reversed, with the themes related to live culture for those of more international tourists and those related to tangible assets most important to the national tourist. The tourist interested in culture, is also seeking price, climate, landscape and activities that can meet the needs and wishes of traveling members of the group.

Mexican cultural tourists are sensitive to the cost-benefit purpose, value destinations around the variety and quality of activities offered, are willing to spend on experiences, but not in services that do not provide clear differences with respect to others which have an interesting style. Factors such as the economic costs, emotional and physical experiences are crucial. The relationship between them and their benefits must be proportionate. A cultural tourist destination with cultural activities featuring comfort and additional options for leisure and entertainment, is more likely to attract tourists or occasional specialized visits than other destinations. Cultural tourists in general think that pleasant and attractive cultural offerings are scarce for children and adolescents and lack moreover the necessary instruction needed to appreciate the local cultures.

5. Market potential

Surveys to estimate and characterize the current volume of demand for cultural tourism in the domestic market indicate that only 5.5% of domestic tourists are considered particularly motivated by culture and 35.7% have a casual interest. Worldwide 37% of tourists do some cultural activity during their trip and that the annual growth rate has been 12% as an average since 2000 (CESTUR, 2011)

Mexico is currently involved with the tourists, -554.233 1.8% of the market that represent the countries of origin, United States, Canada, Germany, France, Spain and England, which means there is huge potential for penetration, on condition of development and marketing of adequate supply. Mexico is already involved with the 8.4% market share amounting to 7.2 million tourists. tourists with an occasional interest in culture, they represent a total of 84.9

million tourists who travel abroad: 35% of the total. Mexico is already involved with the 8.4% market share amounting to 7.2 million tourists.

6. Characteristics of the offer of cultural tourist destinations.

The size and competitiveness of the tourist and cultural offer cannot be assessed from the cultural resources in isolation but in relation to their geographical locations and the different elements which converge to make the visit possible.

The criteria used for selecting the destination locations are:

- a) The role they play in the tourism system;
- b) The main features that have cultural heritage;
- c) The conditions of infrastructure and services for tourist use, and
- d) Characteristics of the local population.

The difference in perceptions between nationals and foreigners becomes more obvious. As some examples of the diversity of cultural tourism resources the following can be mentioned:

- Cities and villages with architectural forms, historic and particular environments.
- Indigenous groups with their own production and exchange techniques, customs, stories, legends, rituals, celebrations, food, etc.,
- Archaeological sites that are open to the public (INAH)
- Landmarks of historical value from the sixteenth to the nineteenth centuries
?(CONACULTA)
Objects: historical, artistic and of everyday use, displayed in museums registered by INAH, Houses of Culture, Museums Private, State, Municipal and Community.
- Events and festivals, theatrical events, concerts, film, dance, etc.
- In terms of infrastructure and services, tourists interested in culture can be encouraged to use the other tourism segments, such as:
- Food and beverage establishments, travel agencies, tour guides and car rental. Highway that connects the main cities and roads which connect the small towns, and airports, 3 of which are international.

5. Operations of the cultural tourism business

In cultural tourism activities companies from various sectors of production are involved. In addition to the cultural tourism sector, firms and institutions from other economic sectors are significantly involved also, such as urban development and the service sector in general which are important supporting areas.

Cultural Tourism Sectors

The cultural tourism sector includes public, private and social organizations and institutions. Such diversity of actors determines the fact that administration has a greater complexity than in other fields of tourism.

In specific areas of cultural tourism some organizations excel whose presence is very important in those places where the activity occurs: Hotels, tour operators, museums, craft stores, restaurants, tourist guides, cultural sites managed by the INAH, etc.

Within the interactions among the various actors in the cultural tourism system, the basic structure of marketing generates harmonious relationships between private agents and public actors. In addition to these key players, cultural tourism has others, such as: Cultural tourism players, municipal authorities, state and federal bodies culture promoters, administration agencies of sites and monuments, nongovernmental organizations, universities, schools and institutes, business of entertainment, carriers, tourists guides, travel agencies, independent travel promoters, associations and clubs.

6. SWOT corporate Analysis

A corporate strategic planning analysis (table 1.4) shows that in general, the business outlook is favorable for the development of cultural tourism but requires a better use of cultural resources to strengthen the identity of the destinations and the country as there are more strengths than weaknesses. There is a need for greater certainty about the path to follow in order to take advantage of the assets needed to build on the cultural heritage and to improve the participation of cultural tourism companies. There is a willingness to undertake the necessary improvements to enhance the development of these communities and tourism enterprises themselves.

Recognized six areas for action in proposing a series of strategic guidance and tactical approaches that will strengthen and enhance the relationship of tourism activities in their cultural side:

- A. Revaluation of the relationship between culture and tourism
- B. Systematization of planning and control instruments
- C. Organizational strengthening
- D. Optimization of cultural heritage management
- E. Enriching the cultural tourism offer
- F. Rethinking promotion and marketing

Table 1: SWOT corporate Analysis

External/internal	Strength	Weakness
Internal/external	Emergence of companies in the process of modernization that value culture	Predominance of firms with conventional approaches to culture and tourism and lack of adequate supply
Opportunities Recognition of culture as the value of differentiation and identity and its importance for the competitiveness of the company	Companies and Products competitive heritage value and participate in strengthening local cultures	Simulated Development and use of conventional spaces and property in Tourism
Threats Short-term business vision and prominence of big business (mass model) as a paradigm.	Creating enclaves business without local benefits regional	The use of heritage limited to entertainment. Competition price, and loss profitability businesses and destinations

7. Design of cultural tours circuits in Southern Jalisco

A. *Cultural tourism circuit "footsteps in the land of great artists"* Municipalities that comprise the cultural tour: Zapotlán El Grande, Sayula, San Gabriel Tolimán, Zapotitlan de Vadillo Cultural scene

First Day

1. City Tour Historic Center of Painting and Sculpture Guzman City Hall, Columnar Illustrious Men of the Great Zapotlán, Birthplace of the writer Juan José Arreola in Lazaro Cardenas street, Mendoza Portal architecture, temple architecture and sculpture of the Tabernacle, painting, sculpture and architecture of the Third Order temple and former convent, painting, architecture and sculpture of the cathedral, market Paulino Navarro, Portales, birthplace of painter José Clemente Orozco, architecture Town Hall, Palace of the cob architecture, snack restaurant above the Portal Hidalgo , backyards overlooking the Portal Hidalgo. (Estimated time: 4 hours). From 12 to 23 October you can visit the Fair with all its traditions and customs, which culminates with the floats or litter.

Suggested meal in some of the excellent restaurants of Ciudad Guzmán

2. Sayula Tour: Legend of the poem, the spirit of Sayula and location of the main places

referred to, Downtown and portals Sayula, visit the Center of the Immaculate Conception Parish and a former convent, visit the Museum and Casa de la Cultura Juan Rulfo, visit the house of Handicrafts, cutlery shop visit of Ojeda, Juan Rulfo birthplace, architecture and paintings of the Santuario de Guadalupe and a former Franciscan convent. The carnival was staged on Shrove Tuesday to end on Ash Wednesday. (Estimated time 4 hours).

Suggested dinner with typical food and sleep in Sayula in La Casa de los Patios.

Second day

Typical breakfast is suggested in Sayula

3. Travel in San Gabriel

On the way to San Gabriel from Sayula suggested references to places mentioned in the works of Juan Rulfo: Apango, Apulco, etc.; Apango visit. View of Llano Grande, Puerto Los colimotes view, visit the Historic Center of San Gabriel, paintings and sculptures of Trujillo Enrique the Lord of Mercy Amula, visit the house where Juan Rulfo, visit house where Jose Mojica, priest, composer and singer, a visit to the stones with petroglyphs Telcampana visit, visit to the former estate of Juan Rulfo Apulco where he lived most of his childhood, can be visited if it coincides in time, the Feasts of the Lord is held in Amula ? from 11 to 19 January each year, the feasts of the Lord of Mercy, (Estimated time, 6 hours).

For lunch and dinner, typical local cuisine (food and beverages) is suggested and staying overnight in San Gabriel.

Third day

4. Tour of Toliman, and Vadillo Zapotitlan. Breakfast at Toliman t is suggested

Visit the Cerro Encantado and Petacal, Crescent View, visit the Museum in Toliman. Visit the Wall of the Temple of the Assumption. If you match 6 to August 15, you can join the feast of Our Lady of the Assumption, to appreciate their dances and traditions. Typical meal is suggested.

Visit the Historical Center of Zapotitlan Vadillo and for a presentation, some poems and legends that abound in the folklore of this place are suggested, as the Cerro Chino. If it coincides with the local religious festivities, cultural tourists can participate in the Feast of the Virgin of Guadalupe from 1 to January 15 and the feasts of Mary Magdalene on 22 July, the religious feast day image borne in procession through the streets, ornate people, parade floats, music and dance.

Return to Cd Guzman, cultural tourism circuit ends.

B. Cultural tourism circuit "at the feast eternal"

Municipalities comprising the tour: Tonila, Tuxpan Zapotiltic

Cultural scene

Tour the city of Tonila: Breakfast and visit to the Ex Hacienda La Esperanza, visit Tonila Parish Temple is a replica of the colonial style carved stone used for construction, has seen Swiss watches among the few of its kind, Temple San Marcos, modernist baroque and Byzantine motifs. If it is agreed at the time, you can participate in religious festivals in honor of the Virgin

of Guadalupe is celebrated from 3 to 12 December in the municipal delegation's village of San Marcos. (Estimated time: three hours)

Tour the city of Tuxpan: Visit the Historic Center of Tuxpan, Atrial (area around the church) view of the Cross dating from the sixteenth century and visit the parish church, Indigenous House visit with exhibitions of typical food and beverages (The Cuaxala), Celebration of indigenous wedding where the groom dressed in beautiful and intricate costumes, dances and performances of the Paixtles Chayacates Indians, in the afternoon visit to the Museum Melquiades Rubalcaba. If visitors match the time of programmed events and festivities, they can participate in the Regional Competition that takes place from 23 to May 31 and coincides with the festivities of the Lord of Forgiveness. (Estimated time: 4 hours).

Tour the city of Zapotiltic: Visit the Historic Center of Zapotiltic, visit the Temple of the former estate of Huescalapa. If the dates coincide with the celebrations of the Lord of Forgiveness in the first two weeks of May, visitors can participate.

C. Cultural tours "townships on the lake's rivera".

Municipalities comprising the tour: Gómez Farías, Atoyac, Teocuitatlán, Techaluta, Amacueca. Cultural scene.

San Sebastián: Visit the Historic Center of San Sebastian, visit the Artisan House (tule crafts), Participation in workshops. Visitors can participate if they coincide with the festival of Candlemas on February 2, the Feast of St. Andrew from the 20th to November 30th and the festivities of Our Lady of Refuge on July 4. (Estimated time 1 hour) Atoyac municipality, visit the Historical Centre and view the paintings of Painting. Box .- Painted by Antonio Zamarripa Castellón in 1968. Craft Site visits belts, participation in craft workshops .. If it matches on dates, visitors can witness the Health Festival on Friday of Lent and Carnival, which takes place in the month of February. (Visit estimated at one hour).

City of Teocuitatlán de Corona: Visit to the Ex Hacienda San José de Gracia and the Indian Pantheon. A presentation of the legends about these two scenarios is recommended. Visit the historic center of Teocuitatlán, visits to places of crafts and antiques collector blankets, if we agree on the dates when you visit the site, you can witness the festivities of the Virgin of Guadalupe from 1 to December 12. (Estimated time 3 hours).

Suggested meal in a restaurant Teocuitatlán.

Techaluta Township: Municipal Palace Tour 1878 coincides in time If visitors can witness and participate in the most important celebrations in the town that bullfighting are held from 9 to 16 September; religious holidays in honor of St. Sebastian Martyr taking place from 11 to 20

January, and the Pitaya Annual Fair every May for approximately 8 to 15. (Estimated time: one hour).

Amacueca Township: Visit the historic center of Amacueca, visit the ruins of the Franciscan monastery, XVII century building facade with twisted columns and gilded altarpiece. Visit to the Holy Name of Jesus, carved wooden sculpture of the sixteenth century. If we agree on the dates you can participate in bullfights on the third Sunday of January, the celebrations of the Holy Name of Jesus on January 8 and carnival that takes place in the month of February.

D. Cultural tours

Municipalities comprising the tour: Torres Zacoalco, Atemajac de Brizuela, Tapalpa Cultural scene

Zacoalco de Torres: Visit the Historic Center of Zacoalco Torres, visit equipales craft centers, participation in craft workshops, representing Indian wedding. If there is agreement on dates, visitors can witness the Feast of the Virgin of Guadalupe on January 12, the Lord of Health on August 6, and the feasts of St. Francis of Assisi on October 14. (Estimated time: three hours).

Atemajac de BRIZUELA: Visit the Historic Center of Brown Atemajac. If there is coincidence of dates, visitors can participate in the festivities of Our Lady of the Defense of 6 to 9 September, the pilgrimage of the Virgen de la Defense 7 and October 8 and the festivities of St. Bartholomew on 24 August. It is suggested to eat at this place the typical food, shepherd's lamb with punch and sweet fruit preserve

TAPALPA: Visit the historic center of Tapalpa, typical of mountain people, visit the Chapel of the Soledad, visiting the Casa de la Cultura (Parish of San Antonio de Tapalpa) Juanacatlán Temple and Temple of Our Lady of Mercy, visit to the paper mache crafts, visit the Hostal de la Casona del Manzano, visit the Water House, a visit to the Chapel of the Immaculate Conception, visit the Chapel of Solitude.

8. Business development strategies of cultural tourism

1. Improving the coordination of the various factors involved in the activity for development programs, marketing, participation in the conservation and enhancement of cultural heritage in the areas: intersectional and interdisciplinary.
2. Improve mechanisms for training of Human Resources.
3. Facilitate the development of small and medium companies and grocery services to strengthen the system as a whole
4. Strengthen the bond of action of the companies with the conservation and enhancement of cultural heritage
5. Encourage companies to provide information to tourists on cultural activities that exist in the destination, and to establish awareness programs for the care of heritage and respect for local customs
6. Promoting and using cultural tourism to differentiate the existing tourist facilities, opening new market opportunities
7. Diversify mechanisms to promote and market segments with an interest in culture

8. Harnessing the elements of cultural identification of each region to increase differentiation of Mexican companies in domestic and international markets
9. Promote use of sustainable technology (alternative energy, recycling, etc.).

9. Conclusions and recommendations

The Southern Region of Jalisco has important potential elements and resources identified as opportunities and strengths to facilitate the development and promotion as a cultural tourism destination. This paper identifies a need for a theoretical framework to design a normative model of sustainable cultural tourism policy in the Southern Region of the state of Jalisco, México. Cultural tourism stakeholders and suppliers in the Southern Jalisco can benefit from the implementation of a normative model to promote regional economic development through the creation of employment and poverty alleviation.

A normative model for cultural tourism requires the active participation by the tourist stakeholders, business, government agencies and the community, from the inception phase until implementation of a program for developing the potential as a cultural tourism destination. The design and implementation of cultural and heritage tourism programs must promote, preserve and enhance the communities' cultures, folklore, arts, artifacts, etc. Active participation of all cultural tourism stakeholders, governmental agencies and local communities in decision making processes, not only legitimates the activities, but provides experience and grounding to design and implement the strategies to pursue the effectiveness of cultural tourism policies (Blench, 1999) and promote responsible and sustainable cultural tourism.

The normative model establishes a set of normative criteria as an approach to achieve functional cultural tourism in the Southern Jalisco. Variables identified in the normative model as weaknesses, strengths, opportunities and threats can assist tourism stakeholders, government agencies, business and the community as a whole, to design and develop cultural tourism products and services and offerings for national and international tourists participating in the cultural market. Any development or promotion of a cultural tourism product needs to be well designed and implemented on the basis of the existing cultural tourism policies. A permanent approach towards the practice of sustainable cultural and heritage development is a requirement to spill over the benefits to the local communities.

Cultural tourism brings the best benefits to the development of a local community after an effective implementation of cultural tourism policies. The effectiveness of cultural tourism policies must be assessed. Local communities must attempt to manage cultural tourism resources whilst linking them to development and economic growth.

Local and municipal government plays an important role with respect to cultural tourism for the Region of Southern Jalisco. Furthermore, the planning, development, promotion, marketing and implementation of these products and services can sustain cultural tourism as an economic activity that can improve standards of living for people in the Southern Jalisco.

The design and development of a normative model is concomitant to a set of recommendations for implementation of cultural tourism in the Southern Jalisco. A cultural

tourism must offer intrinsic value for tourism consumption while adding value to local cultural tourism resources. Cultural tourism must offer to fulfill the expectations of tourists with memorable experiences. Cultural tourism in the Southern Jalisco can be a development tool for creating better conditions of employment, opportunities for economic development and improvement of the standards of life for the people living in the communities. The recommendations here offered are only an attempt to change the current dysfunctional situation into an efficient system of cultural tourism management based on a normative model.

The development of cultural tourism requires cultural heritage attractions in order to achieve the objectives and preservation of the tangible and intangible cultural heritage. The scope of cultural tourism for the Southern Jalisco may include ethnic tourism and historical tourism, comprising the observation, participation and sharing cultural expressions and lifestyles, dance and music performance, religious ceremonies, visual arts exhibitions, visiting monuments, sites and buildings, etc. Cultural tourism initiatives may succeed in consolidating the ethnographic “gaze” if it designs and develops tour routes involving living and interactive experiences in real life in the townships and cultural houses or centers.

Cultural tourism in the Southern Jalisco can be an opportunity for the local communities to market and promote overseas experience-periods, holidays to share and assimilate cultural values and life experiences taking advantage of the favorable weather conditions and the beautiful natural landscape. The design of cultural tourism routes is important, supported by the necessity to improve the infrastructure. To facilitate promotion and marketing of cultural tourism in the Southern Jalisco, easy access to a tourism information management system is required.

Local tourism information centers at the municipalities play an important role on spreading, guiding and providing assistance to visitors, rendering products and services available and meaningful and sharing responsibilities with tour and guide operators. Also the roles played by communities, owners of facilities, etc. are vital on these matters. With respect to development, maintenance, promotion and marketing cultural tourism in the Region Southern Jalisco, it is vital to design, formulate and implement a public policy-making process.

This paper on cultural tourism addresses the critical shortages of resources, infrastructure and skills amongst tourism stakeholders, business, practitioners, communities, etc., and offers some strategies as recommendations to improve the regional market with new cultural products and services. A differentiation between cultural tourism resources development and cultural production is essential for the design and implementation of cultural tourism strategies.

The implementation of a normative model leads to the development of cultural tourism infrastructure, the improvement of entrepreneurial skills of the community, the creation of opportunities to attract foreign investors and funding agencies, the design and implementation of marketing and promotional strategies, etc., all of which can contribute to the regional economic development of Southern Jalisco.

Fostering cultural tourism in the Southern Jalisco has a positive impact on developing infrastructure, offering diversified products and services in the cultural tourism market, creating employment, developing of entrepreneurial skills of the community, improving living conditions, etc. But most important, the normative model of cultural tourism has an impact on the spatial

framework to address the sustainability of cultural tourism on cultural sites and attractions and economic development for the communities, thereby creating employment and improving the standards of life for the people.

This analysis may be the starting point for further research about cultural and heritage tourism development, marketing and promotion in the Region of Southern Jalisco.

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KNOWLEDGE TRANSFER IN TOURISM

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Abstract

A number of tourism researchers have suggested that despite the proliferation of tourism research (there are now over 70 tourism journals) the exchange of knowledge from academic research to practical application in the tourism industry is poor. The argument made is that academic research seldom influences the real world of practice, and that for knowledge transfer to assist destinations for example, a paradigm shift is required. This paper will take a look at the challenges of knowledge transfer in tourism, and focus on a unique tourism research center in South Carolina, where private and public sectors have joined together in an effort to support applied and commercially relevant research in order to improve the competitiveness of the state as a tourism destination.

Knowledge Transfer in Tourism

Many tourism academics have expressed a concern about the lack of balance between research production and utilization (Faulkner et al., 1994; Cooper et al., 2002; Frechtling, 2004; Cooper, 2006; Xiao and Smith, 2007). As noted by Ritchie and Ritchie, “a great deal of research is being conducted in tourism, but is inefficiently used and rarely exploited to its full potential” (2002: 451). Similarly, Xiao and Smith (2007) question the effective use of knowledge by tourism businesses, and suggest there is a paradox in which practitioners espouse an appreciation for research but fail to use it.

What are the causes of this breakdown in knowledge transfer? Both Cooper (2006) and Frechtling (2004) suggest that the diffusion of knowledge from academic research to practical application in the tourism industry is weak due in part to the poor linkages between tourism academics and practitioners. Others propose that knowledge generated by academics is often perceived as needlessly complicated or overly sophisticated whilst industry practitioners prefer easy-to-use tools or quick answers (Ryan, 2001; Ritchie and Ritchie, 2002). Some say the problem lies with academics who speak to and write only for themselves (Samdahl and Kelly, 1999), failing to understand the transfer process, and other suggest practitioners are indifferent to research journals (Jordan and Roland, 1999), relying more on intuition, personal experience and word of mouth for management and policy decisions than on research. Finally, Tribe (1997) proposes that the impasse between consultancy and academic research needs to be resolved before transfer and adoption of knowledge in tourism is common.

Despite these drawbacks, there has been an acknowledgement in the last decade or so, by governments in particular, that knowledge transfer is a priority for developing policy frameworks

for a knowledge-based economy (Beesley, 2004; Cooper, 2006). As a consequence, funding is being provided to set up academic research centers to conduct applied and commercially relevant research, and various forms of technology transfer. Practices such as the Cooperative Research Centre program in Australia, and tourism research centers as part of the extension services in U.S. universities, are models of such knowledge transfer (Xiao, 2006).

In 2002, the South Carolina General Assembly created the Center of Economic Excellence program (since rebranded as the ‘SmartState’ program). The legislature authorized the state's three public research institutions, Clemson University, Medical University of South Carolina, and University of South Carolina, to use state funds to create Centers of Economic Excellence in research areas that would advance South Carolina's economy. Each Center of Economic Excellence is awarded from \$2 million to \$5 million in South Carolina Education Lottery funds, which must be matched on a dollar-for-dollar basis with non-state investment. By 2012, 48 Centers of Economic Excellence had been created with Endowed Chairs appointed to lead the centers – all from outside the state.

To date, the program has resulted in more than \$1.4 billion in non-state investment entering the South Carolina economy, and has led to the creation of over 8,000 new jobs (SmartState Annual Report, 2012). The SmartState-related jobs were created in part by companies that invested or expanded in South Carolina because of the SmartState program, by start-up companies that were launched based on SmartState research, and by research universities in the form of positions funded by grants and center investments. The \$1.4 billion investment in South Carolina is more than seven times the \$180 million in South Carolina Education Lottery proceeds that the General Assembly appropriated for the SmartState Program between 2003 and 2008.

As part of this program, the “SmartState Center of Excellence for Tourism and Economic Development” was established in 2010 and is housed in the College of Hospitality, Retail and Sport Management on the Columbia campus of the University of South Carolina. In conjunction with industry, faculty, and graduate students, the goal for the center is to perform tourism and hospitality-based research that is relevant and directly applicable to South Carolina, ultimately leading to the creation of jobs in the state.

The center has a small team – the director, two assistant professors, and two fully-funded PhD students. In addition, a grant writer is employed by the center as one expectation of research centers is that they attract external funding – always a challenge in the tourism field. The center has matching funds to kick-start projects that have the potential to spur tourism economic development and create jobs in the state. This helped secure two funded research projects in rural South Carolina.

The first was a research study looking at potential for tourism development in the Pee Dee region of South Carolina. The team discovered from research that the Pee Dee (like many rural areas of South Carolina) has the potential to attract tourists, but has very little brand recognition, both amongst tourists and South Carolina residents. There is also a need for improved relationships between tourism stakeholders in the region, and between tourism stakeholders in the Pee Dee and the popular coastal tourism honeypots. The center has since followed up the research by submitting a grant proposal to the Economic Development Administration to assist the Pee Dee engage in a destination brand building exercise.

In the second study, the center was asked by the Chamber of Commerce in Aiken County to conduct a feasibility study for a \$130m International Equestrian Center. The study included an industry analysis, a tourism resource inventory of Aiken and surrounding areas, a stakeholder perception and attitude study, projected market demand for the various components of the park, potential direct and indirect economic impacts, and a sustainability analysis. It was an \$80,000 project for the center, and if the development moves ahead (a strategy the team recommended), it will have a significant impact on the economy and job creation in South Carolina – as well as raising the profile of the state internationally.

The center has also assisted a small rural town called Lake City where local entrepreneurs are seeking to open the town up for tourism. In one project, using a mix of focus groups and surveys, the team looked at the feasibility for a new, high-class restaurant; and in another, they advised on retailing strategies in the main street. They also helped with the planning for an unusual arts competition and festival held in the spring of 2013. Called ArtsFields, the idea is based on the “Artsprize” event that began in 2009 in Grand Rapids, Michigan. That 10-day event, part art show and competition, draws hundreds of thousands of visitors annually, including more than 1,500 artists who participate for \$500,000 in prize money. For the ArtsFields event in Lake City, artists from 10 Southeastern states displayed their art in various venues downtown, and vied for \$100,000 in cash prizes.

And in another initiative, the center has received funding to develop a health and wellness tourism strategy for South Carolina. There are a growing number of tourists who travel for ‘lifestyle rejuvenation’, so U.S. travelers are being surveyed to investigate perceptions and attitudes towards health and wellness tourism, and their likelihood of visiting South Carolina as a health and wellness destination. The outcome will be a strategy document that identifies the best competitive marketing position for health and wellness tourism in the state.

Future research projects include identifying ways to increase the number of African American tourists coming to South Carolina and to promote the state’s rich inventory of sites and experiences related to African American culture and history. South Carolina has an unparalleled legacy of African American culture and history and a strong tourism infrastructure capable of supporting the growth and development of this exciting market component. The team is also conducting feasibility studies to open up South Carolina’s waterways for tourism. The state has nearly 500 miles of navigable inland waterways – most of it untouched - so the center is looking at the potential for sustainable tourism development on these lakes, rivers and intracoastal waterways.

In order to encourage innovation and create new jobs in the state, the center has also created a tourism and hospitality business incubator. Academic research and research-based education are generally considered indispensable for the encouragement of inventions and innovations and for their subsequent commercial exploitation (Hjalager, 2010). So this new incubator offers opportunities for tourism and hospitality entrepreneurs to turn their business ideas into a reality. The first business into the incubator - a father-son partnership - plans to set up an agri-tourism business in Columbia centered around hydroponics. To assist these (and other) small businesses, the center director has also created a new tourism consultancy class for Masters students, where the students go out in teams and consult for tourism and hospitality businesses in the state.

A future goal for the center is the creation of a training program for tourism and hospitality employees in South Carolina. The team has started with customer service training, but they plan to expand the training into subjects such as Marketing, Finance, Retailing, Research Methods and Sustainability Analysis. They have already conducted pilot customer service training programs for restaurants in Charleston and a group of small businesses in Lake City.

Running a research center does not come without its challenges. Convincing the industry that an academic research center can actually help them is an ongoing trial. As mentioned earlier, practitioners want easy-to-use tools and quick answers – and often for nothing (Ryan, 2001). This relates to the second challenge of raising funds. There are very few government agencies or foundations that sponsor tourism-related research, so winning large grants is not easy. For that reason, the center is collaborating with researchers from different schools across the University of South Carolina campus – from Public Health and Medicine, to Arts and Science and Engineering – in an effort to win major grants from agencies like the National Science Foundation and the National Institute of Health.

For all research centers of this nature that are designed to support a knowledge-based economy, the transfer of knowledge is critical. Cooper and Ruhanen (2002) have suggested that successful adoption of knowledge transfer occurs when industry partners and researchers establish joint objectives prior to commencing the project and jointly identify appropriate vehicles for transfer. This occurred on completion of the Aiken feasibility study referred to earlier. It was decided that a glossy but professional report would be printed and posted online, and released at the same time as a town meeting was held in Aiken, preceded by a media event where local correspondents could interview the researchers about the results of the study. Aside from these individual arrangements, the center distributes information via a dedicated website, a blog, a bi-annual newsletter, and various printed communication materials. Members of the team speak at industry conferences on a regular basis in the state and publish a number of industry articles in local business magazines. They also comment regularly on various local TV channels and for national newspapers. These public relations opportunities raise the profile of the center and of the university in general.

There can be downsides to the establishment of such research centers. Some say that they exacerbate the strain that university faculty already endures (Boardman and Bozeman, 2007), and others suggest that academic departments are ill equipped to evaluate center research when making salary, tenure and promotion decisions (Bozeman and Boardman 2003; Arocena and Sutz, 2001; Siegel et al., 2003). But what this regional spotlight has shown is that academic research centers can be of great benefit to tourism destinations. The ultimate goal of knowledge transfer is that of gaining competitive advantage (Nonaka, 1991), and for destinations, knowledge is critical for adapting to changing situations (Cooper, 2006). It is acknowledged that the tourism research center profiled here is not a one-off. But the more we can highlight such initiatives, the more likely we are to change the perception that academic research seldom influences the real world of practice.

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Economic Development Tourism Planning and Government Role : A Case study of Gorakh Hill DADU-SINDH-PAKISTAN

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ABSTRACT

The current research examines the Economic development tourism planning and Government role: A case study of Gorakh Hill-Dadu-Sindh-Pakistan. Data were collected from 300 respondents by using simple random sampling and data were analyzed by using SPSS-19 version. Nine factor were determined in the context of tourism development: security and safety for tourists; infrastructure and tourism facilities development; stakeholders collaboration; cultural heritage preservation; environmental protection; human resources development; tourism products promotion; simplification of travel procedures; and regional cooperation. It was revealed that Government should provide above nine factors for the Economic development of tourism in Dadu-Pakistan.

Keywords: Tourism, Economic Development, Ghorakh Hill.

INTRODUCTION

The Gorakh Hill Station has all potential to become an important tourist resort, it is located at a distance of less than 100 km from Indus Highway makes it easily accessible for local population and as well as for the urban center of Sindh. It is fact that in the past due attention was not paid for the development of the area and adequate funding was not provided to developed the necessary infrastructure. However the Government of the Sindh under the directives of the president of the Islamic Republic of Pakistan has now decided to issue. It needs to participate in the development and betterment of the Gorakh Hill Resort project so as to provide recreational and tourism facilities and opportunities to the people of Sindh.

1.3 TOURISM POLICY

Tourism is one of the largest global industries, much of it focusing on the attractions of relatively natural environments. A policy is well thought-out plan of action, especially one of an organization or government, laid down to guide in the achievement of identified goals and objectives. It is commonly regarded as a statement of intent or commitment to the driving vision. A tourism policy is such a plan, meant to facilitate achievement of set objectives for a government or organization.

Tourism can however have negative impacts through: increased resource use (for both food and souvenirs); habitat destruction and pollution from construction; social and cultural impacts; physical damage to sensitive habitats such as coral reefs and mangroves, and disturbance of wildlife.

Tourism is also related to the opportunity to unite cultures and people from around the world, which in turn adds value to the local communities and passing through visitors. This benefits both parties not only through experience but also enhances local economics. Considerable effort is needed to minimize the negative side effects of tourism, it is important that each destination is able to remain in keeping with its original beauty and charm.

These properties are set in local areas and support entirely local tradesmen, companies and organizations. It supports local communities by actively encouraging guests to visit local restaurants, markets, shops. It supports guests by providing details information of the local culture as well as tradition.

Tourism is a highly political phenomenon, the implications of which have been only rarely perceived and almost nowhere fully understood (Richter, 1989)

LITERATURE REVIEW

Tools to promote regional tourism integration are infrastructure and legal framework. Infrastructure plays an important role in regional tourism integration. Evidences have shown that infrastructure plays a critical role in the tourism industry in Singapore (Low & Heng, 1998), in Southeast Asia (Page, 2000). Page observes that “the future prospects for further growth in tourism will be contingent upon regional cooperation to assist in the greater integration and development of transport modes upon which the region’s tourism industry relies” (Page, 2000). Several international airports (Malaysia, Singapore, Thailand and Vietnam) in region have become gateways for tourists. Cheap air fares among the ASEAN members have been promoted to encourage intraregional tourism. In addition, legal framework has been a main issue to collectively and regionally develop tourism. ASEAN Tourism Agreement was adopted at the ASEAN Ministerial Summit in Phnom Penh in November 2002. Agreement emphasizes the need to strengthen, deepen and broaden cooperation in tourism among ASEAN Member States and among their private sectors in the light of the complementary nature of their tourism attractions and the need for ASEAN cooperation in making travel into and within ASEAN easier and more efficient. The agreement aims to improve the efficiency and competitiveness of ASEAN’s tourism services.

The above discussion has illustrated the diverse ways in which government is involved in tourism planning and development, and the ideology behinds it. of Angkor has been memorized as the ‘true’ past of the nation” (Sasagawa, 2005). After centuries of socio-cultural transformations and changes, particularly after the colonial period, the Khmer traditions have been reconstructed through what Hobsbawm and Ranger call the “invention of tradition” (Hobsbawm and Ranger,

1983). Cambodian culture and traditions are products of an intellectual construct together with the international and external forces (Ledgerwood et al, 1994). Tourism, a global phenomenon, is one of the exogenous factors influencing the reconstruction of Cambodian culture. Tourism provides incentives for the national and local government to rediscover things which are believed to be related to Cambodian culture and identity in order to attract tourists. Tourism can also help to improve the image of the Cambodian state. It is argued that the Cambodian state considers tourism as the main contributor to socio-economic development, and to improvement of Cambodia's image and identity (Chheang, 2008).

DISCUSSIONS

The tourism issue has figured quite remarkably in these speeches. From them, a discursive diagram can be drawn in which tourism as economic development is the hub while other issues play as spokes such as security, infrastructure, stakeholders collaboration, natural and cultural heritage preservation, tourism products development and marketing, travel facilitation, human resource development and trainings, and regional cooperation and integration.

The Hub: Tourism and economic development

The speeches focus more on the economic benefits of tourism. The government views tourism as one of the most effective tools in poverty reduction in Cambodia through employments, tax revenues, and other spillover effects in other sectors, particularly agriculture, handicrafts and souvenirs production, and construction. Tourism is one of the top five national development priorities of Cambodia. In addition, tourism play a vital role in realizing the Cambodian national development strategy called "Rectangular Strategy" focusing on promoting economic growth, employment, equity and efficiency in public sector.

The key sources of our economic growth continue to be tourism and the garments industry (Hun Sen 07 August 2002)

Tourism will offer us jobs and will also absorb some of our people's products (Hun Sen 25 January 2003)

Tourism continues to be at the forefront of Cambodia's economy (Hun Sen 4 September 2003)

he Spokes: Tourism management and development *Security and safety for tourists*

Political stability and security are among the most important elements in tourism development in Pakistan specially in Sindh Province. Security issues are more concern for the tourist in Gorakh

Hill so Government should provide certain measures for the development of this spot\

Stakeholders collaboration: private, NGOs, and government

Collaboration between the public, private sectors and civil society is considered to be a factor propelling tourism development in Cambodia. The private sector plays an important role in providing tourism services while the non-governmental organizations (NGOs) support sustainable tourism and poverty reduction in Pakistan.

I urge the Ministry of Tourism to work closely with the Ministry of Environment, the Ministry of Land Management, Urbanization and Construction, as well as with relevant ministries, provincial and municipal authorities to develop the entertainment sector and to improve services to cater for tourists. The most crucial issue is to work in partnership with the private sector to implement all action plan related to tourism sector development.

Human resources development

Tourism education and trainings have been just introduced and developed in Pakistan since the early 2000s. Human resources in tourism planning and development are the big challenge for the country. Therefore, training and education in tourism is given special attention by the government. Tourism vocational training schools were established; technical staff and employees have been trained both at home and abroad

Tourism products marketing and promotion

There are many tourism products in Pakistan but the problem is that marketing and promotion of the products is still very poor. Currently, most of the tourists come to visit Ghorakh Hill to see Angkor and not other places. It is necessary to promote other cultural and natural attractions for tourists in order to keep them to stay longer in Sindh Pakistan.

CONCLUSION

Tourism issue has figured quite remarkably in these speeches. From them, a discursive diagram can be drawn in which tourism as economic development is the hub while other issues play as spokes such as security, infrastructure, stakeholders collaboration, natural and cultural heritage preservation, tourism products development and marketing, travel facilitation, human resource development and trainings, and regional cooperation and integration.

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The Interpretation of Macau's Complex Heritage: Tourism Management Challenges

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Abstract

The Macau Special Administrative Region of China is renowned as resort and casino destination and what is often overlooked is that it has long and complex heritage and history. In fact, the Tourism Management Plan that was created for Macau in 2012 specifically mentions the importance of its cultural heritage. This study investigates the level of visitor interest in Macau's heritage and analyses how they would best like to find out about it. It looks at range of interpretative strategies, not of all of which are currently in use in Macau and finds that applications for smart phones are arguably the most attractive interpretative aid. However, it also notes the ongoing popularity of other forms of what might be called traditional interpretation and notes that guided tours have remained almost as important as electronic media. The paper discusses the management challenges of these findings in terms of tourism.

Introduction

On reading some of the literature that is currently available to visitors you could be forgiven for thinking that Macau was a sleepy island that suddenly came to life in the 2007 when it outstripped Las Vegas in terms of gambling revenues. I cannot be denied Macau is a major gaming center, but what should not be overlooked is that simultaneously it is also a World Heritage Site that was 'inscribed' – to use UNESCO's terminology –in 2005. The fact that Macau has a significant heritage was brought to the fore in 2012 as a result of study by the Macau PATA Task Force that declared that its culture was one of the 'five stars' that together make the territory an important tourism destination (PATA 2012:17). Macau's heritage is thus part of a complex mix of attractions that brings in perhaps as many as 27 million visitors per annum (ibid.), leaving aside questions concerning the counting arrivals. Given that the heritage of Macau is seen as central to its future, it is worth considering what kind of heritage it has and how it is made accessible to visitors who might want to know about it. This paper therefore examines the composition of Macau's heritage and explores the various ways it can be interpreted, and visitors' preferences in this respect. Before moving on to consider exactly what is meant by interpretation, it is worth considering briefly why Macau's heritage might be deemed worthy of being accorded World Heritage status.

The first point that is worth making is that Macau's heritage is closely connected to that of China, which has one of the longest written histories known on earth. In fact Macau was absorbed into this ancient state as a part of Guangdong Province, a process that commenced with the unification of China under the Qin Dynasty (221-206 BC). Then, as now, Macau comprised

three small islands – Macau, Taipa and Coloane – lying on the western side of the Pearl River delta flanked by Hong Kong to the east. The Pearl River has long been an important artery of trade as it links the ancient city of Guangzhou to the South China Sea with Macau as a kind of entrance to the sea, which is reflected in its Chinese name, Àomén (澳門), meaning ‘bay gate’. The main inhabitants were the Cantonese, the dominant population of Guangdong Province, but fishermen from neighboring Fujian province also settled there. Together they who erected the A-Ma temple in 1488, which is devoted to the goddess of seafarers and fishermen Whether or not the islands were visited by other ethnic groups remains unknown, but the delta certainly attracted traders from further afield, notably from the Persian Gulf. However, the first foreign group to establish a permanent presence was the Portuguese who arrived in the delta in 1513, though it was not until 1535 that they were granted the right to anchor in the Macau’s inner harbor by the ruling Ming Dynasty (1368-1644). The Portuguese were, however, not alone as they brought with them peoples from their territories in Africa and Southeast Asia and so Macau gradually came to be quite culturally mixed, which is also reflected in the synthesis of Macanese cooking, the indigenous cuisine of the islands. Portuguese rule was to last for more than four centuries when the islands were re-united with China as a Special Administrative Region (SAR) in 1999, two years after the British handover of Hong Kong.

As befits a cluster of islands with multicultural origins both the heritage of Macau is complex with a mix of baroque churches, Portuguese forts and Chinese temples, but this is not the only story. Macau was also the scene of some important events that brought together the eastern and western worlds, and the parish church of St Francis Xavier, the renowned Catholic missionary in Asia is located on Coloane Island. Macau is also associated with the Italian Jesuit, Matteo Ricci, who arrived in 1582 and began to learn Chinese and who was the first person to translate the Confucian classics into a Western language, Latin, with the assistance Xu Guangqi. Despite this illustrious history, Macau’s heritage is not awesome as compared to the ancient cities of Europe or the major temples and royal palaces of mainland China. In fact the built heritage, including the church of St Francis, is often quite small scale and this could lead to misunderstanding and even dissatisfaction as visitors struggle to understand why the territory is a World Heritage Site. Yet in its modest way Macau’s tangible and intangible heritage is highly meaningful and tells us a great deal about one of the first cultural encounters between the China and Portugal that eventually led the global world culture that we live in today, but it does need well developed interpretation to bring it alive. The World Heritage Site is spread across all three islands and there is already some interpretation including signage, story boards and pamphlets. There are also 19 museums, four of which deal quite extensively with Macau’s heritage: Macau Museum of Art, Maritime Museum, Taipa Houses Museum and Museum of Taipa and Coloane History.

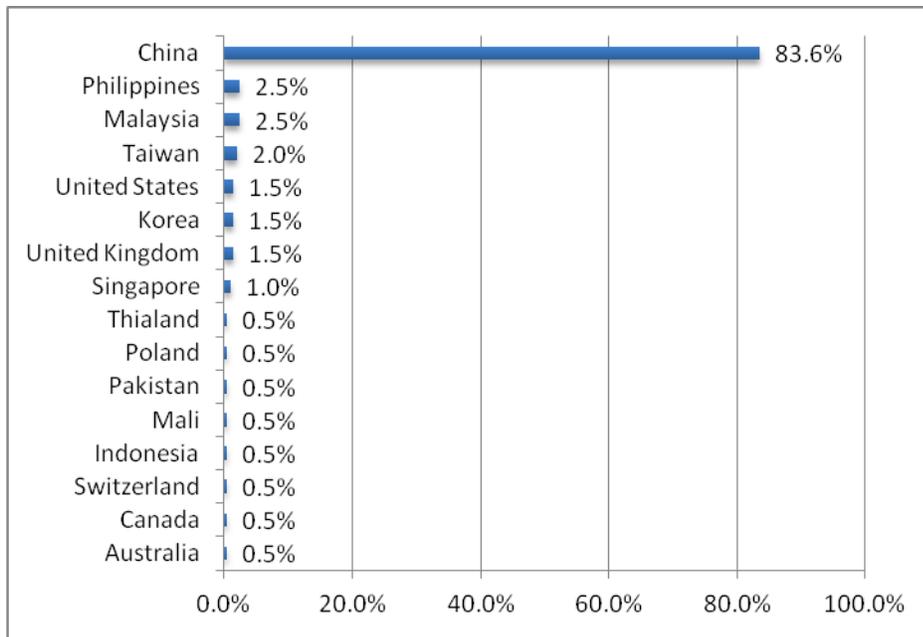
Heritage Interpretation

There is a vast literature analyzing heritage and the purpose here is to focus on heritage interpretation and related questions of management. The interpretation of heritage involves the communication of information about or the explanation of the natural or cultural resources of a given destination. Interpretation may take place at dedicated forms of infrastructure such as interpretation centers or museums, but can also be found in a wide range of other venues including historic sites, historical buildings and parks. The media used to interpret heritage are diverse and can include guided tours, dramas and re-enactment, displays, signs, labels, audio guides and audio visual material such as smart phone apps.

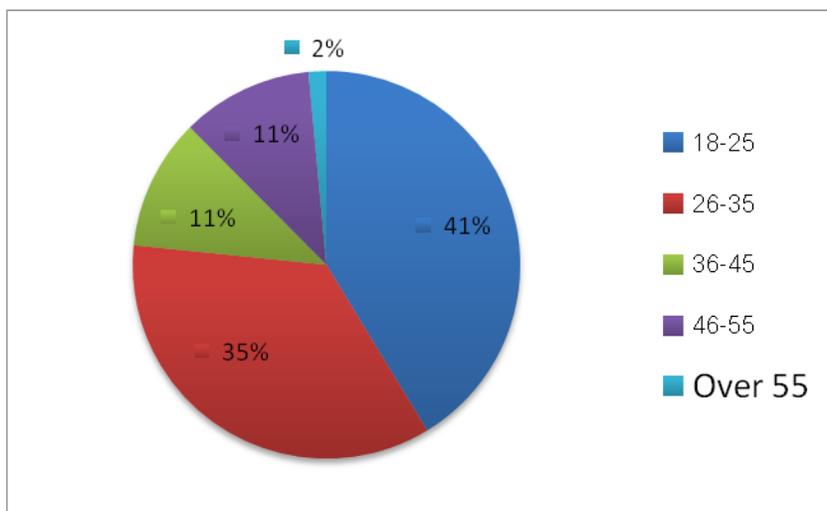
As early as 1957 Freeman Tilden had outlined the aims of heritage interpretation and, although its aim was largely educational, he conceived of interpretation as going beyond formal education (Light 1991). A common theme in the literature on interpretation is whose heritage is it that is being interpreted and for whom? Ashworth and Larkham, for example, have noted there are tensions between European and individual state identities and a number of possible heritages may be shaped from the European past (1994). These questions are relevant to Macau with diverse heritage and potentially divided loyalties, as well as the constitution of main visitor base, which is predominately mainland Chinese. The fact that heritage interpretation raises questions of management is not always evident in the literature, but Howard argues that the study of heritage brings together theoretical questions of identity and the practical necessities of management (2000). From the perspective of the tourism industry, heritage is useful economic resource, but some authors place emphasis on interpretation as a conservational resource and that educational awareness needs to be raised through participation in interpretation (Breathnach 1994). In fact there is quite a strong argument to be made for using interpretation to reduce the impacts of visitors to conservation areas, though it is recognized that interpretation may differ in effectiveness for different visitors (Littlefair & Buckley 2008). A longer term output of this study could be an analysis of how visitors respond to different interpretative strategies, though this paper has more immediate concerns about concerns about visitor choice and intentions.

Research Methods and Results

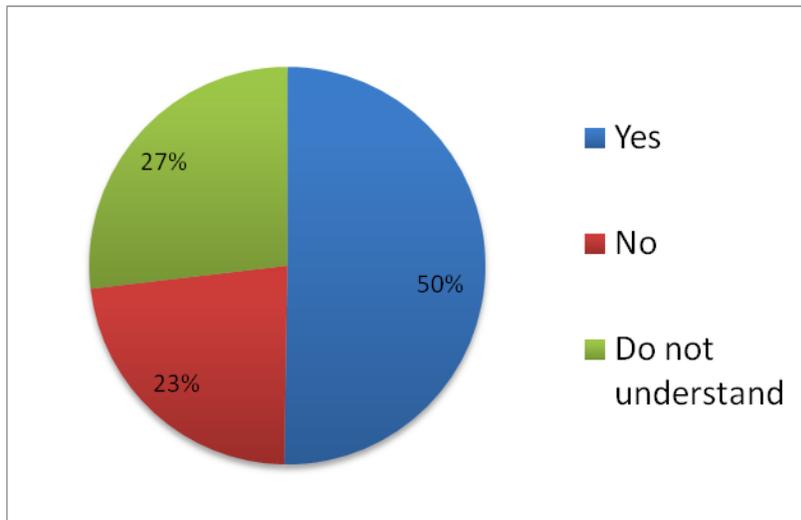
A one page questionnaire was devised by the authors with questions in English on one side and Chinese (Putonghua, Mandarin) on the other. A group of postgraduate students were charged with collection that data (n=201) close to one of the main World heritage Site locations in Macau in April 2013. Among the respondents the overwhelming language used was Chinese (n= 177), but more than half interviewed (n=102) had a second language. People of Chinese nationality were overwhelmingly predominant (n=167) and mostly resident in China (n=177), the other visitors being from a diverse range of countries with commonly only one respondent per country. Roughly speaking the results turned out to be as expected as they reflect the proportion of visitors by nationality to Macau



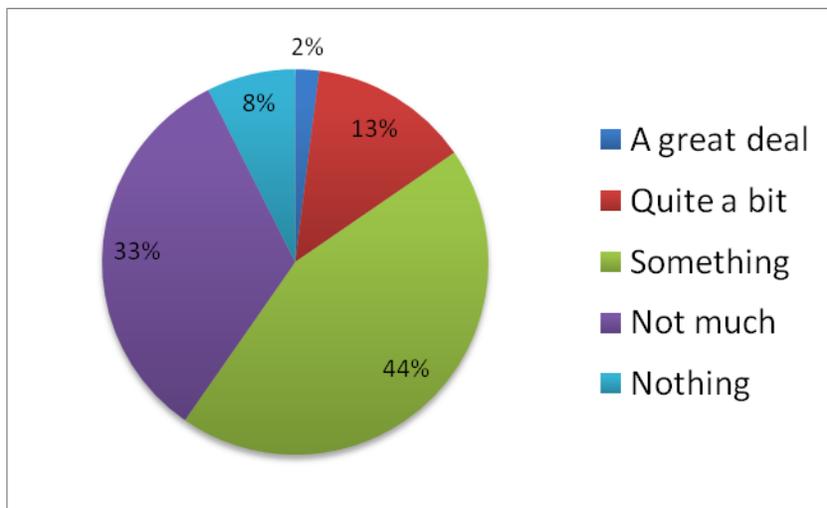
The age group profile turned out to be younger than expected with 41% of visitors in the 18-25 range and 35% in the 26-35 range. When one factors in the fact that travelling abroad is still largely a new phenomenon in China with younger people tending to make use of new opportunities.



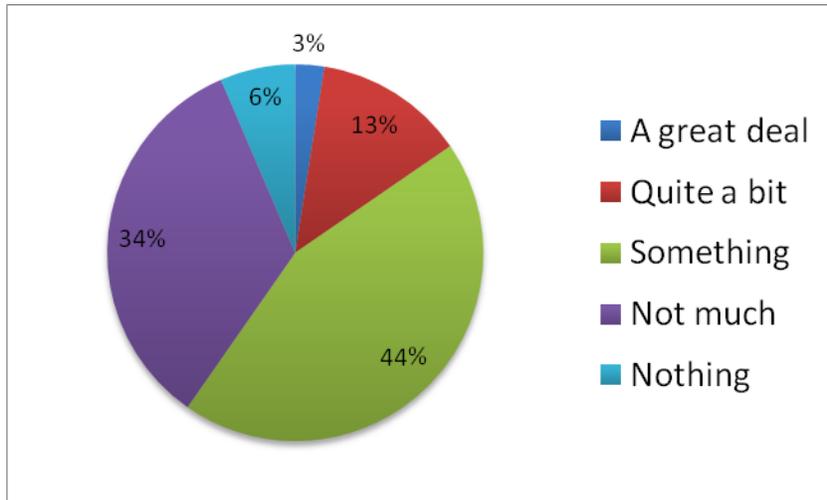
For the majority (n=114) have visited Macau more than once and the majority (n= 178) were individual traveler. About half of them (50%) was aware that Macau is a World Heritage Site, whereas 23% were unaware of its status, while the remainder did not appear to understand this concept.



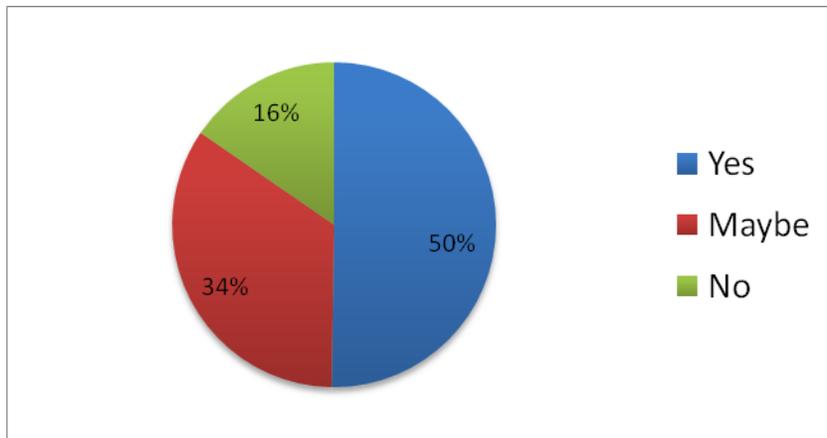
Only 2% of visitors claimed to know a great deal about the history of Macau, though 13% know ‘quite a bit’ and 44% knew ‘something’ about it.



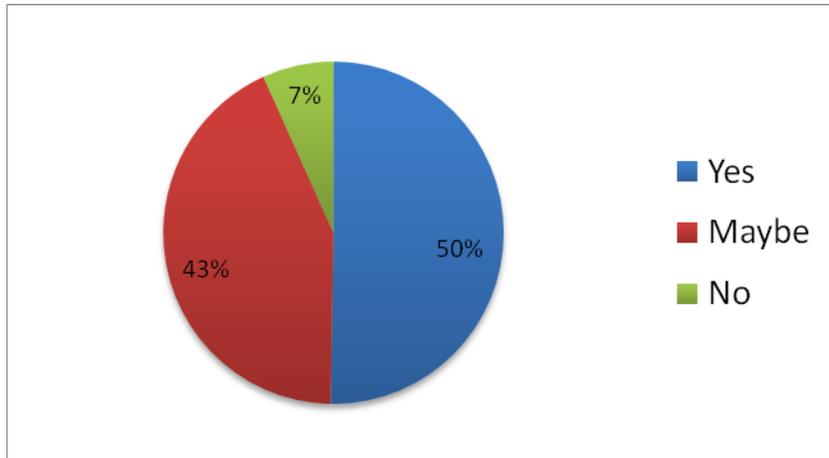
23% of visitors know a great deal, 22% quite a bit, and 36% something about the heritage of Macau. Only 1% know nothing about this. These are possibly higher percentages than what one would find if the questionnaire had been conducted in the main casino areas. In other words the visitors appear to have had some interest in heritage and history and were attracted to the study site area.



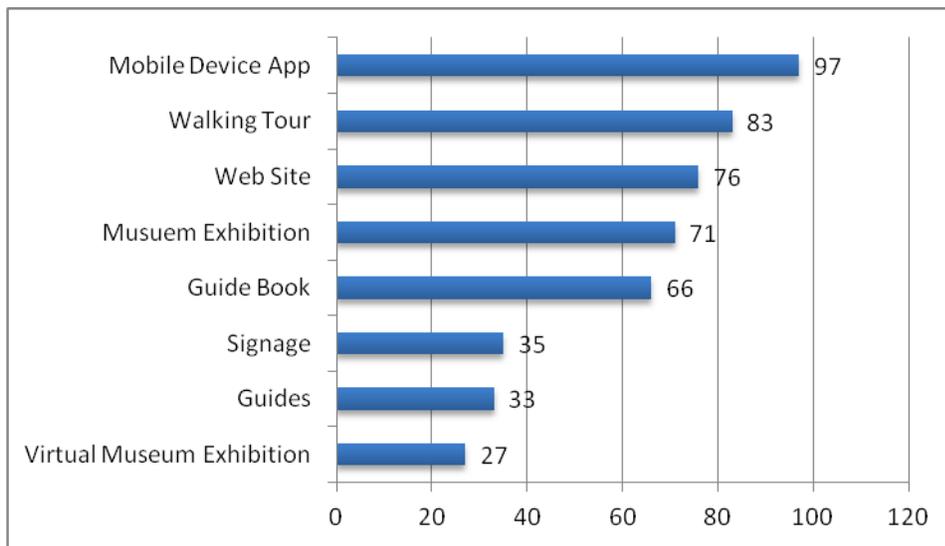
Interestingly, the majority (50%) agreed that the heritage of Macau was an important part of their visit experience and a further 34% considered that it maybe. Only 16% denied that the heritage of Macau was important.



Even though the most of the respondents knew something about the history of Macau, 50% actively wanted to learn about the heritage of Macau with only 7% firmly denying that they had this wish.



When asked about their preferred way of learning the responses slightly surprised – given the popular attention on use of mobile technology - that walking tours proved to be the second most popular. Web-sites were a little bit than popular and guidebooks, museum exhibitions and signage were not far behind. Interestingly virtual museums were not especially popular along with guides.



Discussion and Conclusions

The study confirms the observations of the PATA/Macau Task Force with regard to culture and history, although their study was not based on gathering data among the visitors. Instead, their insights were based on interviews with and presentations by informed stakeholders. Their study assigned culture to being one of the five stars that make up Macau as a destination and perhaps this study would suggest that it is an especially important star, though perhaps only among those visitors in the historic quarter of Macau. Interestingly the task force placed great emphasis on the need for better signage, which surprised some members of the audience who attended the briefing as signposting in terms of Macau's heritage sites is regarded locally as quite good. Interestingly, it was given a lower priority by the actual visitors surveyed in this study than other forms of interpretation. Digital media in the form of social networking sites are also mentioned in the task force's study, but mobile device apps are not included in the management plan for Macau, which may well reflect the age profile of the consultants as opposed to the relatively youthful profile of the respondents in this study. In fact 'interpretation' is scarcely mentioned at all in management plan, which is a bit of an oversight given that the authors flagged up culture and history so prominently in the plan.

The history and heritage of Macau are clearly an important part of the visitor experience, especially for visitors who actually visit the historical quarters of Macau. At present it remains unknown what the overall proportion such visitors comprise, but even if the overall percentage turned out to not be especially high, they would still comprise a very large number of people such is the size of Macau's tourism industry. A casual observation of the historic quarters of Macau shows them to be very busy on a year round basis and even busier still on public holidays. Clearly heritage interpretation is important for tourists found in these areas, but there is not one form of interpretation that stands out. Mobile device apps and walking tours remain firm favorites, with guide books not far behind, suggesting that many visitors like to have access to a variety of forms of interpretation. Given the sheer numbers of people in the historic parts of Macau, it is suggested that interpretation could become an important part of the management of Macau's tourism, especially with regard the reduction of negative impacts on its precious heritage. The fact that visitors to these parts of Macau are not only open to interpretation per se, but are open to a variety of forms of interpretation suggests that policies makers need to take on board the need for these forms of communication. This study also suggests that have access to interpretation is enriching for the visitor, though this was not a main concern of this research. It also indicates that heritage interpretation strategies need to be incorporated into Macau's tourism master plans if the recommendations of the PATA/Macau Task Force are to be fully realized

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Competitive Advantage of Cultural Tourism

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Abstract

The research was to investigate actual factors affecting marketing effectiveness in the cultural tourism. The conceptual framework was developed from the competitive advantage theory on industrial organizations and other contemporaneous research in marketing effectiveness. Accordingly, the researchers consider the importance of the factors supply chain strategy, low costs strategy and differentiation strategy. In this the researchers employed both qualitative and quantitative research approaches. The instruments of research were two steps: interviews and a questionnaire. Data were collected from administrators of the business tourism industry. Data collected were analyzed using the path modeling and on the basis of observing the actual marketing effectiveness of the organizations studied through all operational links in the supply chain.

Findings are as follows: Application of supply chain strategy, low costs strategy and differentiation strategy was explanatory for the variance in marketing effectiveness at 37.2 percent ($R^2=0.372$). The application of supply chain strategy was explanatory of all variances in differentiation strategy at 77.6 percent ($R^2=0.776$) and the application of supply chain strategy was explanatory of all variances in low costs strategy at 79.3 percent ($R^2=0.793$)

Keyword: Marketing Effectiveness, Competitive Advantage, Cultural Tourism

1. Introduction

Nowadays a tourism industry is an important industry that creates a very high income for Thailand. The tourism industry has become vital to the Thai economy. There are several types of tourism, such as conservation tourism, green tourism, cultural tourism etc. These types of tourism have become the tourists' options. The tourists can choose different destinations. Business operators will draw tourists to their services. These business operators must apply techniques and methods. Meanwhile, they must use administrative strategies to make their

businesses grow and increase incomes. They must have a higher market share and sales volume. Their businesses can grow if they strengthen competitive advantages [16, 17].

Historical tourism or cultural tourism business is unique in itself. For example, it has arts and ancient objects, Buddhist temples, Buddha image halls and sacred items. Most of them are ancient objects that cannot be found anywhere else in the world, which is the selling point of this business, depending on which business strategy the management needs to apply for the administration and for the maximum benefit of the business. To apply the strategy, the organization must also be ready. All strategies used for the administration sometimes require a high cost of investment. If the business has a limited budget and should select only one strategy for administration, how will it select the strategy that renders the maximum benefit [16, 17].

2. Review of the Literature

Resource Dependency Theory

Resource dependency theory has a main principle concerning the business development using of the main resources that are available, by adding and modifying to add value to these resources. It is the way to improve the business power base. This theory has been applied for building the added value to the available resources, by developing the works of agencies. Meanwhile, the existing information system has been improved [1, 9, 19]. Besides, the theory has been applied to strengthen the relationship between organizations and the internal relationship to speed up the work, reduce working hours and cost. It is important for the business performance and administration [8, 21, 27].

Competitive Theory

Porter has proposed two forms of competitiveness that enable the industry to have advantages as follows:

Cost advantage means the business must have lower costs than other business entities in terms of production capacity, product innovation as well as quicker delivery. Besides, customers will receive a higher added value from low-costs [19, 20, 21].

Low-cost leadership strategy requires the business potential to produce products and services with lower costs than those of the competitors. Meanwhile, customers' satisfaction remains the same. Although the products are sold at the same prices, the profits from sales remain unchanged. The low-cost leadership strategy focuses on three factors including 1) lower logistic costs for all activities 2) lower raw material costs by acting as a major sales distributor 3) lower location costs by locating near sources of raw materials called just-in-time cost reduction [20, 21].

Differentiation advantage means the creation of the cultural unique value in terms of quality, style and after sales service. These differences are so unique for the culture that makes it far beyond their competitors, enabling the business to have a higher advantage [21].

Differentiation strategy focuses on the competition effectiveness of successful businesses. The differences consist of product quality and response to customers' different needs. Delivery and service activities must be able to compete with competitors. Unfortunately, the cultural tourism business has insignificantly focused on this service activity.

The competitive advantage of product quality differences will focus both on the style and the benefit that should differ from competitors. Moreover, the services, include the credit policy, the delivery policy, the sales policy, and the sales promotion are different from competitors [21, 22].

Supply Chain Strategy

Successful businesses focus on the following marketing effectiveness:

Relationships between businesses and customer. Good relationships are a beginning of trust between customers and businesses. In the supply chain, both sides must trust each other, leading to long-term relationships. Most businesses always focus on their customers and forget their suppliers. They misunderstand that the suppliers must care for them, causing the lack of good relationships in terms of mutual benefits. If businesses also focus on their suppliers, they will see the suppliers' potential. This focus will lead to the selection of major suppliers. When their good relationships continue, the mutual planning and the product development exist [3, 7, 9, 14, 25].

Collaboration in work process for effective mission. Several academics have explained the effectiveness of the work process. The effective work process must have a clear mutual goal [10, 16]. In general, work specifications must be mutually agreed upon including 1) all work specifications should be jointly set up. 2) Resources and personnel should be shared. 3) Work measurement and evaluation should be conducted to see whether the work meets its goal. 4) Work performance should be jointly developed [6, 17] to achieve the goal [3, 12, 14].

Mutual improvement of work system. The first priority is to plan together [10, 16] to ensure working step reduction, inventory reduction and delivery of raw materials and products by joining in solving problems and improving the work system. The latter should be tailored to match with the business environment. In addition, the shared resources and the changing environment of the business have to be considered. By doing so, the business can work smoothly, leading to flexibility and enabling the business to adjust itself to the changing environment [9, 15, 26].

Benefit sharing is the main principle of the business. Alliance strategy should be applied to strengthen the cooperation among businesses to ensure good working cooperation. Successful businesses must have trust on their counterparts, as they share benefits and risks. Businesses agreeing to cooperate as business alliances must make written agreements stipulating conditions appropriate for all parties. Furthermore, appropriate benefits must be clearly stated for each party. Significant particulars must be recorded, comprising details of joint work, shared resources and personnel and mutual work measurement and evaluation [9, 11, 12].

Marketing Effectiveness

Most businesses look at a long-term picture to ensure an acceptable outcome. It means that businesses, the marketing share of which continues increasing, find that the clear goal and outcome must be obviously stated. According to the competition theory, successful businesses having a high market share must focus on their continued development strategy. The strategy must be appropriately applied. The result of the strategy implementation must derive from the good internal process analysis of the business. The business must have a clear working goal, leading to the expected outcome. Additionally, the business must focus on the result of the continued relationships. The sales increase of the business must come from the development and the improvement of various aspects of activities, considering customers' views as a main factor, consisting of trust strengthening, communication to customers regarding the business and its products. Moreover, the market must be expanded to reach new customers to ensure the sales increase. The assessment of the sales and the revenue increases must be averagely conducted every three years for apparent results [5, 15, 20, 21, 22, 23, 24].

3. Conceptual Framework

The conceptual framework was developed from the competitive advantage theory and resource-based theory of industrial organizations and other contemporary research in marketing effectiveness.

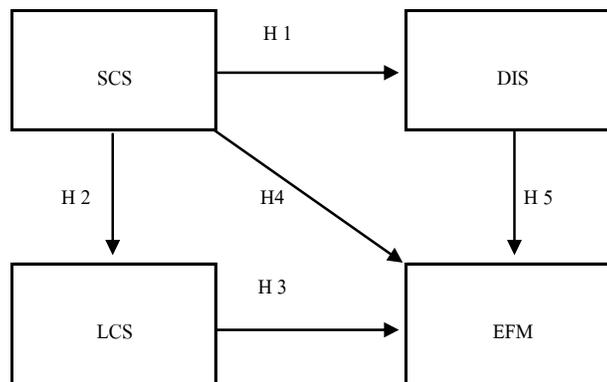


Figure 1: Proposed Model of Marketing Effectiveness

Hypotheses Testing

$$\text{EFM} = \beta_0 + \beta_1\text{DIS} + \beta_2\text{LCS} + \beta_3\text{SCS} + \zeta \dots\dots\dots(1)$$

$$\text{DIS} = \beta_4 + \beta_5\text{SCS} + \zeta \dots\dots\dots(2)$$

$$\text{LCS} = \beta_6 + \beta_7\text{SCS} + \zeta \dots\dots\dots(3)$$

Methodology

This research employed both qualitative and quantitative research approach. The researchers divided the study into two steps.

Firstly, relevant theories and literature in connection with an examination of the general conditions and the problem situation of the tourism industry were reviewed. Then, in-depth interviews were conducted with fifteen tourist business and high-ranked administrators of these organizations in order to determine what the actual problems are and to generate guidelines that can be applied to find solutions.

The instruments of research were two steps, interviews and a questionnaire. The sample survey encompassed data from 90 of 120 general managers of tourism business in Thailand [4].

Data collected were analyzed using the path modeling on the basis of observing the actual marketing effectiveness of the organizations studied through all operational links in the supply chain. Data were analyzed through path modeling to determine model causality using SPSS software.

4. Findings

On the basis of the findings derived from in-depth interviews and the study of general conditions and problems in the tourism industry, the following three significant problems in the industry's supply chain were isolated in four paths: 1) Supply chain strategy 2) Differentiation strategy 3) Low-cost leadership strategy 4) Marketing effectiveness.

Table 1: *Factors Derived from In-Depth Interviews to Be Used in Formulating Guideline for the Solution of Problems*

Variable	n	Mean	S.D.	result
Supply chain strategy				
Joint operation process for jobs quality	90	3.69	0.78	most
Joint good relationship between organization	90	3.99	0.93	most
Joint improve organization policy	90	3.91	0.93	most
Joint used to resource	90	3.52	0.64	most
Joint to benefit sharing	90	3.55	0.92	most
Differentiation strategy				
The increase differentiation tourist attraction	90	4.21	0.44	mostly
The increase differentiation to credit sale	90	3.84	0.58	most
The increase differentiation to promotion for sales	90	4.27	0.71	mostly
The increase differentiation to convenience service	90	3.34	0.58	most
Low-cost leadership strategy				
We have reduction process activity to necessary	90	3.91	0.72	most
We have control raw material with mostly purchasing	90	4.15	0.78	mostly
We have trade contact between tourist attraction	90	4.84	0.88	mostly
We have reduction raw material of tourist	90	4.12	0.66	mostly
we have reduction transportation between tourist attraction	90	3.82	0.63	most
Marketing effectiveness				
The company has enhance market share	90	3.93	0.58	most
The company has enhance total sales	90	3.81	0.89	most
The company has enhance sale	90	3.92	0.87	most

Table 2: Findings on the Basis of an Overall Analysis of the Factors Influencing Logistics Performance

Assumption			Correlation	R ²	β	t - value	p - value	Results	
Independent	Dependent								
H1	SCS	DIS	positively	0.473*	0.706	0.439	2.797	0.008	support
H2	SCS	LCS	positively	0.344*	0.683	0.323	2.332	0.025	support
H3	LCS	EFM	positively	0.340*	0.302	0.312	2.322	0.011	support
H4	SCS	EFM	positively	0.480*	0.302	0.328	2.322	0.011	support
H5	DIS	EFM	Positively	0.398*	0.302	0.322	2.311	0.011	support

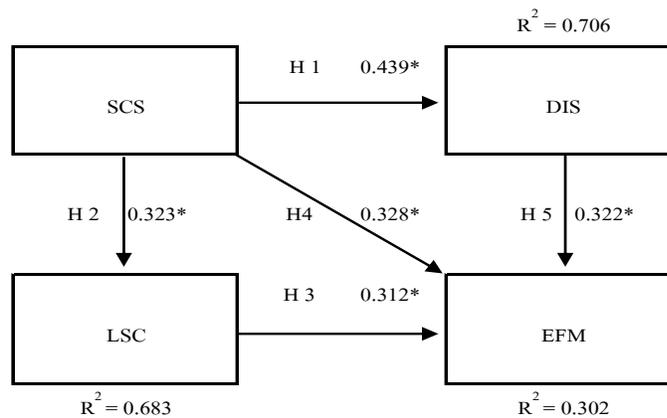


Figure 2: Path Analysis Modeling

Discussion of the findings

Strategies of business tourism affecting marketing effectiveness are as follows:

(1) Low-cost strategy consisting of the reduction in the work process and improving trade systems by contact both **business tourist attraction** and **business tourist attraction**.

(2) Supply chain strategy the components of which consist in the use joint good relationship both internal and intra organization and the used improve organization policy.

(3) Differentiation strategy consisting of the tourist attraction and sales promotion.

In addition, all businesses involve significant subsidiary factors for a total of 14 factors. Each of these should be taken into consideration by the tourism industry in solving problems in order to ensure success in marketing effectiveness.

Indicators for the marketing effectiveness of the tourist industry consist of enhanced market share, total sales and total income sales. Altogether, there are three important aspects in this connection.

5. Conclusion, Discussion and Suggestions

The result from the study of the marketing effectiveness using various strategies in the tourism industry has been analyzed in three aspects as follows: The low-cost strategy has influenced the marketing effectiveness with the significance level at 0.011. The differentiation strategy has influenced the marketing effectiveness with the significance level at 0.011. The supply chain strategy has influenced the marketing effectiveness with the significance level at 0.011 and supply chain strategy, low costs strategy and differentiation strategy were explanatory of the variance in marketing effectiveness at 30.2 percent ($R^2=0.302$) The supply chain strategy has influenced the low-cost strategy with the significance level at 0.025 and the application of supply chain strategy was explanatory of all variances in low costs strategy at 68.3 percent ($R^2=0.683$). The supply chain strategy has influenced the differentiation strategy with the significance level at 0.008 and supply chain strategy was explanatory of all variances in differentiation strategy at 70.6 percent ($R^2=0.706$). Consequently, the supply chain strategy must work with the low-cost and the differentiation strategies to get good results. Thus, businesses should implement all of the three strategies. There are altogether 14 elements that should be implemented.

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The Sustainability of Fraser's Hill as an Eco-destination

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ABSTRACT

Fraser's Hill, a popular highland retreat in Peninsular Malaysia, is rich in bio-diversity. The seven trails within Fraser's Hill is collectively the main attraction. The aim of this paper is to analyse and evaluate the sustainability of Fraser's Hill as an ecotourism destination. Three research methods were adopted for this study, namely key informant approach, participant observation and secondary analysis. The findings show that the trails are well maintained and show very little signs of stress. The rebranding and positioning of Fraser's Hill as an eco-destination and as The Little England is not in sync with the high-rise hotels which have a larger carbon footprint. Infrastructure development has to a limited extent impaired the fragile eco-system. There is also a lack of community participation in ecotourism activities within Fraser's Hill. In conclusion, the rebranding and positioning of Fraser's Hill is unequivocally appropriate. However, high-rise hotel development and the broadening of appeal towards mass tourism are not in sync with an eco-destination theme. However, the high-rise hoteliers could adopt environmentally-friendly practices to help preserve the fragile forest eco-system health. More should be done for the local community as they could partake in activities that are associated with an eco-destination.

Keywords: Ecotourism, flora, fauna, infrastructure development, local communit

AIMS AND BACKGROUND

Fraser's Hill is one of the most popular highland retreats in Peninsular Malaysia for local and foreign tourists. It is located between latitude 30 46' 25" to 30 47' 50" and longitude 1100 43' 50" to 1100 45' 15" in the district of Raub, Pahang and is east of the Titiwangsa Main Range. Fraser's Hill, an area of approximately 28 square kilometres and at an elevation of between 1000 to 1525 metres above sea-level, is covered mainly by pristine hill dipterocarp and lower montane

forest. The daily temperature variation is from 160 Celsius to 250 Celsius and is a haven for a cool respite.

As the vegetation in Fraser's Hill is still mainly pristine, it has become an important biological and ecological site. It is a permanently protected nature reserve and is also gazetted as a wildlife sanctuary. The flora in Fraser's Hill is rich in diversity with a mosaic of flowering plants, mosses, ferns, parasitic plants, gingers and nepenthes. Thus far, a total of 36 Peninsular Malaysian endemic species are located within Fraser's Hill (Latiff 2009). The fauna in Fraser's Hill has mega-diversity with an amalgamation of insect fauna like butterflies, bees, crickets, dragonflies etc., herpetofauna like snakes, frogs, lizards, geckoes etc., birds and mammals like gibbons, squirrels etc (Ng, et al. 2009).

The relatively undisturbed jungle and cool climate attract over 250 species of migratory and residential birds. The migratory birds fly to Fraser's Hill to escape the harsh winter in Russia, China and Japan. They stopover in Fraser's Hill for a few months prior to flying south to New Zealand and Australia looking for warmer climes before making the reverse journey. Fraser's Hill is designated as an Important Bird Area by Birdlife International.

Accessibility to Fraser's Hill is via road and the entrance to Fraser's Hill is known as the Gap. Previously, odd hours were for ascending traffic whereas even hours were for descending traffic during daytime. The construction of a descending road, eventually leading back to the Gap, led to the termination of the odd and even hours' rule.

The small town centre is dominated by the iconoclastic Clock Tower within a roundabout and surrounding it are the police station, post office, rural health clinic, sports complex also housing the Fraser Hill's Nature Education Centre, a hotel, a shop and eateries. With the exception of the ascending road, the other roads emanating from the roundabout lead to private or boutique bungalow and cottage accommodations, three hotels, a mosque, a food-court, a paddock, a catchment lake, seven trails, two golf courses, Jeriau waterfall and a residential enclave for hotel workers and government officials. The seven trails cover over 50 kilometres and collectively is the main attraction in Fraser's Hill.

Fraser's Hill has been positioned by Fraser's Hill Development Corporation as The Little England (Ahmad Ghazali 2008). Its British colonial history and legacy has left behind quaint old stone cottages and a nine-hole golf course. The mock-English Tudor architecture is left imprinted on almost all building facades in Fraser's Hill. Some of the bungalows have a charming garden which is reflective of an English country house.

The aim of this paper is to analyse and evaluate the sustainability of Fraser's Hill as an ecotourism destination. In the initials years, Fraser's Hill was a convalescing hill station and later evolved into a holiday hill station. However, the extent that Fraser's Hill has being transformed into an eco-destination is yet to be answered. This paper aims to fill in this gap by reviewing the development that has taken place in Fraser's Hill and whether this development is leading towards a makeover of Fraser's Hill as an eco-destination.

Research Methods

Three research methods were adopted for this paper. Key informants were selected from the public and private sectors to obtain a balanced perspective. The key informants identified for this research were senior government officials from the Fraser's Hill Development Corporation and senior hoteliers who have long-standing years of service in Fraser's Hill hotels. The key informant approach has found to be of high utility as incisive insights can be gathered in terms of the development of Fraser's Hill as an eco-destination. The data and information were gathered via direct interviews with an open-ended questionnaire.

Participant observation is used to validate the above viewpoints as well as having a deeper understanding of the above dynamics. Participant observation is carried out at the various hotels, food and beverage outlets, trails and public places especially at the Clock Tower.

In addition, secondary analysis via secondary data and information from the Fraser's Hill Research Centre with regard to the physical and bio-environment were conducted. This is used as one of the means in analysing the ecosystem health.

RESULTS AND DISCUSSION

The seven trails within Fraser's Hill range from easy to difficult terrain. Hemmant Trail is relatively easy and can be completed within twenty minutes to an hour, even for those who are relatively unfit. On the other hand, Pine Tree Trail is the most challenging and would take a day to complete. This trail ascends the Pine Hill Tree Mountain at an elevation of 1500 metres prior to descending to the trail end. Thus, the different trails with varying levels of difficulty would cover nearly the entire spectrum of different levels of fitness. Along these trails, many species of flora and fauna can be identified and would be a haven for nature lovers. The trails alone can be a distinct eco-destination but not much has been done to promote them either at the local or international ecotourism market with the exception of the International Bird Race. Most of them who do know about these trails are nature lovers. These seven trails are well maintained and show very little signs of stress.

The Fraser's Hill Nature Education Centre, rebranded as the Bird Interactive Centre, funded by both the Fraser's Hill Development Corporation and World Wildlife Fund provide information on these seven trails, inclusive of the area's fauna cum flora and organise guided trekking with minimal fees being imposed. This centre also provides an indoor interactive facility to learn more about the highland's flora and fauna. The educational role of bringing public awareness to the beauty and the need to conserve the highland forest for the current and future generations is carried out effectively by enthusiastic staff. This is especially so for school children who are on school field trips.

The tradition of Bird Race started in 1987 and recently the Fraser's Hill Development Corporation together with Tourism Pahang Malaysia, Malaysian Nature Society, World Wildlife Fund and others have organised Bird Races in June and December (Fraser's Hill Development Corporation Online 2013). The Bird Race in Fraser Hill is held in conjunction and closely in

tandem with the Bird Race in Genting Highlands which both are part of the International Bird Race Circuit. These two Bird Races have attracted bird watchers from the international and local scene. The participants of the Bird Race are to spot, identify and record the species that they can locate from an official list within a particular timeframe. The winners are adjudged based on the highest counts. The objectives of the Bird race are twofold, namely to preserve nature and to promote Fraser's Hill as a bird sanctuary. On this count, the Bird Races are a success in promoting Fraser's Hill as an eco-destination.

The positioning of Fraser's Hill as Little England adds to its charm as an eco-destination. The maintenance of heritage old stone cottages or bungalows together with their gardens is an integral component of ecotourism as preservation of historical sites is a key precept. Some of these bungalows have been converted into boutique tourist accommodations with dining services. The revenues generated from hospitality help in maintaining the upkeep of these heritage buildings and their grounds. The mock Tudor architectural style for old and new buildings is to provide uniformity and symmetry to the built environment without any building sticking out like a sore thumb. However, the high-rise hotels, even with a Tudor facade, do not blend in with the ecotourism theme. High-rise hotels would definitely leave a larger carbon footprint and would not be in line with the precepts of eco-lodges which would be discussed later. However, the saving grace is that the high rise hotels are built along the contours and terrains of their locational sites. This, to a certain extent, helps in complementing Fraser's Hill as an eco-destination.

The high-rise hotels also bring into question the market segment that Fraser's Hill intent to tap into. High-rise hotels with a relatively larger number of rooms would, to a certain extent, be focusing on the mass tourism market. If mass tourism were to be pursued in filling up the rooms, the question mark is the impact on the ecological health. Firstly, most of the tourist accommodations with the exception of some boutique bungalows are managed as any commercial entity with revenue, cost and efficiency as main considerations. Accommodation facilities, transportation, employment, energy, water and local produce consumption would be typical of a city hotel. This would be in contrast with the precepts of being small with less than 30 rooms, energy efficiency, water reduction and water conservation, training and employing local people at fair wages and ecological awareness and provision of an economic return to the local community as advocated by eco-lodges or green hotels (Worldwide ecolodges.com 2013). Secondly, mass tourism will encourage more private vehicles to traverse up and down Fraser's Hill and consequently more tourists in utilising the trails and facilities there. Landslide and erosion have happened occasionally and there is no in-depth study done on the impact of tourism on the ecosystem health. Thus, the carrying capacity of Fraser's Hill is yet to be determined. A definitive guideline for carrying capacity would help in delineating the type(s) of market segment(s) that Fraser's Hill can pursue.

According to Glenda & Yeap (2001) and Ahmad & Abdullah (2009), signs of impairment to the ecosystem health can be observed. Overlapping of lowland and highland bird species occur for some altitudes such as at Jeriau Waterfall. At altitudes below or higher than these, no

overlapping occurs at all. The competition for food minimises via this sharp division. Habitat disturbance has been postulated for the shift in the altitudinal distribution of birds. Lowland birds are now very common at the peak of Fraser's Hill whereas highland species are sighted as far down as the gap. The change in behaviour and distribution is postulated to land-use change i.e. the construction of roads, golf course, apartments and new private homes. This land-use change has resulted in negative impacts like landslides, soil erosion and habitat loss.

Other studies also pointed to the fragility of Fraser's Hill physical environment. A study on landslide distribution along the main road of Gap-Fraser's Hill revealed that most of the cut slopes were associated with slope failures (Rahman et al. 2009). Another study on surface slope erosion in Fraser's Hill showed remarkable slope erosion at the tested areas (Khor et al. 2009). Laboratory test also revealed that low soil cohesion, low plasticity, acidic soil and low organic content can weakened soil aggregation and subject the soil to rapid surface runoff. Despite all these, the forest ecosystem in Fraser's Hill is still relatively intact.

The people working in Fraser's Hill are mainly a mixture drawn from the nearby local communities and migrant labour. The common reason given for the need of migrant labour is that the locals, especially the younger generations, are not interested in menial or relatively poor paying jobs. There are also limited avenues for the local population to participate in business activities that revolve around Fraser's Hill.

The minimum wage requirement implemented in January 2013 in Malaysia would to a small extent reduce this problem. The local business community should search for more innovative approaches to tackle the issue of a lack of local community participation.

CONCLUSIONS

The flora, fauna and nature trails in Fraser's Hill is an ecological asset that is worth preserving as it is relatively intact. Other hill stations in Malaysia like the Cameron Highlands and Maxwell Hill have an impaired forest ecosystem due to overdevelopment. Thus, Fraser's Hill is the last bastion of a relatively pristine highland retreat in Peninsular Malaysia. Thus, the decision to rebrand Fraser's Hill as an eco-destination is unequivocally appropriate. In conjunction, the positioning of Fraser's Hill as The Little England is in sync with the eco-destination theme. The preservation of these English heritage stone cottages is an integral constituent of an eco-destination.

The rebranding and positioning of Fraser's Hill as an eco-destination as well as The Little England is not in consonance with the mass tourism market segment. However, the later developments of high-rise hotels point to that direction. These high-rise hotels, even with a mock Tudor façade, are run as a pure commercial entity and are not in keeping with the precepts of an eco-lodge. Even though these high-rise buildings are not in symmetry with the eco-destination theme, the hoteliers can definitely adopt the precepts of ecological preservation and maintenance, resource conservation and the involvement of local communities as part of their corporate policy in terms of ecological conservation or corporate social responsibility.

Signs of impairment to the Fraser's Hill ecosystem can be observed even though it is still relatively pristine. The later developments have led to the disturbance of bird habitats and the occasional occurrence of landslide. Thus, determining the carrying capacity via scientific research is the long-term solution for sustainability.

The lack of local community involvement is reflected in the need for migrant labour. More innovative intervention strategies have to be deployed to ensure local participation. The local community involvement is not just merely in employment but also in the wider arena of business opportunities that are related to the ecotourism and The Little England themes.

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Does Aesthetics Matter for Airlines Performance?

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ABSTRACT

Abstract—Extant researches have generally addressed on the customer satisfaction issues from the service quality, neglecting aesthetics as a key factor in airline performance. Aesthetics has become the new criterion for competition since aviation industry now is facing severely competitive environment. This study explores the impact of aesthetics (atmospheres and aesthetic labor) on the performance of airlines. This study uses four constructs (finance, customer, internal process, and learning and growth) under the balanced scorecard (BSC) framework to measure the business performance of airlines. A total of 250 questionnaires are distributed to the airline managers, giving a response rate of 39.7%. Confirmatory factor analysis and structural equation model have then performed. The findings show that airline atmospheres and the aesthetic labor have the significant influences on finance, customer, internal process, and learning and growth in terms of business performance from the BSC perspective. These findings could enable airline executives to gain insight into how to increase business performance through aesthetics. Future research would extend financial variables as the measurement of business performance to confirm the impact of aesthetics on the financial performance in the airlines.

Keywords: atmosphere、 aesthetic labor、 BSC、 performance、 airlines

II. INTRODUCTION

Aviation industry is facing increasingly tough competition in recent years, when the low cost carriers start to join this airline market. More and more global airlines take strategic alliances. In this environment, some airline managers believe what passengers concern is just about the price and even sacrifice the service to cut down the prices. However, it may fall into the vicious cycle of price wars and cause slow economic growth (Postrel, 2003). Therefore, it is urgent to find a new competitive advantage. Aesthetics has become the new criterion for competition (Biehl-Missal & Saren, 2012). Design has expanded scope and depth of commodities and change space into a more attractive environment (Weaver, 2009). Yang (2005) noted it is an era of aesthetics. Managers can create incredible output and profits through aesthetics in today's enterprises. Aesthetics can help enterprises achieve a sustainable competitive advantage (Wu & Wu, 2005).

However, does aesthetics really matter for performance? The existing literature seldom investigated the impact. Rahman (2010) shows that décor is an important influencing factor on restaurant performance and suggests researchers can take the resource-based view to

discuss how factors of atmospheres and aesthetic labor influence performance in related studies. There is a paucity of research in the airline industry. The main objective of this paper focuses on the gap by examining the impact of atmospheres and aesthetic labor on airline performance.

III. Aesthetics and Business performance

Böhme (1993) introduces atmospheres as the essential concept of aesthetics. Aesthetic works created atmospheres through various media to exert influence in many areas (Ho, 2003). *Biehl-Missal & Saren* (2012) utilize the concept of Böhme's aesthetic theory to explain the atmosphere as a key strategic tool for Starbucks stores. Some airlines have noted aesthetic power, for example: Virgin Atlantic rebuilds their upper class a *luxurious* atmosphere (Virgin-Atlantic, 2012). The idea of Hello Kitty jet from Eva air made flight fun and comfortable whose concept also won Travel Weekly awards for advertising campaigns (Star Alliance, 2012).

Aesthetic labor, as a key component, embodies the aesthetic image in service industry. It not only introduces emotion of labor, but specifically expresses how employee's external performance was emphasized and utilized by organization (Witz, Warhurst & Nickson, 2003). Spiess & Waring (2005) noted flight attendants are asked to show favorable appearance and sound deliberately to comply with corporate image in serving passengers. The employees are asked not only show their soft power, such as attitude, but importantly the appearance meaning "look good, sound right" (Nickson, Warhurst & Dutton, 2005). However, the employers take further steps, like training and rules, to remodel their staffs to perfectly embody the aesthetics of organization. Singapore Airlines create their own "Singapore Girl" image of their flight attendants to engage with *care and elegance*. This strategy received a huge response and powerful success (Chan, 2000).

The empirical studies showed aesthetics is a key factor on business performance. Aesthetics of the hospitality industry can prevent profit from declining (Rahman, 2010). Aesthetics as a strategy can attract more consumers' interests and participation (Weaver, 2009). Phillips (2004) used the qualitative method bringing the strategy map in balanced scorecard (BSC) to integrate aesthetics into internal processes and innovation value, thereby increasing customer royalty and shareholder profits. Aesthetics can be used to enhance the quality of life for employees and improve profit growth (Phillips, 2004). The "look good, sound right" employees offer competitive advantage in service and become an integral part of the tangible product (Nickson et al., 2005). The requirements of aesthetic labor are increasingly popular among organizations, because employers become aware of its commercial interests (Warhurst et al., 2000). Nickson et al. (2005) also suggested managers to consider the demand for aesthetic labor, and put related courses into training.

In this study, we use BSC structure first stated by Kaplan and Norton (1992) as our performance measurement tool. Kaplan and Norton (1992) particularly pointed out the inadequacy enterprise evaluated performance only by financial aspect. The BSC emphasizes not only evaluation of financial dimension, but also estimation of non-financial dimension, like customer, internal business processes, and learning and growth. Wu & Lu (2012) utilize the BSC structure to evaluate the hotel and motel performance. Hence, this study proposes the following hypotheses :

- H1a. Atmospheres have a positive influence on the financial dimension.
- H1b. Atmospheres have a positive influence on the customer.
- H1c. Atmospheres have a positive influence on the internal process dimension.
- H1d. Atmospheres have a positive influence on the learning and growth dimension.
- H2a. Aesthetic labor has a positive influence on the financial dimension.
- H2b. Aesthetic labor has a positive influence on the customer dimension.
- H2c. Aesthetic labor has a positive influence on the internal process dimension.
- H2d. Aesthetic labor has a positive influence on the learning and growth dimension.

IV. Methods

The measurement items for atmosphere were adopted from Jang, Ha & Park (2012). Aesthetic labor aspect was measured by survey designed by Nickson et al. (2005). We also used four dimensions of BSC to identify business performance and measure items which were borrowed from Wu and Lu (2012). The forth section of the survey is about respondents' relevant personal information.

Using a convenience sampling approach, this data was collected from managers of airlines in Taiwan that operate international routes, which including China Airlines , Eva air, Uni Air, Mandarin Airlines, Far Eastern Air Transport and TransAsia Airways. A total of 630 questionnaires were distributed, 250 of them were used for analysis, giving a response rate of 39.7%.

The data was analysed by using confirmatory factor analysis (CFA) to determine the efficiency of the measurement models, and structural equation modelling (SEM) was used to examine the conceptual framework and path analysis.

V. Results

We use CFA to examine separately validity of six constructs (atmosphere, aesthetic labor, finance, customer, internal process, learning and growth) and achieve the goodness of fit by dropping those question items that demonstrates poor correlations from the scale (Hatcher, 1994). Table 2 shows that the CFA for each construct fulfils the requirement of model fit (Bentler & Bonett, 1980; Bagozzi & Yi, 1988; Browne & Cudeck, 1993; Bentler, 1993; Hair et al., 1998). The perspectives of customer and internal process are saturated models.

Table1 – CFA measure for each construct

Ft indices	Criteria	Atmosphere	Aesthetic labor	Finance	Learning and growth
χ^2/df	<3	2.215	1.835	0.091	2.506
RMSEA	<0.08	0.070	0.058	0.000	0.078
RMR	<0.05	0.069	0.034	0.008	0.035
GFI	>0.8	0.967	0.979	1	0.990
AGFI	>0.8	0.935	0.951	0.998	0.952
TLI	>0.9	0.967	0.976	1.010	0.985
IFI	>0.9	0.978	0.986	1.003	0.995
CFI	>0.9	0.978	0.986	1.000	0.995

The instrument's reliability was assessed by composite reliability. Composite reliabilities for all six constructs were also above 0.70 (Hair, 1997) (see Table 3). The instrument was reliable to measure the latent constructs in this study. In addition, the AVE of all constructs approached the recommended value 0.5 (Fornell & Larcker, 1981). This means the latent variables were explained by the observed variables.

Table2 – The reliability of dimension

Constructs	items	Standardized factor loadings	Composite reliability	AVE
Atomosphere	interior design	0.733	0.8825	0.519
	table setting	0.710		
	background music	0.604		
	comfortable smell	0.735		
	warm colors	0.760		
	spatial layout	0.762		
	cabin cleaning	0.739		
Aesthetic labor	grooming regulation	0.792	0.843	0.476
	hair length regulation	0.630		
	clean appearance	0.808		
	visible tattoo	0.664		
	punishment of disobedience	0.619		
	appearance for image	0.598		
Financial perspective	unexpected losses	0.738	0.878	0.645
	sales growth rate	0.675		

	return on assets	0.905		
	net profit margin	0.873		
Customer perspective	Satisfy customer needs	0.783	0.8811	0.7123
	intention to purchase	0.917		
	customer satisfaction	0.827		
Internal process perspective	operating efficiency	0.707	0.8617	0.677
	retain old customers	0.885		
	confirm target customers	0.865		
Learning and growth perspective	problem-solving ability	0.886	0.9007	0.694
	service quality	0.815		
	intention to learn	0.839		
	corporate culture	0.790		

Discriminant validity was assessed by 1000 bootstrapped procedure (Torzadeh, Koufteros, Pflughoeft, 2003). The result (see Table 3) shows that discriminant validity is validated for different constructs.

Table 3 – Discriminant validity

Parameter	Estimate	Lower	Upper	P
Atmosphere ↔ Aesthetic labor	0.331	0.182	0.450	0.002
Atmosphere ↔ Finance	0.263	0.106	0.408	0.003
Atmosphere ↔ Customer	0.465	0.303	0.591	0.002
Atmosphere ↔ Internal process	0.540	0.404	0.652	0.002
Atmosphere ↔ Learning and growth	0.563	0.446	0.664	0.002
Aesthetic labor ↔ Financial	0.284	0.125	0.470	0.001
Aesthetic labor ↔ Customer	0.443	0.285	0.582	0.001
Aesthetic labor ↔ Internal process	0.330	0.185	0.482	0.001
Aesthetic labor ↔ Learning and growth	0.337	0.221	0.527	0.001
Financial ↔ Customer	0.704	0.554	0.806	0.003
Financial ↔ Internal process	0.650	0.507	0.760	0.003
Financial ↔ Learning and growth	0.580	0.423	0.699	0.002
Customer ↔ Internal process	0.750	0.623	0.854	0.002
Customer ↔ Learning and growth	0.649	0.513	0.777	0.001
Internal process ↔ Learning and growth	0.929	0.870	0.972	0.003

The goodness-of-fit indices of the proposed model show that the proposed model reasonably fits the data ($\chi^2/df=1.40$, RMSEA=0.04, GFI=0.90, AGFI=0.88, TLI=0.97, IFI=0.97, CFI=0.97). The results of the proposed model are summarized in Table4.

Table4 – Structural parameter estimates

Hypothesized path	Standardized path coefficient	t-Value	Results
Atmosphere → Business performance			
Atmosphere → Finance	0.292	4.007***	Supported
Atmosphere → Customer	0.447	6.355***	Supported
Atmosphere → Internal process	0.569	7.365***	Supported
Atmosphere → Learning and growth	0.578	8.021***	Supported
Aesthetic labor → Business performance			
Aesthetic labor → Finance	0.267	3.639***	Supported
Aesthetic labor → Customer	0.359	5.259***	Supported
Aesthetic labor → Internal process	0.232	3.551***	Supported
Aesthetic labor → Learning and growth	0.257	4.120***	Supported
Goodness-of-fit indices: x ² /df = 1.4, CFI = 0.995, TLI = 0.97, IFI = 0.97, RMSEA = 0.04			

*p<.05, **p<.01, ***p<.001

The study uses structural equation model to investigate the impacts of atmospheres and aesthetic labor on the performance in table 4. H1a and H1b are supported that atmosphere positively affect finance and customer. These results are consistent with Philips (2004) and Weaver (2009), which claimed that managers faced the challenge of aesthetics, aesthetics created not only attractive atmosphere, but also provided customers new experiences, and turned the aesthetic pleasure into profits. Aesthetics really matter for profitability (Yang, 2005). H1c, H1d, H2c, H2d are supported. This study further proves the significantly positive impact of aesthetics on the internal process and learning/ growth. The findings are consistent with the statement of Weggeman, Lammers & Akkermans (2007) that if an organizational culture can be established aesthetically, which may conclude a better performance. H2a and H2b are supported, aesthetic labor has a significantly positive impact on finance and customer constructs. Spiess & Waring (2005) proposed flight attendants are required to utilize their aesthetic skills in service encounter to maximize profits and impress customers (Warhurst et al., 2000). Our results strongly support this hypothesis. These results concur with the finding of Biehl-Missal and Saren (2012), who empirically show managers are able to carefully create marketing atmospheres to enhance their competitiveness.

VI. Conclusion and Future Work

The contributions of this study have three-fold: (1) this is the first paper to use quantitative research to examine the relationships between aesthetics and business performance in airlines, as

far as the authors know; (2) the empirical findings indicate that both atmospheres and aesthetic labor have significant impacts on performance. This aesthetic appeal would be the spotlight of enterprise from the marketing perspective (Nikson et al., 2005); (3) this study use comprehensive measurement (four constructs of BSC) to evaluate the business performance. Aesthetics cannot be separated from organizations (Witz, Warhurst Nickson, 2003). Eagleton (1990) noted the organizational interests are indissolubly linked with aesthetics.

Management executives should allocate reasonable business resources to make cabin atmospheres attractive and enhance staff training in order to utilize the aesthetic labor for profit maximization and customer satisfaction. For example, airlines could use decoration, spatial layout, lighting, music, smell to create an atmosphere to enhance the competitiveness and business performance. For aesthetic labor requirements, managers need to train employees to maintain decent appearance and professional performance. Enterprise is not just an economic entity, but also to be an aesthetic entity.

Despite the importance of this study, there are still some limitations to be overcome. The findings might be limited because of a convenience sampling method. Future research could adopt a more comprehensive sample and even explore the effects of different cultures. Furthermore, we recommend that future researchers can also use the BSC to do quantitative research of other hospitality industries such as hotels and restaurants in aesthetic researches.

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THE ROLE OF EXPATRIATE MANAGERS IN INTERNATIONAL HOTEL DEVELOPMENT: A CASE STUDY FROM JAKARTA, INDONESIA

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ABSTRACT

The issue of human resources in hospitality remains engaging especially when we discuss about expatriation. Topic in expatriation in certain countries such as in Asia probably is far more interesting than in some part of the world. Indonesia is one of the largest countries in Asia with tourism as one of the appeals to attract attention from around the world. Dynamic of employment in international hotel in Indonesia is very vast. A lot of MNC (multi-national corporations) love to invest their tangible and intangible assets in order to get market share in Indonesia. Many scholars research about advantage or disadvantage of expatriation, but there are not many studies about expatriation in hotel industry, especially in Indonesia. Therefore, the aim of this conceptual paper is to investigate the dynamics of deployment between host country managers and expatriates in the International Hotel Industry in Indonesia

Keywords: expatriation, international hotel, host country manager, expatriate manager, Indonesi

INTRODUCTION

The term of deployment comes from the result of deploying in resource management process which means the assignment of people (Sirmon *et al.*, 2007). The term expatriation is often used to describe the management of the transfer of intra human resources (Miao *et al.*, 2011; Ozdemir and Cizel, 2007). Although the term expatriate literally be taken to mean any employee that is working outside his or her home country, it is normally reserved for PCNs (Parent Country Nationals) and sometimes TCNs (Third Country Nationals) working in foreign subsidiaries of the MNC (Multi National Corporations) for pre-defined periods, usually 2-5 years (Harzing, 2011). As research by Perkins and White (2008) identifies, expatriates are tasked with transplanting corporate culture, competence and strategy to local units. There has been a healthy debate about competencies of expatriate managers and global managers (Harris and Brewster, 1999; Scullion, 1994; Suutari, 2002). Expatriation is seen to be a challenging part of human resources, and Suutari and Brewster (1998) have argued that the uses of expatriates can also create problems. Amongst the issues identified are: compensation gap (host country manager) (Leung *et al.*, 2011; Warneke and Schneider, 2011), limits to the supply of expatriates (parent

country national) (Collings *et al.*, 2007), family adjustment (expatriate) (Haslberger and Brewster, 2009; Palthe, 2008), adaptation (expatriate) (Suutari and Brewster, 1998), commitment (Harrison *et al.*, 2004), job attitudes (expatriate) (Leung *et al.*, 2001), loss of businesses (host country manager and parent country national) (Collings *et al.*, 2007; Dowling and Welch, 2004).

In early studies, Gailbraith and Edstrom (1976) identified three motives for using expatriates. Firstly, to fill positions which local nationals are not qualified to occupy. Secondly, to utilize management talent and develop the competence of the individual manager. Thirdly, to provide international experience and employee knowledge about organizational structure and decision process of multinational organizations. TCN sees the benefit of hiring local to fill management positions because HCNs are familiar with local culture, speak the local language, have an existing network relationship, and understand the subtle nuances of the local environment. In addition, it is generally much less expensive to hire HCNs than expatriates since they are paid on local salary structure and do not need the additional expenses that expatriates would require (Lenartowicz and Johnson, 2007). As suggested by Causin *et al.*, (2011:886) “The use of expatriates also provides managerial talent in developing countries where there is limited local talent and enhances the global mind set of the organizations”.

PURPOSE

Anecdotal evidence from Indonesian hotel industry suggests there are more expatriate managers than local managers and also, it seems that there is “glass ceiling” for local managers to reach senior level management in international hotels in Indonesia. The importance of tourism industry in Indonesia gives a significant impact in bringing economic growth to the country. In order to bring international tourists to Indonesia, tourism infrastructures must be considered. As posited by Ayeni (2013:5) “Infrastructure assets are key requirements to sustainable development since accessibility to specific tourism destinations depend on the quality of the overall infrastructure”. One of those infrastructures is accommodation. According Gagian (2010) accommodation is as important as transport, public food and leisure services, even it is a first basic service requested by tourist. In order to bring “personal services”, multinational hotel companies bring each of their visions, missions, culture of services to provide niche market among them. As mentioned by Dickson *et al.*, (2006) company likes Disney and Ritz Carlton placed themselves as a benchmark in aligning their strategic activities, staffing policies, and system design and procedures to make sure that everything and each employee are focused on customer service.

Some research on expatriation has been undertaken across the world but notable contributions have focused upon China (the compensation gap between expatriates and local) (Leung *et al.*, 2011), Thailand (cross-cultural effectiveness between western-expatriates and Thai) (Gregory and Charmine, 2003), Finland: (expatriate’s adaptation in Europe) (Suutari and Brewster, 1998), Turkey (a review of expatriate management and its literature) (Ozdemir and Cizel, 2007), UK (gender diversity in expatriation) (Shortland, 2009) and USA (examines perceived failure and desirable attitudes for expatriate managers) (Shay and Tracey, 1997). There are also some studies on expatriation in Indonesia for example research on; Chinese-Indonesian’s middleman in transnational corporation (Leggett, 2010), and the experience of Canadian’s expats in Indonesia (Russell, 2007), and the Finnish cross-cultural leadership

(Suutari, 2002). However, there appear to be no studies in the context of Indonesian hotel and tourism industry.

PROJECT DESCRIPTION

The unique contribution of this research relates to the development of a framework that analyses the dynamics of deployment in hotels. This is the first time that such a framework will be developed. Although the framework will be applied in Indonesia it will also have a potentially wider significance within Asia as a whole (for example: Thailand, Malaysia, Philippines, and China). The framework will be involving four dimensions/four actors. The four dimensions/actors are expatriates, host country managers, International hotel company executives and policy makers. Indonesian's case is very relevant because the enormous growth of International hotels keeps occur likewise its tourism industry (Sugiyarto *et al.*, 2003).

To accomplish the aim of this exploratory research, the following objectives are identified:

Goals and Objectives:

1. To evaluate and integrate generic and hospitality based literature on managing expatriates and local managers
2. To develop an initial framework that focusing on expatriates, host country managers, international hotel industry executives and policy makers in Indonesia
3. To analyse the influence of expatriate and host country managers on the process of employment in the context of the international hotel industry in Indonesia
4. To develop a revised framework focusing on the dynamics of deployment between expatriates, host country managers, international hotel industry executives and policy makers in Indonesia
5. To contribute the knowledge to academic as well as with the practitioner communities in Indonesia and other Asia countries who has similar characteristics in regard to human resources policy which involves expatriates, local managers, international hotel industry executive and policy makers.

Methodology and Timelines:

This project favours an inductive, qualitative research approach. Pragmatism is the philosophy which is chosen for this study as it emphasizes the importance of conducting research that best addresses the research problem (Saunders *et al.*, 2012). As posited by Creswell (2007:23) "pragmatists agree that research always occurs in social, historical, political and other context". Business and management studies are always evolved all the times, this study has a continual movement from real experience and always changing. According to Saunders *et. al* (2012:130) "pragmatism recognise that there are many different ways of interpreting the world and undertaking research, This does not mean that pragmatism always use multiple method, rather they use the method or methods that enable credible, well-founded, reliable and relevant". Moreover, this research is using a case study as the research strategy because it allows more thorough investigation and may give new information which never been examined previously. As suggested by Petty *et al.* (2012) "a variety of data may be collected to help deepen understanding of the case and in qualitative studies this commonly includes interview, observation and document analysis".

This study will use multi method technique to collect data:

Interview:

A semi-structured interview will be employed in the study of two international multi-branded hotel groups in Jakarta, Indonesia. Additionally, in order to increase the reliability of findings, sound recording will also be employed as added research tools. The informants in this study will be 5 to 10 department heads who are expatriates, 5 to 10 local managers, 2-3 of informants will be sought among the policy makers in this case from government (Ministry of Tourism and Creative Economy Of The Republic of Indonesia), and 1-2 regional managers who represents its parent company. All interviews are conducted by meeting each informant 'face to face'. They are expected to provide experiences of deployment and development on expatriation and local managers. Some topics would be discussed on expatriation (expatriates, local manager, regional manager and government), ownership policy and entry mode (regional manager and government) and organizational commitment (expatriates and local managers). Expatriate's population is small, the maximum number is 10 employees, which means all expatriates will be interviewed; Although local manager population is bigger than expatriate, 5-10 local managers is enough to reach data saturation; There is one head and one deputy in human resource division in Ministry of Tourism and Creative Economy of The Republic of Indonesia; It is a very small population for regional manager position, usually he/she has two roles in a parent company, as a general manager in a hotel and as a general manager for a certain region e.g. Southeast Asia or South Asia.

Documentary Analysis:

Fundamental to analysis of documents is identifying the context of the document, establishing who writes it and for what purposes (Robson, 2011). There are three institutions: government, international hotels and public records, where secondary data can be obtained. Government will give information about any policy related to: how a multi-national company manages their employees recruitment, the limitations for foreign investment in Indonesia, and the people management issues in the tourism sector. International hotels will have information about hotels such as: fact sheet, number of local employee, number of expatriates, numbers of employee turn over, manager's job descriptions, manager qualifications, and any particular issues within the company such as complaints or enquiries between employees. Public records can be gathered from: any type publications such as newspapers, magazine, brochures, and hotel websites.

Observation:

Direct observation of existing development processes for hotel department heads will add another layer of depth from the information collected through interviews. The researcher would fill the role of observer-as-participant. As an observer-as-participant, the researcher's identity and purpose would be clear and explained (Saunders *et al.*, 2012). Initially, it is planned to conduct rounds of observations of management activities such as: management meeting, front office interaction, staff and management briefing in order to examine interactions and roles of expatriates and local managers.

Access to informants:

The researcher has access to networks for further information from informants due to previous employment at the Pelita Harapan University, Tangerang, Indonesia in a management position and a full time lecturer. Constant links to the hotel industries and government will help gathering the data needed

Timelines:

Status	Date	Agenda	Location
MPhil:			
Objectives 1	Sept 2012 – Dec 2013	Oxford Brookes University	UK
Objectives 2	Jan 2013 – June 2013	Oxford Brookes University	UK
PhD:			
Objectives 3	Mei 2014 – Dec 2014	Oxford Brookes University	UK
Objectives 4	Sep 2014 – Mar 2015	Oxford Brookes University	UK
Objectives 5	Apr 2015	Oxford Brookes University	UK
Draft Thesis	May 2015	Oxford Brookes University	UK
Final submission	July 2015	Oxford Brookes University	UK

Data Analysis and Contribution to knowledge

Collected data will be analysed using CAQDAS and findings will be compared with the reviewed literature to explain the practices and process of deployment between local and expatriate managers to refine the proposed framework. The final stage of the research will be to evaluate the theoretical and practical implications of the findings in order to develop a deeper understanding of the specific issues regarding the dynamics of deployment between host country managers and expatriates in international hotels in Indonesia. This knowledge can then be shared in the academic context as well as with the practitioner communities in Indonesia and at a global level. Indonesia has similar characteristics with other countries in Asia such as: Thailand, Laos, Cambodia, Philippines, Singapore, Malaysia, Myanmar and China. The similar characteristics of Asian countries are: still developing, limited resources for education, under developed area of tourism, and the limited number of academic research in hospitality and tourism is very limited. So this study is not only relevant to Indonesia, but also can be used to other Asia countries.

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Factors Affecting Customer Positive Emotion and Service Relation- Restaurants in Hotel as Examples

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Abstract

In the past, the researches about emotional contagion usually focused on the effect of waiter's smile on customers' affections. Instead of only researching the waiter's emotional expressions, this research based on the theory of emotional labor and emotional contagion, extend the conceptual structure of Henning-Thurau et al. (2006), then hen combine the concept of positive emotional expression that Tsai andHuang (2002) proposed. Besides, we take some other variables into consideration,including waiter's emotional expression, customer's positive affection that affect customer-employee rapport and customer satisfaction.

The sample of this study includes 458 consumers in hotel restaurants in Haulien area.Because a part of the questions are related to some psychological aspect, we sample through the customers who had just finished their meals to avoid the change of thecustomers' actual feelings or thoughts. Finally there are 330 valid questionnaires. Then we apply structural equation modeling to analyze the data and test thehypotheses. According to the analysis of the surveys, this study concludes with three rmajor implications:

1. Waiter's emotional expression has no direct effect customer satisfaction, but it will affect customers' satisfaction through customer-employee rapport.
- 2.Customer's positive affections affect customer-employee rapport and customer satisfaction directly.
3. The rapport between customer and employee positively affects customer satisfaction.

Keywords: Emotional Contagion, Emotional Labor, Customer-Employee Rapport, Customer Satisfaction

1. Introduction

In the era of the service economy, the economic development of Taiwan has been moving towards a service-oriented age. In a service economy, customers are the most significant assets for an organization. If organizations want to increase their customers, they have to place the emphasis on the true feelings of their customers and offer customized services to satisfy their customers' needs, something which is known as truly possessing customers. For enterprises, how to establish the bridge and maintain a good relationship with customers is a topic worthy of exploration.

Meuter et al. (2000) stated that the interaction between customers and service providers in the course of providing a service is an important key to measure the service quality felt by customers. Therefore, "service encounter" has become one of the most important topics in services' marketing (Bitner, 1992; Fisk, Brown & Bitner, 1993; Bitner, Booms & Mohr, 1994; Zhou Yiheng, Guan Fuyong, Ling Yiling, 1998). Furthermore, Hennig-Thurau et al. (2006) also verified that the positive affect of customers have become an important variable that can affect the level of customer satisfaction.

Meuter et al. (2000) also suggested that the interaction process between customers and service providers in the course of providing services is critical for evaluating the service quality for customers. Therefore, the interaction between customers and employees providing service has a significant influence on the perception and expectation of customers. In addition, most enterprises believe that building up a long-term relationship with customers can promote the profitability of the enterprises (Martin, 1996). From the perspective of emotional labor, Hennig-Thurau et al. (2006) proposed that emotional displays by service employees will have the effect of emotional contagion on the positive affect of customers, and further affecting customer satisfaction. Therefore, this study takes the restaurant service as a research object, regards the positive affect of customers as the mediator and explores the influence of emotional displays by service employees (e.g., smiling, sincerity) on customer satisfaction.

Organizations and employees should endeavor to understand how to affect customer emotions and enrich their service experience through the shape of the actual service environment. In addition, emotional displays or skills and customer-oriented behavior shown by

employees help bring customers happiness and joyful feelings, meet customer expectations and enhance customer satisfaction. However, in a review of domestic and foreign literatures, most of the related researches on service encounters focused on interaction between service employees and customers, and the influence of actual environment on customers; few of the researches have explored emotional display and customer-employee rapport. Therefore, based on the above background and motivations, this study focuses on an exploration of the influence of emotional displays by employees, the relationship between the positive affect of customers, customer-employee rapport, and customer satisfaction in order to offer references for service practitioners when creating marketing strategies.

2. Theoretical Framework and Hypotheses Development

2.1 Relationship between Emotional Display and Positive Affect of Customers

Hatfield, Cacioppo, and Rapson (1994) pointed out that emotional displays by employees would strengthen the emotional consistency between employees and their customers. The degree of sincerity of the emotional display of employees is helpful to enhance inducing the positive affect of customers. That is because customers experience sincere and cordial service rather than fake and pretended guises displayed by service employees. Conversely, when employees are not sincere, it is not possible to induce the positive affect of customers. Therefore, a sincere emotional display can better induce the positive affect of customers. Based on the above literatures, it can be seen that emotional displays by employees will affect the emotional response of customers; and a sincere emotional display will induce the positive affect of customers. As a consequence, this study proposes the following hypothesis:

H1: The sincere emotions displayed by service employees have a significant and positive influence on the positive affect of customers.

2.2 Relationship between Sincere Emotional Displays by Service Employees and Customer-Employee Rapport

This study defines a sincere emotional display as the deep acting, which echoes the findings of Grandy (2003), the deep acting of employees will bring a relatively higher level of evaluation on service quality by customers. Therefore, this study suggests that sincere emotional displays could

enhance the evaluation of customers toward the service quality. In addition, Grandy (2005) also mentioned that a sincere emotional display could directly influence the customer-employee rapport because sincere emotional disguises by employees could affect customers' perceptions of “kindness” and “warmth.” These two kinds of awareness are the implied features of rapport. That is to say, if customers feel warmth and kindness in a service encounter, it means that the two sides have a rapport. Therefore, this study proposes the following hypothesis:

H2: Sincere emotional displays by service employees have a significant and positive influence on customer-employee rapport.

2.3 Relationship between Sincere Emotional Displays by Service Employees and Customer Satisfaction

In the service industry, customers regard the display of emotions by service employees as a part of the service (Grove, Fisk, & Bitner, 1992). Customers expect an emotional display by employees, and this expectation will affect the satisfaction of customers toward the services provided (Tsai, 2002). However, Grandy (2005) and his colleague also stated that if customers perceive the sincere behavior of employees, their customer satisfaction will be relatively higher. Therefore, compared with insincere emotional displays by employees, sincere emotional displays will easily induce the positive affect of customers. Based on an exploration of the above literatures, whether the emotional display of employees is sincere or not will affect the satisfaction of customers towards the services provided. Consequently, this study proposes the following hypothesis:

H3: Sincere emotional displays by service employees have a significant and positive influence on customer satisfaction.

2.4 The Relationship between Positive Emotional Display of Service Employees and Customer Positive Affect

The positive affect display mentioned in this study refers to the type of behaviors expressed by employees, which are probably facial or physical expressions, including smiling, conventional greetings, eye contact, voice and intonation, and the like. In service industries, organizations should require their frontline employees to display these types of emotional behavior, and

smiling, in particular, is often regarded as the one of the necessary emotional rules established by organizations (Frank, Ekman, & Friesen, 1993). Employees could also conduct surface acting or deliver conventional greetings to customers to express kindness, according to the established emotional rules. Hennig-Thurau et al. (2006) adopted video tape renters as research objects to explore whether the smiles of service employees have an influence on the positive affect of customers, or not. The results showed that smiling by employees has no direct effect on the positive affect of customers. Therefore, this study inclines to use restaurant service industry practitioners as research objects to explore whether smiling and other positive affect displays by service employees has an influence on the positive affect of customers, or not. This study proposes the following hypothesis:

H4: Positive affect displays by service employees has a significant and positive influence on the positive affect of customers.

2.5 The Relationship between the Positive affect al Displays of Service Employees and Customer-Employee Rapport

Hennig-Thurau et al. (2006) pointed out that even if there is no significant influence on the positive affect of customers when service employee smile, the smiling of service employees makes customers feels their kind and friendly attitude. Therefore, if service employees smile, it will affect customer-employee rapport. Furthermore, this study believes that, besides smiling, other positive affect al displays by service employee (e.g., eye contact, conventional greetings) will also have a positive influence on customer-employee rapport. Therefore, this study proposes the following hypothesis:

H5: Positive affect displays by service employees have a significant and positive influence on customer-employee rapport .

2.6 The relationship between positive affect al displays by service employees and customer satisfaction

Customers regard smiling as part of the emotional display by service employees and the smiling of service employees will generate a kind and friendly attitude toward customers and promote customer-employee rapport. However, Hennig-Thurau et al. (2006) indicated that the smiling of

service employees could have an influence on customer satisfaction using customer-employee rapport as the mediator rather than direct effect. Therefore, this study also took other positive displays of emotion by service employees, such as conventional greetings, and eye contact, etc. into consideration in order to explore whether positive affect displays by service employees have an impact on customer satisfaction. Therefore, this study proposes the following hypothesis:

H6: Positive affect displays by service employees have a significant and positive influence on customer satisfaction.

2.7 Relationship between the Positive Affect of Customers and Customer-Employee Rapport

A pleasant interaction is critical for customer-employee rapport (Gremler & Gwinner, 2000). Pleasant interactions can improve the positive affect of customers, and the promotion of positive affect of customers could improve customer-employee rapport. In addition, scholars Weitz, Castleberry, and Tanner (2004) defined rapport as a kind of close and friendly relationship based on mutual trust. However, Dell (1991) proposed that rapport is the interaction in good customer-employee relationship, which consists of living together in a mutually harmonious way and the establishment of a good interactive relationship. Furthermore, rapport must be equipped with a degree of sensitivity and the attention of a sincere, interactive relationship (Ashforth & Humphrey, 1993). Customers' affect also influences customer-employee rapport and the promotion of the positive affect of customers is also conducive to improving the customer-employee rapport, promoting smooth service encounters and enhancing the customer satisfaction of the service encounter (Hennig-Thurau et al., 2006). Therefore, this study proposes the following hypothesis:

H7: The positive affect of customers have a significant and positive influence on customer-employee rapport.

2.8 Relationship between the Positive Affect of Customers and Customer Satisfaction

In addition to the influences of the service encounter, sincere emotional displays by employees, and frequencies of the emotional display to customer, customer satisfaction is also affected by customer emotions; and the degree of satisfaction with the service encounter is significantly

influenced by customer emotions (Oliver, 1980). When customers evaluate their consumption experience (such as the degree of satisfaction with the service), their responses are frequently based on their emotional status; or they may ask themselves “how did I feel at that moment?” In the meantime, customer emotions are closely connected with employees’ emotions; and the changes in customers’ emotions will affect customer satisfaction (Hennig-Thurau et al., 2006). Furthermore, the promotion of the positive affect of customers is conducive to improving customer-employee rapport, promoting smooth service encounters and enhancing the customer satisfaction of the service encounter (Hennig-Thurau et al., 2006). Therefore, this study proposes the following hypothesis:

H8: The positive affect of customers have a significant influence on customer satisfaction.

2.9 Relationship between Customer-Employee Rapport and Customer Satisfaction

Hennig-Thurau et al. (2006) believed that a pleasant interaction has a high degree of customer-employee rapport. Customers may then disclose related personal information, which could help customize the services so as to satisfy the customer s’ needs (Gremler & Gwinner, 2000). Therefore, this study proposes the following hypothesis:

H9: Customer-employee rapport has a significant influence on customer satisfactio

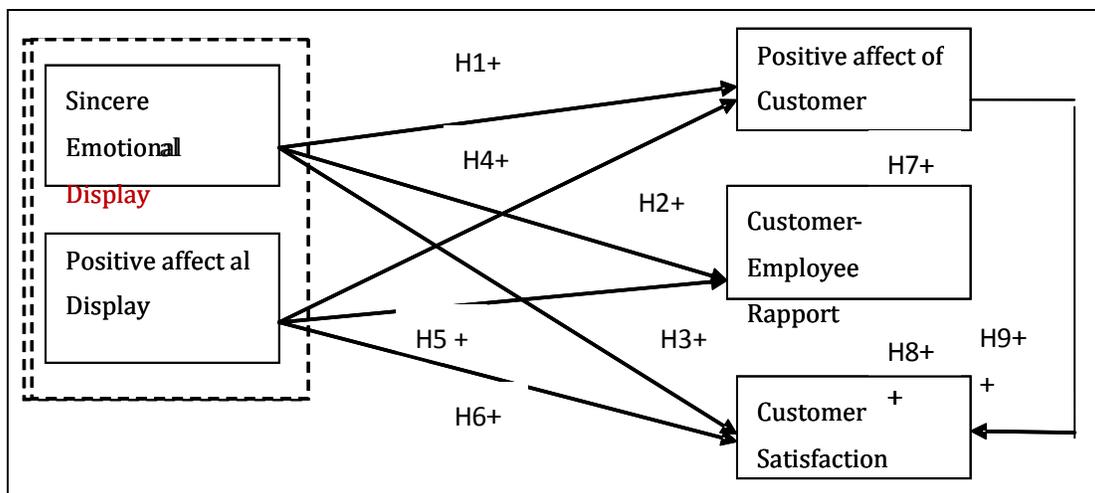


Figure 1 Research Framework

3. Methods

3.1 Data Collection

3.1.1 Samples

The research objects of this study are tourism hotels in Hualian area. Based on the classification of international sightseeing hotels, as defined by the Tourism Bureau, MOTC, and the Republic of China, this study chose the tourism hotels of the Hualian area as the main research objects. The classified directory of international tourism hotels in Hualian County consists of six international tourism hotels, such as the Farglory Hotel and the Parkview Hotel etc.

Before distributing formal questionnaires, this study conducted a pre-test to ensure the validity and consistency of the measurement of questionnaires. The pre-test adopted convenience sampling method and sent out questionnaires online. 71 copies were returned and 57 of them were valid.

3.1.2 Pre-Test Result

In the reliability analysis of the sincere emotional display scale, the coefficient of Cronbach's α was 0.898. The reliability analysis of the positive affect al display scale, showed that the coefficient of Cronbach's α was 0.755; in the reliability analysis of the customer-employee rapport scale, the coefficient of Cronbach's α was 0.907; in the reliability analysis of customer satisfaction, the coefficient of Cronbach's α was 0.964. The reliability levels of these scales are well above the basic benchmark of 0.70 suggested by Nunally (1978). Therefore, each scale has a certain degree of internal consistency, reliability and stability.

3.1.3 Questionnaire Distribution

Regarding the distribution of paper questionnaires, based on the top five hotels ranked by the Tourism Bureau, MPTC in 1998, this study plans to use the FarGlory Hotel, Parkview Hotel, China Trust Hotel, Grand Formosa Regent and the Marshal Hotel as the main research objects. However, due to the certain difficulties in practice, it was not possible to acquire data from the China Trust Hotel and the Grand Formosa Regent. Subsequently, they were replaced by the Promised Land Resort & Lagoon and the Azure Hotel, both of which have good performance.

These five hotels could reach relatively more customers and, therefore, has equipped with indexicality. Therefore, this questionnaire is targeted at these five hotels in order to acquire samples that are more diversified. The quantity of questionnaires distributed was 730 copies in total. 458 copies were returned, of which 330 copies were valid. The return rate is 62.7% and the valid return rate is 45.2%.

4. Results

The exploration of the comprehensive model in this study is based on the two-stage structural equation modeling approach suggested by Anderson and Gerbing (1988). In the first stage, this study is aimed at the research dimensions. These measures the items in the questionnaire so as to conduct an analysis of the coefficient of Cronbach's α and a confirmatory factor analysis to understand the reliability and convergent validity of each dimension. In the second stage, multiple measurement items will be reduced to a few or single measuring indicators and the structural equation modeling approach can be used to analyze and test the hypotheses.

During the application of statistical tools, this study adopted AMOS software to conduct analyses and also used a Pearson product-moment correlation to measure the significance level of the correlation among research variables. The analysis results tell us the reliability and the convergent validity of each dimension. All the analysis result in this study has proved to achieve an acceptable level.

H1 "The emotions displayed by service employees have a significant and positive influence on the positive affect of customers" was proven to be true with the path coefficient of 0.278. H2 "Sincere emotional displays by service employees have a significant and positive influence on customer-employee rapport" was proven to be true with the path coefficient of 0.215. However, H3 "Sincere emotional displays by service employees have a significant and positive influence on customer satisfaction" was proven to be false. H4 "Positive affect al displays by service employees has a significant and positive influence on the positive affect of customers" was also proven to be false. H5 "Positive affect al displays by service employees have a significant and positive influence on customer-employee rapport" was proven to be false. In addition, H6 "Positive affect displays by service employees have a significant and positive influence on customer satisfaction" was proven to be true with the path coefficient of 0.261; H7 and H8, quoted above, were proven to be true with path coefficients of 0.172 and 0.136

respectively. H9 "Customer-employee rapport has a significant influence on customer satisfaction" was also proven to be true with a path coefficient of 0.466.

5. Conclusion

In the service industry, previous researches focused on the factors of service encounter, including actual environment, the profession of service employees and interaction between customers. However, this study started from an emotional dimension and explored the influence of the deep acting of service employees on customer affect. This study divided the emotions of service employees into deep acting and surface acting. The empirical results of this study indicate that the emotions of service employees significantly influence the positive affect of customers. This study concludes that, in the process of a service encounter, if the service employee enables a customer to perceive that they are being treated sincerely rather than with a fake emotional disguise, the positive affect of the customer will be triggered and the customer will feel pleasant and enjoy the process of the service encounter and will feel satisfied with the services.

Generally speaking, in the service industry, the training of service employees by industry practitioners places more emphasis on service skills and professional skills. However, in this study, the "positive affect displays" mentioned in this study are the active display of kindness by service employees, including smiling, conventional greetings, voice, intonation and eye contact etc.

In response to Hennig-Thurau et al. (2006), the promotion of the positive affect of customers will be conducive to customer-employee rapport. This study verifies that, in hotels and restaurants, when the degree of positive customer emotions is higher, the degree of customer-employee rapport is higher. The customer showing positive affect will easily perceive the affability and kindness of service employees. The core concept of "rapport" is affability and kindness (Grandy, 2003). Regarding satisfaction with the services, in addition to the influence of the factors of service encounter and the emotional display of employees, the satisfaction of customers with the service encounter is significantly influenced by their personal emotions (Oliver, 1980). The empirical test results of this study indicate that, in hotels and restaurants, when the degree of positive affect of the customer is higher, the degree of customer-employee rapport is higher.

Based on the above statement, customer-employee rapport refers to the pleasant interaction between customers and service employees. It can significantly influence the positive affect of customers. In addition, customer-employee rapport directly affects customer satisfaction. In summary, besides service encounters, this study added the emotional display by service employees as the antecedent, and used the positive affect of customers and customer-employee rapport as the mediators to explore the factors affecting customer satisfaction. The empirical test results of this study indicate that, besides service encounters, the factors affecting customer satisfaction also consist of positive affect and customer-employee rapport at a psychological level.

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MUSIC PRIMES PSYCHOLOGICAL FLEX-IBILITY IN COUNSELING: A COGNITIVE-BEHAVIORAL HEALING MODEL

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ABSTRACT

Psychological flexibility is a key capacity for success in counseling that allows a person to shift, recall, or generate new analytic or conceptual frames to adapt to the current situation where decision-making, problem solving, or healing is the goal. Recently, research in education, neuroscience, the social and health sciences has increased concerning the dynamics of psychological flexibility in health, learning, and experience. Simultaneously, certain tracks in music research, most notably cognitive and medical ethnomusicology, have contributed new and important understandings regarding to the role of sound, rhythm, and music in priming and facilitating psychological flexibility. Yet, with few exceptions, music's role in priming psychological flexibility is virtually absent from the literature in counseling. To explore the music-psychological flexibility dynamic, I conducted a long-term (2003-2011) research project that employed diverse types of music across different cultural contexts and domains of learning and counseling with participants. I employed a combined methodology of ethnographic research techniques with validated psychological instruments and physiological experiments to measure stress and psychological change over multiple periods of time. My research shows that music, when aligned with the cultural contexts of learners, proves to be a quintessential primer and facilitator of psychological flexibility; and moreover, that when cultural considerations are avoided, music can inhibit psychological flexibility and become a barrier to success in learning and counseling. This paper presents my findings, introduces the music cognitive-behavioral-healing (CBH) model, which can be employed to increase psychological flexibility in counseling and thus achieve multiple health and learning objectives.

Keywords— Counseling, Music, Psychological Flexibility

VII. INTRODUCTION

This project emerges from the dynamic and promising new field of medical ethnomusicology—an area of research, performance, and applied practice that is concerned with diverse cultural and clinical practices of music, sound, the arts, medicine, health, and healing (see further Koen 2008, 2009). Among the wide array of theories and methods in this and related fields concerned with music and healing, psychological flexibility has recently gained influence and explanatory power as a framework for understanding a universal dynamic that undergirds experiences of illness, disease, wellness, and healing.

In my own research, I have created a holistic model I call the “five factors of music, health, and healing” that I have successfully employed in research, applied healing practices, and in counseling. The model builds from multiple tracks of research in the health, social, and physical sciences, diverse indigenous and traditional practices, and music. Briefly, the model comprises five factors of a human being—namely, the physical, psychological, social, emotional, and spiritual (or transcendent). Notably these are the same five factors that comprise music—that is, music has physical, psychological, social, emotional, and spiritual (or transcendent) aspects, domains, or dimensions, which, when factored into a person’s life, can effect beneficial or healing transformations in the body, mind, emotions, relationships, and spirit of a person.

Importantly, in relation to the five factors model, which is holistic in nature and in application, psychological flexibility is but one term that is expressive of flexibility in each of the factors. Hence, psychological flexibility implies a potential flexibility in the other four factors and in the whole of a human being. For instance, the emotional factor of music can effect a change in the body or physical factor of a person, which in turn or simultaneously can influence the other factors as well. Moreover, as a truly holistic model, each factor can be seen as a proxy or expression of the other factors. For example, in counseling, when employing music or sound as a vehicle to effect a change in the thinking or behavior of a patient or client, although patients might experience a shift in their minds (psychological factor) regarding a person with whom they want to resolve a conflict (relational/social factor), that mind shift is often also experienced as a state change in the spiritual, emotional, and/or body (physical factor) as well. Often, although patients experience a shift in one factor more prominently than the others, upon further reflection

on the experience of the shift, they notice that in fact a meaningful shift has also occurred in the other factors.

Just as the model itself outlines five factors as a way to explore and focus attention in specific areas where a particular need has been identified in the context of counseling, some authors have emphasized multiple inter-related areas of flexibility within the broad frame of psychological flexibility. Most notable is medical anthropologist and psychiatrist Dr. Devon Hinton, whose benchmark chapter in *The Oxford Handbook of Medical Ethnomusicology* (2008) “Healing Through Flexibility Primers”, details several types and sub-types of flexibility. The major areas he identifies are cognitive flexibility, emotional flexibility, and somatic flexibility, each of which has multiple and overlapping subsets, and all of which are encompassed in the five factors model. In the context of research, Hinton’s discussion of, for example, brain-state correlates of psychological flexibility, can provide the counselor with key considerations for developing transformative practices for a patient or client. In my applied work, for the person receiving counseling, the five factors model then provides an easily understandable context for the person to link the theory of healing through flexibility to the experience of change in daily life. The examples below will illustrate this point. First, however, a brief background on flexibility, music, and counseling through the lens of medical anthropology and ethnomusicology will be instructive.

FLEXIBILITY

Across diverse cultures, flexibility is prized as an indicator of health, wellbeing, excellence, and mastery in multiple areas of life. When we think of flexibility, we most often start with the physical aspect of life. Advanced yoga and Tai ji practitioners are known for their bodily flexibility, as are athletes in general; and the myriad expressions of flexibility in the natural environment are notably celebrated in the cultures of Asia, as well as in many traditional cultures across the world. In the realm of the mind, great thinkers, scientists, inventors, artists, and musicians are renowned for their flexibility, or an ability to shift attentional sets, consider different and multiple possibilities, and view one object or topic from radically different perspectives. With respect to emotions and relationships, flexibility as opposed to stubbornness, is the ability to appreciate and experience different emotional states and the awareness and

capacity to modulate one's state and develop one's relationships, rather than being stuck in a state or unwilling to experience other perspectives—this is often the hallmark of emotional wellbeing and healthy relationships. Finally, the spiritual or transcendent dimension of life presumes flexibility as being essential—indeed, when there is no flexibility, one experiences stagnation of the spirit, a lack of fulfillment and meaning in life, a lack of beauty, and cannot experience the ineffable joy associated with that which is spiritual, intangible, or transcendent.

Literature in psychology, health science and education has long recognized the importance of the ability to modulate and regulate attentional foci as being key in counseling (e.g. Cassidy, 1999; Hamilton and Ingram, 2001) and that culture should form a key consideration for counselors (Kirmayer, 1993; Kleinman, 1988, 1980). Several researchers and practitioners have cited psychological flexibility as a foundational aspect of health and wellbeing (Hinton 1999, 2008; Kashdan 2010; Koen 2009; Rozanski and Kubzansky 2005). From these works we can define psychological flexibility in these four areas: (1) psychological processes of change, (2) the ability to adapt or traverse psychological domains, and (3) a psychological or holistic state of potentiality. This article highlights this holistic aspect wherein psychological flexibility plays a key role in effecting change through a process of counseling. With respect to this, Kashdan indicates “a number of dynamic processes that unfold over time [and] could be reflected by how a person: (1) adapts to fluctuating situational demands, (2) reconfigures mental resources, (3) shifts perspective, and (4) balances competing desires, needs, and life domains” (Kashdan 2010:2). Building from Rozanski and Kubzansky (2005), who champion a paradigm of flexibility in the research and practice of psychology, Devon Hinton gives a concise definition: psychological flexibility is “the ability to shift in order to adaptively adjust to a given context” (2008:125). He further articulates three steps, or the “triphase structure of psychological flexibility” that entails shifting the emotional or analytic lens through which an event or situation is viewed (124). The three steps of this “set shifting” are: (1) Disengage, (2) Contemplation of Choice, and (3) Selection. In addition, Kashdan points out that psychological flexibility interventions are not only effective treatments “for people suffering from disorder, they can be used to increase well-being at the personal and even societal level” (Kashdan 2010:19).

MUSIC

A critical consideration when employing music in the context of counseling is to recognize that, although we often love the notion that “music is a universal language”, and notwithstanding that some sounds carry a universal meaning, and that some songs and music might also convey a universal meaning, and that perhaps someday all music will convey a universal meaning at all times and under all conditions, “music” is more accurately viewed as a universal phenomenon or aspect of life that is neither singular nor uniform in its import or meaning to all people across the diverse cultures of the planet. Moreover, numerous researchers have noted that highly specific and culturally diverse aspects of music, which are most often only understood by people from within the culture or deeply steeped in that culture, are key for healing (see Cook, 1997; Friedson 1996; Gouk 2000; Janzen, 1992; Laderman and Roseman 1996). This is critical in the context of counseling as the counselor must see how music and sound, as vehicles of meaning, resonate within patients and clients and compel them toward the identified goal of the counseling. As powerful as music is in being an impetus for positive change or to function as a channel to open up new and healthy ways of viewing an issue, it can also be negative and push a person further from the desired outcome. To know how music and meaning function for a patient, an in-depth ethnographic approach proposed by reflexive anthropology is instructive and should be considered.

COUNSELING AND CULTURE

Counseling, like music and medicine, when viewed through the lens of culture, becomes a framework for considering all aspects articulated in my five factors model. Indeed, in diverse cultural contexts, counseling is a function often fulfilled by traditional healers, shaman, religious or spiritual leaders, and notably—musicians. In such instances, the classical meaning of psyche (i.e. the soul, spirit, or animating force of the human being) is apropos. In traditional cultural contexts, a musician-counselor employs music as a channel through which spiritual energy can flow, which has the power to effect a change in all aspects of the patient’s being. Let me provide an example drawn from an ongoing research project that utilizes an integrative methodology of in-depth ethnographic field research techniques, psychological instruments to measure the experience and modulation of stress in the five factors categories, and physiological

experimentation to measure other benefits that are not filtered through the interpretation of the researcher in the same way as ethnographic data. A theme throughout this project is how music, as a vehicle of meaning, functions as a key tool for traditional and indigenous counselors; and how music can be employed in diverse cultural and clinical contexts to prime psychological flexibility.

Persian Mystical Poetry and Indigenous Counseling

Across cultures in the Persian-speaking world, spiritual or mystical poetry stands out as a key resource for giving counsel in all aspects of life. Moreover, the often inextricably interwoven relationship with multiple aspects of specialized sound (including chant, song, declamation, recitation, and music), empower Persian poetry with a distinct capacity to influence a person via the cognitive-behavioral pathway, and, at times move beyond the pale of therapy into healing, hence the cognitive-behavioral healing model I propose here.

The potential for such affect is, of course, most true for a person with a deep understanding of, sincere appreciation for, and meaningful experience with this genre of poetry and music. For example, in the Pamir Mountain region of Tajikistan, the pre-eminent genre of devotional music known as *maddoh* serves many functions in the local culture, including worship, healing, and giving counsel. Indeed, the *maddohkhan* (master musician and leader of the performance) functions as a traditional counselor and healer. The *maddoh* performance is composed of three sections, one of which is especially dedicated to giving counsel, although the entire performance is often didactic in nature and can be understood as a genre of giving counsel. *Maddoh* is typically performed by 3-5 musicians playing the Pamiri *rubab* and at times the *tanbur* (long-necked lutes) and *doire* (frame drum).

In one example, the *maddohkhan* guided the person to avoid forbidden things and warns that if a person does not follow this counsel, the result will be as if the person has eaten a forbidden food, which, after it is digested, will express its effects throughout the person's body and life. Other options are also presented in the performance. That is, if the person follows the counsel of a healthy, positive, and spiritual life, joy and benefits will naturally follow. Notably, classical or mystical Persian poetry forms a web of meaning in the minds of the listeners and multiple meanings are easily connected from one performance to another, and from one poem used in counseling and other poems that are in the memory of the listener. A key theme is

transformation, which can be seen as being dependent on the capacity and skill of flexibility. In this connection, a celebrated verse from the pen of Mowlana (popularly known as Rumi) is instructive. This four-lined excerpt exemplifies the potential for transformation from death to life, depression and sadness to joy and happiness, and poverty to fortune and prosperity:

<i>morde budam, zende shodam</i>	Dead I was, Alive I became
<i>geiry e budam, khande shodam</i>	Weeping I was, Laughter I became
<i>dolat-e eshq ámad o</i>	The fortune of love came and
<i>man dolat-e páyande shodam</i>	I became eternal fortune

This verse, and countless others that often form part of the *maddoh* counsel, or which are connected in the mind of the one receiving counsel, when linked to the pulsating and recurrent rhythmic pattern typical of *maddoh* music, provides fertile ground for psychological flexibility wherein the listener’s attention is focused on that which will bring about a transformation. Most importantly, a recurrent theme in the context of this type of counseling through *maddoh* is the reliance on and trust in God to help a person traverse the border between a present state, which is defined by a dysfunction, illness, conflict, or condition, and a desired state defined by health, balance, joy, and peace and other virtues that are markers of well being. To traverse this space between the present illness and future wellness, psychological flexibility is essential.

In the context of *maddoh* performance and counseling, there is the foundational belief of participants (those receiving counseling) that they can transform from one state of being to another better state if they follow the counsel given in the *maddoh*. A key cultural belief that primes psychological flexibility and provides the necessary cognitive impetus for change is expressed in this classic Persian couplet: *Az to harakat, Az Khoda barakat*, which literally means “From you action, From God *baraka* (blessings, spiritual energy).” This phrase is viewed locally as a promise or truth—that is, in the context of following the counsel given in the *maddoh*, if one takes action to follow that counsel, God will provide spiritual energy, divine, assistance, and blessings that will work in hand with a person’s own effort to facilitate change and healing. Thus, after the *maddoh* performance, the participants who received the counsel will have faith

that their efforts to change will be confirmed by the spiritual energy and blessings (*baraka*) of God. Hence a key attentional shift is made from a present state to a healthier state, from the self to God or divine nature, from the past to the present and future, and from one action that leads to a negative effect to another action that leads to a positive effect and higher state of being.

Often, counseling in this context forms a tripartite model that includes a pre-performance counseling session, the *maddoh* performance, and post-performance follow up counseling. In Step 1 (the pre-performance), an assessment is made relative to an individual's or community's counseling needs—this is done by the local religious leader and at times the *maddohkhan*; Step 2 (text selection and *maddoh* performance) consists of selecting specific poems and prayers and their performance in *maddoh*; Step 3 (post-performance) consists of formal and informal sessions with the *maddohkhan* or local religious leader who provides support and counsel based on the person's needs and the content of the performance. Often, supplementary counsel and what is viewed as spiritual medicine is given in the form of a *tumár*, which is a prayer or spiritual passage written on a small piece of paper, which is then folded and tied with a string around a person's neck or other body part.

CONCLUDING THOUGHTS

Elsewhere I have written how the rhythmic structure of *maddoh* conveys a deep cultural meaning, which itself can be seen as a quintessential primer of psychological flexibility; and how the unique qualities of music in general, across cultures and genres, are particularly effective in priming psychological flexibility (see e.g. Koen 2007, 2009, 2013). The cognitive-behavioral-healing model proposed here consists of *assessment—selection—performance—follow up*. In the context of *maddoh* counseling, *assessment* of the patient's needs, *selection* of appropriate poems and prayers, and *follow up* is done by the local religious leader and/or the *maddohkhan*, while the *performance* is done by the *maddohkhan* and supporting musicians. In my own applied music-counseling and healing work, this model has proven effective and moved beyond the typical CBT (cognitive-behavioral therapy) model into a CBH (cognitive-behavioral healing) model. The healing effect has been overwhelming successful after a period of training, treatment, and individual practice by a client. After in-depth assessment and selection of which attentional sets and qualities will form a healing transformation for clients, I train them in a music-meditation practice to be performed twice a day in the morning and evening. Next, for the treatment and counseling, I perform individualized and empowered music with multiple indigenous instruments specialized for meditation and healing in hand with the counseling content selected during the assessment. Lastly, clients continue their practice for one-week until

our next session and the process continues as per the needs of the client. Some clients are equipped to continue their practice independently after one week, while others might require one or more months of individualized sessions.

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Analysis of user requirement on u-Healthcare system

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Abstract

The objective of this study was to explore and connect the relation between independent variables of Health Promotion Model (HPM) and customers' demand for developing ubiquitous healthcare (u-Healthcare) system and then, to suggest the methods applicable to the system design. After identifying performance levels and influence coefficients of every variables and applying them to Quality Function Deployment (QFD) to find out the relation between the requirements and customers' demand of u-Healthcare System, it sets the main goal in determining what are important system characteristics for effective quality improvement. First, it applied structural equation modeling (SEM) to search for multiple independent variables influencing user's intention. Second, with the findings, this study has also its significance in suggesting techniques applicable to the u-Healthcare system development using QFD. Concretely, by investigating u-Healthcare users' direct requirement attributes and extracting u-Healthcare system service characteristics with customer requirement reflected by using QFD model, this study figured out the order of priority in the importance of system characteristics that must be dealt with most importantly. As a result of analysis, this study proposed an application method of QFD to satisfy customer requirements for the development of u-Healthcare system. Finally, the result could give important features to improve users' requirements by using this process.

Keyword: user requirements, u-Healthcare, SEM, QFD

1. Introduction

Interest in healthcare is gradually increasing lately as the living standard is improved thanks to improvement in income level and change in social values, and needs for healthcare are also becoming diverse (Stut et al. 2006). Also, side effects caused by medical accidents and so on are further expanding the desires for healthcare (Institute of Medicine, 1999). In this respect, one of the fields of society in which ubiquitous can be most widely utilized is ubiquitous healthcare (u-healthcare) field which is most actively discussed recently. As an example, because it is shown that chronic diseases are caused by wrong living behaviors of individuals and, in case of USA, more than 50 % of death is caused by wrong living behaviors, healthy way of life is very important (Pender, 1987). Also, there are many studies which have indicated failure of health information system (HIS) informing that 70 % of such HIS have failed or have not satisfied end users (Anderson, 2000) and there are much more cases of failure than of success (Berg, 2001).

The proof is that many superior medical information systems are actually avoided by medical teams and users after materializing it by investing much expense and time. Most of studies end in making a prototype, for which it is difficult to find an actual application (Souf & Newman, 2007) and not many studies have been actually performed on needs of users (Steele et al., 2009). The core of success is to promptly grasp or predict in advance needs of customers and provide a system and service as needs of individuals ceaselessly change following development of information technology

Accordingly, the objective of this study is to explore important factors for acceptance of u-healthcare system by users and analyze user requirements of the system using diverse methodologies as a preliminary study to develop a u-healthcare system based on those factors.

2. Literature Review

2.1 User centered u-Healthcare system

Ubiquitous computing means intelligent environment composed of innumerable computer sets which can provide necessary information to the person who needs it at the right time (Weiser, 1993).

Many studies are being carried out on u-healthcare service in various aspects and Rigby (2007) proposed that, though ubiquitous technology is not yet exhibiting a value equivalent to its fame, all kinds of applications and data which can take actions against emergent situation by monitoring patients based on ubiquitous technologies will increase positive, ethical and confidential value in the future.

Especially, among many studies on benefits of health information system (HIS), there are studies carried out in relation to adaptation and acceptance model of users for systems using an acceptance model such as technology acceptance model (TAM). Pai et al. (2010) presented that, in acceptance of HIS, information quality and system quality have a significant effect on parameters, perceived usefulness, perceived ease of use and intention to use. Expense and ease of service use were selected as important factors in accepting HIS by investigating old persons through focused group interview (FGI) method (Steel et al., 2009). And, Vest (2010) asserted that while US government much focused only on technical factors in relation to healthcare IT

adaptation in studying main factors of health information exchange (HIE), in reality, many factors other than technical factors have effect on advancement of efficient HIE. Wu et al. (Wu et al., 2007) presented that compatibility in the aspect of medical team in acceptability (applicability) of mobile healthcare system (MHS) not only has an effect on perceived usefulness and perceived ease of use of MHS but also has the highest effect on intention to use. In the result of investigation carried out by Chatterjee et al. (2009) for the factors which influence satisfaction on healthcare service through a mobile terminal, portability of the terminal, system reliability and system support, which enable the user to receive healthcare service anytime anywhere, were found to be the factors which have the highest effect on user satisfaction.

2.2 Pender's Health Promotion Model

As for the forecasting model to analysis health behavior, there are four main models; Health Belief Model, Health Promotion Model, Theory Planned Behavior and Precede model. Among these, Bandura's Society Perception Theory and Pender's Health Promotion Model drawn out from Health Belief Model are the ones that are used most frequently to explain the Health Promotion behavior (Pender, 1982).

Pender presented health protection and Health Promotion behavior as the components of Healthy life style. In particular, he suggested Health Promotion Model to explain about the Health Promotion behavior (Pender, 1987). Health Promotion Model is the model used by Pender by developing on the notion of self efficacy, a core concept of Bandura (1986)'s theory (Pender, 1982). Pender model's key assumption is that the degree of acting on the Health Promotion behavior will be greater when there is positive and resourceful emotion towards past experiences. Likewise, Health Promotion behavior in the Health Promotion Model can be considered the behavior that brings out positive health experience in the life of human beings and the final result of the behavior. Accordingly, diverse Health Promotion behaviors are explained from the behavior related to the prevention of illness and use of the Health Promotion Model is considered viable and most effective as the model that can forecast.

Among the variables that affect Health Promotion behavior of middle aged adults and senior citizens based on Pender's the 3rd Health Promotion Model(HPM), researches conducted on the society's support, self respect, self efficacy, perceived benefit and perceived pathic will be examined.

2.3 Outline of System Users' Requirements Analysis

As the users' requirements are very abstractive and non-programmed, the job of extracting and programming the requirements of system is not that easy. The requirements area document defining what functions the system should be equipped with. This is the step defining what to process rather how to process in the system design stage. Then, it moves into the design stage. As the result of requirement analysis is the basis of the design stage, there are overlapping parts between two stages (Andirole & Stephen, 1990). Moreover, the requirements include not only users' requirements but the scope of realizable possibility as objects of requirement analysis (Galletta et al, 1999).

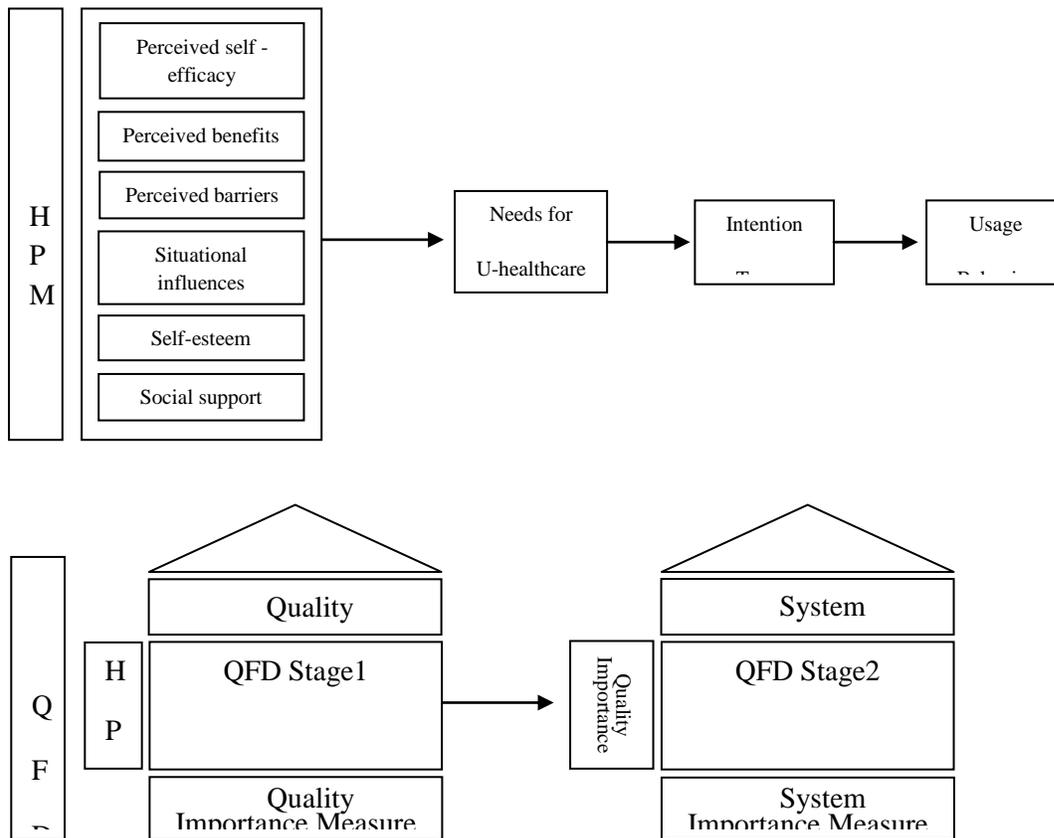
3. Research Methods

3.1 Research Model

This study conducts a survey of consumers who have experienced or want to experience u-Healthcare service now as it aims at figure out the relation between health promotion model and not only consumers' requirements of u-Healthcare service but also system service characteristics. Korean adults tend to be greatly concerned with healthcare and suffer from some chronic diseases so that they might have a high interest in u-Healthcare service, too. Thus, this study takes Korean adults as subjects.

Though, at this point of time when the interest in u-Healthcare is on the increase, a lot of related researches are being conducted, most of them are done separately by focusing on HMP verification or QFD analysis. Thus, this study attempts to find out practical implications including a suggestion of evaluation method to assess objectively and evidently the system quality characteristics of u-Healthcare service by connecting two models of HPM and QFD. The research model based on mentioned intent is shown in figure 1.

Figure 1. Research Model



3.2 Measuring Instruments

U-Healthcare can continue to monitor patients' health information including workout time and rapidly cope with an emergency situation by using mobile terminals and various sensors due to

their development (Stut et al., 2006). Thus, this study will suggest a way to provide necessary information in building u-Healthcare systems and to plan a product with customer satisfaction taken into account. Among the constructs in this analysis, Self-esteem measurement instrument developed by Rosenberg (1965) was used. As an instrument to measure self-efficacy, the self-efficacy measure in common situations developed by Sherer & Maddux (1982) was used. In this study, the quality characteristic measurement instrument is composed of 17 items revealed by the research of Natalia et al. (2005) in order to select user requirements for efficient u-Healthcare system development with QFD.

4. Analysis Findings

4.1 Data Collection

Survey subjects of this study are users (adults) who are interested in u-Healthcare System. During August 2010, 289 questionnaires were finally used for the analysis and the analysis was carried out with SPSS 12.0 for window. Divided into genders, male subjects are 47.7% and female 52.3%. Classified into age groups, 17.2% are in their twenties, 40.5% in their thirties, 26.5% in their forties and 15.8% in their fifties. In education, it is revealed that 26.85 of them are under high school graduation, 10.7% in college, 57.7% college graduation, and 4.5% over graduate school.

The requirement chart necessary to u-Healthcare system as the horizontal axis of HOQ was conducted simultaneously with the main. In addition, 20 copies of u-Healthcare system service measurement items and difficulty survey were distributed to Healthcare-related data processing experts and 18 of them were collected. Total 14 copies among them were used for this study as 4 copies with weak response reliability were ruled out.

4.2 Application of Structural Equation Model

In this section, a reliability analysis with factor analysis and internal consistency as norms was carried out by using Cronbach's coefficient in order to analyze the validity and reliability of independent variables, dependent variables and mediating variables put into this study. The findings by exploratory factor analysis (EFA) are made up of 6 factors in total. The accumulated explanation rate is revealed as 65.5%. Factor 1 is made up of 8 social support questions, 5 self-efficacy questions, 5 self-esteem questions, 5 benefit questions, 5 disability questions and 2 situational factor questions respectively. The reliability coefficient is all as high as over 0.70 when internal consistency among items of each factor is examined. The recommended minimum Cronbach's alpha coefficient reliability of 0.70 (Nunnally, 1978) is used to verify the reliabilities of each factor.

This analysis aims at finding out questions hurting reliability by identifying Squared Multiple Correlation (SMC) that explains whether significant causal relationship exists between potential variable and observation variables or not and potential variables by observation variables (Bollen, 1989). Various criteria of SEM analysis using AMOS 19.0 in this study were satisfied. Finally, the variables having a significant effect on necessity are 3 factors such as self-efficacy, perceived benefit and social support ($p < 0.05$). On the other hand, situational factor, perceived disability and self-esteem do not have a significant effect ($p > 0.05$). That is, it is found out that as self-efficacy is higher, benefit of u-Healthcare service is highly recognized, and the degree of social support is higher, necessity of u-Healthcare is highly recognized. In addition, necessity has a significant

positive (+) effect on attitude and in turn, attitude on intention. As attitude is positive, it affects behavioral intention. The result of verifying path significance between potential variables examined in the final model is as follows.

Table 1. Path Significance in model

Paths	standardization	β	S.E.	C.R.	p
PSE → Needs	0.19	0.19	0.07	2.79	0.005
PB → Needs	0.47	0.40	0.07	5.96	0.000
SS → Needs	0.17	0.18	0.07	2.79	0.005
Needs → Attitude	0.49	0.64	0.09	7.37	0.000
Attitude → Intention	0.83	0.92	0.07	13.33	0.000

4.3 Analysis for the QFD Application

QFD is a technique to determine how to satisfy customers' needs with limited resources by listening to customers' opinion and finding out what they want. QFD turns customer-experienced quality factors revealed in customer satisfaction into technological quality and analyzes them, selects quality improvement tasks according to importance and priority of customers and make customer-oriented products through quality improvement (Hauser & Clausing, 1988; Sullivan, 1986). The intention of this paper is to apply HPM to QFD. That is, HPM, u-Healthcare service quality characteristics and system service characteristics are built into a causal relationship, a center of HOQ. Finally, chief result of HOQ is the priority of system service characteristics. By using this, this paper determines important system service characteristics for the effective quality improvement.

This paper identified three pivotal factors of self-efficacy, perceived benefit and social support through confirmatory factor analysis in order to select an effective u-Healthcare system development using QFD. Contents of each factor are shown in table 2.

Table 2. Contents of significant factors in SEM

Factors	Contents
PSE1	Using u-Healthcare Service, I can carry out necessary health acts to improve my health.
PSE2	Using u-Healthcare Service, I can maintain a balanced diet.
PSE3	Using u-Healthcare Service, I feel confident to overcome difficulties in healthcare.
PSE4	Using u-Healthcare Service, I can exercise regularly.
PB1	Ubiquitous Healthcare will be effective to cope with emergency immediately.
PB2	Ubiquitous Healthcare will be helpful to save time for health care.
PB3	Ubiquitous Healthcare will be convenient as it is possible to measure and manage it.
SS1	I have people to have a good time with me.

SS2	I have people to help me to the hospital when sick.
SS3	I have people to tell me right and wrong without hesitation.
SS4	My relatives and friends think that I am helpful for them.
SS5	I feel satisfied with my life more than others do.

In order to calculate importance measure of individual variables of each factor applicable to HOQ, This paper divided necessity of u-Healthcare with a mean into upper and lower groups and extracted important elements in judging upper and lower groups of self-efficacy, perceived benefit and social support and then, conducted discriminant analysis to figure out order of importance priority (Hyejung Chang& Dohoon Kim, 2010). This paper made up of a measuring instrument for quality characteristics with 17 items revealed by Natalia et al. (2005).

Table 3. Quality characteristics for QFD step 1 analysis

	Feature	Description
NETWORK	Mobility	Ability to operated in mobile environment
	Security	Ability to protect users' personal information
	Accessibility	Ability to be easily accessed
	Scalability	Ability to provide stable and scalable work even if the system is overloaded
	Interoperability	Connects various kinds of devices
DEVICE	Invisibility	Ability to provide service calmly, namely, without users' recognition
	Durability	Ability to maintain 'Power-on' status all the time
	Embeddedness	Ability to be embedded into physical environment and be unseen
	Portability	Ability of being used hands-free or with one hand
USER INTERFACE	Customizability	Ability to provide information to users according to their profile and preferences
	Nomadicity	Ability to be used while a user moves from place to place
	Usability	Ability to underpin input and output with by various user interfaces
	Versatility	Ability to be operated as a user moves from place to place and be manipulated using different physical objects
OPERATING SYSTEM	Context inference	Ability to provide users with service fairly correlated with their current context
	Agility	Ability to complete operations on real-time basis
	Personalization	Ability to remember users' common patterns and use them later
	Pro-activeness	Ability to provide users with the service they are likely to require in the nearest future depending on their current situation

In order to find out how much systematic correlation exists between HPM and u-Healthcare service quality characteristics, this paper conducted a correlation analysis. By using this, this paper can build first House of Quality (HOQ). Correlation is marked below 0.01(**) and 0.05(*) in significant level between all the variables. As the result of correlation analysis, all showed consistent correlation except 'portability. This means that most quality characteristics have high correlation with variables of HPM. And this fact is the foundation to compose HOQ 1 quality chart (Hyejung Chang & Dohoon Kim, 2010).

The method of calculating importance to determine order of priority in practicing service quality characteristics for each customer requirement in QFD is to use importance of HPM and correlation coefficients between HPM and service quality characteristics that customers evaluated. According to the size obtained from the calculation of order of priority in service quality characteristics is determined (Wasserman, 1993).

Technical characteristic is one of the two main elements of QFD. One of the essential objectives of QFD is to determine how to cope with customer needs technically. QFD is the process to transform qualitative customer needs into quantitative technical characteristics. One of these methods is to fill in required quality deployment chart that transforms customer needs into concrete requirements. And then, you can extract technical characteristics by drawing up technical characteristic chart. Finally, calculation of quality chart reflects opinions of technical characteristic experts and judges the degree of relationship between customer requirements and technical characteristics.

In this study, the multiplied values in the relation of importance of required quality and technical characteristics by using simple weighted sum method are calculated, and then, the value of technical characteristics is calculated by adding them vertically. When relative importance of required quality as a line of HOQ is and the value indicating the degree of relevance is, absolute weight is expressed like the following equation.

As the degree of Difficulty on Service Platform and External Interface is 2.6~4.0, the gap is rather wide. The highest degree of difficulty is the construction of "Treatment Decision Support System Management" and "Emergency Situation Management" system as 4.0. "Biometric Information Collection/Storage/Management" and "Biometric Information Analysis" is the next as 3.6 degree of difficulty. That is, to build these systems is recognized as very hard.

In the rank of Service Platform and External Interface, "Emergency Situation Management" is the highest as the first and "Biometric Information Collection/Storage/Management" is the next. And "Treatment Decision Support System Management", "Individual Health Information Management", "Biometric Information Monitoring Management", "Contents Management" and "Biometric Information Analysis" are placed in the following order respectively. "Network Telemanagement" is the lowest in order.

4. Conclusion

For this study, survey was carried out on the basis of quality model extracted from the previous research. From the survey findings, both consumer requirements and degree of difficulty as well as importance measure in building service system are drawn out. And, by using QFD technique, system characteristics of high correlation with quality characteristics and

consumer requirements are extracted and by evaluating these characteristics with degree of difficulty added as suitable or not in real system development, much time and effort can be saved and efficient evaluation procedures are suggested.

Concretely, this study first introduced main evaluation factors of Pender's HPM in order to draw out consumers' objective requirements about u-Healthcare for u-Healthcare system development. In addition, it suggested structural equation model for the purpose of examining evaluation methods to accommodate multiple dependency causal relationship between evaluation factors and finding out optimal causality between them. Second, this paper examined structural equation model with the validity in composing potential variables and observation variables of HPM through confirmatory factor analysis and evaluates its goodness of fit. Third, in order to consider the correlation between evaluation norms and factors of service quality characteristics for the satisfaction of u-Healthcare system users, this paper figured out the influence of multiple dependency causality. In addition, this paper rated significant HPMs on the basis of the standardization discriminant function and applied it to the evaluation norms as a weighted value. Using this, this paper suggested an evaluation model to determine the order of priority in consumer quality characteristics.

Through this study, by applying QFD techniques in order to find out service system characteristics according to u-Healthcare service types, this paper attempted to provide more improved system environment to u-Healthcare users.

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THE SECRETARY AS AN EVOLVING PROFESSIONAL: ETHICS AND MANDATES FOR TODAY'S WORLD

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Abstract

This study investigated the secretary as an evolving professional and examined key roles in secretarial trends in modern times. The paper made a distinction between traditional secretarial duties and the evolving roles of secretaries that have both administrative and supervisory contents. The historical analytical design was adopted in the study for overcoming challenges of the secretarial profession explaining its ethics, mandates and prospects. The theory of change was adopted for its frame work. It was observe that technology was challenging the professional development of secretarial studies. Most secretaries today lack technical efficiencies in core secretarial mandates calling for a review in social demand for secretaries, curriculum review and professional development. The paper recommended that new associations that are productive and proactive be registered for secretaries. It was further stated that the profession needed to be repositioned and revitalized with pre and post qualification training in Management and modern Information and Communication Technology (ICT).

Key words: Secretary, Evolving, Ethics, Mandates, Professionalism

Introduction

The world is in a continues evolution and has been since creation. Haag, Cummings and Dawkins (2000), explained that global evolutions could be described in terms of time, for example; there were the Neolithic, stone, machine, revolution, Agricultural revolution ages and that today, it is the information age. In another document written by CODESSRIA (2005), it was further explained that the 21st century had began on a good note but that the century is poised to reverse old methods. The century is in a hurry to change old methods that had proved unprofitable in previous centuries. This indicates that the 21st century involves change. The envisaged changes of the 21st century will create challenges is several professional spheres.

To create envisaged 'change' several indices must alter. The foregoing implied that erstwhile traditional methods of doing things (production) must change and if they must change, there must be new discoveries (research, innovations creativity etc) that must be incorporated into what we now do. It is clear that organizations too in this century are changing. Such changes include; merger of firms, big time investments etc. This paper examined professional evolution as it affects the secretarial profession zeroing on professional ethics. The study investigated

conceptual description of secretarial duties, professional evolutions in secretarial profession and ethical conducts for today's secretaries. The theoretical framework is the theory of change.

Theoretical Framework - Theory of Change

Change is a much talked and discussed concept in several issues. It must have been so because over time, it has been observed that the only way to progress is 'change'. Change is a process. Change could arise due to need that further leads to invention. A situation of satisfaction does not lead to change hence it is the conception of change that brings about discovery, research, technology etc. The quest for change is the cause of life change. Bassey (2009), explained the dynamism associated with life trends and in consequence described change as 'alterations that occur within persons, structure and technology'. In another study on change, Oredein (2009), explained that the concept of change could not be pinned down to a particular concept since it had to do with the dynamism of life. Oredein (2009), explained that change depended on the perception of the change agent. In essence to change, there must be a need, a desire to meet that need and a willingness to effect the change. It is effecting that change that brings innovations. Babalola (2009), writing on strategic thinking, process and innovations explained that the process of change (inventions and innovations) involved; awareness of the problem, getting more information on the problem, talking and relating with the problem, finding options for the problem, choosing alternatives among the problem and developing a strategic intent to that problem. In such a way, the process has been set in motion. After choosing alternative, then testing, awareness creation and advocacy may follow.

Oredein (2009), Bassey (2009), Alimba (2009) all agree that for change to take place, there must be a change agent. Who is a change agent or agents? '*... a change agent is a person who has the clout, conviction and charisma to make things happen and to keep people engaged*'... (Oredein, 2009:463). Oredein's (2009), description is premised on the Model developed by Hiatt (2006), described as the ADKAR model that was brought about by input from more than 1,000 organizations in 59 countries. The ADKAR model included;

Awareness (A) - Where the change is needed

Desire (D) - Support and participate in the change

Knowledge - How to change

Ability - Implementing new skills and behaviours

Reinforcement - Sustaining change

The foregoing shows that change as a process requires change agents that must of necessity possess the qualities highlighted above. Models of change according to Bassey (2009), include; leadership models in which the leader champions the change, political process model in which political indices that enable change must be unfrozen and enabled. There is also the environmental change model in which change is inevitably occasioned by happenings in the environment very related to needs etc. Techniques for managing change include; reward and power, legal authority, referent power, coercive power, constraints, inducements, persuasion, expert power and legitimate power.

From the preceding derivation on the theory of change, it is clear that the secretarial profession as will be seen in this discuss require change. The profession needs to identify its goals and answer the following questions. Do we remain traditional secretaries, stereotyped to routine jobs or we need an emergence? Who is going to champion the change? What are the changes that we need? Can we evolve a new professional mandate from the present one?

The Secretary in Perspective

The secretary has occupied and still occupies a very important position in organizations. The reason for this is that the secretary plays an important role in the corporate image of large organizations. The secretary is often seen at times and in other cases not seen. The secretary is partially sighted when not physically present but documents presented at meetings and conferences etc. speak volumes of the unseen 'power house' behind the documents. The secretary is seen when he/she comes into the organization to present or take notes hence there are traditional secretaries and modern secretaries. Types of secretaries have changed based on industrial needs. In cases where these changes occurred, mandates, ethics and professional evolutions also occurred.

Personnel Today (2010), explains that the perceptions on secretarial duties have changed in line with today's global world that has been transformed through the emergence of information communication technology (ICT). The same was corroborated by Isah (2012), that the modern organization require men and women that are skilled and capable of changing their world and the world of others. Harris (2004), Mills and Standingford (1984) agreed that a modern office/organization is driven by technology. Nwankwo (1985), explaining further and supporting Harris (2004) said that in the wanning years of the 20th century, all activities in the approaching century (21st) will be directed by ICT. The traditional secretary was seen as typist, tea maker for the boss, keeping diaries and schedules, taking dictations, learning speedwriting etc. These appear to have changed. Secretarial practice still at this level is outskilled, outdated and out of market competition. Today's secretaries have transformed through the line of needs of duties.

Secretarial Profiles and Organizational Evolutions

Organizations are changing rapidly in this century. Globally, the concept of globalization that was made possible through the emergence of the internet changed the way people operated in the past (Alimba, 2009) and Oredein (2009). Industrial needs have changed the scope of personnel resources needed in industries for example, the Michigan State civil service job description for a secretary included coordinating office activities with the management of professional staff that includes capacity development, (local and international);. In another job description, by the same organization, a secretary outside the traditional purview of secretarial duties involves combining secretarial office duties with Personal Assistance (PA) to the boss and organization (www.universityofmichigan.org). The modern secretary interfaces between the organization and management. Today's Personal Assistants (PA) must have within their training, elements of management (Planning, Administration and Human Resources Development), costing, budgeting

etc. Further to the foregoing, the modern secretary must be vast, creative and enterprising. The era of stereotyped secretaries have gradually faded with the 20th century.

Professional Development of Secretaries

Akpomi and Ordu (2009) asserted that the functionality of secretaries are primarily dictated by training, environment and technology. Training here refers to prevocational training and in-service training. Prevocational training of secretaries include those ingredients that could make secretaries marketable. In the modern context, a good secretary must be ICT compliant, educationally sound, exceptionally communicative and highly corporate. Modern secretaries are not to be seen carrying brief case of executives. A modern secretary must be indispensable.

Modern Organizations

Organizations have been in existence since the beginning of production. Ajayi (1986), described an organization as an assembly in which men and women are geared towards the same objective. In essence, the type of organization determine the following; skills required to work, personnel, scale of production, type of production etc. It is well known that the skills required to work in a hospital may not be the same as those required to work in an auto firm but they all have a common denomination in administrative duties. They all have the following sections 'Management'. Management could be top, middle or lower management. Management involves Planning, Administration, Coordination, Supervision, Directing etc (Haag, et al., 2000); Haiman, Scott and Connor (1978); Nwankwo (1985). Nwankwo (1985), explained that management consists of administrative and supervisory practices. Management ladder a worker belongs depends on the level of administration or supervision such worker is involved with. For example a top manager deals more with policy, planning and less of administrative supervision. It is such level of creativity that enables new products hit the market.

It cannot be reasonably denied that the level of corporate operations in modern organizations have risen beyond the comprehension of most people in recent times. The level of operations of Mega companies such as 'Exon Mobil', Banks etc with a board, a Chairman, Chief Executive Officer etc can be imagined. There are companies that have formed mergers, acquisitions etc. Such complexities in companies and organizations have resulted in the redefinition of roles, re-examination of targets revitalization of ethics and evaluations of conduct. It is clear that no Chief Executive Officer can handle all his daily tasks hence the need for assistance. The growth of industry has further resulted in the use of technology. It is for these reasons that there is a shift in emphasis today in modern organizations from the use of the term 'Secretary' to 'Personal Assistant'. In an analysis by www.careersoverview.com, the traditional secretary varies from the modern secretary as shown in Table 1.

Table 1: Comparing Traditional Secretary to Modern Secretaries in Organizations

S/N	Traditional Secretary	Modern Secretary
1.	Non Professional and designated Secretary	Professional and now designated 'Personal Assistant'
2.	Used manual machines	Automated office equipments and technology
3.	Stereotyped to dictations, scheduling etc.	Representative to organizations and corporate in inclinations.
4.	Usually limited educationally to stages of PMAN examinations etc.	Unlimited: can reach any level. High qualifications, professionals skills and conduct
5.	-	Different types of secretaries – legal, administrative, executive, Personal Assistant etc.
6.	Code of conduct	Body of ethics.

Source: Extracts from www.personneltoday.com; www.careersoverview.com and www.universityofmichigan.com; Retrieved 1/6/13.

With the increasing roles of Secretaries – 'Personal Assistants', the need to increase and improve communication, advice with foresight cannot be over emphasized. In most organizations, information needs vary hence the Personal Assistant position is emphasized. In today globalized environment, a limited secretary will be out of the market. What then could be seen as difference between a Secretary and Personal Assistant (PA)?

Table II: Differences between a Secretary and PA

S/N	Secretary	PA
1.	Limited in educational scope	Unlimited in educational scope.
2.	Limited to organizational duties	Unlimited, could represent the boss.
3.	Used to office routines	Both office routines and administrative controls.
4.	Less supervisory (independent)	Highly fluid operationally

Source: *The Researcher*

Fig. I: Administrative levels of control by organizational personnel.



Source: *Theory and practice of Educational Administration (1982) by Nwankwo, J.I.*

The organizational structure of modern firms is shown in figure I. The side of the box that each manager falls to determine the level of supervision or administration required for effectiveness, for example, lower management virtually has little or no administrative capacity. A messenger for example has no subordinates to administer but has the responsibility of supervising his work. Ensuring that the duties assigned to him are effectively carried out.

Professional Evolution in Secretarial Duties

The growing evolution in secretarial functions requires that this category of workers meet professional conduct. Secretaries presently have Associations for example; the Institute of Chattered Secretaries and Administrators (ICSA) regulates the certification of professional secretaries hence membership has been thrown open. In most organizations, the type and level of secretarial duties determine the qualifications for entry. For example, most Banks today require services of professional lawyers as Bank Secretaries. According to Nwankwo (1985); a profession needs to meet certain criteria. Prominent among these criteria are the fact that it must:

1. Have acknowledge that only itself can use for example, only lawyers are licensed to practice and advocate for offenders, only licensed medical doctors treat sick people.
2. Must have a well established professional association e.g. ICAN for accountants, TRCN for teachers, NBA for lawyers etc.
3. Must have rules and ethics.
4. Must be guided by a code of conduct etc.

Looking at these rules, it could be argued that the same condition prose challenges to secretarial development in Nigeria. Take for example; the evolution of ICT is fast eroding the importance of traditional secretarial duties as most managers now have the capacity of producing their own materials in their own ways. Secretaries are not known to have an association that institutes codes of ethics except for certification etc. Again the development of the modern office assistants/personal assistant is fast eroding the duties of the secretary hence secretarial knowledge is not only for secretaries.

The foregoing indicates that secretarial professionalism is being challenged by the evolution of ICT in the 21st Century, why? Administrators and policy makers are getting increasingly independent of their secretaries. To this end, certain policies are likely to serve as inhibitions to the development of the secretarial profession. Among them are policies of computer literacy for all. These policies are likely to introduce more unprofessionalism into secretaryship.

Information Communication Technology (ICT) and Secretarial Profession

Hanson (2005), Mills et al (1984) agree that the ICT has revolutionized the profession with the development of communication gadgets. It is expected that more evolutions will come in soon. This is because secretaries may be unable to cope with the increasing complexities required by modern organizations. To this end, secretaries have to pave a new way forward. Hanson (2005) and Mills et al (1984) agree, that secretaries have to adapt to new technologies. Their studies explain that the gap between installations of new equipment between old, new, large and small organizations is usually with a gap of about ten years. What then should be the way forward for the secretarial profession in this century?

Pathways to Secretarial Revolution in the 21st Century

This study opines that some steps need to be taken in this century to revolutionize secretarial duties:

1. Professionalism

The profession needs to re-emphasize its code of conduct by establishing that it has a unique knowledge hence secretaries need innovation in their profession. The present training of secretaries needs a review to conform them to new challenges. Most universities in Africa are not known to run courses in Secretarial affairs but run courses in ICT, Office Technology etc. These innovations are running secretarial studies out of the market. The profession needs a strong association that will negotiate its roles and ethics but is the profession ready for this?

2. Social Demand

The social and occupational demand for secretaries must be re-invented. Scientific discoveries need to be introduced into the occupation to attract highly intelligent and capable candidates. Today it appears the profession is being gender dominated. This has to be de-emphasized optimally. The position of Secretary has crashed due to perceived educational and technical lapses. Organizers have to seek a forum to bring in all categories of secretaries for example all lawyers whether SAN, Magistrates and judges belong to the Nigerian Bar Association (NBA).

3. Improving Pre-Service Training Curriculum of Secretaries

This paper opines that the pre-service training of secretaries be improved for example, new technologies coming to the market should be taught in school. Scientific documentation, i.e. introducing aspects of archival studies into the curriculum of secretaries.

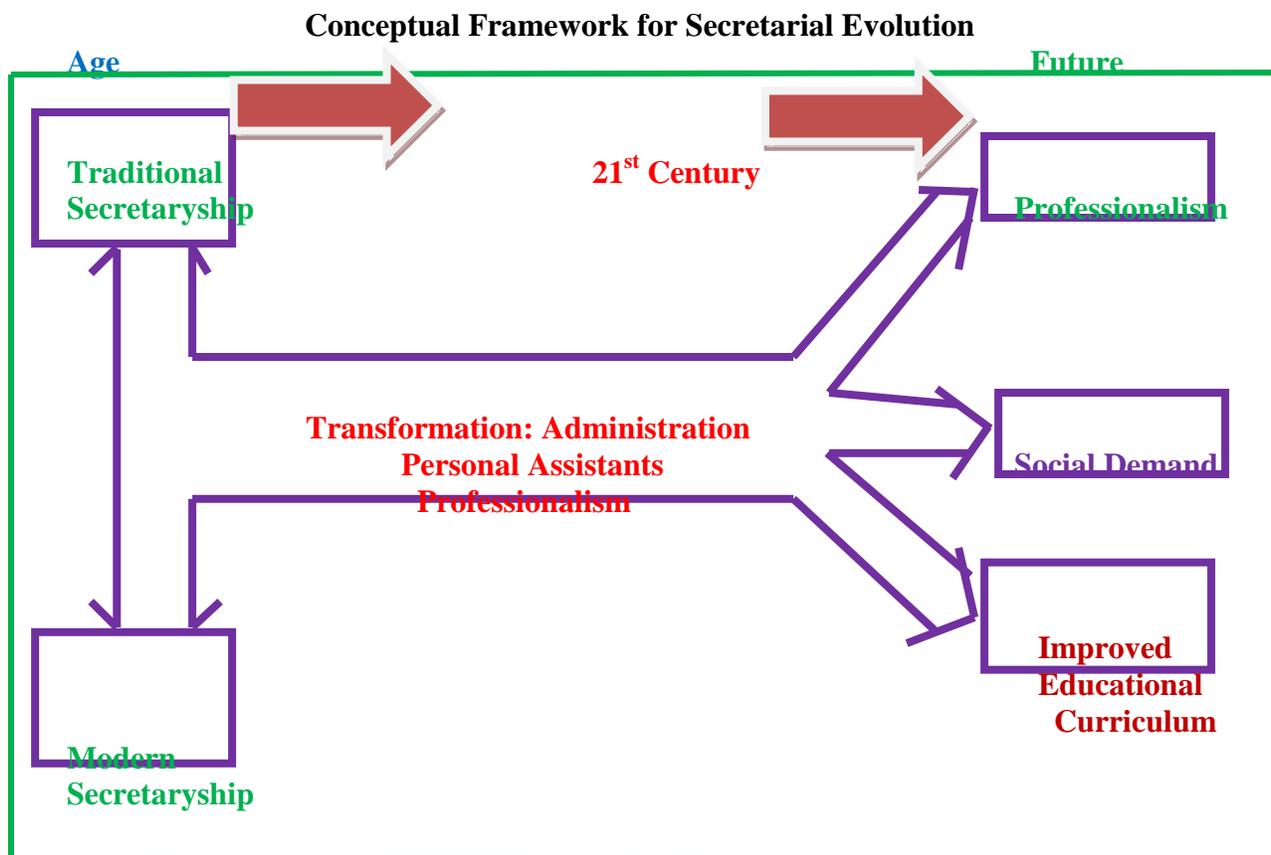


Fig. 2: *Transformation of Secretarial Profession.* The Researcher; 2013

It is the opinion of this paper that a combination of traditional and modern practices requires a bridge which the transformation model answers. There are secretarial challenges that must be addressed today to give the profession a lift.

4. Curriculum Review

The curriculum of modern secretarial studies needs to be reviewed. The secretary must be trained to grow and rise. In that case, innovations into the discipline should be emphasized. These should be pre and post training exposure of secretaries and extensive.

Summary

This study examined the role of secretaries and the evolving changes in the secretarial profession over time in the context of developments in modern ICT. The study overviewed traditional and modern secretaries, evolving stages in modern industrial organizations requiring the use of administration and Personal Assistants. The concept of top, middle and lower management in the contextual administration and supervision in organizations was overviewed. The study eventually examined challenges facing secretarial profession despite new innovation in the area.

Implication of Study to Management and Practice

This study has implications for theory and practice. In the first instance, evolving global occupational competitions and ICT has exposed this discipline to competition from non professionals. Again, managers appear to be getting more independence from secretaries being able to work on their laptops to do preparation of their documents and spreadsheets. In the light of the above, this study recommends that:

1. Secretaries evolve a competent and formidable association capable of innovations to uplift the recipients from their current state.
2. Improve on pre-service training.
3. Increase involvement in office administration especially in the area of certification.
4. Enhance social and occupational demand for secretaries.
5. Expand secretarial ICT scope in organization.
6. Re-vitalize secretary's professional association.

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Biography of Author



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MULTI-ECHELON SUPPLY CHAIN DIAGNOSIS SYSTEM WITH FUZZY HIDDEN MARKOV MODEL

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Abstract

There are several advantages to evaluating a problem with a hidden Markov model. The analyst can use a representation that is natural to the decision maker since the algorithm executes all of the inference and analysis automatically. However, when imprecise knowledge is involved in the systems, how to reason from approximate information becomes a main issue in evaluating a hidden Markov model effectively. In real-world expert systems, the knowledge engineers are allowed to maintain and update the distributions of the nodes with system interfaces. The decision-makers may conduct diagnostic reasoning based on the observed symptoms or evidences for multiple periods. This study proposes a fuzzy hidden Markov model (FHMM) to describe the cause-and-effect relationships in the multi-echelon supply chain. A simulation algorithm is designed for the posterior distribution of two types of nodes: crisp discrete nodes and fuzzy continuous nodes.

Keywords: Hidden Markov model, fuzzy sets, supply chain diagnostics.

1. Introduction

Supply chain management has been commonly recognized as a key factor of business success, especially for multinational industries and global markets. In supply chain systems, the key factors concerning customers and suppliers constitute intricate causal effects with industrial performance. Most previous studies of supply chain diagnostics stressed the qualitative causal

relationships among businesses. Qualitative investigations have yielded insightful managerial implications from supply chains.

There are several works on the causal effects in supply chains, such as the dynamics of buyer-supplier relationships (Heide & John, 1990; Youssef, 1992; Olsen & Ellram, 1997; Holm, Eriksson, & Johanson, 1999), the strategic role of the buying firms in structuring supplier-supplier relationships and supply chain effectiveness (Choi, Wu, Ellram, & Koka, 2002), the relationship between just-in-time purchasing techniques and supply chain performance (Kaynak, 2002), and so on. Chao (2013) measured the benefits and influences of adding online customers with and without the retailer's inventory information sharing through the Markov Decision Process and also simulated the production and availability policy via a myopic method, which can be implemented easily in the real world. Fasli and Kovalchuk (2011) addressed the problem of predicting customer order prices and choosing the selling strategy which can lead to a greater profit in the context of supply chain management. The potential of the Neural Networks and Genetic Programming learning techniques was explored for making price forecasts. Liang (2011) proposed a fuzzy linear programming approach based on the possibility theory to solve multiproduct and multi-time period manufacturing/distribution planning decision problems with imprecise goals and forecast demand by considering the time value of money of related operating cost categories. Lorton, Fouladirad, & Grall (2013) addressed the prognosis of complex systems using stochastic model-based techniques. Prognosis consists in computing the distribution of the Remaining Useful Life (RUL) of the system conditionally to available information. Miller and John (1983) introduced an interval type-2 fuzzy logic model of a multiple echelon supply chain. Naim, Childerhouse, Disney, & Towill (2002) developed a methodology to diagnose the European automotive supply chains, which generates the cause-and-effect diagram of two-echelon supply chains.

The hidden Markov model has been widely used as knowledge bases under uncertainty (Rabiner, 1989; Baldi & Chauvin, 1994; Bengio & Frasconi, 1995; Fine, Singer, & Tishby, 1998; Bengio, 1999; Gales, 1999; Rao & Rose, 2001). However, in previous works, the uncertainty measure in hidden Markov model is usually probability distributions for crisp variables, which restricts the practical usefulness when incomplete knowledge or linguistic vagueness is involved in reasoning systems. Reviewing the literatures on supply chain management, we find some important issues. First, the diagnostic models need to be properly designed. Second, the uncertainties of the causal relationships need to be identified and quantified. Third, fuzzy information is not considered in the previous works.

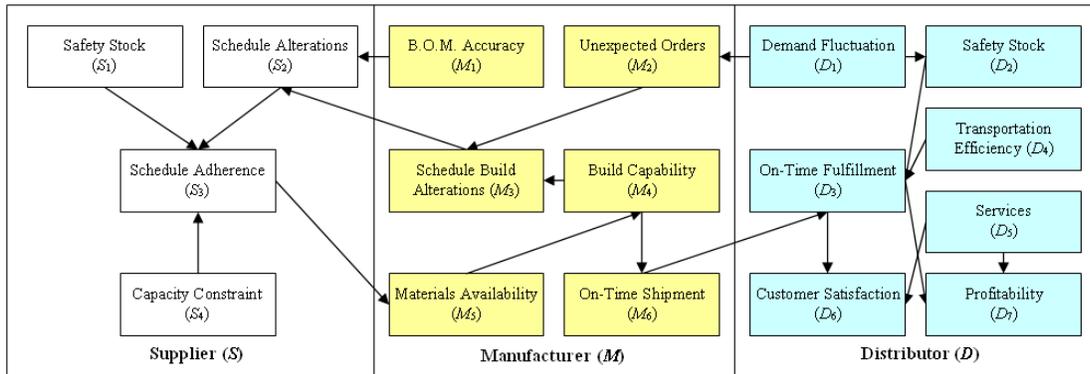
This study develops a fuzzy hidden Markov model (FHMM) in which fuzzy variables as well as crisp variables are considered. The proposed fuzzy hidden Markov model is applied to supply chain modeling and reasoning. The simulation algorithm is designed to answer various diagnostic queries from supply chains.

The rest of this study is organized as follows. Section 2 describes an illustrative case of three-echelon automotive supply chains. Section 3 formulates the diagnostic problems with a fuzzy hidden Markov model and designs the simulation algorithm for reasoning from a fuzzy hidden Markov model. Section 4 gives our conclusions.

2. Case Study

In this section, we first introduce a case from the three-echelon automotive supply chain. An engine manufacturer and its suppliers can catch the critical information of the supply chain performance. One main output is the cause-and-effect diagram shown in Figure 1. In Figure 1, there are three kinds of factors from the supplier, manufacturer, and distributor. The arrows in the diagram represent the causal links between the keys of the three-echelon supply chains.

Figure 1. Cause-and-effect diagram of the supply chain



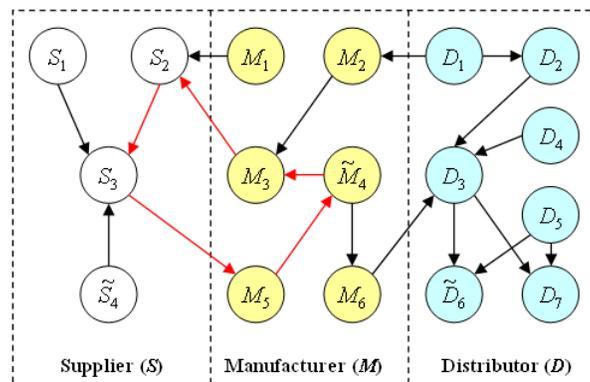
As a supplier of the leading engine manufacturer, it monitors the key indicators from the diagram periodically. After one routine checkup, the supplier records the key factors which are safety stock (S_1), schedule alterations (S_2), schedule adherence (S_3), and capacity constraint (S_4). The key factors of the manufacturer are B.O.M. accuracy (M_1), unexpected orders (M_2), schedule build alterations (M_3), build capability (M_4), materials availability (M_5), and on-time shipment (M_6). The key factors of the distributor are demand fluctuation (D_1), safety stock (D_2), on-time fulfillment (D_3), transportation efficiency (D_4), services (D_5), customer satisfaction (D_6), and profitability (D_7), respectively.

According to the nature of problems, there can be several types of network nodes: crisp discrete nodes, crisp continuous nodes, fuzzy discrete nodes, and fuzzy continuous nodes. Because there is a feedback loop in Figure 1, the three-echelon supply chain will be expressed by a FHMM in the following steps. First, this study changes each factor in Figure 1 into a network node. Considering the nature of the supply chain systems, there are two types of nodes: crisp discrete nodes and fuzzy continuous nodes as follows:

- (i) Crisp discrete nodes: For the crisp nodes, this study uses the uppercase letters to represent the variables and lowercase letters for their associated values. For example, S_1^t represents the safety stock at time t and s_1^t stands for the value of S_1^t . Because $S_1^t \in \{0, 1\}$, we let $+s_1^t$ stand for $S_1^t = 1$ and $-s_1^t$ stand for $S_1^t = 0$.
- (ii) Fuzzy continuous nodes: This study denotes $\pi(x)$ a possibility distribution that $X = x$, and $\pi(y|x)$ the conditional possibility distribution of $Y = y$ given $X = x$. A triangular membership function is used for the possibility distribution function of a fuzzy node. Every fuzzy node \tilde{Y} is denoted by $(\underline{y}, y^*, \bar{y})$, where \underline{y} and \bar{y} represent the lower and upper limit of the support for \tilde{Y} , and y^* stands for the mode (most possible value) of \tilde{Y} . That is, $\pi(y^*) = 1$ and $\pi(y) = 0$ for $y \geq \bar{y}, y \leq \underline{y}$. Remarkably, the probability distributions of some crisp nodes conditioned on the manifestation of their fuzzy parents, such as $\tilde{S}_4, \tilde{M}_4,$ and \tilde{D}_6 . To cope with these cases, we partition the support of the continuous parents into several sub-domains, and then approximate the discrete children's conditional probability on the sub-supports (Miller & Rice, 1983; Keefer, 1994).

Then, Figure 1 is transformed into Figure 2. The description and states of the random nodes are listed in Table 1.

Figure 2. A fuzzy hidden Markov model of the three-echelon supply chain



3. Proposed Methods

The problem is a typical diagnostic query in a fuzzy environment. In Figure 2, a feedback loop exists among S_2 , S_3 , M_5 , \tilde{M}_4 , and M_3 . If we take a time expansion aspect, Figure 2 can be expanded into Figure 3.

The joint distribution of the network is expressed as (1). The equation (1) involves both joint probability and possibility distribution functions, so we use \otimes to denote the operator linking the crisp and fuzzy parameters.

$$\begin{aligned}
 L(x, \tilde{y}) &= P(x) \otimes \pi(x) \\
 &= P(s_1^1, s_1^2, \dots, s_1^n, s_2^1, s_2^2, \dots, s_2^n, \dots, d_7^1, d_7^2, \dots, d_7^n) \otimes \pi(\tilde{s}_4, \tilde{m}_4, \tilde{d}_6) \\
 &= P(s_1^1)P(s_3^1 | s_1^1, s_2^1, \tilde{s}_4^1)P(m_1^1)P(m_2^1 | d_1^1)P(m_3^1 | m_2^1, \tilde{m}_4^1) \\
 &\quad \times P(m_5^1 | m_3^1)P(m_6^1 | \tilde{m}_4^1)P(d_1^1)P(d_2^1 | d_1^1)P(d_3^1 | m_6^1, d_2^1, d_4^1)P(d_4^1) \\
 &\quad \times P(d_5^1)P(d_7^1 | d_3^1, d_5^1) \otimes (\pi(\tilde{s}_4^1) \wedge \pi(\tilde{m}_4^1 | m_5^1) \wedge \pi(\tilde{d}_6^1 | d_3^1, d_5^1)) \\
 &\quad \times \prod_{t=2}^n [P(s_1^t)P(s_2^t | m_1^t, m_3^{t-1})P(s_3^t | s_1^t, s_2^t, \tilde{s}_4^t)P(m_1^t)P(m_2^t | d_1^t)P(m_3^t | m_2^t, \tilde{m}_4^t) \\
 &\quad \times P(m_5^t | m_3^t)P(m_6^t | \tilde{m}_4^t)P(d_1^t)P(d_2^t | d_1^t)P(d_3^t | m_6^t, d_2^t, d_4^t)P(d_4^t) \\
 &\quad \times P(d_5^t)P(d_7^t | d_3^t, d_5^t) \otimes (\pi(\tilde{s}_4^t) \wedge \pi(\tilde{m}_4^t | m_5^t) \wedge \pi(\tilde{d}_6^t | d_3^t, d_5^t))]
 \end{aligned} \tag{1}$$

where the term $P(s_2^t | m_1^t, m_3^{t-1})$ embraces contemporaneous dependencies at time t and noncontemporaneous dependencies at $t-1$.

This study will use a simple parameterized decompositions used commonly by time series analysis (Dagum, Galper, & Horvitz, 1992) as (2).

$$P(s_2^t | m_1^t, m_3^{t-1}) = \omega P(s_2^t | m_1^t) + (1 - \omega) P(s_2^t | m_3^{t-1}) \tag{2}$$

where ω denotes the likelihood that s_2^t predicted from the information at period t , and $1 - \omega$ denotes the likelihood that s_2^t predicted from the information prior to t . For the crisp nodes X , we denote by W_X the state of all variables except X , then the value of X will be chosen by tossing a coin that favors 1 over 0 by a ratio of $P(+x | W_X)$ to $P(-x | W_X)$. The distribution of each crisp variable X conditioned on the values W_X of all other variables in the system, $P(x | W_X)$, is the base of local computations for posterior distributions (Pearl, 1988). The distributions of $P(x | W_X)$ in this network at time t are as (3)–(16).

Table 1. The states and description of the nodes in Figure 2

Level	Node	Description	State
Supplier	S_1	Safety Stock	$+s_1$: high, $\neg s_1$: low
Supplier	S_2	Schedule Alterations	$+s_2$: high, $\neg s_2$: low
Supplier	S_3	Schedule Adherence	$+s_3$: high, $\neg s_1$: low
Supplier	\tilde{S}_4	Capacity Constraint	(low, mid, high)
Manufacturer	M_1	B.O.M. Accuracy	$+m_1$: high, $\neg m_1$: low
Manufacturer	M_2	unexpected orders	$+m_2$: high, $\neg m_2$: low
Manufacturer	M_3	Schedule Build Alterations	$+m_3$: high, $\neg m_4$: low
Manufacturer	\tilde{M}_4	Build Capability	(low, mid, high)
Manufacturer	M_5	Materials Availability	$+m_5$: high, $\neg m_5$: low
Manufacturer	M_6	On-Time Shipment	$+m_6$: high, $\neg m_6$: low
Distributor	D_1	Demand Fluctuation	$+d_1$: high, $\neg d_1$: low
Distributor	D_2	Safety Stock	$+d_2$: high, $\neg d_2$: low
Distributor	D_3	On-Time Fulfillment	$+d_3$: high, $\neg d_3$: low
Distributor	D_4	Transportation Efficiency	$+d_4$: high, $\neg d_4$: low
Distributor	D_5	Services	$+d_5$: high, $\neg d_5$: low
Distributor	\tilde{D}_6	Customer Satisfaction	(low, mid, high)
Distributor	D_7	Profitability	$+d_7$: high, $\neg d_7$: low

$$P(s_1^t | W_{S_1^t}) = \beta P(s_1^t) P(s_3^t | s_1^t, s_2^t, \tilde{s}_4^t) \quad (3)$$

$$P(s_2^t | W_{S_2^t}) = \beta(\omega P(s_2^t | m_1^t) + (1 - \omega)P(s_2^t | m_3^{t-1}))P(s_3^t | s_1^t, s_2^t, \tilde{s}_4^t) \quad (4)$$

$$P(s_3^t | W_{S_3^t}) = \beta P(s_3^t | s_1^t, s_2^t, \tilde{s}_4^t) P(m_5^t | m_3^t) \quad (5)$$

$$P(m_1^t | W_{M_1^t}) = \beta P(m_1^t)(\omega P(s_2^t | m_1^t) + (1 - \omega)P(s_2^t | m_3^{t-1})) \quad (6)$$

$$P(m_2^t | W_{M_2^t}) = \beta P(m_2^t | d_1^t) P(m_3^t | m_2^t, \tilde{m}_4^t) \quad (7)$$

$$P(m_3^t | W_{M_3^t}) = \beta(\omega P(s_2^t | m_1^t) + (1 - \omega)P(s_2^t | m_3^{t-1}))P(m_3^t | m_2^t, \tilde{m}_4^t) \quad (8)$$

$$P(m_5^t | W_{M_5^t}) = \beta P(m_5^t | m_3^t) \quad (9)$$

$$P(m_6^t | W_{M_6^t}) = \beta P(m_6^t | \tilde{m}_4^t) P(d_3^t | m_6^t, d_2^t, d_4^t) \quad (10)$$

$$P(d_1^t | W_{D_1^t}) = \beta P(d_1^t) P(d_2^t | d_1^t) P(m_2^t | d_1^t) \quad (11)$$

$$P(d_2^t | W_{D_2^t}) = \beta P(d_2^t | d_1^t) P(d_3^t | m_6^t, d_2^t, d_4^t) \quad (12)$$

$$P(d_3^t | W_{D_3^t}) = \beta P(d_3^t | m_6^t, d_2^t, d_4^t) P(d_7^t | d_3^t, d_5^t) \quad (13)$$

$$P(d_4^t | W_{D_4^t}) = \beta P(d_4^t) P(d_3^t | m_6^t, d_2^t, d_4^t) \quad (14)$$

$$P(d_5^t | W_{D_5^t}) = \beta P(d_5^t) P(d_7^t | d_3^t, d_5^t) \quad (15)$$

$$P(d_7^t | W_{D_7^t}) = \beta P(d_7^t | d_3^t, d_5^t) \quad (16)$$

For the fuzzy node \tilde{Y} , $\pi(\tilde{y}^t | W_{\tilde{Y}^t})$ at time t are listed as (17)–(19).

$$\pi(\tilde{s}_4^t | W_{\tilde{S}_4^t}) = \beta \pi(\tilde{s}_4^t) \otimes P(s_3^t | s_1^t, s_2^t, \tilde{s}_4^t) \quad (17)$$

$$\pi(\tilde{m}_4^t | W_{\tilde{M}_4^t}) = \beta \pi(\tilde{m}_4^t | m_5^t) \otimes P(m_3^t | m_2^t, \tilde{m}_4^t) P(m_6^t | \tilde{m}_4^t) \quad (18)$$

$$\pi(\tilde{d}'_6 | W_{\tilde{D}'_6}) = \beta \pi(\tilde{d}'_6 | d'_3, d'_5) \quad (19)$$

where β is the normalizing constant. In the fuzzy simulation, the operator \otimes will be replaced with \wedge (min).

This study develops a simulation algorithm to solve this problem. The algorithm of the simulation is listed in Table 2.

Table 2. The algorithm of the simulation

```

program Simulation

Begin

  read Crisp_Data, Fuzzy_Data;
  read Unknown_Node_Data, Evidence_Data;

  repeat

    Read Unknown_Node from Unknown_Node_Data;

    if Unknown_Node in Crisp_Data

      X := Unknown_Node;

      Execute Stochastic_Simulation();

    else

      Y := Unknown_Node;

      Execute Fuzzy_Simulation();

    end;

  until end of Unknown_Node_Data;

end.

function Stochastic_Simulation()

```

```
begin
    set rx = Probability(X); {Obtain the probability of x = 1 from (3)-(16)};
    if Randomv() <= rx / (rx + 1) then
        x[i] := 1;
    else
        x[i] := 0;
    end;
    i := i + 1;
end.

function Fuzzy_Simulation()
begin
    read alphacut;
    Distribution(y, pi(y)); {Obtain the distribution pi(y) as (17)-(19)};
    y[i] := Sample(pi(y), alphacut); {Obtain the sample of y from pi(y)};
    i := i + 1;
end.
```

4. Conclusions

This study proposes a fuzzy hidden Markov model to describe the cause-and-effect relationships in the three-echelon supply chain. A simulation algorithm is designed for the posterior distribution of two types of nodes: crisp discrete nodes and fuzzy continuous nodes. In real-world expert systems, the knowledge engineers are allowed to maintain and update the distributions of the nodes with system interfaces. The decision-makers may conduct diagnostic reasoning based on the observed symptoms or evidences for multiple periods.

For future extensions, this work may be implemented into complete decision support systems which include various models and reasoning strategies. Through the user interfaces, the decision-makers may modify the network structures, relevant parameters and distributions. There are some potential themes:

- (i) Integrated analysis with fuzzy sets in various graphical decision model, including Bayesian networks, decision trees, and influence diagrams.
- (ii) Hybrid decision analysis with fuzzy sets and rough sets in graphical decision models.
- (iii) Potential applications of intelligent decision support with fuzzy sets, such as supply chain management, business strategic analysis, and biomedicine.

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Ro-Ro ferry safety and transport supply chain: A conceptual framework for tourism industry

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ABSTRACT

Abstract—Strengthen integrated national connectivity locally and globally connected is the one of three major elements strategy for the implementation of MP3EI 2011 – 2025 (Master Plan of acceleration and expansion of the Indonesia economic development) through six economic corridors. One of the corridor is corridor 5 covered the area of Bali and Nusa Tenggara which has the commodities strength of tourism sector, livestock, and fisheries. The corridor 5 is geographically separated by straits, therefore the need of sea transport corridors especially crossings transportation becomes a success key for the successful implementation of MP3EI in this corridor. Tourism sector has a fundamental framework such as transport, travel and tourism itself. Conceptually the tourism market in this segment may be viewed as residing somewhere in the mid-section where these three key elements overlap. Therefore, the transport supply chain may influence the demand of tourism. The transport supply chain for this case is relying on the use of crossing transportation which Ro-Ro ferry type is commonly used. Further the safety of Ro-Ro ferry operation may also influence the reliability of transport supply chain. Hence, the aim of this paper is to propose the applicability concept of Ro-Ro ferry safety operation through its shiphandling difficulty level in relation to the transport supply chain in supporting the tourism market. The development of transport supply chain concept and ferry characteristic are described. The shiphandling difficulty model for ferry is discussed. The simulation of shiphandling difficulty model is carried out in order to demonstrate proposed concept. Further discussion in the context of shiphandling for ferry is presented in detail.

Keywords—Ro-Ro ferry safety, shiphandling, tourism, transport supply chain.

I. INTRODUCTION

II.

The MP3EI 2011 – 2025 (Master Plan of acceleration and expansion of the Indonesia economic development) was established in 2011 (The coordinating ministry of economic affairs, 2011). The implementation strategy of MP3EI is done by integrating three main elements, namely: (1) developing the economic potential areas in six Indonesian economy corridor; (2) strengthening the integrated national connectivity locally and globally connected; (3) strengthening human resources capacity and the science and technology national to support the development of major programs in every economic corridor. One of the corridors is corridor 5 which covers Bali and Nusa Tenggara Island. The corridor 5 is gateway for tourism and national food support. As a gate for tourism, Bali was intended for the main gate of tourists local and foreign and then they may continue their visit to other islands in Indonesia. Based on Central Statistic Agency (BPS), Bali's foreign tourist numbers for the whole year of 2011 totaled is 2,756,579 people (Central Statistic Agency (BPS) Province of Bali, 2013A). Increase about 10.57% over the total for 2010's 2,493,058 people. It is assumed that the foreign tourist have visited Bali by air transport. However, the local tourist was not calculated. In figure 1, it may be seen that the number of passengers arrived at and departed from the ports in Bali (Gilimanuk, Padangbai and Benoa) is higher than the number of foreigner tourist (Central Statistic Agency (BPS) Province of Bali, 2013B). Therefore, it is assumed that the number of local tourist was higher than foreign tourist.

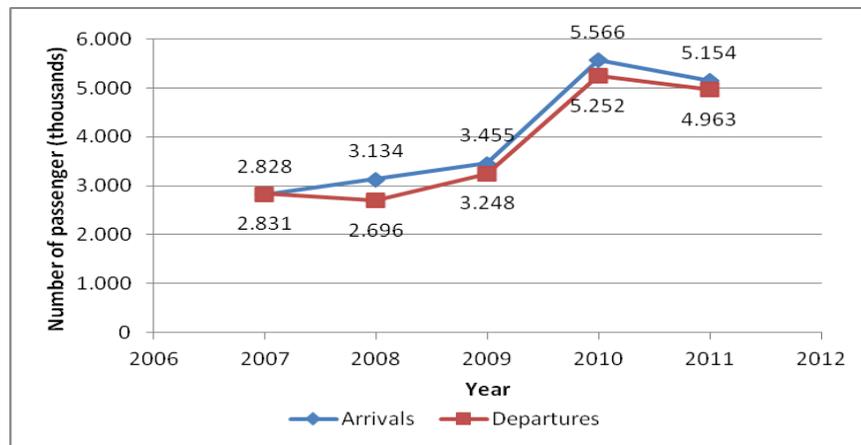


Figure 1 Number of passenger arrived and departed by ports in Bali
Source: Modified: Central Statistic Agency (BPS) Province of Bali, 2013B

The economic corridor 5 consists of major islands such as Bali and Nusa Tenggara and dozens small islands. In figure 2, it is shown the layout of corridor 5 in detail. The east part of Bali Island is connected by Ro-Ro ferry route to the Java Island as a main island, whereas the west part of Bali Island is connected by Ro-Ro ferry route to the Lombok Island. As it is illustrated, the tourism node is located at Bali and Lombok. Therefore, the role of crossing transportation as

part of transport supply chain is also important to transport goods and passengers from Java Island and Lombok Island. Further, such transport supply chain will support the development of economic in this region according to the objectives of MP3EI.

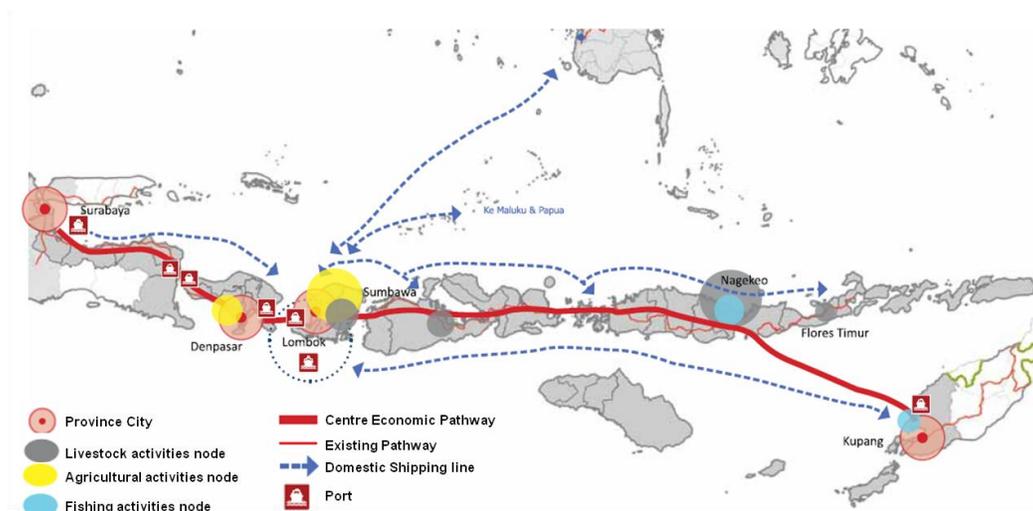


Figure 2 Layout of economic corridor 5

The roll-on/roll-off ship (Ro-Ro) is one of the most successful types operating today. Its flexibility, ability to integrate with other transport systems and speed of operation have made it extremely popular on many shipping routes. One of the Ro-Ro ship's most important roles is as a passenger/car ferry, particularly on short-sea routes. Nevertheless, despite its commercial success, there have been disturbing accidents involving different types of Ro-Ro ships, the worst being the sudden and catastrophic capsizing of the passenger/car ferry Herald of Free Enterprise in March 1987 and the even more tragic loss of the Estonia in September 1994. Further, during 2003-2009 in Indonesian waters, there were 24 numbers of Ro-Ro ferry accidents, which the accident types commonly were 25% of sinking, 25% of fire, 29% of grounding, 9% of passengers accidents, 8% of MOB and 4% of collide buoy (Directorate of Coast Guard of Ministry Transportation Indonesia (Dit. Penjagaan dan Penyelamatan Ditjen Hubla), 2009). Therefore, this paper has objective to propose the applicability concept of Ro-Ro ferry safety operation through its shiphandling difficulty level in relation to the transport supply chain in supporting the tourism market. The development of transport supply chain concept and ferry characteristic are described. The shiphandling difficulty model for ferry is discussed. The simulation of shiphandling difficulty model is carried out in order to demonstrate proposed concept. Further discussion in the context of shiphandling for ferry is presented in detail.

II. RELATED WORK

2.1 Transport Supply Chain

The important role of transportation toward logistic chain has been discussed (Tseng, Yue, & Taylor, 2005). The role of transportation in chain logistic can be identified through various

sections in logistic process (figure 3). The logistic system consists of three main components closely linked such as logistics services, information systems and infrastructure/resources. The interaction of the three main components in the logistics system can be described as follows. First, logistics services carry the movement of materials and products from inputs through production to consumers, followed by associated waste disposal and reverse flows. They contain activities undertaken in-house by the users of the services (e.g. storage or inventory control at a manufacturer's plant) and the operations of external service providers.

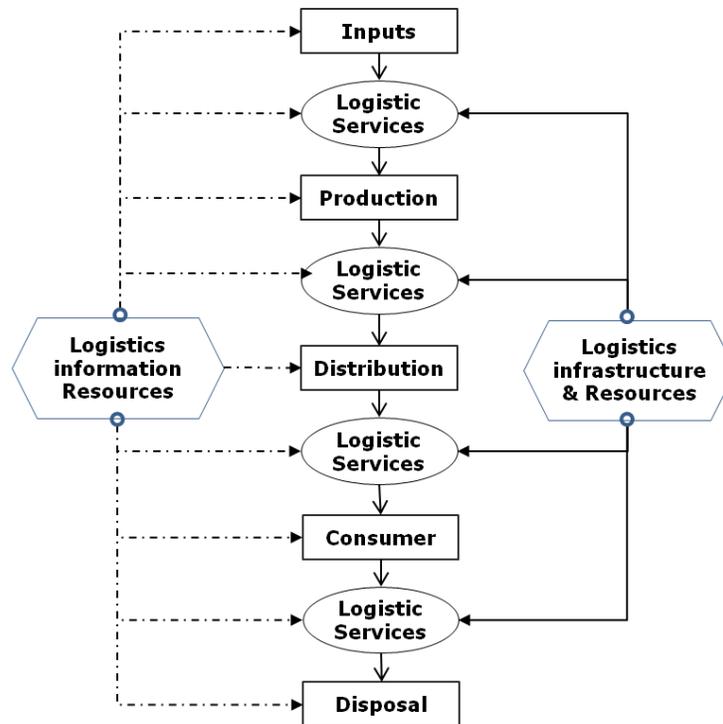


Figure 3 Logistic system (BTRE, 2001)

Logistics services contain both physical activities (e.g. packing, transport, storage) and non-physical activities (e.g. supply chain design, selection of contractors, freightage negotiations). Most activities of logistics services are two way directions. Second, information systems comprise modelling and management of decision making, and more important concerns are tracking and tracing. It provides essential data and consultation in each step of the interaction among logistics services and the target stations. Third, Infrastructure contains human resources, financial resources, packaging materials, warehouses, transport and communications. Most fixed capital is for constructing those infrastructures. They are concrete foundations and basements within logistics systems. Further, in logistic services, we may divide into tangible and intangible services. The tangible services are related to the physical form of service such as good product, whereas the intangible services are related to the nonphysical services such as tourism services. Therefore, it is quite clear that transportation has an important role in logistic system for supporting a transport supply chain especially in non physical form such as tourism industry.

In general, transportation activity process has several related elements (Abubakar, 2010). Those elements could be described as follows:

- The availability of means of transport;
- The availability of road or pathway;
- The availability of commodities (goods or passengers);
- Legislation;
- Place of departure and place of arrival.

There are several types of transportation mode such land, air and maritime transportation. In the logistic system, it is very often to use the combination of transportation mode for instance land and maritime transportation or air and land transportation. In maritime transportation especially for connecting among islands as the extension of road or railway, Ro-Ro ferries are mostly used as transportation means. Typically the disadvantage of maritime transportation mode is that it needs longer transport time and its schedule is strongly affected by the weather factors. Therefore, the reliability of this transport mode in term of efficient and safety transport will enhance the logistic service supply chain.

2.2 Ro-Ro ferry Safety

The safety term has various in definition. We may cite the definition of Kuo which safety is a human perceived quality that determine to what extent the management, engineering and operation of a system is free of danger to life, property and the environment (Kuo, 2007). One of elements of safety defined by Kuo is the operation of system. Since in this research, the focus of research is safety operation of Ro-Ro ferry, it is necessary to elaborate the Ro-Ro ferry characteristic. The Ro-Ro ferry characteristic in generic form is developed based on the paper published (Wang & Foinikis, 2001; Lois, Wang, Wall, & Ruxton, 2004). The generic Ro-Ro ferry is not a typical a ship but a hypothetical one consisting of all technical, engineering, operational, managerial and environmental (physical, commercial and regulatory) networks that interact during the transportation of cargoes and passengers. This generic model can be broken down to its component and more detailed levels which consist of four basic levels. Therefore, the generic Ro-Ro ferry can take the form shown in figure 4.

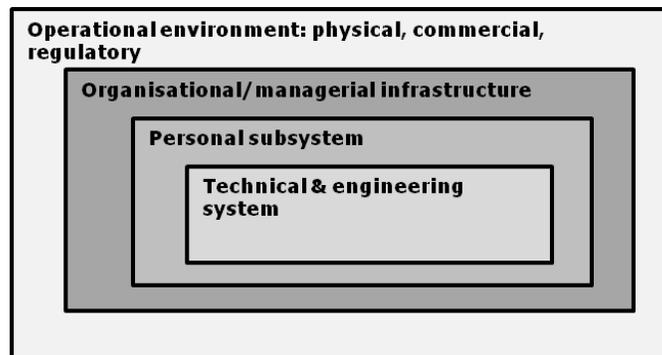


Figure 4 Generic Ro-Ro ferry component

The researches on Ro-Ro ferry has been conducted in the topic of shiphandling difficulty. Those papers intensively consider the role of shiphandling in ferry operation. The development model of shiphandling difficulty level for ferries at port water and strait water was proposed through the analytic hierarchy process (AHP) (Priadi, Tjahjono, & Benabdelhafid, Determining Ship Handling Difficulty Level for Ferries at Port/Strait Water, 2012A). On this model, 24 factors was identified and grouped into ship condition, shiphandling facility condition, navigation condition and weather condition. Further research in sensitivity analysis for that model is carried out (Priadi, Benabdelhafid, & Tjahjono, The AHP Ship Manoeuvring Difficulty Model for Ferry: A Sensitivity Analysis, 2012). The sensitivity analysis is conducted for testing the robustness of the shiphandling difficulty level to the variation of values on the factors. A decision tool for safety improvement of ship operated at port water and strait water was studied (Priadi, Tjahjono, & Benabdelhafid, A Ship Handling Difficulty Decision Tool for Safety Improvement of Ship Operated at Port Water and Strait Water based on the combination of AHP and Fuzzy Logic: study case ferry, 2012B). In this paper the combination approach of analytic hierarchy process and fuzzy logic was accounted. The use of analytic hierarchy process is to counter the complexity of situation and the use of fuzzy logic is to handle the uncertainty situation in shiphandling activities. This paper was improved further in the area of AHP FIS shiphandling model for determining ferry transportation safety (Priadi, Tjahjono, & Benabdelhafid, The AHP FIS Ship Handling Model for Determining Ferry Transportation Safety, 2012C). Further research was conducted for assessing safety of ferry routes (Priadi, Tjahjono, & Benabdelhafid, Assessing Safety of Ferry Routes by Ship Handling Model through AHP and Fuzzy Approach, 2012D). Several ferry routes such as Merak-Bakaheuni at Sunda strait, Ketapang-Gilimanuk at Bali strait, Padangbai-Lembar at Lombok strait was elaborated. The shiphandling difficulty model is also used for determining safety criteria of ferry operation (Priadi, Benabdelhafid, & Tjahjono, Shiphandling Fuzzy Logic Approach for Determining Safety Criteria of Ferry Operation, 2013). In this research, based on the simulation the safety criteria can be formulated. The shiphandling difficulty model for ferry (SHDMF) is also validated through simulator experiment (Priadi, Tjahjono, Benabdelhafid, & Sunaryo, Determining Risk Accidents based on Shiphandling Difficulty Model for Ferry: A validation approach, 2013).

In conclusion, the use of shiphandling model difficulty for ferry (SHDMF) can be applied for determining the transport supply chain in supporting the tourism industry. We assume that when the shiphandling difficulty is higher than the transport supply chain is lower and it may cause less in supporting tourism industry. This assumption can be illustrated in figure 5.

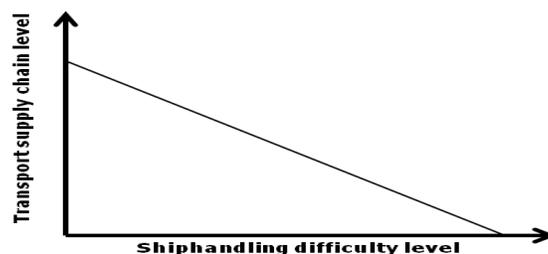


Figure 5 Relationship shiphandling difficulty & transport supply chain

III. METHODS

Methods use for this research is divided into two steps. The first step is the development of a conceptual framework of transport supply chain for tourism industry based on the previous related work. The second step is the application of shiphandling difficulty for ferry through simulation scenario for Bali Strait. The procedure of simulation is commenced from the gathering of Ro-Ro ferry movement at Bali Strait, the identification of Ro-Ro dangerous position, calculation of shiphandling difficulty level by used of SHDMF model and result analysis.

The simulation with real data is performed for ferry traffic at Sunda Strait. The simulation used several ferry positions (FP) for several ferry extracted from recorded AIS (Automatic Identification System) data installed in Ketapang port. The AIS equipment was installed personally due to the unavailability of sea traffic recording and monitoring system. The shipplotter software is used and the recorded AIS data can be replayed with this software. The ferry route is divided into several regions based on the grid cell concept (Anatec, 2006). The navigation chart layout is illustrated in figure 6.

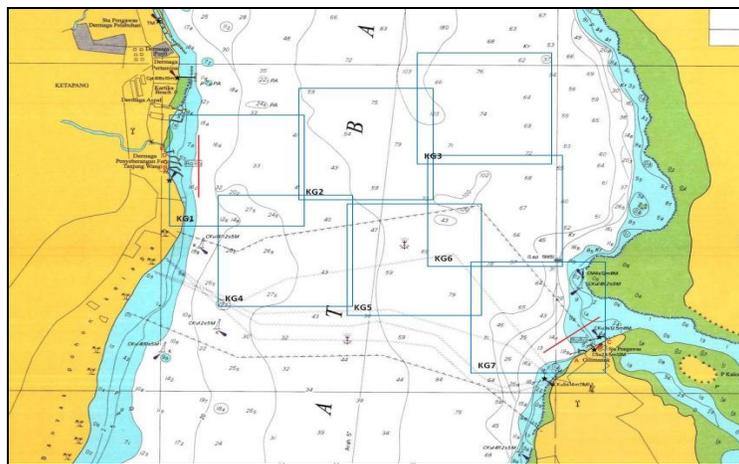


Figure 6 The division of Ketapang-Gilimanuk region

For this purpose, the AIS data on 4th January 2013 is assigned. The weather data is obtained from Indonesia Meteorological agency (BMKG). The certain ferry position, especially when assumed in the dangerous situation is picked up for further analysed using SHDMF. The detail of ferry position for each region is presented in table 1.

Table 1 Ferry position analyzed for Ketapang-Gilimanuk Region

No.	Region	Ferry Position	Remarks
1	KG1	26	
2	KG2	2	
3	KG5	6	
4	KG6	9	
5	KG7	14	

The calculation of shiphandling difficulty level through SHDMF based on the algorithm as follow:

$$SHDMF(z) = \frac{\int_z \mu(z).z dz}{\int_z \mu(z) dz} \quad (1)$$

SHDMF(z) : Centroid centre

$\mu(z)$: membership degree of z

$$\mu_{SHDMF}(z) = \max^i \left[\min[\mu(W_S^i), \mu(W_F^i), \mu(W_N^i), \mu(W_W^i)] \right] \quad (2)$$

Where $i = 1, 2, 3, \dots R$.

$\mu_{SHDMF}(z)$: membership function of shiphandling difficulty/output

$\mu(W_S^i)$: membership function of ship condition for i value

$\mu(W_F^i)$: membership function of shiphandling facility condition for i value

$\mu(W_N^i)$: membership function of navigation condition for i value

$\mu(W_W^i)$: membership function of weather condition for i value

$$R_{MISO}^i: (W_S \times W_F \times W_N \times W_W) \rightarrow (SHDMF_i) \quad (3)$$

$$R = \{R_{MISO}^1, R_{MISO}^2, \dots, R_{MISO}^n\} \quad (4)$$

Where, R: Rules, MISO: Multiple Input Single Output, WS, WF, WN, WW: premises/antecedent, SHDMFi: Implication/consequence.

IV. RESULTS

The development of generic Ro-Ro ferry characteristic is based on the previous related work as shown in the section of related work. The main idea is the generic form of four basic levels which compromise of technical and engineering system, personal subsystem, organisational/managerial infrastructure and operational environment. In this paper, our focus is the detail level of operational environment because this is the main reason for connecting between transport supply chain and tourism industry. In the level of operational environment, Ro-Ro ferries follow the general pattern that all internationally trading cargo ships do, but they differentiate in various aspects as illustrated in figure 7.

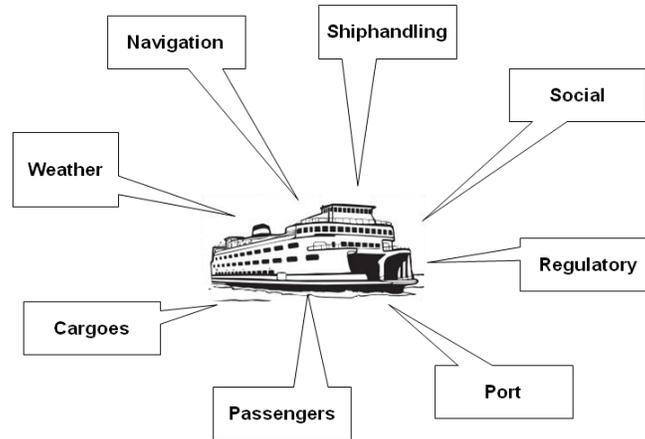


Figure 7 Generic Ro-Ro ferry for environment operational element

There are eight aspects in operational environment and it can be described as follows:

- Port/Terminal for Ro-Ro ferry is generally designed specifically. It is because the process of loading-unloading is different with other types of ship. For passengers, the access to the ship is by using passenger door. If this door is not available then passengers may use ramp door to board the ship. For cargo loading-unloading, this type of ship general use ramp door as main access situated at bow, hull and stern.
- Passengers are commonly carried by this type of vessel. There are three possibilities the passengers may enter the ship. The first possibility, passengers enter the ship through the passenger access. Second, the passengers enter the ship through their vehicles. After their vehicle was parked, the passengers go to passenger deck. Third, if there is no passenger access, passengers may use ramp door. Generally, passengers aboard the ship firstly followed by vehicle that also uses the ship. During voyage, passengers should stay in passenger deck and they are not allowed in car deck.
- The cargoes for this type of ship are cargo that has been loaded by a vehicle having wheels such as bus, truck, car, lorry etc. The ship does not provide loading-unloading equipment. The only available is ramp door access. After the vehicles enter the ship and place on the specified position, the vehicles will be lashed to prevent the movement during the voyage.
- Weather in nature is the aspects which may hinder the operation of Ro-Ro ferries. The weather is an important aspect in the operation of this type of ship. Generally, the Ro-

Ro ferry has specific design therefore the vehicle's deck is an open space without longitudinal bulkhead. This causes the movement of the vehicle can affect the stability of ship. The movement of vehicle is generally caused by the movement of ship against the waves that cause ship has 6 degree freedom of ship motion. In addition to the waves, the wind also affects ships because of the large enough opening surface above sea water level compared to other types of ships. The other factor in this aspect is swell, sea current, visibility, the influence of the day or night.

- Navigation is operational of Ro-Ro ferries by their movement from place of depart and place of arrival. In navigation, there are several types of navigation based on the areas such as ocean navigation, coastal navigation, port navigation and river navigation. Ro-Ro ferries are generally navigating in crossing area which has coastal navigation characteristics.
- Shiphandling is a guiding vessel to achieve the objective of navigation. Shiphandling relates to the manoeuvrability of ship at port at sea. For this type of ship, generally shiphandling activities are done directly by ship officer without the assistance of pilot. The reason is the frequency of Ro-Ro ferry voyage is high enough so the ship officers considered have sufficient experience and knowledge for such ferry route.
- Social aspect is much more relating to the passengers' relationships while on board. The passengers of this type typically consist of passengers who are aboard as public passengers and the drivers of vehicles which are transported by this ship. The service of passengers during voyage is also a social aspect that will affect the customer satisfaction.
- Regulatory aspect relates to the international and national requirements for the operational of Ro-Ro ferries. The international regulations refer to requirements issued by IMO, while the national requirements are to fulfil the additional rules in the operation of Ro-Ro ferry on crossing route.

The relationship between transport supply chain and Ro-Ro ferry safety especially in shiphandling matter is illustrated in figure 8. The input of the flowchart is taking form of natural resources, human resources, financial resources and information resources. Those inputs are used to create the tourism product such natural tourism, artificial tourism, culinary tourism, culture tourism etc. Then the tourism production is distributed in the various forms of promotion and publicity. The next process is tourism consumer which the tourist will savour tourism product. At the end is the process of disposal. The disposal process is taking form in consumer satisfaction to the tourism product. It is also interpreted that each of process consists of logistic service where the role of transportation is taking a place. Further, the transportation role performance will be affected by transport supply chain where the safety boundary of shiphandling difficulty takes a role. The transport supply chain performance generally takes form of efficiency (cost, assets), effectiveness (reliability, flexibility, responsiveness) and safety. Therefore, it is clear that shiphandling difficulty for Ro-Ro ferry will determine the overall tourism industry in form of transport supply chain performance.

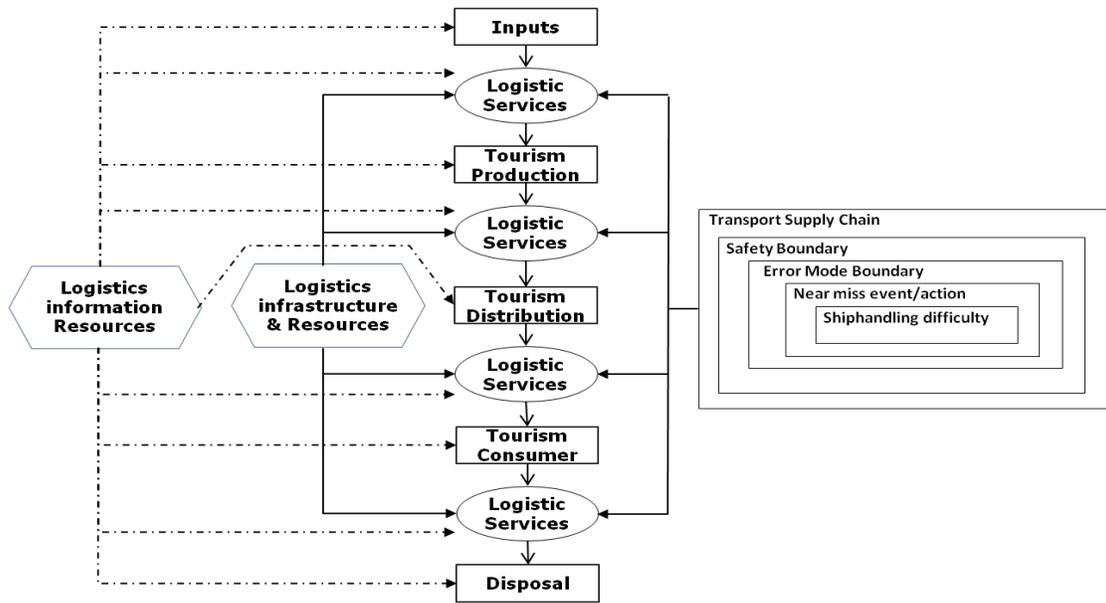


Figure 8 The relationship of logistic system & transport supply chain

Based on the conceptual framework of tourism industry and transport supply chain especially in the element of shiphandling difficulty, the simulation of scenario for Bali strait is performed. The simulation is calculated by using of shiphandling difficulty model for ferry (SHDMF). The analysis is focused for region KG1 where it is assumed some dangerous situation is occurred. The detail of SHDMF result is illustrated in figure 9. For all ferry position, result of the SHDMF is in term of neither safe/dangerous shiphandling difficulty level and it is fallen under the marginal zone. It is shown also the variation on the input of navigation situation and weather condition.

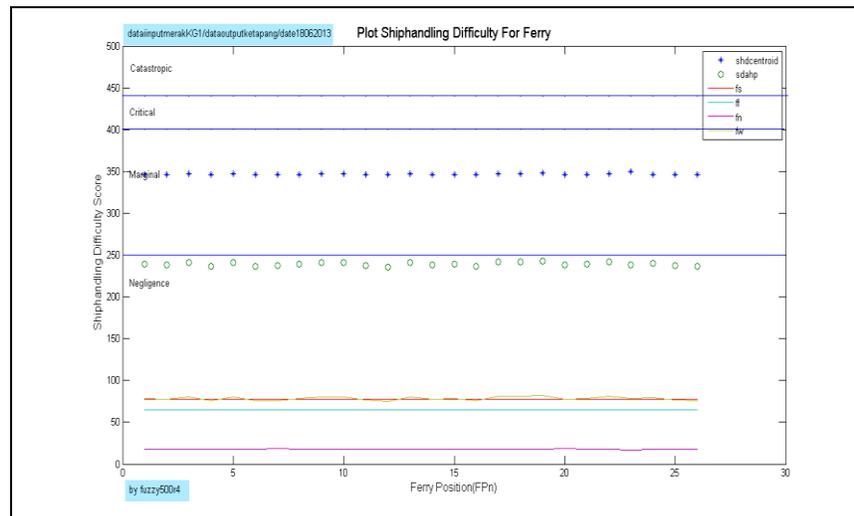


Figure 9 SHDMF result for KG1 region

The result of SHDMF in region KG 1 showed that the shiphandling difficulty level is in the marginal zone. The overall result for simulation is presented in figure 10.

shiphandling difficulty level	Extremely Dangerous						}	Catastropic
	Fairly Dangerous							Critical
	Somewhat dangerous						}	Marginal
	Neither safe/dangerous							
	Somewhat safe						}	Negligence
	Fairly safe							
	Extremely safe							
		KG1	KG2	KG5	KG6	KG7		
		Bali Strait Region						

Figure 10 SHDMF result for Bali Strait region

V. CONCLUSION AND FUTURE WORK

The overall result of shiphandling difficulty level for Ro-Ro ferry for Bali Strait is on the neither safe/dangerous level which is under marginal rank. It means in general situation, there is no special attention in relation transport supply chain. Even though the shiphandling difficulty on the level of neither safe/dangerous, it does not mean that there is no potential risk of accident which breaks the safety boundary. If the safety boundary is penetrated by shiphandling difficulty, the transport supply chain is also disturbed and further it will affect the performance of transport supply chain. Nevertheless, this research is only taking into account of Ro-Ro ferry transportation for supporting the transport supply chain. There are some constraints in this research such as the assumption that the number of passengers in the Ro-Ro ferry is considered as tourist while in the real condition is not always the case. The other constraint is the development of generic Ro-Ro ferry characteristic that is the initial development and it is need for further improvement based on the others views such as human machine interaction approach. The further effort in transport supply chain management research based on this research result needs to be done for advance supporting the economic corridor 5 Bali and Nusa Tenggara. Hence the objective of MP3EI could be achieved accordingly.

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DEVELOPING AN OPTIMISATION MODEL FOR ESTIMATING AGGREGATE SUPPLY CHAIN OPERATIONS OUTPUT IN A TRANSIENT QUEUING NETWORK

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Abstract

This research proposes to improve robustness of the supply chain queuing network models, such as optimal aggregate work input in regarding to the objective function, cost of goods in process (GIP), inventory, outcome etc. The objective of this research is to develop a framework for supply chain operations output in a transient queuing network. We apply this in two possible ways in relation to each other. Firstly, the application of linearised model in the non-linear optimisation model. Secondly, we approximate period τ to apply directly in the non-linear optimisation model. The integration of both ways leads to a precise output. The application in a real industry, limitation and future research topic are also presented.

Keywords: Supply Chain Operations Unit Control, Aggregate Model of Supply Chain Operations Unit, Transient Queuing Network.

1. Introduction

Refer to Mattfeld (2006), the supply chain operations unit means any supply chain department that consists of operation tasks on specific goods based upon detail scheduling of work orders. As a whole industry (the so-called supply chain network) contains an enormous task in both

theory and practice, the importance of planning aggregate goods flows models is easily seen. Since the aggregate goods flow model (the so-called aggregate goods model) is the combination of continuous goods flow (usually expressed in hours of work), it is clear that this model has to be synchronised within the dynamic behaviour of supply chain operations units as a function of the work input, time-dependent, time units of capacity etc. Therefore, the objective of this research is to develop a framework for supply chain operations output in a transient queuing network.

The paper is organised as follows. Section 2 illustrates the background of the models used in this research and some relevant literature. Section 3 describes the formulation model. Section 4 presents collaboration with a firm. Finally, section 5 draws conclusions and recommendations from this research.

2. Literature Reviews

This paper applies concept of Supply Chain Operations Control Systems (SCOCS) based upon Meal (1984). In terms of the transient behaviour of supply chain operations units, it begins with Odoni and Roth (1983) who consider a M/M/1 system. If at time $t = 0$, the system is empty and in the stationary state (arrival rate $\lambda < \text{service rate } \mu$), the expected number of goods in queue at time t (Q_t) can exponentially converge to follow an exponential function if t is sufficiently large.

$$Q_t = Q_\infty \cdot \left(1 - e^{-t/z}\right) \quad : \text{for } t \geq 0 \quad (1)$$

Lin and Cochran (1990) and Stahlman and Cochran (1998) apply dynamic metamodelling and base the transient behaviour upon the equation (1) as a background to calculate aggregate planning of a number in queues. Zäpfel and Missbauer (1993) modify a mathematical

formulation in Karmarkar (1989) in an aggregate model for a job shop. They present the simulation results of optimisation model in comparison between dynamic parameter adjustments and load oriented order release with standard parameter setting.

Missbauer (2002) and (2000) use a sound theoretical analysis of the transient behaviour of queuing networks in the aggregate order release planning. Such a model determines the optimal aggregate work input into the supply chain operations unit in regard to the objective function, for example, the cost of GIP, finished goods inventory and outcome etc. The model can deliver a high performance, but there are some weaknesses shown in the result. Particularly, in constant high utilisation, a high standard deviation of the due-date deviation can obtain some late delivered goods up to five periods. There are, in Missbauer (2000), some recommendations to improve the model but this research aims to enhance even further in the direction of supply chain operations

3. The Formulation Model

According to Missbauer (2002) and (2000), particularly from the equation (2) to (8). The rest of the equations are newly developed by the authors. The objective function of the model is to minimise some of the holding costs of GIP and finished goods inventory without considering overtime. The following are the variables and parameters used in the model.

Variables:

\hat{W}_{jmt} work of goods group j waiting at operations centre m or at one of the non-bottlenecks that have to be passed between the previous bottleneck operations and operations centre m at the end of period t ,

$W_{\hat{j}mt}$	work of goods group \hat{j} waiting at operations centre m at the end of period t ,
$I_{\hat{j}t}$	inventory of goods group \hat{j} at the end of period t , $\hat{I}_{\hat{j}t}$ amount of work of goods group \hat{j} at the end of period t , with no more bottleneck operations to be performed ($I_{\hat{j}t}$ plus work at non-bottlenecks after the last bottleneck operations),
$R_{\hat{j}t}$	released work of goods group \hat{j} in period t ,
$X_{\hat{j}mt}$	output of goods group \hat{j} from operations centre m in period t ,
$I_{\hat{j}t}, \hat{I}_{\hat{j}t}, R_{\hat{j}t}$	measured in hours of work,
$\hat{W}_{\hat{j}mt}, W_{\hat{j}mt}, X_{\hat{j}mt}$	measured in hours of work at operations centre m .

Parameters:

$D_{\hat{j}t}$	finished goods demand for goods group \hat{j} in period t (measured in hours of work),
$h_{\hat{j}mt}$	GIP holding costs for goods group \hat{j} waiting at operations centre m in period t (for one hour of work),
$l_{\hat{j}t}$	finished goods holding costs for goods group \hat{j} (for one hour of work),
$\tilde{p}_{\hat{j}im}$	average load arriving at operations centre m when one hour of work of goods group \hat{j} is finished at operations centre i ,

$z_{\hat{j}m\tau}$ proportion of the output of goods group \hat{j} from operations centre i to operations centre m that arrives at m at τ periods after completion at i (delayed by the non-bottlenecks between i and m and by the transportation time).

The Objective function is to minimize the final goods inventory as following:

$$\text{Min} \sum_{\hat{j}=1}^{\hat{J}} \sum_{m=1}^M \sum_{t=1}^T \hat{W}_{\hat{j}mt} \cdot h_{\hat{j}mt} + \sum_{\hat{j}=1}^{\hat{J}} \sum_{t=1}^T \hat{I}_{\hat{j}t} \cdot l_{\hat{j}t} \quad (2)$$

The restrictions are:

The equation (3) is the definition of the GIP at the bottleneck operations centres. The sources of the input are the output of the preceding operations centres and the release of orders. The input is delayed by the flow times at the non-bottleneck operations centres. $i = 0$ means order release.

$$W_{\hat{j}mt} = W_{\hat{j},m,t-1} + \sum_{i=1}^M \sum_{\tau=0}^{\infty} X_{\hat{j},i,t-\tau} \cdot \tilde{p}_{\hat{j}im} \cdot z_{\hat{j}im\tau} + \sum_{\tau=0}^{\infty} R_{\hat{j},t-\tau} \cdot \tilde{p}_{\hat{j}0m} \cdot z_{\hat{j}0m\tau} - X_{\hat{j}mt} \quad \text{for all } \hat{j}, m, t. \quad (3)$$

The equation (4) is the definition of the total GIP including the orders at the non-bottleneck operations centres.

$$\hat{W}_{\hat{j}mt} = \hat{W}_{\hat{j},m,t-1} + \sum_{i=1}^M X_{\hat{j}it} \cdot \tilde{p}_{\hat{j}im} + R_{\hat{j}t} \cdot \tilde{p}_{\hat{j}0m} - X_{\hat{j}mt} \quad \text{for all } \hat{j}, m, t. \quad (4)$$

The equation (5) is the definition of the finished goods inventory. The input is delayed. The index 0 in p and z denotes completion in operations centre.

$$I_{\hat{j}t} = I_{\hat{j},t-1} + \sum_{m=1}^M \sum_{\tau=0}^{\infty} X_{\hat{j},m,t-\tau} \cdot \tilde{p}_{\hat{j}m0} \cdot z_{\hat{j}m0\tau} - D_{\hat{j}t} \quad \text{for all } \hat{j}, t. \quad (5)$$

The equation (6) is the definition of the work finished at the bottlenecks operations, including finished goods inventory and the orders at the non-bottleneck resources.

$$I_{\hat{j}t} = \hat{I}_{\hat{j},t-1} + \sum_{m=1}^M X_{\hat{j}mt} \cdot \tilde{p}_{\hat{j}m0} - D_{\hat{j}t} \quad \text{for all } \hat{j}, t. \quad (6)$$

Missbauer (2000) mentions that for the numerical analysis of a transient M/M/1 system, by using the time dependent state probabilities, it has been found that the relationship between expected load and expected output in period t is not independent from the previous period. This means the relationship that holds for the stationary state does not hold for the non-stationary state.

We know that we should consider the expected output of a operations centre m in period t in different goods group \hat{j} ($x_{\hat{j}mt}$) as a function of the inputs from the previous periods. The equation (7) presents the most general form of $x_{\hat{j}mt}$.

$$X_{\hat{j}mt} \leq f_{\hat{j}m}(A_{\hat{j}m\tau}; \tau = 1, 2, \dots, t) \quad \text{for all } \hat{j}, m, t. \quad (7)$$

where $A_{\hat{j}m\tau}$ is the planned goods input of goods group \hat{j} to operations centre m in period τ . The following equations aim to enhance the optimisation model (2) – (6) by attempting to calculate x_{mt} in the linearised form of non-linearity and later using a τ approximation to obtain the output directly from non-linearity optimisation model.

Presumably there is only one goods group and omitting index \hat{j} (which means that allocating available capacity to goods is not considered), then we can use the model as a single operations centre:

Goods using A_{mt} by beginning at the end of period $t-1$ the planned GIP at operations centre m is $W_{m,t-1}$. The planned input to operations centre m during period t is A_{mt} which is both delayed by the non-bottleneck operations centre defined as follows:

$$A_{mt} = \sum_{i=1}^M \sum_{\tau=0}^{\infty} X_{j,i,t-\tau} \cdot \tilde{p}_{jim} \cdot z_{jim\tau} + \sum_{\tau=0}^{\infty} R_{j,t-\tau} \cdot \tilde{p}_{j0m} \cdot z_{j0m\tau} \quad (8)$$

If we assume that we know the functional relationship between average input (= average output) and average level of GIP at the operations centre m for the stationary state. It means we know the average GIP to which the w_{mt} would converge if an input rate of A_{mt} per period were maintained considerably long; we denote this value as $E(w^{A_{mt}})$. There are two possibilities to enhance the model above and both of them are related to each other, using a linearised model and using a non-linear model directly with the τ approximation.

3.1 The Application of Linearised Model in the Non-Linear Optimisation Model

In order to enhance the models above, there are two possibilities for GIP, increase and decrease, as presumably A_{mt} will increase or decrease the GIP level. Taha (1976 p. 577 ff.) suggests to use Separable Convex Programming which can be simplified in two cases as follows.

1. Assuming that A_{mt} will lead to an increase in the GIP level (that is, $E(W^{A_{mt}}) > W_{m,t-1}$), which leads to the following equation:

$$W_{mt} = W_{m,t-1} + [E(W^{A_{mt}}) - W_{m,t-1}] \cdot (1 - e^{-t/\tau}) \quad (9)$$

According to the Figure 1:

- The K^{th} breaking of i point of the function W_{mt} is determined by $a_{ki}; k = 0, 1, 2, \dots, K_i$.
- The t_{ki} defines the incremental of the variable t_i in the range $(a_{k-1,i} \text{ to } a_{ki}) k = 1, 2, \dots, K_i$.
- The ρ_{ki} is the corresponding slope of the line segment in the same range.

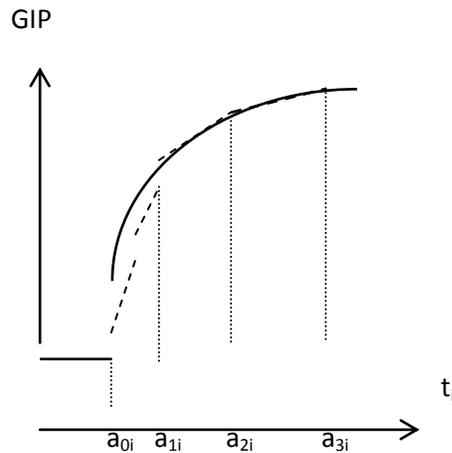


Figure 1: W_{mt} level in the proces

$$\text{If } t \leq a_{0i} : W_{mt} = W_{m,t-1} \quad (10)$$

$$\text{If } t > a_{0i} : W_{mt} = \sum_{k=1}^{K_i} (\rho_{ki} t_{ki}) + W_{mt}(a_{0i}) \quad (11)$$

$$t_i = \sum_{k=1}^{K_i} t_{ki} \quad (12)$$

provided that $0 \leq t_{ki} \leq a_{ki} - a_{k-1,i}$, $K = 1, 2, \dots, K_i$

We have the balance equation:

$$W_{mt} = W_{m,t-1} + A_{mt} - X_{mt} \quad (13)$$

We substitute (11) into (13) which can obtain the X_{ki} :

$$X_{mt} = W_{m,t-1} + A_{mt} - [\sum_{k=1}^{K_i} (\rho_{ki} t_{ki}) + W_{mt}(a_{0i})] \quad (14)$$

Note that:

- (11) and (14) can only holds if $E(W^{A_{mt}})$ is finite and if $E(W^{A_{mt}}) > W_{m,t-1}$
- τ depends upon the utilisation and the method to obtain τ will be discussed in detail in Section 3.2 and in the Appendix.

2. Presuming that A_{mt} will lead to a **decrease** in the GIP level (that is, $E(W^{A_{mt}}) < W_{m,t-1}$), which leads to the following equation:

$$W_{mt} = W_{m,t-1} + [W_{m,t-1} - E(W^{A_{mt}})] \cdot (e^{-t/\tau}) \quad (15)$$

According to the Figure 2:

- The K^{th} breaking of i point of the function W_{mt} is determined by $a_{ki}; k = 0, 1, 2, \dots, K_i$.
- The t_{ki} defines the incremental of the variable t_i in the range $(a_{k-1,i}$ to $a_{ki})$, $k = 1, 2, \dots, K_i$.
- The ρ_{ki} is the corresponding slope of the line segment in the same range.

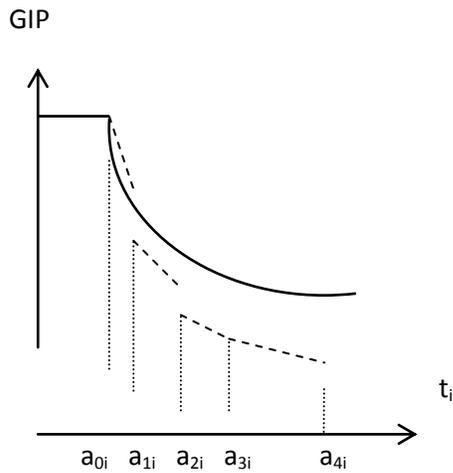


Figure 2: W_{mt} level in the process

$$\text{If } t \leq a_{0i} : W_{mt} = W_{m,t-1} \quad (16)$$

$$\text{If } t > a_{0i} : W_{mt} = \sum_{k=1}^{K_i} (\rho_{ki} t_{ki}) + W_{mt}(a_{0i}) \quad (17)$$

$$t_i = \sum_{k=1}^{K_i} t_{ki} \quad (18)$$

provided that $0 \leq t_{ki} \leq a_{ki} - a_{k-1,i}$, $K = 1, 2, \dots, K_i$

We have the balance equation:

$$W_{mt} = W_{m,t-1} + A_{mt} - X_{mt} \quad (19)$$

We substitute (17) into (19) which can obtain the X_{ki} :

$$X_{mt} = W_{m,t-1} + A_{mt} - [\sum_{k=1}^{K_i} (\rho_{ki} t_{ki}) + W_{mt}(a_{0i})] \quad (20)$$

Note that:

- (17) and (20) can only hold if $E(W^{A_{mt}})$ is finite and if $E(W^{A_{mt}}) < W_{m,t-1}$
- τ depends upon the utilisation and the method to obtain τ will be discussed in detail in Section 3.2 and in the Appendix.

3.2 The Approximation of the τ

Missbauer (2000) suggests using the equation (9) as shown again in equation (21), to substitute for W_{mt} at the balance equation (22) then we can obtain the output X_{mt} in equation (23).

$$W_{mt} = W_{m,t-1} + [E(W^{A_{mt}}) - W_{m,t-1}] \cdot (1 - e^{-t/\tau}) \quad (21)$$

$$W_{mt} = W_{m,t-1} + A_{mt} - X_{mt} \quad (22)$$

$$X_{mt} = A_{mt} - [E(W^{A_{mt}}) - W_{m,t-1}] \cdot (1 - e^{-t/\tau}) \quad (23)$$

According to Odoni and Roth (1983) and Newell (1971), the utilisation factor forms, based upon the relaxation time of the queue, would be of order as follows:

$$\tau = \frac{(C_A^2 + C_S^2)}{[2.8\mu(1 - \sqrt{\rho})^2]} \quad (24)$$

The proof of using the equation (24) is given in the appendix.

4. The Collaboration with a Firm

A major warehouse and supply chain operations firm interested in collaborating, this firm is a rapidly growing Vietnam warehouse and supply chain operations. The warehouse and supply chain operations process takes place in a number of areas in Vietnam which employs approximately 300 workers.

Its current warehouse was designed and used for years based upon the goods layout type. There is some evidence that if it wants to improve the supply chain operations, there is a need to apply a new model as developed in this research. As there are various types of machines used in the processes, it is inappropriate to design and assess the new operations plant based upon the experience of an expert alone. Therefore, it is crucial that this research should guide the assessment of each operations plan by using simulation and other models.

The commercial simulation software is performed the simulation tasks as recommended by Kelton *et al.* (2002). The relevant information from the simulation consists of the output of the system, Goods in Process (GIP) and the utilisation of the transporters. The step-by-step explanation is below.

4.1 The assessment in simulation model

4.1.1 Data collection

The list of data, in order to create a simulation model, is as follows:

1. Goods to transport.
2. Processing time, moving time, and inspection time of each goods.
3. Schedule of activity and transportation time. (demand, load carrying etc.)
4. Number and quantity of operations, goods handlings and operators.
5. Rule and sequence of operations, goods handlings and operators.
6. Plant layout and distance from each station.
7. Arrival time, order parts and goods.
8. Mean Time Before Failure (MTBF of Machines) and Mean Time to Repair (MTTR of Machines) in the operations.

Based upon the above data, most events can occur randomly: we therefore need to assign the probability distribution. Kelton *et al.* (2002) suggest using a triangular form as it is commonly used in situations in which the exact form of the distribution is not known but the minimum, maximum, and most likely values are available. The triangular distribution is more practical and understandable to use than other distributions, see Kelton *et al.* (2002).

4.1.2 Building the simulation model

This can be done in the computer programming based upon all gathered data above. There are current plant layout including the output of the system, GIP and the utilisation of the transporters. The next step is to test the precision of the simulation result with the real current data result by using the statistical analysis.

4.1.3 Statistical and verification analysis

In performing the Statistical Analysis, the relevant measurement is following:

- Length of each simulation run
- Number of independent simulation runs
- Length of the warm-up period

The Statistical Program which contains standard t-test and F-test, as suggested by Kelton *et al.* (2002) is used, we have compared the result from a simulation run with the real current data result of the factory on the output quantity based upon the following:

- Collection of data in 2,400 minutes or 40 working hours.
- Warm-up period of 3,000 minutes or 50 working hours.
- Run simulation 30 replications 30 times.

The verification results of the output from statistical analysis is illustrated below.

t-test

t-test $\alpha = 0.025$ (97.5 % confidence level)

Hypothesis for testing

$H_0 : \mu_1 = \mu_2$: (simulation average output = real data average output)

$H_1 : \mu_1 \neq \mu_2$: (simulation average output \neq real data average output)

$t = 0.5655$, P-value = 0.546695 (which is higher than 0.025)

Accept H_0 Reject H_1

F-test

Variance of simulation program 1,524.88, variance of real data 1,851.36

F-test $\alpha=0.025$ (97.5 % confidence level)

Hypothesis for testing

$H_0 : \sigma_1^2 = \sigma_2^2$, (variance of simulation program = variance of real data)

$H_1 : \sigma_1^2 \neq \sigma_2^2$, (variance of simulation program \neq variance of real data)

Accept H_0 Reject H_1

As a result of the above, we can conclude that the data in the Simulation Model can be used to analyse further.

4.1.4 New improved operations plans

After the simulation results have been accepted to use in further analysis, the next step is to apply operations models equation 2-24 that are the aggregate supply chain operations output in a transient queuing network and compared to the output from the stationary state.

4.1.5 The simulation result

As mentioned earlier, the relevant results are obtained in comparison between new transient queuing network model and stationary queuing network model as follows:

1. Output of the System (Volume in Unit of Goods)
2. Goods in Process (GIP)
3. Transporters Utilisation

Table 1: Comparison between transient queuing network and stationary queuing network

Interested Result	Current Plan	New Plan (measured by transient queuing network model)	New Plan (measured by stationary queuing network)
Average O/P 55 h.	9,854 units	12,366 units	9,988 units
GIP	5,987 units	6,452 units	6,875 units
Transporters Utilisation	C1 80.27 % C2 78.55 % C3 4.47 % Fork Lift 24.11%	C1 83.44% C2 89.74% C3 5.12% Fork Lift 32.24%	C1 81.23% C2 81.73% C3 4.82% Fork Lift 30.25%

Remark: C1 is Goods Handling Cart Type 1
C2 is Goods Handling Cart Type 2
C3 is Goods Handling Type Pallet Jack

Table 1 illustrates the comparison between the Current Plant layout and the New Plant layout. It shows that using new developed model would be better than the plan using Missbauer's model and the Current Plan in terms of average output of the system at 20 working hours. On the other hand, new developed model offers minimum GIP which is preferable to stationary queuing network and the Current plan. Regarding the Transporters Utilisation, the new developed model appears better, but only marginally, than the current plan. According to the management of the firm, the most important factors are the average output and GIP, therefore the new developed model plan remains very competitive.

5. Conclusions and Recommendations

The contribution of this research lies in the development of a new approach that is flexible and applicable to supply chain company to improve output of the system. In terms of limitations, this research initially aims to support the decision making problem in transient queuing network, therefore, it may not be appropriate in other types of queuing network although the model itself is feasible and applicable to any industry. The advantage of this research is that the user can apply the optimal model and set to manage as needed

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Appendix

According to Section 3.2, the work in process W_{mt} and the output X_{mt} in equation (21) and (23) which have been shown again in equation (25) and (26) respectively.

$$W_{mt} = W_{m,t-1} + [E(W^{A_{mt}}) - W_{m,t-1}] \cdot (1 - e^{-t/\tau}) \quad (25)$$

$$X_{mt} = A_{mt} - [E(W^{A_{mt}}) - W_{m,t-1}] \cdot (1 - e^{-t/\tau}) \quad (26)$$

Intuitively, the coefficient of variation (ratio of standard deviation) is a meaning of the relative “variability”, the more coefficient of variation, means the more variability.

$$\tau \propto C_A^2 + C_S^2 \quad (27)$$

where C_A is the coefficient of variation of the interarrival.

C_S is the coefficient of variation of the service times.

And; if system approach saturation: the utilisation factor ($\rho = \frac{\lambda}{\mu}$) $\rightarrow 1$, it requires a great amount of time to reach equilibrium which means τ varies directly on the power of $1/(1-\rho)$ or

$$\tau \propto \frac{1}{(1-\rho)^2} \quad (28)$$

Finally, if we fix ($\rho = \frac{\lambda}{\mu}$), we can test 2 queuing systems which are all identical except the time unit measured. For example, System 1, λ_1 and μ_1 per min., System 2 per hour, $\lambda_2 = 60\lambda_1$ and $\mu_2 = 60\mu_1$.

(λ = arrival rate), (μ = service rate), $Q(t)$ = Expected number of customer at time (t).

γ = difference in time system

$$Q_2(t) = Q_1(\gamma): \gamma = \frac{\mu_2}{\mu_1} = \frac{\lambda_2}{\lambda_1} = 60 \quad (29)$$

As the time constant τ_1 and τ_2 are measured in the same system so:

$$Q_2(\tau_2) = Q_1(\tau_1) \quad (30)$$

$$Q_2(\tau_2) = Q_1\lambda(\tau_2) \quad (31)$$

$$\tau_1 = \gamma\tau_2 = \frac{\mu_2}{\mu_1}\tau_2 \quad (32)$$

$\tau_1\mu_1 = \tau_2\mu_2 = \text{Constant}$ which means:

$$\tau \text{ must be directly proportionate to } \frac{1}{\mu} \quad (33)$$

According to equations (27), (28) and (33), Newell (1971) suggest using the approximation of τ which is based upon using the *diffusion approximation* for queues under heavy traffic and later is enhanced to be even more precise by Odoni and Roth (1983) to obtain τ as in equation (34).

$$\tau = \frac{(C_A^2 + C_S^2)}{[2.8\mu(1 - \sqrt{\rho})^2]} \quad (34)$$

Then we can substitute equation (34) in equation (23) or has been shown again in equation (35).

$$X_{mt} = A_{mt} - [E(W^{A_{mt}}) - W_{m,t-1}] \cdot (1 - e^{-t/\tau}) \quad (35)$$

Degree of approximation of conjugate of signals (functions) belonging to the generalized weighted Lipschitz $W(L_r, \xi(t))$, $(r \geq 1)$ – class by $(C,1)(E,q)$ means of conjugate trigonometric Fourier series

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Abstract

Very recently, Sonker and Singh [16] determined the degree of approximation of the conjugate of 2π -periodic signals (functions) belonging to $Lip(\alpha, r)$ $(0 < \alpha \leq 1, r \geq 1)$ -class by using Cesàro-Euler $(C,1)(E,q)$ means of their conjugate trigonometric Fourier series. In the present paper, we generalize the result of Sonker and Singh [16] on the generalized weighted Lipschitz $W(L_r, \xi(t))$, $(r \geq 1)$ – class of signals (functions) by product summability $(C,1)(E,q)$ transform of conjugate trigonometric Fourier series. Our result also generalizes the result of Lal and Singh [6]. Few applications of approximation of functions will also be highlighted.

Key words and Phrases: Degree of approximation, weighted Lipschitz

$W(L_r, \xi(t))$, $(r \geq 1), (t > 0)$ – class of functions, (E,q) transform, $(C,1)$ transform, product summability $(C,1)(E,q)$ transform, conjugate Fourier series, Lebesgue integral.

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1. Introduction

The degree of approximation of functions belonging to $Lip\alpha$, $Lip(\alpha, r)$, $Lip(\xi(t), r)$ and $W(L_r, \xi(t))$, $(r \geq 1)$ – classes by general summability matrices has been proved by various investigators like Govil [1], Khan [3-5], Mohapatra and Chandra [15], Mittal et al. [8-9], Mittal and Mishra [7] and Mishra et al. [10-14]. Recently, Sonker and Singh [16] discussed the degree of approximation of the conjugate of signals (functions) belonging to $Lip(\alpha, r)$ class by $(C,1)(E,q)$ means of conjugate trigonometric Fourier series. But nothing seems to have been done so far to obtain the degree of approximation of conjugate of signals belonging to the generalized weighted Lipschitz $W(L_r, \xi(t))$ class by $(C,1)(E,q)$ product summability transforms. Weighted Lipschitz $W(L_r, \xi(t))$, $(r \geq 1)$ – class is generalization of $Lip\alpha$, $Lip(\alpha, r)$ and $Lip(\xi(t), r)$ – classes. In the present paper, an attempt to make advance study in this direction, a theorem on the degree of approximation of conjugate of signals (functions) belonging to the generalized weighted Lipschitz $W(L_r, \xi(t))$, $r \geq 1$ class by

product summability $(C,1)(E,q)$ transform of conjugate series of Fourier series has been established.

Let $L_{2\pi}$ be the space of all 2π -periodic and Lebesgue-integrable functions over $[-\pi, \pi]$. Then the Fourier series of $f \in L_{2\pi}$ at x is given by

$$f(x) : \frac{a_0}{2} + \sum_{n=1}^{\infty} (a_n \cos nx + b_n \sin nx) \equiv \sum_{n=0}^{\infty} A_n(x) \quad (1.1)$$

with n^{th} partial sum $s_n(f;x)$, called trigonometric polynomial of degree (or order) n , of the first $(n+1)$ terms of the Fourier series of f , a_n and b_n are the Fourier coefficients of f .

The conjugate series of Fourier series (1.1) is given by

$$\sum_{n=1}^{\infty} (a_n \sin nx - b_n \cos nx) \equiv \sum_{n=1}^{\infty} B_n(x). \quad (1.2)$$

Let $\sum_{n=0}^{\infty} u_n$ be a given infinite series with sequence of its n^{th} partial sums $\{s_n\}$. The (E,q) transform is defined as the n^{th} partial sum of (E,q) , $q > 0$ summability and we denote it by E_n^q .

If
$$E_n^q = \frac{1}{(1+q)^n} \sum_{k=0}^n \binom{n}{k} q^{n-k} s_k \rightarrow s, \text{ as } n \rightarrow \infty \quad (1.3)$$

then the infinite series $\sum_{n=0}^{\infty} u_n$ is summable (E,q) to a definite number s [2].

If
$$\tau_n = \frac{s_0 + s_1 + s_2 + \dots + s_n}{n+1} = \frac{1}{n+1} \sum_{k=0}^n s_k \rightarrow s, \text{ as } n \rightarrow \infty \quad (1.4)$$

then the infinite series $\sum_{n=0}^{\infty} u_n$ is summable to the definite number s by $(C,1)$ method. The $(C,1)$ transform of the (E,q) transform defines $(C,1)(E,q)$ product transform and denote it by $E_n^q C_n^1$. This if

$$C_n^1 E_n^q = \frac{1}{n+1} \sum_{k=0}^n (1+q)^{-k} \sum_{\nu=0}^k \binom{k}{\nu} q^{k-\nu} s_{\nu} \rightarrow s, \text{ as } n \rightarrow \infty \quad (1.5)$$

then the infinite series $\sum_{n=0}^{\infty} u_n$ is said to be summable by $(C,1)(E,q)$ method or summable $(C,1)(E,q)$ to a definite number 's'.

If $C_n^1 E_n^q \rightarrow s$ as $n \rightarrow \infty$ then the infinite series $\sum_{n=0}^{\infty} u_n$ or the sequence $\{s_n\}$ is said to be summable $(C,1)(E,q)$ to the sum s if $\lim_{n \rightarrow \infty} C_n^1 E_n^q$ exists and is equal to s .

$$s_n \rightarrow s \Rightarrow (E,q)(s_n) = E_n^q = \frac{1}{(1+q)^n} \sum_{k=0}^n \binom{n}{k} q^{n-k} s_k \rightarrow s, \text{ as } n \rightarrow \infty, (E,q) \text{ method is regular,}$$

$$\Rightarrow (C,1)((E,q)(s_n)) = C_n^1 E_n^q \rightarrow s, \text{ as } n \rightarrow \infty, (C,1) \text{ method is regular,}$$

$$\Rightarrow (C,1)(E,q) \text{ method is regular.}$$

A signal (function) is said to belong to the class $Lip\ \alpha$, if

$$|f(x+t) - f(x)| = O(|t^\alpha|) \quad \text{for } 0 < \alpha \leq 1, t > 0 \quad (1.6)$$

and $f(x) \in Lip(\alpha, r)$, for $0 \leq x \leq 2\pi$, if

$$\|f(x+t) - f(x)\|_r = \left(\int_0^{2\pi} |f(x+t) - f(x)|^r dx \right)^{1/r} = O(|t|^\alpha), \quad 0 < \alpha \leq 1, r \geq 1, t > 0. \quad (1.7)$$

For a given a positive increasing function $\xi(t)$, $f(x) \in Lip(\xi(t), r)$ if

$$\|f(x+t) - f(x)\|_r = \left(\int_0^{2\pi} |f(x+t) - f(x)|^r dx \right)^{1/r} = O(\xi(t)), \quad r \geq 1, t > 0 \quad (1.8)$$

Given positive increasing function $\xi(t)$, an integer $r \geq 1$, a signal (function) f is said to belong to the generalized weighted Lipschitz $W(L_r, \xi(t))$ -class [5], if

$$\left\| [f(x+t) - f(x)] \sin^\beta \left(\frac{x}{2} \right) \right\|_r = O(\xi(t)), \quad \beta \geq 0, t > 0. \quad (1.9)$$

If $\beta = 0$, then the generalized weighted Lipschitz $W(L_r, \xi(t))$ class coincides with the class $Lip(\xi(t), r)$, we observe that

$$W(L_r, \xi(t)) \xrightarrow{\beta=0} Lip(\xi(t), r) \xrightarrow{\xi(t)=t^\alpha} Lip(\alpha, r) \xrightarrow{r \rightarrow \infty} Lip\ \alpha \quad \text{for } 0 < \alpha \leq 1, r \geq 1, t > 0. \quad (1.10)$$

The L_r -norm of signal f is defined by

$$\|f\|_r = \left(\int_0^{2\pi} |f(x)|^r dx \right)^{1/r}, \quad (1 \leq r < \infty), \quad \text{and } \|f\|_\infty = \sup_{x \in [0, 2\pi]} |f(x)|. \quad (1.11)$$

A signal (function) f is approximated by trigonometric polynomials $\tau_n(f)$ of order n and the degree of approximation $E_n(f)$ is given by [17]

$$E_n(f) = \min_n \|f(x) - \tau_n(f; x)\|_r \quad (1.12)$$

in terms of n , where $\tau_n(f; x)$ is a trigonometric polynomial of degree n . This method of approximation is called Trigonometric Fourier Approximation (TFA) [8].

We note that E_n^q and $C_n^1 E_n^q$ are also trigonometric polynomials of degree (or order) n .

The conjugate function $\tilde{f}(x)$ is defined for almost every x by

$$\tilde{f}(x) = - \frac{1}{2p} \overset{p}{\underset{0}{\int}} y(t) \cot t/2 dt = \lim_{h \rightarrow 0} \overset{\infty}{\underset{0}{\int}} \frac{1}{2p} \overset{p}{\underset{h}{\int}} y(t) \cot t/2 dt \overset{0}{\underset{0}{\int}} \quad (\text{see [17, p. 131]}).$$

We use the following notations throughout this paper

$$\psi(t) = \psi_x(t) = f(x+t) - f(x-t),$$

$$\tilde{G}_n(t) = \frac{1}{2p(1+n)} \sum_{k=0}^n \frac{1}{(1+q)^k} \sum_{v=0}^k \frac{\cos(v + \frac{1}{2})t}{\sin(\frac{t}{2})}$$

2. Known Theorem

In a recent paper, Sonker and Singh [16] have studied the degree of approximation of functions belonging $Lip(\alpha, r)$ -class using $(C,1)(E, q)$ summability means of its conjugate Fourier series. They proved the following theorem:

Theorem 2.1. Let $f(x)$ be a 2π -periodic, Lebesgue integrable function and belong to the $Lip(\alpha, r)$ -class with $r \geq 1$ and $\alpha r \geq 1$. Then the degree of approximation of $\tilde{f}(x)$, the conjugate of $f(x)$ by $(C,1)(E, q)$ means of its conjugate Fourier series is given by

$$\|C_n^1 E_n^q - \tilde{f}\|_r = O(n^{-\alpha+1/r}), \quad n = 0, 1, 2, \dots, \quad (2.1)$$

provided

$$\left(\int_0^{\pi/(n+1)} \left(\frac{|\psi(t)|}{t^\alpha} \right)^r dt \right)^{1/r} = O((n+1)^{-1}), \quad (2.2)$$

$$\left(\int_{\pi/(n+1)}^\pi \left(\frac{t^{-\delta} |\psi(t)|}{t^\alpha} \right)^r dt \right)^{1/r} = O((n+1)^\delta), \quad (2.3)$$

where δ is an arbitrary number such that $(\alpha + \delta)s + 1 < 0$ and $r^{-1} + s^{-1} = 1$ for $r > 1$.

3. Main Theorem

Recently, Mishra et al. [14] have studied the degree of approximation of functions belonging to $W(L_r, \xi(t))$ -class through $(E, q)(C,1)$ means of conjugate Fourier series. In this paper, we use the $(C,1)(E, q)$ means of conjugate Fourier series of $f \in W(L_r, \xi(t))$ to determine the degree of approximation of the conjugate of f , which in turn generalizes the result of Sonker and Singh [16] and Lal and Singh [6]. More precisely, we prove

3.1 Theorem

If $\tilde{f}(x)$, conjugate to a 2π -periodic function f belonging to the generalized weighted Lipschitz $W(L_r, \xi(t))$, ($r \geq 1$)-class then its degree of approximation by $(C,1)(E, q)$ product summability means of conjugate series of Fourier series is given by

$$\left\| \overline{C}_n^1 E_n^q - \overline{f} \right\|_r = O\left((\sqrt{n})^{\frac{1}{r} + b} \frac{1}{\sqrt{n}} \right) \quad (3.1)$$

provided $\xi(t)$ satisfies the following conditions:

$$\left(\int_0^{\pi/\sqrt{n}} \left(\frac{t |\psi(t)|}{\xi(t)} \right)^r \sin^{\beta r} t/2 dt \right)^{1/r} = O\left(\frac{1}{\sqrt{n}} \right) \quad (3.2)$$

$$\left(\int_{\pi/\sqrt{n}}^{\pi} \left(\frac{t^{-\delta} |\psi(t)|}{\xi(t)} \right)^r dt \right)^{1/r} = O\left(\sqrt{n} \right)^\delta \quad (3.3)$$

and $\frac{\xi(t)}{t}$ is non-increasing in 't' (3.4)

where δ is an arbitrary number such that $s(1-\delta+\beta)-1 > 0$, $\frac{1}{r} + \frac{1}{s} = 1$, $1 \leq r \leq \infty$, conditions

(3.2) and (3.3) hold uniformly in x and $\overline{C}_n^1 E_n^q$ is $(\overline{C}, 1)(E, q)$ means of the series (1.2) and

$$\overline{f}(x) = - \frac{1}{2p} \int_0^{\pi} y(t) \cot t/2 dt. \quad (3.5)$$

Note 3.2 $\xi\left(\frac{\pi}{\sqrt{n}}\right) \leq \pi \xi\left(\frac{1}{\sqrt{n}}\right)$, for $\left(\frac{\pi}{\sqrt{n}}\right) \geq \left(\frac{1}{\sqrt{n}}\right)$.

Note 3.3 The product transform $(C, 1)(E, q)$ plays an important role in signal theory as a double digital filter [13] and theory of Machines in Mechanical Engineering [13].

4. Lemmas

For the proof of our theorem, the following lemmas are required:

Lemma 4.1: $\left| \overline{G}_n(t) \right| = O\left(\frac{1}{\sqrt{n}} \right) ((n+1)t)$ for $0 \leq t \leq \frac{p}{\sqrt{n}} \leq \frac{p}{\sqrt{n}}$.

Proof: For $0 < t \leq \frac{\pi}{\sqrt{n}}$, $\sin \frac{t}{2} \geq \frac{t}{\pi}$ and $|\cos nt| \leq 1$.

$$\begin{aligned} \left| \overline{G}_n(t) \right| &\leq \frac{1}{2p(n+1)} \left| \sum_{k=0}^n \frac{1}{(1+q)^k} \sum_{v=0}^k \frac{q^{k-v}}{n^v} \frac{\cos(v+1/2)t}{\sin(t/2)} \right| \\ &= \frac{1}{2p(n+1)} \left| \sum_{k=0}^n \frac{1}{(1+q)^k} \sum_{v=0}^k \frac{q^{k-v}}{n^v} \frac{\cos(v+1/2)t}{\sin(t/2)} \right| \end{aligned}$$

$$\begin{aligned}
& \left| \sum_{k=0}^n \frac{1}{(n+1)} \frac{1}{(1+q)^k} \sum_{v=0}^k \frac{q^v}{n} \cos(v+1)t \frac{\cos(t/2) + \sin(v+1)t \sin(t/2)}{\sin(t/2)} \right| \\
&= \frac{1}{(n+1)} \sum_{k=0}^n \frac{1}{(1+q)^k} \sum_{v=0}^k \frac{q^v}{n} \left| \frac{\cos(v+1)t \cos(t/2) + \sin(v+1)t \sin(t/2)}{\sin(t/2)} \right| \\
&= \frac{1}{(n+1)} \sum_{k=0}^n \frac{1}{(1+q)^k} \sum_{v=0}^k \frac{q^v}{n} \left(O(1/t) + O(\sin(v+1)t) \right) \\
&= O\left(\frac{1}{(n+1)t} \sum_{k=0}^n \frac{1}{(1+q)^k} \sum_{v=0}^k \frac{q^v}{n} \right) + O\left(\frac{1}{(n+1)t} \sum_{k=0}^n \frac{1}{(1+q)^k} \sum_{v=0}^k \frac{q^v}{n} (n+1)t \right) \\
&= O\left(\frac{1}{(n+1)t} (n+1) \right) + O\left(\frac{1}{(n+1)} (n+1)(n+1)t \right) \\
&= O\left(\frac{1}{t} \right) + O(n+1)t
\end{aligned}$$

in view of $\sin(n+1)t \leq (n+1)t$ for $0 \leq t \leq \frac{p}{\sqrt{n}}$.

This completes the proof of Lemma 4.1.

Lemma 4.2 : $\left| \tilde{\Theta}_n(t) \right| = O\left(\frac{1}{\sqrt{t}} \right) + O(1)$ for $\frac{\pi}{\sqrt{n}} \leq \frac{\pi}{\sqrt{v}} \leq t \leq \pi$.

Proof: For $0 < \frac{\pi}{\sqrt{n}} \leq \frac{\pi}{\sqrt{v}} \leq t \leq \pi$, $\sin \frac{t}{2} \geq \frac{t}{\pi}$ and $|\cos nt| \leq 1$.

$$\begin{aligned}
\left| \tilde{\Theta}_n(t) \right| & \leq \frac{1}{2p(n+1)} \left| \sum_{k=0}^n \frac{1}{(1+q)^k} \sum_{v=0}^k \frac{q^v}{n} \cos(v+1/2)t \frac{\cos(v+1)t \cos(t/2) + \sin(v+1)t \sin(t/2)}{\sin(t/2)} \right| \\
&= \frac{1}{2p(n+1)} \left| \sum_{k=0}^n \frac{1}{(1+q)^k} \sum_{v=0}^k \frac{q^v}{n} \frac{\cos(v+1/2)t \cos(t/2) + \sin(v+1)t \sin(t/2)}{\sin(t/2)} \right| \\
& \leq \frac{1}{(n+1)} \sum_{k=0}^n \frac{1}{(1+q)^k} \sum_{v=0}^k \frac{q^v}{n} \left| \frac{\cos(v+1)t \cos(t/2) + \sin(v+1)t \sin(t/2)}{\sin(t/2)} \right| \\
&= \frac{1}{(n+1)} \sum_{k=0}^n \frac{1}{(1+q)^k} \sum_{v=0}^k \frac{q^v}{n} \left| \frac{\cos(v+1)t \cos(t/2) + \sin(v+1)t \sin(t/2)}{\sin(t/2)} \right|
\end{aligned}$$

$$\begin{aligned}
&= \frac{1}{(n+1)} \prod_{k=0}^n \frac{1}{(1+q)^k} \prod_{v=0}^k \frac{1}{\sin \frac{\pi}{2^v}} q^{k-n} O(1/t) + O(1) \\
&= O \left(\frac{1}{(n+1)t} \prod_{k=0}^n \frac{1}{(1+q)^k} \prod_{v=0}^k \frac{1}{\sin \frac{\pi}{2^v}} q^{k-n} \right) + O \left(\frac{1}{(n+1)} \prod_{k=0}^n \frac{1}{(1+q)^k} \prod_{v=0}^k \frac{1}{\sin \frac{\pi}{2^v}} q^{k-n} \right) \\
&= O \left(\frac{1}{(n+1)t} \right) + O \left(\frac{1}{(n+1)} \right) \\
&= O \left(\frac{1}{t} \right) + O[1],
\end{aligned}$$

in view of $|\sin(n+1)t| \leq 1$ for $0 < \frac{\pi}{\sqrt{n}} \leq \frac{\pi}{\sqrt{v}} \leq t \leq \pi$.

This completes the proof of Lemma 4.2.

5. Proof of Theorem

Let $\bar{s}_n(x)$ denotes the partial sum of series (1.2), we have

$$\bar{s}_n(x) - \bar{f}(x) = \frac{1}{2p} \int_0^p y(t) \frac{\cos \left(\frac{\pi}{2} \left(n + \frac{1}{2} \right) t \right)}{\sin \frac{\pi}{2} t} dt.$$

Therefore, using (1.2) the $(C,1)$ transform C_n^1 of \bar{s}_n is given by

$$\bar{C}_n^1 - \bar{f}(x) = \frac{1}{2p(n+1)} \int_0^p y(t) \prod_{k=0}^n \frac{\cos \left(\frac{\pi}{2} \left(n + \frac{1}{2} \right) t \right)}{\sin \frac{\pi}{2} t} dt.$$

Now denoting $(\bar{C},1)(E,q)$ transform of \bar{s}_n as $(\bar{C}_n^1 E_n^q)$, we write

$$\begin{aligned}
(\bar{C}_n^1 E_n^q) - \bar{f}(x) &= \frac{1}{2p(n+1)} \prod_{k=0}^n \frac{1}{(1+q)^k} \int_0^p \frac{y(t)}{\sin \frac{\pi}{2} t} \prod_{v=0}^k \frac{1}{\sin \frac{\pi}{2^v}} q^{k-n} \cos \left(\frac{\pi}{2} \left(n + \frac{1}{2} \right) t \right) dt \\
&= \int_0^p y(t) \bar{G}_n^1(t) dt
\end{aligned}$$

$$\begin{aligned}
&= \int_0^{\pi/\sqrt{n}} \left(\frac{y(t)}{x(t)} \right)^p \frac{1}{t \sin^b t/2} dt \\
&= I_1 + I_2, \text{ (say)}.
\end{aligned} \tag{5.1}$$

We consider,

$$|I_1| \leq \int_0^{\pi/\sqrt{n}} |y(t)| \frac{1}{t \sin^b t/2} dt.$$

Using Lemma 4.1, Hölder's inequality, Minkowski's inequality and condition 3.2, we have

$$\begin{aligned}
|I_1| &\leq \int_0^{\pi/\sqrt{n}} \left(\frac{y(t)}{x(t)} \right)^r \frac{1}{t \sin^b t/2} dt \\
&= O \left(\frac{1}{\sqrt{n}} \right) \int_0^{\pi/\sqrt{n}} \left(\frac{\xi(t)}{t \sin^b t/2} \right)^r dt \\
&= O \left(\frac{1}{\sqrt{n}} \right) \left[\int_0^{\pi/\sqrt{n}} \left(\frac{\xi(t)}{t^2 \sin^b t/2} + \frac{\xi(t)(n+1)t}{t \sin^b t/2} \right)^r dt \right]^{1/r} \\
&= O \left(\frac{1}{\sqrt{n}} \right) \left[\int_h^{\pi/\sqrt{n}} \left(\frac{\xi(t)}{t^{2+\beta}} \right)^r dt \right]^{1/r} + O(\sqrt{n}) \left[\int_h^{\pi/\sqrt{n}} \left(\frac{\xi(t)}{t^\beta} \right)^r dt \right]^{1/r}, \text{ as } h \rightarrow 0.
\end{aligned}$$

Since $\xi(t)$ is a positive increasing function and using second mean value theorem for integrals, we have

$$\begin{aligned}
I_1 &= O \left(\frac{1}{\sqrt{n}} \xi \left(\frac{\pi}{\sqrt{n}} \right) \right) \left[\int_h^{\pi/\sqrt{n}} \left(\frac{1}{t^{2+\beta}} \right)^r dt \right]^{1/r} + O \left(\sqrt{n} \xi \left(\frac{\pi}{\sqrt{n}} \right) \right) \left[\int_h^{\pi/\sqrt{n}} \left(\frac{1}{t^\beta} \right)^r dt \right]^{1/r}, \text{ as } h \rightarrow 0 \\
&= O \left\{ \left(\frac{1}{\sqrt{n}} \right) \pi \xi \left(\frac{1}{\sqrt{n}} \right) \right\} \left[\int_\epsilon^{\pi/\sqrt{n}} t^{-\beta s - 2s} dt \right]^{1/s} + O \left(\pi \sqrt{n} \xi \left(\frac{1}{\sqrt{n}} \right) \right) \left[\int_h^{\pi/\sqrt{n}} t^{-\beta s} dt \right]^{1/s}, \text{ as } h \rightarrow 0.
\end{aligned}$$

Note that
$$\xi \left(\frac{\pi}{\sqrt{n}} \right) \leq \pi \xi \left(\frac{1}{\sqrt{n}} \right),$$

$$\begin{aligned}
I_1 &= O\left[\left(\frac{1}{\sqrt{n}}\right)\xi\left(\frac{1}{\sqrt{n}}\right)(\sqrt{n})^{\beta+2-\frac{1}{s}}\right] + O\left[\xi\left(\frac{1}{\sqrt{n}}\right)(\sqrt{n})^{\beta+1-\frac{1}{s}}\right] \\
&= O\left[\xi\left(\frac{1}{\sqrt{n}}\right)(\sqrt{n})^{\beta+1-\frac{1}{s}}\right] \\
&= O\left[\xi\left(\frac{1}{\sqrt{n}}\right)(\sqrt{n})^{\beta+\frac{1}{r}}\right] \quad \because \frac{1}{r} + \frac{1}{s} = 1, 1 \leq r \leq \infty.
\end{aligned} \tag{5.2}$$

Now, we consider,

$$|I_2| \leq \int_{\pi/\sqrt{n}}^{\pi} |y(t)| \left| \frac{d}{dt} \left(\frac{t^{-\delta} \sin^{\beta} t/2}{t} \right) \right| dt.$$

Using Lemma 4.2, Hölder's Inequality, Minkowski's inequality and condition 3.3, we have

$$\begin{aligned}
|I_2| &\leq \int_{\pi/\sqrt{n}}^{\pi} \frac{t^{-\delta} \sin^{\beta} t/2}{t} |y(t)| dt \\
&= O\left\{ (\sqrt{n})^{\delta} \int_{\pi/\sqrt{n}}^{\pi} \frac{t^{-\delta} \sin^{\beta} t/2}{t} |x(t)| dt \right\} \\
&= O\left\{ (\sqrt{n})^{\delta} \left[\int_{\pi/\sqrt{n}}^{\pi} \left(\frac{\xi(t)}{t^{-\delta} t \sin^{\beta} t/2} + \frac{\xi(t)}{t^{-\delta} \sin^{\beta} t/2} \right)^s dt \right]^{1/s} \right\} \\
&= O\left\{ (\sqrt{n})^{\delta} \left[\int_{\pi/\sqrt{n}}^{\pi} \left(\frac{\xi(t)}{t^{-\delta+1} \sin^{\beta} t/2} + \frac{\xi(t)}{t^{-\delta} \sin^{\beta} t/2} \right)^s dt \right]^{1/s} \right\} \\
&= O\left\{ (\sqrt{n})^{\delta} \left[\int_{\pi/\sqrt{n}}^{\pi} \left(\frac{\xi(t)}{t^{-\delta+\beta+1}} + \frac{\xi(t)}{t^{-\delta+\beta}} \right)^s dt \right]^{1/s} \right\} \\
&= O\left\{ (\sqrt{n})^{\delta} \left[\left(\int_{\pi/\sqrt{n}}^{\pi} \left(\frac{\xi(t)}{t^{-\delta+\beta+1}} \right)^s dt \right)^{1/s} + \left(\int_{\pi/\sqrt{n}}^{\pi} \left(\frac{\xi(t)}{t^{-\delta+\beta}} \right)^s dt \right)^{1/s} \right] \right\}.
\end{aligned}$$

Now putting $t = \frac{1}{y}$,

$$I_2 = O\left((\sqrt{n})^\delta\right) \left[\left(\int_{1/\pi}^{\pi/\sqrt{n}} \left(\frac{\xi\left(\frac{1}{y}\right)}{y^{\delta-\beta-1}} \right)^s \frac{dy}{y^2} \right)^{1/s} + \left(\int_{1/\pi}^{\pi/\sqrt{n}} \left(\frac{\xi\left(\frac{1}{y}\right)}{y^{\delta-\beta}} \right)^s \frac{dy}{y^2} \right)^{1/s} \right].$$

Since $\xi(t)$ is a positive increasing function so $\frac{\xi\left(\frac{1}{y}\right)}{1/y}$ is also a positive increasing function and

using second mean value theorem for integrals, we have

$$\begin{aligned} &= O\left((\sqrt{n})^\delta \frac{\xi\left(\frac{\pi/\sqrt{n}}{\sqrt{n}}\right)}{\pi/\sqrt{n}}\right) \left[\left(\int_{1/\pi}^{\pi/\sqrt{n}} \frac{dy}{y^{-\beta s + \delta s + 2}} \right)^{1/s} + \left(\int_{1/\pi}^{\pi/\sqrt{n}} \frac{dy}{y^{-\beta s + \delta s + s + 2}} \right)^{1/s} \right] \\ &= O\left((\sqrt{n})^{\delta+1} \xi\left(\frac{1}{\sqrt{n}}\right)\right) \left[\left(y^{-\delta s - 1 + \beta s} \right)_{1/\pi}^{\pi/\sqrt{n}} \right]^{1/s} + \left(y^{-\delta s - 1 + \beta s - s} \right)_{1/\pi}^{\pi/\sqrt{n}} \right]^{1/s} \\ &= O\left((\sqrt{n})^{\delta+1} \xi\left(\frac{1}{\sqrt{n}}\right)\right) \left[(\sqrt{n})^{-\delta - 1/s + \beta} + (\sqrt{n})^{-\delta - 1/s + \beta - 1} \right] \\ &= O\left(\xi\left(\frac{1}{\sqrt{n}}\right)\right) \left[(\sqrt{n})^{-\delta - 1/s + \beta + \delta + 1} + (\sqrt{n})^{-\delta - 1/s + \beta - 1 + \delta + 1} \right] \\ &= O\left(\xi\left(\frac{1}{\sqrt{n}}\right)\right) \left[(\sqrt{n})^{\beta + 1/r} + (\sqrt{n})^{-1 + \beta + 1/r} \right] \because \frac{1}{r} + \frac{1}{s} = 1, 1 \leq r \leq \infty. \\ &= O\left(\xi\left(\frac{1}{\sqrt{n}}\right)(\sqrt{n})^{\beta + 1/r}\right) \left[1 + (\sqrt{n})^{-1} \right] \\ &= O\left(\xi\left(\frac{1}{n+1}\right)(\sqrt{n})^{\beta + 1/r}\right). \end{aligned} \tag{5.3}$$

Combining I_1 and I_2 yields

$$\left| \mathcal{C}_n^1 E_n^q - \hat{f} \right| = O\left((\sqrt{n})^{\frac{1}{r} + b} \frac{1}{\sqrt{n}^{\frac{1}{r}}} \right). \tag{5.4}$$

Now, using the L_r -norm of a function, we get

$$\begin{aligned}
\left\| \tilde{C}_n^1 E_n^q - \tilde{f} \right\|_r &= \int_0^{2p} \left| \tilde{C}_n^1 E_n^q - \tilde{f} \right|^r dx^{1/r} \\
&= O \int_0^{2p} (\sqrt{n})^{b+1/r} x \frac{1}{\sqrt{n}} dx^{1/r} \\
&= (\sqrt{n})^{b+1/r} x \frac{1}{\sqrt{n}} dx^{1/r} \\
&= O (\sqrt{n})^{b+1/r} x \frac{1}{\sqrt{n}}
\end{aligned}$$

This completes the proof of Theorem 3.1.

6. Applications

The following corollaries may be derived from Theorem 3.1.

Corollary 6. 1 If $\xi(t) = t^\alpha$, $0 < \alpha \leq 1$, then the weighted class $W(L_r, \xi(t))$, $r \geq 1$, reduces to the class $Lip(\alpha, r)$, $(1/r) < \alpha < 1$ and the degree of approximation of a function $\tilde{f}(x)$, conjugate to a 2π -periodic function f belonging to the class $Lip(\alpha, r)$, is given by

$$\left\| \tilde{C}_n^1 E_n^q - \tilde{f} \right\|_r = O \frac{1}{(\sqrt{n})^{\alpha - 1/r}} \tag{6.1}$$

Proof: Putting $\beta = 0$, $\xi(t) = t^\alpha$, $0 < \alpha \leq 1$ in Theorem 3.1, we have

$$\left\| \tilde{C}_n^1 E_n^q - \tilde{f} \right\|_r = \int_0^{2p} \left| \tilde{C}_n^1 E_n^q(f; x) - \tilde{f}(x) \right|^r dx^{1/r}$$

or,

$$O (\sqrt{n})^{1/r} x \frac{1}{\sqrt{n}} \int_0^{2p} \left| \tilde{C}_n^1 E_n^q(f; x) - \tilde{f}(x) \right|^r dx^{1/r}$$

or,

$$O(1) = \int_0^{2p} \left| \tilde{C}_n^1 E_n^q(f; x) - \tilde{f}(x) \right|^r dx^{1/r} O \frac{1}{(\sqrt{n})^{1/r} x \frac{1}{\sqrt{n}}}$$

since otherwise the right hand side of the above equation will not be $O(1)$.
Hence

$$\left| \tilde{C}_n^1 E_n^q(f; x) - \tilde{f}(x) \right| = O\left(\frac{1}{\sqrt{n}}\right)^a (\sqrt{n})^{1/r} = O\left(\frac{1}{(\sqrt{n})^{a-1/r}}\right)$$

This completes the proof of Corollary 6.1.

Corollary 6.2 If $\xi(t) = t^\alpha$ for $0 < \alpha < 1$ and $r \rightarrow \infty$ in corollary 6.1, then $f \in Lip\alpha$ and

$$\left| \tilde{C}_n^1 E_n^q - \tilde{f} \right| = O\left(\frac{1}{(\sqrt{n})^a}\right) \quad (6.2)$$

Proof: For $r \rightarrow \infty$ in corollary 6.1, we get

$$\left\| \tilde{C}_n^1 E_n^q - \tilde{f} \right\|_{\Psi} = \sup_{0 \leq x \leq 2p} \left| \tilde{C}_n^1 E_n^q(f; x) - \tilde{f}(x) \right| = O\left(\frac{1}{(\sqrt{n})^a}\right)$$

Thus, we have

$$\begin{aligned} \left| \tilde{C}_n^1 E_n^q(f; x) - \tilde{f}(x) \right| & \leq \left\| \tilde{C}_n^1 E_n^q(f; x) - \tilde{f}(x) \right\|_{\Psi} \\ & = \sup_{x \in [0, 2p]} \left| \tilde{C}_n^1 E_n^q(f; x) - \tilde{f}(x) \right| = O\left((\sqrt{n})^{-a}\right). \end{aligned}$$

This completes the proof of Corollary 6.2.

7. An Example

Consider an infinite series

$$\sum_{n=0}^{\infty} (-1)^n (2q+1)^n \cos nx \quad (7.1)$$

The n^{th} partial sums s_n of series (7.1) at $x=0$ is given by

$$\begin{aligned} s_n &= \sum_{r=0}^n (-1)^r (2q+1)^r \cos rx \\ &\leq \frac{1 - (-1)^{n+1} (2q+1)^{n+1}}{2(1+q)}. \end{aligned}$$

Since $\lim_{n \rightarrow \infty} s_n$ does not exist. Therefore the series (7.1) is non-convergent.

Now, the (E, q) transform of (7.1) is given by

$$\begin{aligned}
E_n^q &= \frac{1}{(1+q)^n} \sum_{k=0}^n \binom{n}{k} q^{n-k} s_k, \quad q > 0 \\
&\leq \frac{1}{(1+q)^n} \sum_{k=0}^n \binom{n}{k} q^{n-k} \left(\frac{1 - (-1)^{k+1} (2q+1)^{k+1}}{2(1+q)} \right) \\
&= \frac{1}{2(1+q)} + \frac{(1+2q)(q-1-2q)^n}{2(1+q)(q+1)^n} \\
&= \frac{1}{2(1+q)} + \frac{(1+2q)(-1)^n}{2(1+q)}.
\end{aligned}$$

Here, $\lim_{n \rightarrow \infty} E_n^q$ does not exist. Hence the series (7.1) is not summable,

Now,

$$\begin{aligned}
\sigma_n^1 &= \frac{1}{n+1} \sum_{k=0}^n s_k \leq \frac{1}{n+1} \sum_{k=0}^n \left(\frac{1 - (-1)^{k+1} (2q+1)^{k+1}}{2(1+q)} \right) \\
&= \frac{1}{2(1+q)} + \frac{(1+2q)}{2(1+q)(n+1)} \sum_{n=0}^{\infty} (-1)^k (2q+1)^k \\
&= \frac{1}{2(1+q)} + \frac{(1+2q)}{4(1+q)^2(n+1)} + \frac{(-1)^{n+2} (1+2q)^{n+1}}{4(1+q)^2(n+2)}
\end{aligned}$$

Here, $\lim_{n \rightarrow \infty} \sigma_n^1$ does not exist, the series (7.1) is not (C, 1) summable.

Finally, the (E, q) transform of (7.1) is given by

$$\begin{aligned}
E_n^q C_n^1 &= \frac{1}{(1+q)^n} \sum_{k=0}^n \binom{n}{k} q^{n-k} \sigma_k^1 \\
&\leq \frac{1}{(1+q)^n} \sum_{k=0}^n \binom{n}{k} q^{n-k} \left(\frac{1}{2(1+q)} + \frac{(1+2q)}{4(1+q)^2(k+1)} + \frac{(-1)^{k+2} (1+2q)^{k+2}}{4(1+q)^2(k+1)} \right) \\
&= \frac{1}{2(1+q)} + \frac{(1+2q)}{4(1+q)^{n+2}} \left[\frac{(1+q)^{n+1} - (-1)^{n+1}}{n+1} \right] + \frac{(1+2q)^2}{4(1+q)^{n+2}} \left[\frac{(-1-q)^{n+1} - (-1)^{n+1}}{n+1} \right] \\
&= \frac{1}{2(1+q)} + \frac{(1+2q)}{4(1+q)(n+1)} \left[1 - \frac{(-1)^{n+1}}{(1+q)^{n+1}} \right] + \frac{(1+2q)^2}{4(1+q)(n+1)} \left[(-1)^{n+1} - \frac{(-1)^{n+1}}{(1+q)^{n+1}} \right].
\end{aligned}$$

$E_n^q C_n^1 \rightarrow \frac{1}{2(1+q)}$ as $n \rightarrow \infty$, the series (7.1) is (E, q) (C, 1) summable.

Therefore the series (7.1) is neither (E, q) summable nor (C, 1) summable but it is (E, q) (C, 1) summable to $\frac{1}{2(1+q)}$. Thus the product summability (E, q) (C, 1) is more powerful than (E, q) and (C, 1). Consequently (E, q) (C, 1) gives the better approximation than the individual methods (E, q) and (C, 1).

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Text Data Mining of English Materials for Environmentology

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ABSTRACT

Abstract—Recently, disasters arising from extreme weather, such as localized heavy rain, snow, typhoons, hurricanes and severe heat waves, have grown both in scale and frequency. To confront environmental problems, a system of “environmentology” is trying to be constructed. In order to study environmentology, reading materials in English is considered to be indispensable. In this paper, we investigated several English books on environmentology, comparing with journalism in terms of metrical linguistics. In short, frequency characteristics of character- and word-appearance were investigated using a program written in C++. These characteristics were approximated by an exponential function. Furthermore, we calculated the percentage of Japanese junior high school required vocabulary and American basic vocabulary to obtain the difficulty-level as well as the K -characteristic of each material. As a result, it was clearly shown that English materials for environmentology have a similar tendency to literary writings in the characteristics of character-appearance. Besides, the values of the K -characteristic for the materials on environmentology are high, and some books are more difficult than *TIME* magazine.

Keywords—Environmentology, Metrical linguistics, Text data minin

VIII. INTRODUCTION

In recent years, disasters arising from extreme weather, such as localized heavy rain, snow, typhoons, hurricanes and severe heat waves, have grown both in scale and frequency. It seems quite obvious that fundamental climate change is taking place on our planet [1].

To confront environmental problems which the human race faces, the promotion of talents who can take a panoramic view of wide objects from nature to the human society is required now. Therefore, study areas covering from natural science, engineering and humanities, to social science being gathered together, a system of wisdom, “environmentology,” that exceeds an existing frame is trying to be constructed to advance the education and research based on it [1].

In order to study environmentology, reading materials in English that can be said to be a world common language considered to be indispensable. If we have beforehand enough knowledge of the features of English in this field, reading of the texts will become easier.

In this paper, we investigated several English books on environmentology, comparing with journalism in terms of metrical linguistics. As a result, it was clearly shown that English materials for environmentology have some interesting characteristics about character- and word-appearance.

IX. METHOD OF ANALYSIS AND MATERIALS

The materials analyzed here are as follows:

- Material 1: Rachel Carson, *Silent Spring*, Mariner Books, 2002
- Material 2: Joseph R. DesJardins, *Environmental Ethics: An Introduction to Environmental Philosophy*, 3rd ed., Wadsworth Pub Co, 2000
- Material 3: Thomas L. Friedman, *Hot, Flat, and Crowded: Why We Need a Green Revolution—and How It Can Renew America*, Picador USA, 2009
- Material 4: Albert Gore, *Earth in the Balance: Ecology and the Human Spirit*, Rodale Press, 2006
- Material 5: James Hansen, *Storms of My Grandchildren: The Truth About the Coming Climate Catastrophe and Our Last Chance to Save Humanity*, Bloomsbury Publishing PLC, 2009
- Material 6: Simon Levin, *Fragile Dominion*, Basic Books, 2000
- Material 7: Bjorn Lomborg, *The Skeptical Environmentalist: Measuring the Real State of the World*, Cambridge University Press, 2001
- Material 8: James Lovelock, *The Revenge of Gaia: Earth's Climate Crisis & The Fate of Humanity*, Basic Books, 2007

Material 9: William D. Nordhaus, *A Question of Balance: Weighing the Options on Global Warming Policies*, Yale University Press, 2008

Material 10: Nicholas Stern, *Blueprint for a Safer Planet: How to Manage Climate Change and Create a New Era of Progress and Prosperity*, The Bodley Head Ltd, 2009

We examined the first three chapters of each material. For comparison, we analyzed the American popular news magazine “TIME” published on January 11 in 2010. Because almost no changes are seen in the frequency characteristics of character- and word-appearance for the magazine for about 60 years, we have used it as a criterion for comparison with English materials [2]. Deleting pictures, headlines, etc., we used only the texts.

The computer program for this analysis is composed of C++. Besides the characteristics of character- and word-appearance for each piece of material, various information such as the “number of sentences,” the “number of paragraphs,” the “mean word length,” the “number of words per sentence,” etc. can be extracted by this program [3].

X. RESULTS

10.1. Characteristics of Character-appearance

The First, the most frequently used characters in each material and their frequency were derived. The frequencies of the 50 most frequently used characters including the blanks, capitals, small letters and punctuations were plotted on a descending scale. The vertical shaft shows the degree of the frequency and the horizontal shaft shows the order of character-appearance. The vertical shaft is scaled with a logarithm. This characteristic curve was approximated by the following exponential function:

$$y = c * \exp(-bx)$$

(1)

From this function, we are able to derive coefficients c and b [4]. The distribution of coefficients c and b extracted from each material is shown in Figure 1. There is a linear relationship between c and b for all the 11 materials. These values for all the materials for environmentology are approximated by $[y = 0.0072x + 0.038]$. The values of coefficients c and b for Materials 1 to 10 are high: the value of c ranges from 10.808 (Material 5) to 14.817 (Material 6), and that of b is 0.1158 (Material 5) to 0.1442 (Material 6). On the other hand, in the case of *TIME* magazine, c is 9.6809 and b is 0.1044, both of which are lower than those for all the materials for environmentology. Previously, we analyzed various English writings and reported that there is a positive correlation between the coefficients c and b , and that the more journalistic the material is, the lower the values of c and b are, and the more literary, the higher the values of c and b [5]. Thus, the values of the coefficients for the books on environmentology are higher

than those for *TIME* magazine, that is, journalism, which means the materials for environmentology have a similar tendency to literary writings, as we have expected.

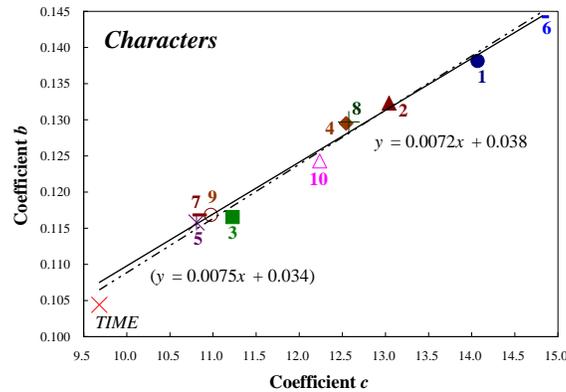


Figure 1 – Dispersions of coefficients *c* and *b* for character-appearance.

10.2. Characteristics of Word-appearance

Next, the most frequently used words in each material and their frequency were obtained. The article THE is the most frequently used word for every material including *TIME* magazine. As for the materials for environmentology, OF is the second for 9 materials, and AND, TO and IN are also ranked high. Some nouns which are related to environmentology such as CARBON, CLIMATE, EARTH, EMISSION and ENVIRONMENTAL are ranked within top 20 in 6 materials. Besides, the words which contain ENVIRONMENT such as ENVIRONMENT(S), ENVIRONMENTAL, ENVIRONMENTALIST(S) and ENVIRONMENTALLY are used in every material, whose total frequency ranges from 0.066% (Material 5) to 0.707% (Material 2) for each environmentology material, while it for *TIME* is 0.019%.

Just as in the case of characters, the frequencies of the 50 most frequently used words in each material were plotted. Each characteristic curve was approximated by the same exponential function. The distribution of *c* and *b* is shown in Figure 2. As for the coefficient *c*, the values for Materials 1 to 10 are high: they range from 1.8065 (Material 4) to 2.2398 (Material 9), compared with that for *TIME* magazine, that is, 1.7427. In the case of word-appearance, we can see a weak positive correlation between coefficients *c* and *b* for all the materials for environmentology, and the values are approximated by $[y = 0.0086x + 0.032]$. Besides, the values for Materials 1, 2, 6 and 7 are relatively similar and we might be able to regard them as a cluster.

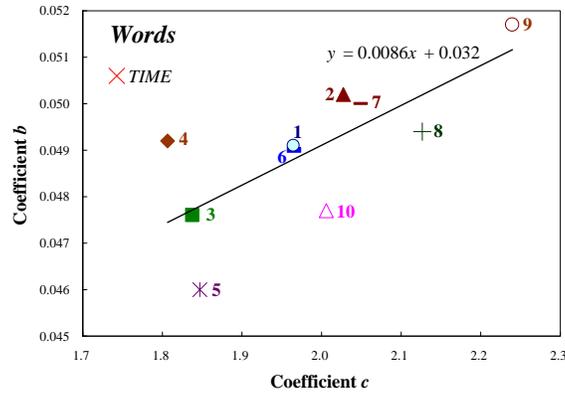


Figure 2 – Dispersions of coefficients c and b for word-appearance.

As a method of featuring words used in a writing, a statistician named Udny Yule suggested an index called the “ K -characteristic” in 1944 [6]. This can express the richness of vocabulary in writings by measuring the probability of any randomly selected pair of words being identical. He tried to identify the author of *The Imitation of Christ* using this index. This K -characteristic is defined as follows:

$$K = 10^4 (S_2 / S_1^2 - 1 / S_1)$$

(2)

where if there are f_i words used x_i times in a writing, $[S_1 = \sum x_i f_i]$, $[S_2 = \sum x_i^2 f_i]$.

We examined the K -characteristic for each material. The results are shown in Figure 3. According to the figure, the values for 10 materials on environmentology are high: they range from 85.981 (Material 3) to 129.244 (Material 4), compared with the value for *TIME* magazine (73.460). Especially, Materials 4 and 9 are high: they are 129.244 (Material 4) and 127.073 (Material 9). They are over 40 more than Material 3 (85.981), which is the lowest of all the materials for environmentology.

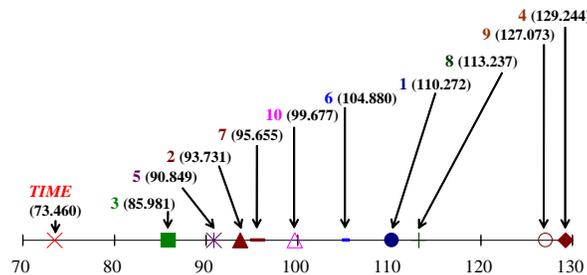


Figure 3 – K -characteristic for each material.

Besides, the value of K -characteristic gradually increases in the order of *TIME*, Materials 3, 5, 6, 1, 8 and 9. This order corresponds with the coefficient c for word-appearance, as well as the intervals of the values of K -characteristic and those of the coefficients c for word-appearance are similar. In addition, the values of K -characteristic for 10 materials for environmentology being higher than *TIME* magazine is the same as the cases of coefficient c for word-character, and coefficients c and b for character-appearance. We would like to investigate the relationship between K -characteristic and the coefficients for word- and character-appearance in the future.

10.3. Degree of Difficulty

In order to show how difficult the materials for readers are, we derived the degree of difficulty for each material through the variety of words and their frequency [7]. That is, we came up with two parameters to measure difficulty; one is for word-type or word-sort (D_{ws}), and the other is for the frequency or the number of words (D_{wn}). The equation for each parameter is as follows:

$$D_{ws} = (1 - n_{rs} / n_s) \quad (3)$$

$$D_{wn} = \{ 1 - (1 / n_t * \sum n(i)) \} \quad (4)$$

where n_t means the total number of words, n_s means the total number of word-sort, n_{rs} means the required English vocabulary in Japanese junior high schools or American basic vocabulary by *The American Heritage Picture Dictionary* (American Heritage Dictionaries, Houghton Mifflin, 2003), and $n(i)$ means the respective number of each required or basic word. Thus, we can calculate how many required or basic words are not contained in each piece of material in terms of word-sort and frequency.

Thus, we calculated the values of both D_{ws} and D_{wn} to show how difficult the materials are for readers, and to show at which level of English the materials are, compared with other materials. Then, in order to make the judgments of difficulty easier for the general public, we derived one difficulty parameter from D_{ws} and D_{wn} using the following principal component analysis:

$$z = a_1 * D_{ws} + a_2 * D_{wn} \quad (5)$$

where a_1 and a_2 are the weights used to combine D_{ws} and D_{wn} . Using the variance-covariance matrix, the 1st principal component z was extracted: [$z = 0.7071 * D_{ws} + 0.7071 * D_{wn}$] for both the required vocabulary and the basic vocabulary, from which we calculated the principal component scores. The results are shown in Figure 4.

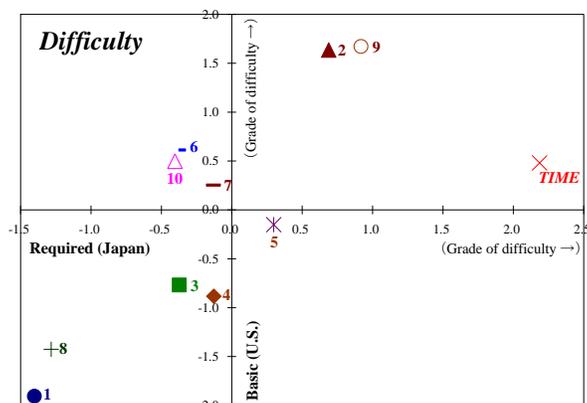


Figure 4 – Principal component scores of difficulty.

According to Figure 4, in the case of the required vocabulary, *TIME* is by far the most difficult of all the materials. The most difficult of the environmentology materials is Material 9, and the second most is Material 2. Their difference is small. On the other hand, the easiest is Material 1, and the second easiest is Material 8. The difficulty of 5 materials, that is, Materials 3, 4, 6, 7 and 10, is very close, whose principal component scores range from -0.4042 to -0.1277.

As for the case of the basic vocabulary, Materials 9 is the most difficult, and Material 2 is the second most of all. These two materials are far more difficult than other 9 materials. *TIME* is the fifth most difficult, whose difficulty is almost equal to Material 10 and very similar to Materials 6 and 7. Also in this case, Material 1 is the easiest, and Material 8 is the second easiest.

Therefore, we might say that while the materials for environmentology are easier to read than *TIME* for Japanese, some environmentology materials are more difficult than *TIME* for Americans.

10.4. Other Characteristics

Other metrical characteristics of each material were compared. The results of the “average of word length,” the “number of words per sentence,” etc. are shown together in Table 1. Although we counted the “frequency of prepositions,” the “frequency of relatives,” etc., some of the words counted might be used as other parts of speech because we didn’t check the meaning of each word.

10.4.1. Mean Word Length

As for the “mean word length” for 10 materials for environmentology, it varies from 5.722 letters for Material 8 to 6.271 letters for Material 2. 7 materials are a little longer than *TIME*

(6.008 letters). It seems that this is because the materials for environmentology contain many long-length technical terms for environmentology such as CONTAMINATION, DEFORESTATION, ENVIRONMENTAL and PRESERVATIONIST.

10.4.2. Number of Words per Sentence

The “number of words per sentence” for Material 2 (20.375 words) is the fewest of 10 materials. This is the only material that is fewer than *TIME* (20.889 w.). Other 9 materials are 22.554 w. (Material 5) to 28.347 w. (Material 4). From this point of view, in addition to the result of the difficulty derived through the variety of words and their frequency, the materials for environmentology seems to be rather difficult to read as a whole.

10.4.3. Frequency of Relatives

The “frequency of relatives” for 10 environmentology materials is 2.092% (Material 10) to 3.616% (Material 6). Their average is 2.825%, which is a little more than that for *TIME* magazine (2.488%). Therefore, we can assume that as the materials for environmentology tend to contain more complex sentences than *TIME* magazine, they are more difficult to read than *TIME*.

10.4.4. Frequency of Auxiliaries

There are two kinds of auxiliaries in a broad sense. One expresses the tense and voice, such as BE which makes up the progressive form and the passive form, the perfect tense HAVE, and DO in interrogative sentences or negative sentences. The other is a modal auxiliary, such as WILL or CAN which expresses the mood or attitude of the speaker [8]. In this study, we targeted only modal auxiliaries. As a result, the “frequency of auxiliaries” of 10 materials for environmentology varies from 1.048% (Material 4) to 2.398% (Material 10). All 10 materials contain more auxiliaries than *TIME* (1.002%). Therefore, it might be said that while the writers of the books on environmentology tend to communicate their subtle thoughts and feelings with auxiliary verbs, the style of *TIME* magazine can be called more assertive.

10.4.5. Frequency of Personal Pronouns

The “frequency of personal pronouns” for 10 environmentology materials is 1.513% (Material 9) to 6.225% (Material 3). Their average is 3.943%, which is about 1.5% fewer than *TIME* (3.943%). Only 2 materials, Materials 3 and 8, contain more personal pronouns than *TIME* magazine.

Table 1 – Metrical data for each material.

	1. Carson	2. DesJardins	3. Friedman	4. Gore	5. Hansen	6. Levin	7. Lomborg	8. Lovelock	9. Nordhaus	10. Stern	TIME 2010
Total num. of characters	60,825	170,456	138,038	127,594	126,656	123,980	153,737	101,152	96,905	105,839	129,888
Total num. of character-type	73	76	82	75	76	74	78	70	77	75	81
Total num. of words	10,221	27,180	23,643	21,402	20,953	19,803	25,864	17,678	15,664	17,835	21,975
Total num. of word-type	2,542	3,553	4,331	4,081	3,546	3,469	4,019	3,485	2,382	2,884	5,896
Total num. of sentences	437	1,334	956	755	929	746	1,064	639	644	690	1,052
Total num. of paragraphs	99	257	165	183	237	130	261	108	133	146	221
Mean word length	5.951	6.271	5.838	5.962	6.045	6.261	5.905	5.722	6.186	5.934	5.911
Words/sentence	23.389	20.375	24.731	28.347	22.554	26.546	24.308	27.665	24.323	25.848	20.889
Sentences/paragraph	4.414	5.191	5.794	4.126	3.920	5.738	4.077	5.917	4.842	4.726	4.760
Repetition of a word	4.021	7.650	5.459	5.244	5.909	5.709	6.435	5.073	6.576	6.184	3.727
Commas/sentence	1.156	1.112	1.504	1.470	1.268	1.643	1.157	1.271	1.107	1.333	1.269
Freq. of prepositions (%)	16.900	14.667	14.411	16.877	14.590	16.178	15.270	16.033	15.444	16.829	15.225
Freq. of relatives (%)	2.309	3.363	3.072	2.990	2.860	3.616	3.076	2.749	2.119	2.092	2.488
Freq. of auxiliaries (%)	1.057	1.932	1.216	1.048	1.407	1.398	1.659	1.431	1.303	2.398	1.002
Freq. of personal pronouns (%)	3.525	3.761	6.225	4.048	4.324	3.538	4.239	5.496	1.513	2.765	5.402

10.5. Word-length Distribution

We also examined word-length distribution for each material. The results are shown in Figure 5. The vertical shaft shows the degree of frequency with the word length as a variable. As for the 10 materials for environmentology, the frequency of 2- or 3-letter words is the highest: the frequency of 2-letter words ranges from 15.707% (Material 5) to 18.923% (Material 10), and that of 3-letter is 16.144% (Material 2) to 20.483% (Material 8). Although the frequency decreases until the 6-letter words, the frequency of 7-letter words such as NATURAL, NUCLEAR and SCIENCE is 0.171% (Material 7) to 1.525% (Material 6) higher than that of 6-letter words in half of the environmentology materials.

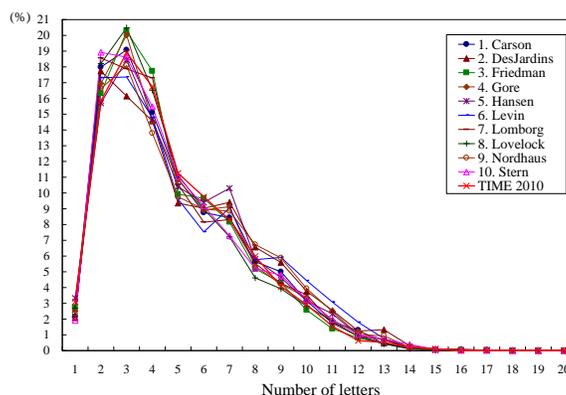


Figure 5 – Word-length distribution for each material.

Besides, *TIME* magazine have higher frequency than 10 environmentology books in 5- and 6-letter words, and the degree of decrease for *TIME* gets a little higher than the environmentology materials after the 8-letter words.

10.6. Correlation of the Number of Words with Characters, Sentences and Paragraphs

We checked the correlation of the total number of words with the total number of characters, sentences and paragraphs for 10 materials for environmentology. The results are shown in Figure 6. While the principal shaft shows the total number of characters, the secondary vertical shaft shows the total number of sentences and paragraphs with the total number of words as a variable.

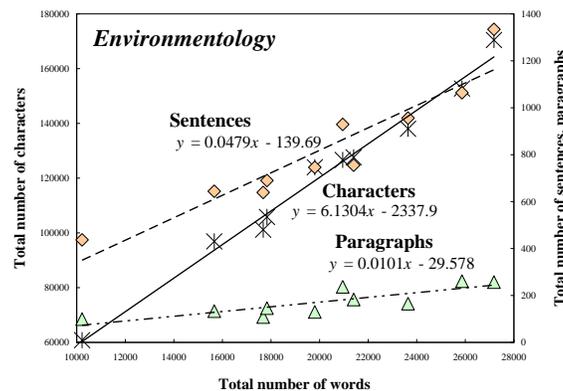


Figure 6 – Correlation of the total number of words with the total number of characters, sentences and paragraphs.

According to the figure, we can see a strong positive correlation between the total number of words and that of characters. We can also see a positive correlation between the total number of words and that of sentences, as well as the total number of words and that of paragraphs, although each correlation is a little weaker than in the case of the characters. For values of 10 materials, approximations shown in the Figure 6 were provided. Therefore, if we know the total number of words for a certain material for environmentology, we can estimate the total number of characters using the function $[y = 6.1304x - 2337.9]$, the total number of sentences by $[y = 0.0479x - 139.69]$, and the total number of paragraphs by $[y = 0.0101x - 29.578]$.

XI. CONCLUSIONS

We investigated some characteristics of character- and word-appearance of some famous English books on environmentology, comparing these with *TIME* magazine. In this analysis, we used an approximate equation of an exponential function to extract the characteristics of each material using coefficients c and b of the equation. Moreover, we calculated the percentage of

Japanese junior high school required vocabulary and American basic vocabulary to obtain the difficulty-level as well as the *K*-characteristic.

As a result, it was clearly shown that English materials for environmentology have the same tendency as English literature in the character-appearance. The values of the *K*-characteristic for the materials on environmentology are high, compared with *TIME*. Moreover, some books are more difficult than *TIME*.

In the future, we plan to apply these results to education. For example, we would like to measure the effectiveness of teaching the 100 most frequently used words in a writing beforehand.

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WHAT'S UP: A CASE-BASED HELPDESK SUPPORT SYSTEM

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ABSTRACT

Abstract— What's Up is the new case-based helpdesk support system capable of learning to rank a case solution from users. Each problem stored in a case base can have many solutions. Once users get a case best matched with input keywords, the system will show possible proposed solutions to the problems. These solutions are validated through feedback from users. This is a part of the learning process of the system as consistently unsuccessful solutions must be discontinued and good solutions must be rewarded so that they will be on the top of the solution list. Using this approach, the historically most successful solution is given the highest ranking. We show that the functionality and the effectiveness of the system could help smoothen and fasten the whole problem solving processes.

Keywords— case-based reasoning, helpdesk support system, solution ranking.

Helpdesk support system has attracted more attention over the past decades. Since it is important for all users of any systems, organizations have recently started noticing a huge potential benefit of applying IT to this function. According to Gartner Group that conducted a study on helpdesk systems, the average of the information technologies that are supported by helpdesks has increased from 25 to 2000 cases from 1996 to 2001 [Structuring, 2001].

However, there are a number of helpdesk service problems to be solved and improvements are also possible. The traditional helpdesk process suffers from a number of disadvantages. For example, the process is time-consuming and expensive. Expert advice to the problem is given only through the experience of the IT helpdesk or the available past services in the service database. In general, no automatic provision of expert advice is available. In addition, it is very difficult to store knowledge gained from helpdesk support [Janti & Kalliokoski, 2010].

Helpdesk automation software is a technology that can help the organization to make decisions and solve problems more effectively [Göker & Roth-Berghofer, 1999]. It focuses mainly on the information about callers and their problems. Helpdesk software forces helpdesk staff to handle calls in such a structured manner which can be reliable at all time. When a call is received, all requests will be immediately recorded into the helpdesk software database regardless of the degree of difficulties posed by the problem. These records help IT staffs to

understand the call load, keep a running log of interactions with callers, or bill for services provided [Aamodt & Plaza, 1994]. This also prevents the call from being lost in the shuffle when the staff is too busy answering another call. However, they do little to help customer service representatives quicker diagnose problems and suggest feasible solutions.

Helpdesk system offers a firm with the self-help approach, allowing workers to submit their requests directly to a helpdesk through helpdesk system. This feature greatly streamlines their internal business processes, and can reduce response time for all users. Moreover, helpdesk supporting staff will not be interrupted by a phone call and consequently need to stop working on another issue to record the information on that particular call. When a request is entered into the system, it allows any available support personnel to respond to all requests and be able to diversify calls. The system also allows newer support staffs to be able to answer many questions by simply searching the database for other calls with similar issues, which lead to much faster response time for the end user. Once all requests are solved, their solutions with user feedback ranking will then become available for firm's future reference [Belecheanu et al., 2003].

Although there has been a rich body of work investigated on help support systems from various perspectives, most of them mainly focused on systematic viewpoints [Chen, 2004]. These studies failed to emphasize on user involvement on helpdesk systems usage and design. In addition, most of other studies addressed helpdesk support systems problems through examining business help systems or application help systems, e.g. [Watson & Marir, 1994]; [Cook, 1997]. This method limits the exploration into a narrow scope. In addition, there are very few studies on helpdesk systems made use of human factors.

Therefore, this study describes the implementation of "What's up", a helpdesk support system, which focusing on a particular customer support from the past knowledge of the firm. The proposed systems could interactively ask the user questions to narrow down the problems gradually until few solutions of each question remain and allow user to evaluate and ranking solutions correspondingly. The goal of the system is to provide the end users a direct access to firm knowledge-based and assist in finding a feasible solution for all problems.

XII. THE PROPOSED HELPDESK SERVICE SYSTEM

The proposed system aiming to solve problems based on the knowledge gained from solving the precedents is formally known as Case-Based Reasoning (CBR). Our system is centered around an IT helpdesk service operated manually by a small team of IT helpdesk personnel. In general, this team manning the helpdesk deals with the coordination of a large number of requests for service and information. The proposed system consists of five main functions as follows:

12.1. Storing the Case

The main function of our system is to store cases into the database that allows user to retrieve it back (reusable) easily. These characteristics are valuable in identifying prior incidents and

solutions that could have been reused in the current situation. This process is initiated with the entry of the incidents and their past solutions. We classified all stored data into 5 major groups, which are:

- Category: in practice, we can normally have many subcategories in one category.
- Subcategory: in practice, we can have many causes in one subcategory.
- Cause: in practice, we can have many problems in one cause.
- Problem: in practice, we can have many solutions in one problem.
- Solution: in practice, this is the last group of the data set we can add.

When we store data, the users should be able to realize what information they want to enter. For example, if the users want to add a new problem, they have to select the related category and subcategory first. Then, they can enter their problems in that selected subcategory. This is the main duty every helpdesk staffs perform in order to keep the data systematically and be able to retrieve back easily.

12.2. Retrieving the Information

The second main function is the retrieving method. The users will search for the most matching problem with their own problems. These mechanisms are highly depending on the indexing scheme used in the system. Many CBR systems use the technique of pre-indexing, whereby indices are fixed prior to case entry time [Chan, Chen, & Geng, 2000].

We use the “FREETEXT” function of Microsoft SQL Server to match the input keyword with problem details in our database. This function will do the free-text query as IR system which consists of 3 main components.

- Tokenization: Separate sentence to the words by space.
- Stemming: Cut the article or verb to be or the unusable words.
- Matching: Match the words with the problem details.

This method generally looks for the similarities over a series of instances and then form categories based on those similarities. Finally, the results user retrieved will be listed and ordered by the level of priority of that received problem.

12.3. Ranking the Cause and Solution

When users select the most matching problem, they prefer to see the best possible solution to solve their problems. The purpose of the ranking is to fit the requirement in different questions and to adjust the weightings when there is a change in the success of a particular solution.

The calculation is performed to rank similar cases. We use the average score of every solution in that cause to rank the cause and then use the validating score of each solution to rank the solution within each cause.

12.4. Validating of the Solution

The proposed solution is validated through feedback from a user or the environment. This is part of the learning process of the system as consistently unsuccessful solutions must be

discontinued and good solutions must be rewarded so that they will be on the top of the solution list. Using this approach, the historically most successful solution is given the highest ranking. The score will be given when the user click “It works” button in the solution page when they search.

Whenever the user clicks the button, that solution’s score will be increased by 5 points from the old score, while the other solutions in the same cause will be deducted by 2.5 points. We use this approach in order to increase chances for other solutions to be able to get a higher score too. However, we will limit the maximum score as 100 and the minimum score as 0.

12.5. Approve the Solution

System administrator allows users to approve the solution. If the users have authorities to approve the solutions, whenever they add new solutions, the status of that solution will be “approved”. On the other hand, if the user can not approve the solution, the status of added solution will be “unapproved”.

We set up an ability to approve the solution whenever the users see the solutions. That is, if the ability is “yes”, they will see the approve button when they open the unapproved solution. On the other hand, if the ability is “no”, they will not see the approve button when they open the unapproved solution.

XIII. SYSTEM IMPLEMENTATION AND EVALUATION

We implement the proposed system using the C# language with WPF interface and the Microsoft SQL Server. To test the system efficiency, we had added a total of 1,500 records from variety of problems as our samples. When answering the call from customers, IT helpdesk staff has to identify the problem, and check whether it had already been occurred and recorded. Our result shows that time consumed for searching problem is 0.983 ± 0.017 second with 99% accuracy (if the case is already presented in the library). However, for new cases, it would take longer to figure out the problem and identify its cause from the start. Since our CBR system is applied with sophisticated format that work compatible with human thoughts, it only provides a part of assistant which are knowledge library, solution suggesting. So, humans still have to make decisions upon their judgments not totally rely on CBR. This fits well when it comes to solving problems because there always are variations in cases which affect solutions to be adapted correspondingly.

In order to measure the performance of our CBR application, IT helpdesk staffs are divided into 2 groups, one performs traditional way of work (human only) as shown in Figure 1, and another one works with an assistance from CBR (proposed system) as shown in Figure 2. The experiment ran for 5 replications and the results are shown in the Table 1 below:

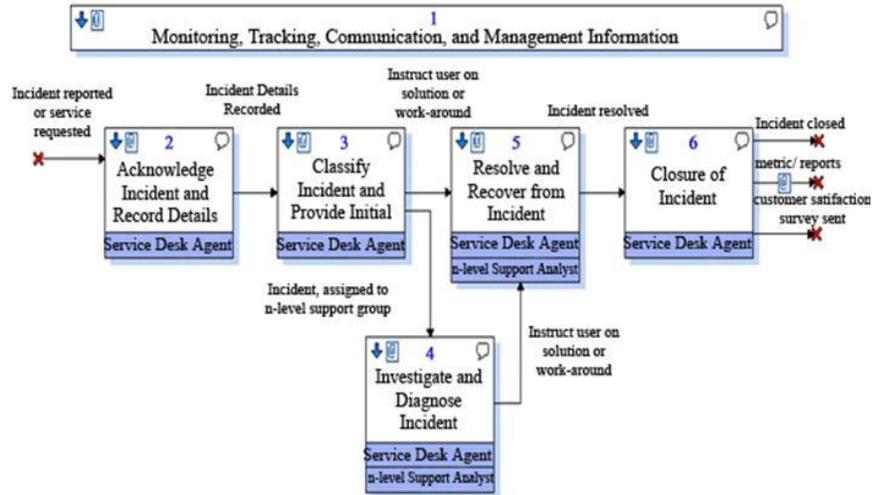


Figure 1 - Current Helpdesk Service Processes

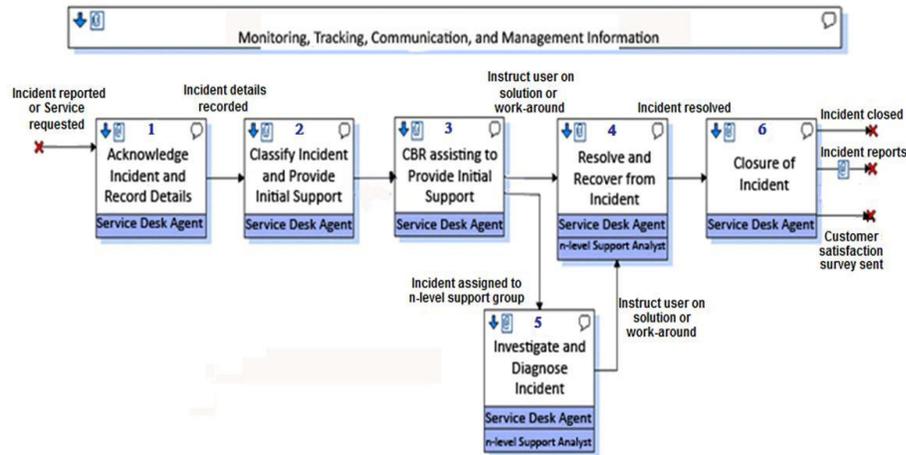


Figure 2 - Modified Incident Management

Table 1 - Service Performance in Pre- and Post-implementation of CBR.

	Average Time Consumed in Each Process	
	Traditional Way	Proposed System
Search for problems	Less than 1 minute	Less than 1 minute
Identify causes	3 to 5 minutes	1 to 3 minutes
Search/Provide initial solution	4 to 7 minutes	1 to 4 minutes
Total Time	8 to 13 minutes	4 to 8 minutes

According to the testing result, with the assistance of CBR system, it is clear that “What’s Up” system has made the time consumed in the process of identifying causes and

searching/providing initial solution significantly less than the traditional way. Also, it does yield a much lower total time consumed when compared with the traditional one.

As mentioned above, this experiment had also involved normal customer who are served by HD to resolve their problems. They show positive reaction and reveal high satisfaction for the quick services by the HD staffs who work with an assistant of our CBR system.

Since it takes less time to serve one customer at a time, waiting time of each call and the number of waiting customers has been decreased. In addition, numbers of customers being served are greatly increased. It also reveals that the staffs with CBR assistance have more spare time to spend on other tasks.

Table 2 - Experimental Results in the Period of One Hour

	Traditional Way	Proposed System
No. of Customers Served by 1 Staff	6 customers	8 customers
Avg. No. of Waiting Customer	3 customers	1 customer
Avg. Waiting Time of Customer	2.12 minutes	1.49 minutes
Overall Customer Satisfaction	Good	Very Good
Avg. Service Idle Time	3.78 minutes	7.35 minutes

In receive

order to the user

feedback on the new system, User acceptance test (UAT) was conducted on topics as follows:

- The relevance of the information retrieved (how suitable is the solution retrieved for the current problems?)
- The ease of use of the system, in terms of the entry forms layout and level of detail
- The security of the system

A. User Acceptance Testing (UAT)

The Test is designed to measure the acceptances and satisfaction of users towards the helpdesk support system. It focuses mainly on 3 categories: functional, security, and usability tests.

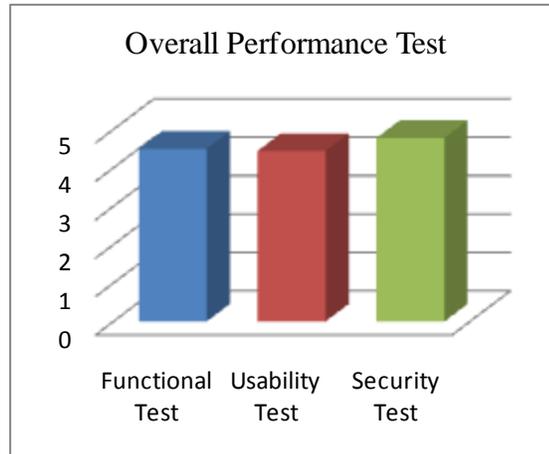


Figure 3 - Overall Performance Test

According to Figure 3, the average score of overall performances test is 4.56 (out of 5), which means very good. This indicates that the CBR application is well accepted by actual users.

B. Case Base Maintenance

While new information is added to the case-based, outdated information is weeded out. Learning by parameter adjustment, which adjusts the ranking of each solution according to its success rate, is implemented in What's Up. In this manner, the next time the same case is retrieved, the solution with the highest ranking, e.g., the historically most successful solution, is at the top of the list for possible solutions and presented to the end user first. All solutions are provided with an initial ranking when they are entered into the case base. Therefore, What's Up maintains the success rate of all suggested solutions and, by adjusting the associated ranking, the system learns the better solutions after each processing iteration. Performance evaluation has been carried out for What's up. Here, we focus on measuring the effectiveness and performance of our new system, which is a major function of the helpdesk environment.

XIV. CONCLUSION

This paper has presented a Case-based reasoning in helpdesk support environment to replace or compliment the traditional phone-based helpdesk environment. In this study, we have developed the novel knowledge support system to improve the performance of IT helpdesk services. The proposed system provides integrated browsing and suggestions about problem-solving knowledge. Relevant processes are recommended to help helpdesk staffs identify the root cause of a problem situation and the appropriate action to take. The CBR could help IT helpdesk staffs by providing necessary knowledge to effectively solve problems. In addition, the system could reduce IT helpdesk staff service time dramatically. A prototype system is

implemented using a data set from a company's intranet portal in order to measure the effectiveness of the system.

According to the result of the system testing, the trial application of CBR for helpdesk services has proven to be success. We found that CBR could promote the performance improvement of helpdesk staffs in several ways as follows:

- Record and maintain knowledge from problem-solving experiences for future use (especially for some technical knowledge or small but significant ones)
- Reduce the average total time consumed in serving one customer
- Increase customer satisfaction from faster service
- Increase the number of customers being served in the system
- Decrease waiting time and the number of waiting customers
- Generate more spare time for IT helpdesk staffs to perform on other tasks
- Enhance the knowledge of the firm

Limitations

Since this project focus mainly on the first-tier of helpdesk support, some limitations still exist:

- Sophisticated or hard-to-solve problems still have to pass through the investigation and diagnose processes for further support (no quick service is guaranteed).
- Solutions for those problems might be in high-technical terms which would be hard to understand or follow by ordinary staff. Therefore, knowledge from specialists must be simplified first before being entered to the case library.
- Since this application is very new to many helpdesk staffs, it might be difficult to extract the information from the firm legacy system into CBR case library directly. In addition, most of recorded data might not be useful. That is, IT helpdesk staffs might have to provide their own tacit knowledge to the system from the start, which is a time consuming process until the CBR would be extremely effective and useful.

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A Comparative study of The IT Risk Management System in different Higher Education Institutes

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ABSTRACT

Nowadays, universities have developed the standard quality of the management including teaching processes. The Information Technology service is established in order to support the university's operation. By using the concept of connected IT together with appropriated system among university. This will be improved to an organizational system and also sharing resources for the highest benefit. Therefore, researcher as human resource of the higher education will study the standard framework called COBIT (Control Objective for Information and Related Technology) By emphasize the Risk Management system which is a tool for operating every organization to IT Governance. Using high-quality University with IT Governance as a blueprint designed for evaluation and analysis the Information Technology procedure comply with university IT strategic plan.

Those are the universities located in Bangkok and perimeter which had highest score for fiscal year 2010. From university case study, researcher summarized that only 80 present could perform as the Process PO1-PO10 of COBIT framework comply with university strategic plan. This is because the limitations for instance an organization cultural limitation. Thus, researcher generally studied and analysed the IT management system of university under the organization structure in order to conformance the domain PO1-PO10. This will lead to the improvement of plan and strategy that could performed as IT Governance. Begin with Information Technological foundation structure, the harmonious of plan and strategy. Finally, this will affect the university IT management to move into the same direction. Moreover, applying the Risk Management system into all procedure will develop the effectiveness performances which bring about the ability of managing IT resource for the highest benefit.

Keywords Risk Management system, Information Technology, COBIT, PO: Planning and organizing the domain

INTRODUCTION

The current higher education institutions in Thailand. Universities were featured as the official performance evaluation criteria Office of the Public Sector Development Commission, Office of the Higher Education Commission, And study quality assessment criteria Office for National Education Standards and Quality Assessment (Public Organization). Which the three organizations for accreditation and evaluation operational three respects management academic education by the three agencies are aware of the benefits of risk management practice within the campus. Has becomes a significant part of the risk management of the organization. To achieve a standard of excellence to meet the academic needs of the business. University under the good governance and management excellence of the operations within the University of Information Technology and Management Studies. Or other support of the university effectively.

The aims of the University, as described above. Which will be evaluated through the assessment criteria level or not. Depending on the choice of standards and guidelines, or practices of any framework to support the vision. Strategy and mission of the University. For the University to develop the path to the next higher quality. The research questions for this investigation are as follows:

1. To compare the performance on risk management, information technology institutions. In Bangkok Thailand. And metropolitan areas.
2. To suggest a form of risk management and information technology university in the future.

THEORETICAL FRAMEWORK

The researchers had studied risk management, information technology systems. Linked with the process and principles. The Committee of Sponsoring Organizations of the Treadway Commission (COSO), COSO-ERM (Enterprise Risk Management), COBIT Policy-based approach to risk management. Understanding of the objectives and policies of the University. and Understanding of the academic business of the University.

When the University has identified risks. Valuation risk. Planning and control. Planning to reduce the risk in the organization. And planning to minimize the risk. Principles of risk assessment in order to plan out a risk management organization. The study focused on the risk management plan for information technology. Also how important it is. Planning and organization. (Santipat Arunthari, 2010).

University risk assessment which must be comprehensive and strategic approach to information technology strategy to achieve the objectives of business education as well. It is planned to provide a strategic vision to succeed. The communication and management of the domain PO; The process consists of 10 information technology domain as follows.

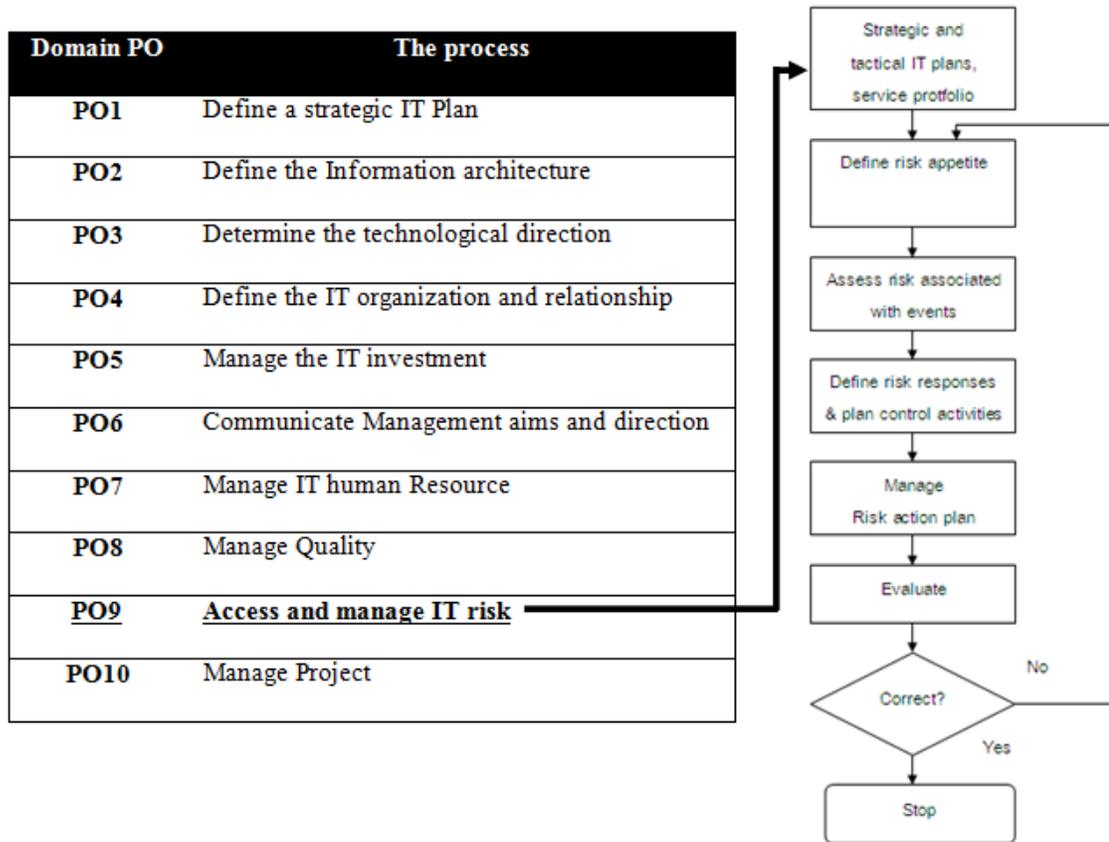


Figure 1 The communication and management of the domain PO and The risk assessment (Applied: IT Governance based on COBIT 4.1, 2007)

The literature on the subject of good governance (IT Governance). Of Figure 1 is the beginning of the application of the COBIT framework for control systems. Linking corporate strategy and strategic management of information seamlessly. Organizations need to process the COBIT framework for planning and organizing. To establish guidelines for good management. Researchers selected PO9 linked to risk assessment. Shown in Figure 1.

These findings made the researchers note that the risk of each institution as a case study. The most successful national strategies, processes and techniques, how to work in information technology. A criterion, Office of the Public Sector Development Commission is a limit to the Office of the Higher Education Commission and Office. For National Education Standards and Quality Assessment (Public Organization). Of the case studies is the University six of which were compared to determine how best practices that leads to excellence best Practices focus on managing policy risk. Information technology.

RESEARCH METHODS

The case study can be used to study population consisted of 60 sample people, the researchers have created a tool for qualitative research to the research advisor. To check for accuracy. The appropriate language. And clarity of the questions. Then the tools to improve. Including the validity of the tool to the tool by the professors and experts in the relevant disciplines.(Sombat Bunpakom, 2002). With knowledge of the use of information technology. And risk management of the third person. This research has led to research to improve under the guidance of experts. And successfully complete research tools to collect real data on a sample set of assumptions. Including the chief executive. In middle management. And practitioners of information technology. Comparison of all higher education institutions in the six case studies.

Population, including the management of information technology directly. The party specified by the group chief executive. And group chief executive agencies. To collect data from staff and the community. Samples. The population used in this study.

Table 1 The population used in this study

Case Study	Samples
Case Study A	Number of respondents and included 10 sample people.
Case Study B	Number of respondents and included 10 sample people.
Case Study C	Number of respondents and included 10 sample people.
Case Study D	Number of respondents and included 10 sample people.
Case Study E	Number of respondents and included 10 sample people.
Case Study F	Number of respondents and included 10 sample people.

The research tool used was a questionnaire. This is the second interview with the general status of the questionnaire respondents interviewed. How to make a participatory action research. (Participatory Action Research - PAR), (Sombat Bunpakom, 2002). Which is the study of the field study will focus on the collection of data by the researcher as part of the organization.

The researchers conducted depth interview is individual depth interview personal interviews. The question discussed during the interview for the contributor. The researcher asked the minuscule depth interview answers carefully. Of the interview questions in addition to the already planned operations and procedures. Have to ask why. A person's behaviour, attitudes, beliefs, values, and personality characteristics in the focus group discussion. The researchers conducted interviews and focus group discussions to issues with invited participants included a group. Groups of 5-7 sample people. And opportunity for participants to exchange views and discuss a wide variety of issues that we need, researchers are trying to find a conclusion.

Researchers need to know the details that are useful in summarizing research. Including new ideas. The technique used to analyse the content of the interview. The information is grouped by the issues, and then analyse the cause and effect. The purpose and concept of the study is to analyse the information technology management model. The standard COBIT framework. Researchers to study the extent of the information technology planning and

organizing the domain. Focus on high level management. Strategic Management Group. Organizational policies and goals.

The researcher analysed the status of the respondents. Results and interview process to compare the strategy with the principles of risk assessment policy (Access and manage IT risk). Each of the case study is university education. Benchmarking to study and research the practices and procedures of a mistake. To note the careful safeguards to reduce the risk to acceptable levels. And the techniques that lead to excellence.

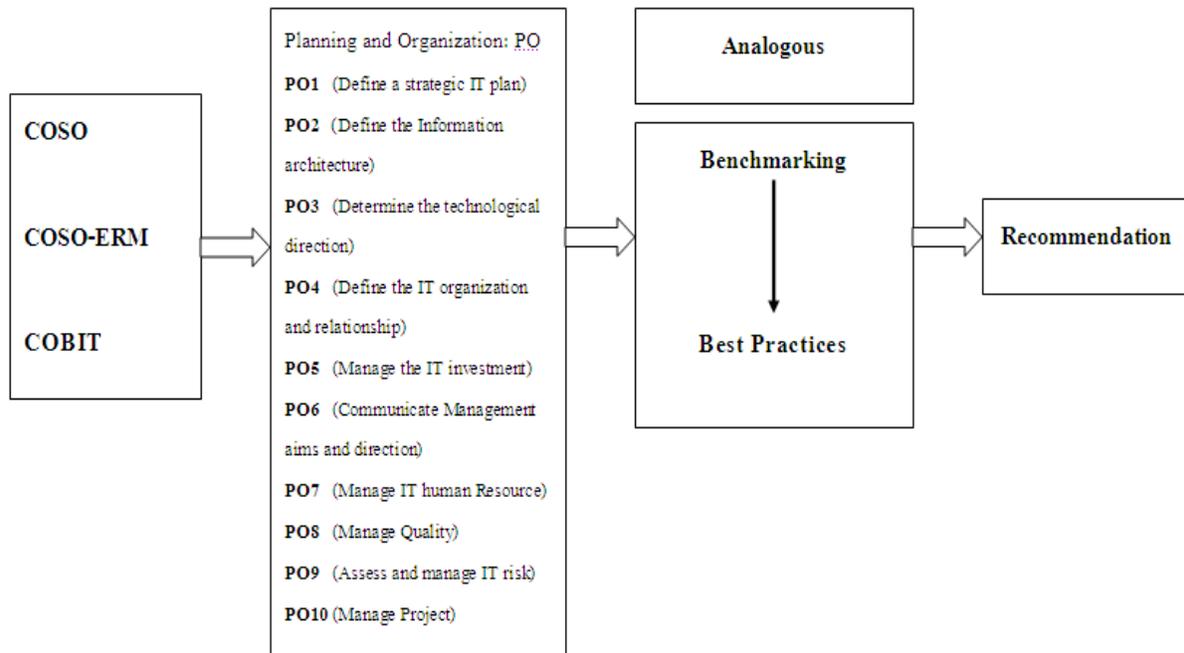


Figure 2 Research Method

Framework for risk management of higher education institutions based on the domain (PO)

This model was mainly based on The Committee of Sponsoring Organizations of the Treadway Commission (COSO, 2009), The framework defines essential enterprise risk management components, discusses key ERM principles and concepts, suggests a common ERM language, and provides clear direction and guidance for enterprise risk management. (COSO-ERM, 2009). Achievement of Objectives Within the context of an entity's established mission or vision, management establishes strategic objectives, selects strategy, and sets aligned objectives cascading effect through the enterprise. This enterprise risk management framework is geared to achieving an entity's objectives, set forth in four categories.

- 1) Strategic high-level goals, aligned with and supporting its mission
- 2) Operations effective and efficient use of its resources
- 3) Reporting reliability of reporting
- 4) Compliance with applicable laws and regulations

This categorization of entity objectives allows a focus on separate aspects of enterprise risk management. These distinct but overlapping categories a particular objective can fall into more than one category address different entity needs and may be the direct responsibility of different executives. This categorization also allows distinctions between what can be expected from each category of objectives. Another category, safeguarding of resources. . (COSO-ERM, 2009).

Because objectives relating to reliability of reporting and compliance with laws and regulations are within the entity's control, enterprise risk management can be expected to provide reasonable assurance of achieving those objectives. Achievement of strategic objectives and operations objectives, however, is subject to external events not always within the entity's control; accordingly, for these objectives, enterprise risk management can provide reasonable assurance that management, and the board in its oversight role, are made aware, in a timely manner, of the extent to which the entity is moving toward achievement of the objectives. (COSO-ERM, 2009). Enterprise risk management is not strictly a serial process, where one component affects only the next. It is a multi directional, iterative process in which almost any component can and does influence another.

Enterprise risk management consists of eight interrelated components. These are derived from the way management runs an enterprise and are integrated with the management process. These components are: 1) Internal Environment; 2) Objective Setting; 3) Event Identification; 4) Risk Assessment; 5) Risk Response; 6) Control Activities; 7) Information and Communication; 8) Monitoring. (COSO-ERM, 2009).

The researcher conducted research to study the use of risk management, information technology higher education. As a way to study the process of planning and organizing the domain Planning and Organizing: PO of the COBIT framework. Control Objectives for Information and Related Technology (COBIT, 2007). Is a framework created by ISACA for information technology management and information technology governance. It is a supporting toolset that allows managers to bridge the gap between control requirements, technical issues and business risks. The research focuses on the use of qualitative research methods. And quantitative research with a few. Study to collect data to determine the facts. Related activities performed

Assessment domain. Effective risk management. And Quality Assurance as evaluation criteria. (Santipat Arunthari, 2011).

RESULTS

The study and survey data on policy implementation strategies, internal control self-assessment by information technology. Risk Management and quality assurance. Of the agencies involved in the field of information technology. Internal audit and information technology. Including quality assurance. From case studies of six universities of higher education.

Researchers assess and compare the risk that the conduct of risk management. Including compliance and risk management. Standardized assessment results to improve the risk assessment of its internal controls. Reporting and risk management. Internal control self-assessment (CSA) information technology. And QA (Quality Assurance) information technology. Agency in the public sector, such as universities. Reports to various committees by the university administration. The administration to report critical information to senior management of the university annually.

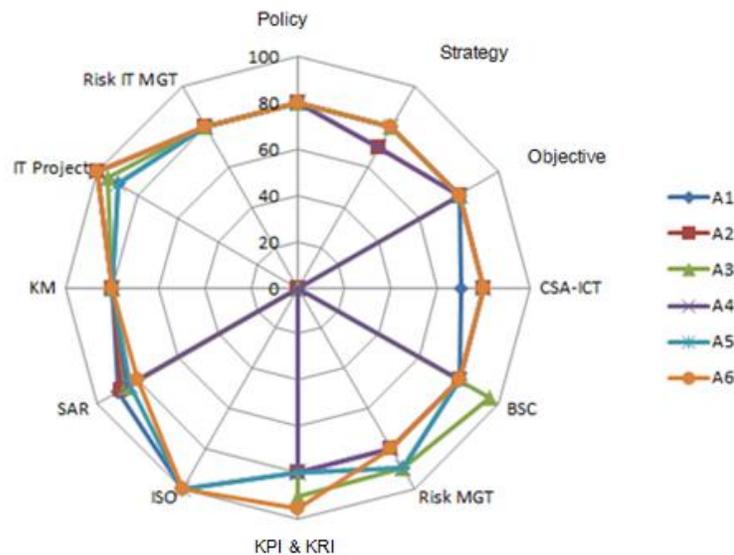


Figure 3 Elements of the internal control system and Risk Management systems

The researchers concluded that the results of a case study of the University. The domains of the implementation of the COBIT framework PO1-PO10 (COBIT, 2007). are aligned in the strategy and implementation of the organization's key performance indicator of 80 present only. The University still has some limitations such as restrictions on the organization's culture budget

policy. Policy at the highest levels of cooperation so. Researchers have conducted a study and analysis of the overall management system of the university under the organizational structure.

University can continue to serve the entire domain of PO1-PO10, which will result in the implementation plans and strategies are defined to develop operational guidelines for good corporate governance of information technology. University should create a process from creating plans and strategies in line with the IT infrastructure. Integrated management of information technology are aligned to the same direction of the University.

If universities are implementing a risk management process to be used in all operations. Will contribute to improve performance. Will be able to manage the information technology resources most effectively. Researchers aim. This research will be used to study qualitative research methods, interviews and analysis of secondary data derived from the functional focus group discussion for the purpose of determining the direction and strategy for the plan. Implementation of information technology master plan and long-term plans and short-term plans. Including information technology projects. Developed under the Master Plan.

In addition, the researchers also analysed the basic overview of the management of information technology within the University as a case study. Comprehensive level of infrastructure and components of the infrastructure layer. Level of development of software applications in organizations. And the level of process improvement implementation plan of the university. The strategic plan must be consistent with the six universities.

CONCLUSION AND FUTURE WORK

The results of this study. The researchers can present a risk of information technology appropriate to the standards and quality of higher education in the future. Universities are educational organizations such as universities must adhere to any standards of operational information technology. To the quality of service. Therefore, it is necessary to prepare the system for the standard framework. There are indications that the standard operational challenges. And detailed references to the standards of good practice in the operation.

The development of KRIs can provide relevant and timely information to both the board and senior management, which is significant to effective risk oversight. Effective KRIs are most often found when they are developed by teams that include the professional risk management staff with a deep understanding of the core operations and strategies of the organization subject to potential risks. Ideally, (Mark S. Beasley. etc., 2010). KRIs are developed in concert with strategic plans for individual business units and incorporate acceptable deviations from plan that fall within the overall risk appetite of the Universities.

Many Universities are seeking to develop a process that provides management and the board of directors with rich information about potential events that may affect the entity, especially top risk exposures, that they can monitor on an on-going basis. While most University monitor numerous key performance indicators (KPIs), often those indicators shed insights about risk events that have already affected the University. Increasingly, boards and senior executives are looking to develop metrics or indicators to help to better monitor potential future shifts in risk conditions or new emerging risks so that management and boards are able to more proactively identify potential impacts. on the organization's portfolio of risks. Doing so enables management and the board to be in a better position to manage events that may arise in the future on a more timely and strategic basis. (Mark S. Beasley. etc., 2010). This latter type of metric or indicator is frequently referred to as a key risk indicator (KRI).

The use of KRIs to anticipate emerging risks and shifts in risks over time can reduce losses, identify opportunities for strategic exploitation, and potentially reduce the cost of capital by mitigating perceptions of risk borne by capital providers. (Mark S. Beasley. etc., 2010). The design and roll-out of a set of KRIs is an important element of a University's enterprise risk management process. This paper has identified the potential benefits of developing a set of IT risk management, important design elements of those KRIs, and an appropriate methodology for communicating KRI data to members of senior management and the board.(Mark S. Beasley. etc., 2010). Examples of specific KRIs have been provided to help differentiate them from key performance indicators that are commonly quality by many universities. As universities look to enhance their risk management approach, the addition of KRIs to complement existing risk identification methods will likely yield significant benefits.

A risk assessment is an important step in protecting your personnel and your university, as well as complying with the law. It helps you focus on the risks that really matter in your workplace. And associated risk management system in conjunction with the five stages.

- 1) Identify and assess the risks.
- 2) Measure the impact on the organization.
- 3) Techniques to deal with risk.
- 4) Introduction of a risk management program and to use.
- 5) Monitoring and Evaluation.

The important thing is to determine how the University's risk management. Risk control. And risk measures for the information technology of the University. This must appear as part of a major policy for the management of information technology such as the use of risk assessment standards NIST800-30 etc.

The University will establish a system of risk management that must be inserted in every stage of the COBIT framework but what should strongly is to educate the people in the organization to create an understanding of the problems and ways to deal with the scene. Emerging and crises that may occur. University must be a way to track and evaluate the results. It needs to establish measures to control the risk to lower risk level is acceptable. From a review of the Risk Management Committee. To pursue a potential high risk by the risk management plan. And continuous risk assessment.

The researcher believes that the University has implemented the COBIT framework domain PO1-PO10 carried out correctly; it is a strategy to build the basic structure by Shared Service Center (SSC) together, starting from the development of infrastructure layer first. The first is linked to the creation and implementation of standards ITIL and ISO 20000 for IT Service Management, ISO / IEC 17799:2000 ISO 17799 and 27000 for Security, CMMI for Software Development. (Santipat Arunthari, 2011). To the best practices in information technology. This will create a powerful and effective way to build a quality system for the organization. To be accepted by international standards, best practices in information technology

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Santipat Arunthari, An Exploratory study on IT Governance and IT Strategy based on COBIT
framework: a case study of a IT company serving group's business synerg

Influencing of Marketing Competency in The Convenience Stores

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ABSTRACT

The research was to investigate actual factors affecting marketing effectiveness in the convenience stores. The conceptual framework was developed from the competitive advantage theory, resource-based theory of industrial organizations, and other contemporaneous research in marketing effectiveness. Accordingly, the researcher considers the importance of the factors of buyer-supplier relationships strategy, connection, low costs strategy and differentiation strategy. In this the researcher employed both qualitative and quantitative research approaches. The instruments of research were two folded: interviews and a questionnaire. Data were collected from managers of business convenience store. Data collected were analyzed using the structural equation modeling and on the basis of observing the actual marketing effectiveness of the organizations studied through all operational links in the buyer-supplier relationships strategy, connection, low costs strategy and differentiation strategy.

Findings are as follows: The data collected were subsequently analyzed using the structural equation modeling (SEM) technique. Using confirmatory factor analysis (CFA), the researchers validated the items in the questionnaire in terms of accuracy and reliability. In determining the weight of factors derived from testing the construct validity of the factors, the researchers found the following: chi-square (χ^2) = 89.49; degrees of freedom (df) = 83; probability-(p-)value = .08; χ^2/df = 1.35; root mean square error of approximation (RMSEA) = .01; goodness of fit index (GFI) = 0.99; adjusted goodness of fit index (AGFI) = 0.99; normed fit index (NFI) = 0.99; non-normed fit index (NNFI) = 0.98; incremental fit index (IFI) = 0.98; relative fit index (RFI) = 0.99; comparative fit index (CFI) = 0.98; and Hoelter's critical "N" (CN) = 338.43 (n = 400).

In addition, the analysis revealed that buyer-supplier relationships strategy, connection, low costs strategy and differentiation strategy. Variances in marketing competency were explanatory at the level of 55.4 percent ($R^2 = 0.554$). Each of the four factors examined were composed of eleven major elements.

KEY Words marketing competency, marketing effectiveness, convenience stores

INTRODUCTION

The retail business in Thailand has become popular for a long time. In the past the business was operated without a certain form, but it was a mere buying and selling. Later, the business has been developed by a systematic management including purchasing system, goods transportation and goods distribution. In addition, the retail store has similarly been designed with the same management system for buying conveniences. Each retail business will design its store, using different uniqueness. Some stores focus on consumer products, other stores emphasize on beverages, sweets and snacks. Meanwhile, some stores aim at selling food supplements and vitamins. The stores have unique names to make them easy to remember. However, the selling point of all stores is a customer's shopping convenience. Furthermore, prices in the stores should be reasonable, not too cheap and not too expensive.[12,13]

A retail store is also called a convenience store. Nowadays there are a large number of competitors. The business is more difficult with a higher competition. Business owners should seek methods and strategies for business sustainability. Nevertheless, no matter what strategies have been applied, the management should think about the appropriateness in terms of budget and employee's capacity for maximum business benefit. The capacity of the organization should be considered when choosing a strategy. To apply all strategies available requires a high budget. If the business has a limited budget, and if only one strategy should be selected, how will the right strategy be chosen for the maximum benefit.[10,12,13]

REVIEW OF THE LITERATURE

Competitive Theory: Porter has proposed two forms of competitiveness that enable the industry to have advantages as follows:

1. Cost Advantage means the business should have lower costs than other business entities in terms of production capacity, product innovation as well as quicker delivery. Besides, customers will receive a higher added value from low costs.[3,17,18]

2. Differentiation Advantage means the creation of the product unique value in terms of quality, style and after sale service. These differences are so unique for the product that it excels their competitors, enabling the business to have a higher advantage.[3,8,17,18]

Strategic Plan of Competitive Advantage Porter (1980) has set up the strategic plan of competitive advantage in line with the decision making at the policy level called strategic decision making in policy, consisting of planning, plan development and control, by relating to the supply chain system for the movement of raw materials, production and resources to support

the production capacity of businesses. These strategies comprise 1) low costs 2) quick service 3) meeting customers' requirements and 4) product flexibility in terms of quantity and quality. The product should be adjustable for customers' requirement levels. 5) Technology is utilized to support business activities including communication, delivery and quick and correct material and equipment storing. and 6) appropriate location of production. [3,4,5,10,17,18]

Low-Cost Leadership Strategy (LCS) This strategy requires the business potential to produce products and services with lower costs than those of the competitors. Meanwhile, customers' satisfaction remains the same. Although the products are sold at the same prices, the profits from sales remain unchanged. The low-cost-leadership strategy focuses on three factors including 1) lower logistic costs for all activities 2) lower raw material costs by acting as a major sales distributor 3) lower location costs by locating near sources of raw materials called just-in-time cost reduction.[3,4,10,17,18]

Differentiation Strategy : (DIS) focuses on the competition effectiveness of successful businesses. The differences consist of product quality and response to customers' different needs. Delivery and service activities should be able to compete with competitors.

The competitive advantage of product quality differences will focus both on the style and the benefit that should differ from competitors. Moreover, the services include the credit policy, the delivery policy, the sales policy and the sales promotion different from competitors. 3,8,10,15,17]

Buyer-Supplier Relationships Strategy : (BSS) building a good relationship between a customer and a supplier is a starting point of trust between both sides of the same supply chain[4].Both sides should take good care of this relationship. The relationship will be long and continue to improve trade. Most businesses always focus on customers only, and forget about the suppliers of raw materials. They misunderstand that the suppliers alone should care the customers. By this reason, the organizations lack an opportunity to get a mutual benefit. If the business cares about the suppliers, the suppliers' capacity can be seen, also affecting the selection of main suppliers. When the relationship is longer, the plan will mutually be set up. Meanwhile, products will be developed, and cost will be reduced [9,16].The result of building this strategy leads to the collaborative use of the information, no information hiding, risk sharing, continued trading, bilateral problem solving, new product design cooperation, high quality products, cost reduction, working hour reduction and continued product development [1,2,3,4,15]

Connection/Guanxi/Personal Relationship : (CON) The personal relationship is important for business, because it creates convenience. In China, the personal relationship has widely been used for a long time. It leads to a joint trade benefit. When the business uses this method, it

reduces the shortage of main resources and the difficulty of contacting procedures. Moreover, a communication is not difficult while a problem can jointly be solved. The personal relationship can improve the business popularity, and it is the thing that the organizations doing a business together should receive the same opportunity. Strengthening a business is one of business powers that helps push an organization to achieve a good performance. The personal relationship system helps reduce a job difficulty significantly. The personal relationship system helps the business to jointly trade as a network system successfully.[1,2,7,15]

In addition, the study shows that the personal relationship in organizations creates a good effect for the business capacity. However, after a deliberate study, if there are too many personal relationships, then these will negatively affect the business capacity. Additionally, the study in organizations shows that the personal relationship does not affect a marketing cooperation. Meanwhile, the information sharing does not affect a job performance [5,7,15].

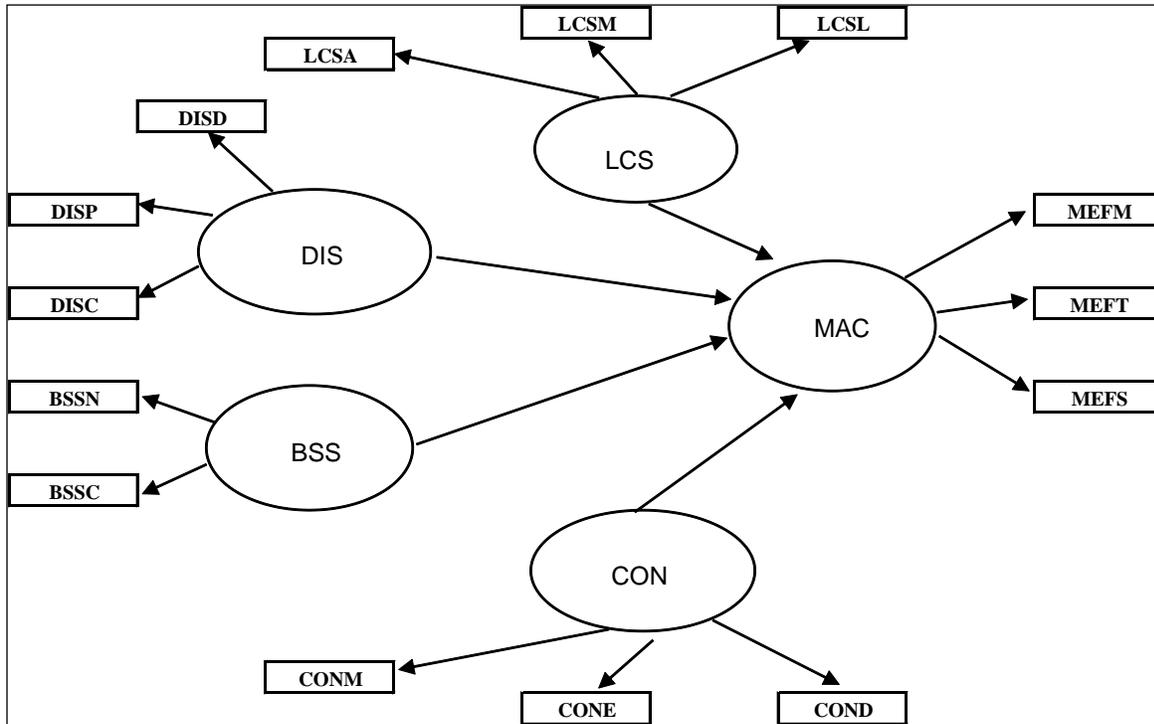
Marketing Competency (MAC) Most businesses look at a long-term picture to ensure an acceptable outcome. It means that businesses, the marketing share of which continues increasing, find that the clear goal and outcome should be obviously stated. According to the competition theory, successful businesses having a high market share should focus on their continued development strategy. The strategy ought to be appropriately applied. The result of the strategy implementation should derive from the good internal process analysis of the business. The business should have a clear working goal, leading to the expected outcome. Additionally, the business should focus on the result of the continued relationships. The sales increase of the business should come from the development and the improvement of various aspects of activities, considering customers' views as a main factor, consisting of trust strengthening, communication to customers regarding the business and its products. Moreover, the market should be expanded to reach new customers to ensure the sales increase. The assessment of the sales and the revenue increases should be averagely conducted every three years for apparent results.[3,10,17,18]

Market Share To continue increasing its market share, the organization should set up its target, outcome and clear working procedures. According to the competition theory, an organization that is successful by having a higher market share should continue focusing on organizational strategy development, coordinating with the organization concerned. The result of the coordination should come from a good personal relationship first. The organizations should have trust on each other. The organization should set up a clear target. Moreover, the organization should focus on the result of the relationship with customers continually.[1,2,3,10]

Income from Sales and sales volume of the organization should come from the activity development and improvement by considering customers' feedback including trust, communication about the information of the organization and organization products. Furthermore, a trading base should be expanded to include new groups of customers in order to

increase sales volume. The evaluation for sales volume and income from high sales should be considered for three years on average to acquire a certain result.[3,7,8,17].

Figure 1 Conceptual framework



Hypotheses Testing

$$MAC = \beta_0 + \beta_1 LCS + \beta_2 DIS + \beta_3 BSS + \beta_4 CON \zeta \dots\dots(1)$$

METHODOLOGY

In the current investigation, the researcher employed qualitative research and survey methods using a questionnaire. The study was divided into two steps: The first a qualitative research study using in-depth interviews to obtain information for use in a quantitative research method and focus group discussion with total of 30 sampling. The second part of quantitative research questionnaire is divided into six main sections. 1) Low costs strategy 2) Differentiation strategy 3) Connection 4) Buyer-Supplier relationships Strategy 5) Marketing Competency

The sample for this research was selected by purposive sampling and conducted interviews to obtain information for use in a quantitative research technique. Sample of

quantitative research is the convenience store business of Thailand form 400 questionnaires collected information.

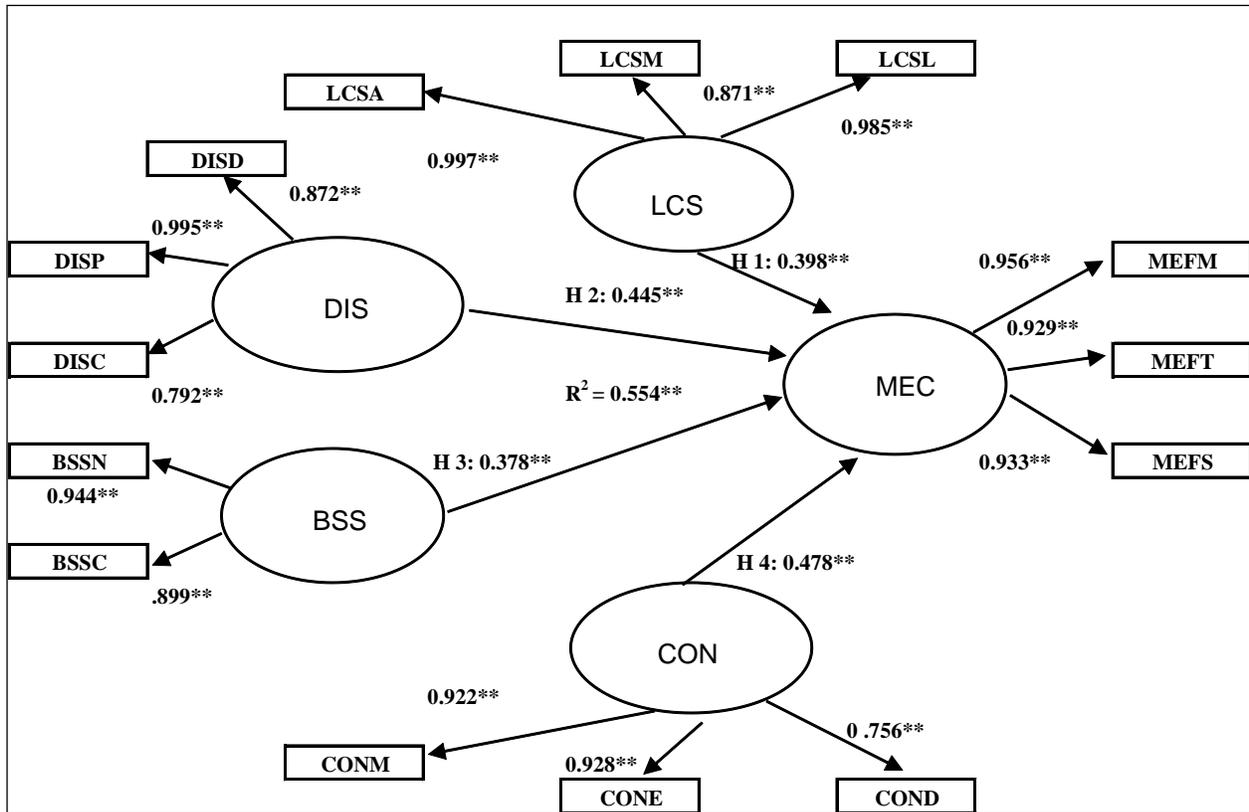
To test the influence of the variables. Data were analyzed using descriptive statistics [14,19] and structural equation modeling (SEM) [19].

FINDING

Factors Influencing the Marketing Competency

The researchers conducted an analysis of the data collected in order to determine relationships between variables to the end of determining whether the empirical data was congruent with the theoretical framework adopted for this investigation and the research hypotheses posited for this inquiry. It was found that the results of SEM analysis in accordance with the conceptual framework adopted in this research investigation were congruent with the empirical data obtained by the researcher.

Figure 2: Results of Data Analysis Conducted Using the Structural Equation Modeling Technique



Chi-Square = 89.49, df = 62, p-value = 0.07, $\chi^2 / df = 1.35$, RMSEA = 0.014, GFI = 0.99, AGFI = 0.99, NFI = 0.99, NNFI = 0.98, IFI = 0.98, RFI = 0.99, CFI = 0.98, CN = 338.43 (n = 400)

*means the statistically significant level of .05 ($1.960 \leq t\text{-value} < 2.576$)

**means the statistically significant level of .01 ($t\text{-value} \geq 2.576$)

Hypotheses Testing

$$MAC = \beta_0 + \beta_1 LCS + \beta_2 DIS + \beta_3 BSS + \beta_4 CON \zeta_1 \dots\dots\dots(1)$$

Table 1: Results of Hypotheses Testing

Path	Path Coefficients	t-stat	p-value	result
H1 : Low cost strategy	0.398	6.488**	0	support
H2 : Differentiation Strategy	0.445	9.826**	0	support
H3 : Buyer-Supplier Relationships	0.378	6.399**	0	support
H4 : Connection	0.478	9.635**	0	support

Table 2: Results of Testing for Path Influences

Variable Result	Decisions (DECIS)		
Variable caused	DE	IE	TE
Low costs strategy : LCS	0.398**	-	0.398
Differentiation strategy :	0.445**	-	0.445
Buyer-Supplier : BSS	0.378*	-	0.378
Connection : CON	0.478**	-	0.478
R^2	0.554		

4.2 Construct Validity

Using analysis involving construct validity, the researchers found the following: The test validated the measurements used in this inquiry suggested that the indicators utilized measured the same construct. The criteria for evaluation used in this connection were that the indicators should have a loading value higher than 0.707 concomitant with a Cronbach's alpha (α) greater than 0.700 [6], and an average variance extracted (AVE) greater than 0.50 concomitant with a statistically significant level result found upon testing convergent validity. Findings are as follows:

Table 3: *The Results of an Analysis of Factorial Construct Validity*

Indicator	Loading	t-stat	CR	AVE
Low costs Strategy : LCS				
LCSA : Activity	0.997	12.183	0.899	0.634
LCSM : Material	0.871	7.456		
LCSL : Location	0.985	10.114		
Differentiation Strategy : DIS				
DISD: Delivery	0.872	12.184	0.859	0.631
DISP: Promotion	0.995	18.382		
DISC : Credit	0.792	9.321		
Buyer – Supplier Relationships Strategy : BSS				
BSSN : New Building	0.944	12.986	0.842	0.699
BSSC : Caring Relationships	0.899	13.395		
Connection : CON				
CONM : Maintaining	0.922	12.631	0.911	0.708
CONE : Enhance Relationships	0.928	15.456		
COND : Development	0.756	10.292		
Marketing Effectiveness : MEF				
MEFM : Enhance market share	0.956	15.196	0.886	0.819
MEFT : Enhance total sales	0.929	9.032		
MEFS : Enhance Sales	0.933	14.517		

In testing hypotheses, it was found that the components of punctuality, security, comfort, and economy influenced the decision to use convenience stores at 55.4 percent ($R^2 = 0.554$) at the statistically significant level of 0.000 as can be seen in the above tables and figures.

Discusstion of Finding

Four factors affecting logistics Tourist satisfaction are as follows:

(1) Low costs strategy consisting of control costs by reducing work process activity, reduction supplies decreased use of air conditioner, paper writing, and reducing distance transport of raw materials.

(2) Differentiation strategy consisting of enables the delivery of goods to the consumer, by organizing promotional events such as end of the month, holiday, traditionals. provide trade credit as the use of a credit card or, debit card shop.

(3) Buyer-supplier relationships consisting of establishing a business relationship with a long-lasting relationship has to start building new relationships and maintain existing relationships for the better.

(4) Connection consisting of the relationships of the individual to develop a closer relationship to the length of no other intervention and to hold old relationship longevity. In addition, all factors involve significant subsidiary factors for a total of 11 factors. Each of these should be taken into consideration by the convenience stores in solving problems in order to ensure success in convenience store business.

CONCLUSION

Findings indicate that factors influencing marketing competency can be used as guidelines in solving problems organizations are currently facing. The four main factors are the following: (1) low costs strategy; (2) differentiation strategy; (3) buyer-supplier relation strategy; and (4) connection. Each factor involves significant aspects with the total being 11. All aspects should be addressed if problems are to be successfully solved over the long haul.

In addition, it was also found that marketing competency can be judged by reference to four indicators as follows: (1) enhance market share; (2) enhance total sales; (3) enhance sales each indicator involves significant subsidiary aspects, the total comprising

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The Effects of Medical Quality, Hospital Service Quality, and Queuing Management Quality on Customer Satisfaction: A Case of a Private Hospital in Thailand

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ABSTRACT

Medical tourism industry is currently very competitive and growing fast in Thailand. Many leading hospitals tried to come up with several marketing strategies to capture both local and tourist medical customers. Employees with several language skills are available to serve medical tourists. The interior designs and services offered, both tangible and intangible are like that of a five-star hotel. Even though service quality of the hospital is excellent, customers have to spend long time to wait for the medical services like queuing for the doctors and wait for their turn for blood tests, x-ray, ultrasound, and so on. Many customers feel that the waiting time and queues are sometime too long and made several complaints. Waiting for such services may be unavoidable but it could be shortened by an effective and efficient queuing management system in the hospital. This research aims to determine the influences of medical quality i.e. professionalism of the doctor and staffs, hospital tangible and intangible service quality, queuing quality, and service lead time on customer satisfaction and revisit intention. A private hospital was selected where 385 data sets were collected from the customers who were using the OPD services. Structural equation modeling was performed. Significant influences of all quality constructs i.e. professional care, tangible and intangible service quality, service lead time and queuing quality on customer satisfaction and revisit intention were found. Also, significant relationship between customer satisfaction and revisit intention was illustrated

Keywords: Customer satisfaction, Medical quality, Queuing quality, Service quality

XVI. INTRODUCTION

The medical service is rapidly changing and expanding in recent years due to globalization that leads to higher standards of living. Higher demand on better medical care is illustrated. In Thailand, medical industry is growing to serve for both Thai and foreign customers. Not only for those who run for higher quality of life but for the increasing number of aging and medical tourist. In the past, wealthy people from developing and underdeveloped countries seek for medical treatment in developed countries in Europe and the United States. Currently, the situation is reverse. Medical tourists from highly developed countries in western and middle-east travel to less developed countries in South-east Asia especially Thailand and Singapore for the affordable and qualified medical services together with vacationing or any forms of tourism (Cohen, 2008). Medical tourists increases from 1.37 million in 2007 with THB 41 billion value to 1.98 million and 2.24 million in 2012 and 2011 with THB 78.7 and 97.8 billion, respectively (The Nation, 2012).

Not only the number of customers is rapidly increasing, the service providers also have increased as well. Many leading hospitals offer services like a five-star hotel. Several marketing strategies are offered to attract both local and medical tourist customers. Employees with several language skills, not only Thai and English but also Japanese, Chinese, Indian, Arabic, French, and so on are available. Better interior designs and other tangibles and intangibles are also offered. However, these hospital services may not provide significant competitive advantages to the hospitals since the major concern of the customers may be only on medical services. Professional expertise of the doctors and health care providers as well as the quality of medical equipments is more of the concern to customers. As the highly experienced doctors are limited and the equipments are expensive, these resources must be shared among customers. Thus, it is unavoidable for the customers to wait for the services. The waiting time, the reasons for waiting, and the queuing system would, undoubtedly, affect customer satisfaction. Satisfaction was found to be a critical factor that makes customers build and maintain relationships in medical services (Amin & Nasharuddin, 2013). The revisit to the hospital is expected if the customers satisfy with the overall services of the hospital. Customer satisfaction is developed not only on such medical and hospital services but also on their waiting time. Thus, the question, "How medical quality, hospital service quality, and queuing management quality affect customer satisfaction and revisit intention?" is proposed.

To answer such question, a questionnaire survey was designed. As the fact remains that the hospital experience of most customers and their judgment of the service quality are on the outpatient department, only OPD service is focused in this study. The details and results are discussed in the next four sections; theoretical background, methodology, research findings, and conclusion and recommendations.

XVII. THEORETICAL BACKGROUND

The disconfirmation model explains the satisfaction as the meeting of what customers expected and the actual performance they perceived. Satisfaction occurs when the expected and actual performances match while dissatisfaction is experienced if the actual performance is less than expectation (Zeithaml & Bitner, 2000). Customer satisfaction is the conclusion of the total experience of the service that acts as the central determination of the attitudes and behavior of the customers (Dawes & Rowley, 1996). In the hospital context, satisfied customers tend to return to the hospital (Kessler & Mylod, 2011) and recommend the hospital to their relatives and friends (Finkelstein et al., 1999; Owusu-Frimpong et al., 2010). In contrast, dissatisfied customers tend to perform critically undesirable behaviors (McDougall & Levesque, 2000) such as switching and complaining to the public (Gabbott & Hogg, 1998).

Customer satisfaction is determined by various factors especially their perception on quality of the health care as well as other tangible services such as the transportation and parking service, hospital atmosphere and facilities. Generally, health care service quality is based on customer judgment of the services provided by the hospital as well as their relationship with nurses, doctors and staffs. Most studies on the health care service quality were based on the SERVQUAL model of Parasuraman, Zeithaml, and Berry (1985; 1988). The service quality of the hospital is discussed in the following section.

2.1 Service Quality in Hospital Context

Many researchers applied SERVQUAL in health care industry without modification (e.g. Butt & Cyril de Run; 2010; Sohail, 2003) where some modified it to fit well with the context. Two attributes model on technical and functional quality was proposed (e.g. Grönroos, 1984; Orava & Tuominen, 2002; Brady et al., 2006.) Technical quality covers the quality of the diagnosis, treatment and other medical procedures while functional quality refers to the service delivery in all other facilities. Cunningham (1991) mentioned, "patient-driven quality," "clinical quality" and "economic/finance-driven quality." Tucker and Adams (2001) kept five SERVQUAL dimensions and also included outcome and caring. Hasin et al. (2001) proposed five dimensions of health care service which are; "cleanliness," "cost," "communication," "responsiveness," and "courtesy." Ovreteit (2000) used three dimensions, profession, patient, and management quality. Patient quality serves the want of customers. Professional quality serves the need and management quality refers to the use of least resources to serve need and want without delays or errors. Tucker and Adams (2001) added "outcomes" and "caring" to SERVQUAL. Walters and Jones (2001) categorized it into performance, convenience, security, reliability, economy and aesthetics.

Recently, Duggirala et al. (2008) identified seven dimensions; "infrastructure," "administrative procedures," "clinical care process," "safety", "personal quality" including

doctor and nursing care, staff, and accommodation quality, "social responsibility," and "overall experience of care." Bakar et al. (2008) proposed two quality dimensions; clinical and service quality. Clinical quality includes the quality of all health care services and service quality covers all other services. In addition, Camilleri and O'Callaghan (1998) proposed seven dimensions of professional & technical care, service personalization, patient amenities, accessibility, environment, catering, and price. Aagja and Grag (2010) proposed the public hospital service quality (PubHosQual) with five dimensions, "medical service," "admission," "discharge," "overall service," and "social responsibility." Otani and Kurz (2004) found that the compassion of the service providers to family and friends and the pleasantness of surroundings of the customers were parts of health care service quality. In another point of view, Chahal and Kumari (2010) indicated that health care service quality is comprised of three dimensions: "physical environment" "interaction quality" and "outcome quality." Physical environment includes tangible factors, environmental surrounding, and social factor. Interaction quality comprises of attitude, behavior, and expertise of the service providers as well as the quality of the service process. Finally, outcome quality refers to waiting time and customer perception on the quality of the overall services.

The two-dimension model of Baker et al (2008) together with that of Camilleri and O'Callaghan (1998) and PubHosQual of Aagja and Grag (2010) were modified in this study. Three service quality dimensions were proposed as medical quality hospital service quality, and hospital tangibles. "Medical quality" comprises two sub-dimensions, professional care and technical care. Professional care refers to the quality of the services provided by the physicians. In Thai context, most customers i.e. patients and relatives perceive the physician as the valuable persons who would help them from their illnesses. Thus, high respect and perceived importance are given to them. Technical care refers to the quality of equipments, laboratory, and other treatments. Quality of all other non-medical services offered by the hospital such as registration, finance, security guards, accessibility, catering and so on were identified as "hospital service quality." In addition, the tangible factors including hospital environment and atmosphere were categorized as "hospital tangibles." Price was not included in this study since the charges of the most of the leading private hospitals are currently similar.

As the service quality is expected to influence customer satisfaction and intention especially on customer choice to switch or revisit, the hypotheses are proposed as:

- H1: Medical (a), Hospital service quality (b) and tangibles (c) positively affect customer satisfaction.
- H2: Medical (a), Hospital service quality (b) and tangibles (c) positively affect revisit intention to the hospital.

2.2 Queuing Management Quality

Apart from service quality, service lead time or length of waiting time should also affect satisfaction. For simple OPD cases, customers must spend their time waiting for the doctor and medicine & payment. For the advance cases, if the patients have to visit more than one specialists and/or need some special investigations such as blood tests, x-ray, EKG, MRI, Ultrasound, and so on, they have to wait for the services from each unit. Some hospitals queue up the customers to all relevant units after getting the doctor's orders. In contrast, the customers have to queue up to wait for the service at each unit from time to time for some hospitals. Moreover, all customers have to wait for the medical records from the registration if the paperless-intranet system is not available. The long waiting time at one unit or cumulative waiting time at all units would affect their dissatisfaction. Hart (1996) indicated that the lengthy waiting time together with the insufficient explanation on the reason to wait provoke the customers to dissatisfy and complain.

Perception on queue is dependent on two main factors, the total waiting time and the reasons for waiting. Customers may be able to wait longer if necessary, for example, when there are lots of customers waiting, when the doctor is busy with other patients, when they have to wait for the laboratory results and also for the different service types. Customers can wait longer to see the doctors or to queue up for the special investigations that require specific or high technology equipments but they can wait shorter for the financial service (wait for payment), pharmaceutical service (wait for medicine) or nursing services (wait for simple physical examination such as vital sign, body weight, wait for medical records, or wait for some treatment such as injection, eye drops and so on). The total waiting time depends largely on the queuing system and reasons to wait. Customers may have satisfaction if the discrepancy of appointment time and the service received is not too long and/or the queuing system is reasonable. For example, if the first in-first out policy (FIFO) is used to queue up many customers who are waiting for the doctors (Mital, 2010). A queuing system covers all processes from customers arriving to the unit, waiting for service, and leaving the system after being served. In addition, the behavioral patterns of service providers such as their courtesy, readiness and willingness to provide services are another important factor that affects customer satisfaction. Thus, the quality of the queuing management emphasize on three dimensions, "queuing system," "service lead time", and "responsiveness" of the service providers. The relationships between queuing management quality and customer satisfaction and revisit intention and the relationship between customer satisfaction and revisit intention were hypothesized as:

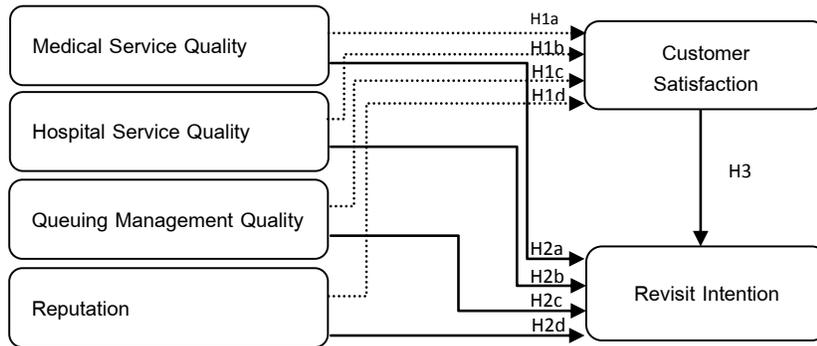
H1d: Queuing management quality positively affects customer satisfaction.

H2d: Queuing management quality positively affects customer revisit intention to the hospital.

H3: Customer satisfaction positively affects customer revisit intention to the hospital.

All hypothesized ideas could be concluded graphically as shown in the research framework in Figure 1 as follows:

Figure 1: Research Framework



Source: Author

XVIII. METHODOLOGY

3.1 Questionnaire Development

Questionnaire survey for hospital customers was designed. The questionnaire was developed based on the previous studies as well as the interview results. Five-point Likert scale was designed to measure the constructs; 10 items for medical quality, 15 items for hospital service quality and hospital tangibles, 10 items for queuing management quality, 5 items for overall satisfaction and another one single scale item for the revisit intention. The questionnaire was pre-tested with 50 OPD customers. Cronbach's alpha coefficients and item-to-total analyses were performed. Satisfactory results were illustrated. Cronbach's alpha coefficients of .871, .844, .831, .903 and .863 were obtained for medical, hospital service quality, tangibles, queuing management quality, and satisfaction, respectively. As all coefficients exceed the cut of point of 0.7 as recommended by Nunally (1978), all are qualified to be used for further analysis.

3.2 Population and Sampling

To control for the possible extraneous variables, a leading private hospital was purposively selected. The data was collected based on the voluntary basis. Five hundred customers who were waiting for the service at the OPD were approached. Questionnaire was distributed to 410 customers who agreed to join. Twenty-five incomplete sets were discarded only 385 data sets, 77 percent response rate, were used for the analysis. Out of these, 47.6 percent were males, 40.40 percent were less than 30 years old, 51.2 percent were 30-45 and 8.40 percent were more than 45 years old.

3.3 Data Analysis

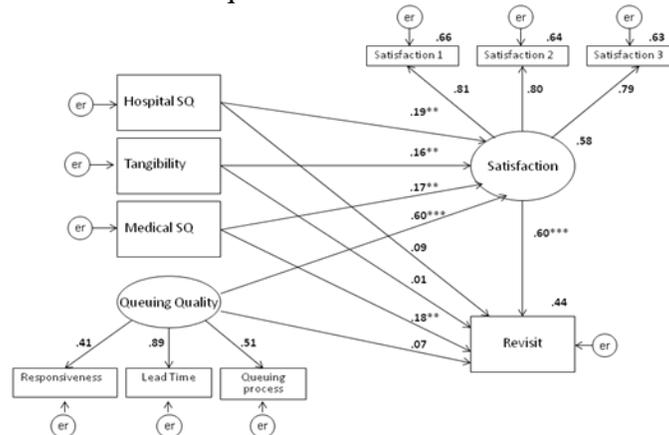
Structural equation modeling was performed to examine the fit of the model and to test all hypotheses. Composite scores of medical quality, hospital service quality, hospital tangibles, and

revisit intention and three sub-dimensions of satisfaction and queuing management quality were computed and used as indicators for structural relation analysis.

XIX. RESEARCH FINDINGS

Structural model fitting was firstly assessed. Satisfactory fits were illustrated ($\chi^2/df=3.851$; GFI=.931; CFI=.933; and RMSEA= 0.081). Then, the hypothesized structural relations between constructs were tested. Details are illustrated graphically in Figure 2 and the estimations of structural relationships are presented in Table 1 as follows:

Figure 2: Structural Equation Model of the research Framework



Remarks: $\chi^2=96.279$; $df=25$; $P=0.000$; $\chi^2/df=3.851$; GFI=.931; CFI=.933; and RMSEA= 0.081

Standardized regression coefficients are shown; * $p < .05$; ** $p < .01$; *** $p < .001$, NS=Not Support.

Table 1: Structural Relationship Coefficients

Hypotheses and Paths in the Model	Relationship Coefficients		t-Value
	Unstandardized	Standardized	
H1a Medical Quality → Customer Satisfaction	0.194	0.174	2.465**
H1b Hospital Service Quality → Customer Satisfaction	0.203	0.194	3.010**
H1c Hospital Tangibles → Customer Satisfaction	1.347	0.597	5.474***
H1d Queuing Management Quality → Customer Satisfaction	0.173	0.156	2.640**
H2a Medical Quality → Revisit Intention	0.218	0.178	2.696**
H2b Hospital Service Quality → Revisit Intention	0.174	0.090	1.398 (NS)
H2c Hospital Tangibles → Revisit Intention	0.103	0.070	0.774 (NS)
H2d Queuing Management Quality → Revisit Intention	0.013	0.011	0.187 (NS)
H3 Customer Satisfaction → Revisit Intention	0.613	0.556	5.363***

Remarks: t-values are significant at * $p < .05$; ** $p < .01$; *** $p < .001$; NS= Not significant

Squared Multiple Correlations (R²) for Satisfaction = 0.58; for Revisit Intention = 0.44

The results indicated that the relationships hypothesized in H1 were significant as in both direction and magnitude as expected. Queuing management quality is found to have the highest influence on satisfaction followed by hospital service quality, medical quality and hospital

tangibles ($\beta=.597, .194, .174, \text{ and } .156$), respectively. Thus, hypothesis 1 is supported by the data. In contrast, only medical quality is found to have significant influence on revisit intention while hospital service quality, queuing quality and tangible factors did not influence the revisit intention. Therefore, hypothesis 2 is partially supported by the data. For hypothesis 3, significant influence of satisfaction on revisit intention was illustrated. Thus, hypothesis 3 is supported by the data. Satisfaction is found to have higher influence on revisit intention than medical quality ($\beta=.556 \text{ and } .178$).

XX. CONCLUSIONS, DISCUSSION, AND RECOMMENDATIONS

Direct and indirect influences of the medical quality i.e. professional care and technical care on revisit intention were illustrated. The result was not surprising as the medical care is the main need of the health care service. Besides, only satisfaction and medical quality influenced revisit intention to the hospital while hospital service quality and tangibles as well as quality of queue do no influence customer decision to return to the hospital. Quality of medical, hospital service, tangibles and queue influenced customer satisfaction significantly. It is interesting that the queuing management quality provided highest influence on satisfaction, more than all other service quality constructs. The less effect of medical quality may be because it serves for "need" of the customers rather than "want." Moreover, the limitation of customer knowledge on illnesses and treatments may allow customer to expect only to "be cure" or "get better" without details of the process and accuracy of the treatment. Thus, its influence on satisfaction is not high while its impact on their choice to return to or switch from that particular hospital is illustrated. Comparing to the hospital services and tangibles, the higher influence of the queuing quality on customer satisfaction showed that the customer value their time much more than the excessive services offering by the hospital.

Hospital operators should emphasize on the medical quality. However, the concern on the improvement of the queuing system is also important. The strategic plan on the improvement of the operations to shorten the service lead time and provide sufficient reasons for waiting should be performed to enhance or at least maintain customer satisfaction. Queuing management quality should be prioritized since its impact is greater while the cost may be less than the improvement of the hospital services and tangibles. For the academic, the queuing management construct should be emphasized. Its details and discrepancy across industry such as banking, restaurant, airport, and other leisure services as well as its impact on customers should be identified.

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THE RELATIONSHIP BETWEEN CASH FLOW RATIOS AND FUTURE EARNINGS AND FINANCIAL COSTS OF COMPANIES LISTED ON THE STOCK EXCHANGE OF THAILAND

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ABSTRACT

The objective of this research paper is to study the relationship of cash flows, future earnings and financial costs of companies listed on the Stock Exchange of Thailand from 2007 to 2012 using multiple regression analysis to test the hypothesis.

Analysis of results from all analyzed units reveal that cash flow ratios from operations to total liabilities, cash flow ratios from operations to total fixed assets, cash flow ratios from operations to sales, cash flow ratios from operations to operations earnings, cash flow ratios from operations to owner's equity, and cash flow ratios from operations to net earnings are related to future earnings and financial costs. Cash flow ratios from operations to fixed assets are related to future earnings but are not related to financial costs.

Analysis of results of sub groups in each business group i.e. financial business group, agro and food industry business group, industrials business group, and property and construction business group, reveal that the cash flows of each business group are related differently to future earnings and financial costs.

Research results are therefore useful in applying to users of financial budgeting in the analysis of data and in the data presentation of the financial budgets of companies listed on the Stock Exchange of Thailand.

KEYWORDS

Cash flow, Future earnings, Financial statements, Financial costs

INTRODUCTION

Financial budgeting is valuable and important to users of financial budgets to reflect the performance and financial position of the enterprise (Kang, 2002). Cash flows budgeting is a part of financial budgeting that shows the changes of cash flow receipts and cash flow expenses, or cash equivalent particulars of three activities i.e. management activity, investment activity, and fund procurement, which can help users of financial budgeting to estimate liquidity and ability to pay debts of the enterprise (Orpurt & Zang, 2009). Cash flows in management activity are data that show main activities that generate revenues for the enterprise (Dechow, Kothari & Watts, 1998). This being information to communicate or messages useful to users of financial budgeting (Barth, Cram & Nelson, 2002) especially for investors who use the information in decision making in estimating securities (Ball & Kothari, 1991). This research, then, has an objective to study the relationship of cash flow ratios and future earnings and financial costs of companies listed on the Stock Exchange of Thailand, by studying all the analysis of units from sample groups and analysis of sub-groups of each business group, which is very useful to developing countries that need funding from abroad. They may use results from this research to specify practices in accounting to obtain correct and appropriate information on the business environment and investors' needs. Moreover, the Stock Exchange of Thailand is a developing capital market which is trying to emphasize the importance and usefulness of disclosure of information in the financial budgeting of listed companies. Especially, investors who can use the analysis of the data to appropriately supplement their investment decision making. (Chen & Kaom, 2004). Moreover, the office that oversees the management of the capital market can use the resulted findings to define the disclosures of important information to create reliability among investors of both Thais and foreigners, which is an important practice in investment that will have a further positive effect on to the economic stability of Thailand.

RESEARCH METHODOLOGY

There are some of 585 companies, the population of this research puts aside those companies under restoration, in the service business, in the consumer product business, in the resources business, in the technological business, and companies with an accounting period other than December 31 were excluded from the population sample for this research. Therefore, the sample group consists of 470 companies.

The researcher collects data from the financial budgeting of the companies in the Stock Exchange of Thailand (Set Smart) and from the Security and Exchange Commission from 2007

to 2012, a total of 5 years, to use in the multiple regression analysis to test the hypothesis (Zikmund, 2008).

FINDINGS

The analysis of the relationship of cash flow ratios and future earning and financial costs of companies listed on the Stock Exchange of Thailand. The researcher uses multiple regression analysis from all the analyzed units from the sample groups and sub-group analysis of each business group. The results of the analysis are as follows:

3.1 The analysis of the relationship of cash flow ratios and future earnings of all analyzed units of the sample group, from Table 1, reveals that cash flow ratios from operations to total liabilities, cash flow ratios from operations to total assets, cash flow ratios from operations to operations earnings, cash flow ratios from operations to owner's equity, cash flow ratios from operations to investing in fixed assets, and cash flow ratios from operations to sales is significantly related to future earnings. As for controlled variables, which are business size and business risk, these are also related to future earnings.

3.2 The analysis of the relationship of cash flow ratios and financial costs of all the analyzed units from the sample group, from Table 1, reveals that cash flow ratios from operations to owner's equity, cash flow ratios from operations to total assets, cash flow ratios from operations to operations earnings, cash flow ratios from operations to total liabilities, and cash flow ratios from operations to sales is significantly related to financial costs. As for controlled variable, which is business size, this is also related to financial costs.

3.3 The analysis of the relationship between cash flow ratios and future earnings of each business, from Table 2, reveals that:

(1) The results of the analysis of the relationship of financial business group reveal that cash flow ratios from operations to total liabilities, cash flow ratios from operations to investing in fixed assets, cash flow ratios from operations to total assets, and cash flow ratios from operations to operations earnings are significantly related to future earnings. As for controlled variable, which is business risk, this is also related to future earnings.

(2) The results of the analysis of the relationship of agro and food industry business group reveal that cash flow ratios from operations to total liabilities, cash flow ratios from operations to investing in fixed assets, cash flow ratios from operations to total assets, and cash flow ratios from operations to sales are significantly related to future earnings.

(3) The results of the analysis of the relationship of industrials business group reveal that cash flow ratios from operations to total liabilities, cash flow ratios from operations to operations earnings, cash flow ratios from operations to total assets, cash flow ratios from

operations to investing in fixed assets, and cash flow ratios from operations to owner's equity are significantly related to future earnings.

(4) The results of the analysis of the relationship of property and construction business group reveal that cash flow ratios from operations to total liabilities, cash flow ratios from operations to sales, cash flow ratios from operations to operations earnings, and cash flow ratios from operations to total assets are significantly related to future earnings. As for controlled variables, which are business size and business risk, these are related to future earnings.

3.4 The analysis of the relationship between cash flow ratios and financial costs of each business, Table 3, reveals that:

(1) The results of the analysis of the relationship of finance business group reveal that cash flow ratios from operations to owner's equity, cash flow ratios from operations to total assets, cash flow ratios from operations to total liabilities, and cash flow ratios from operations to investing in fixed assets are significantly related to finance business earnings. As for controlled variable, which is business size, this is related to financial costs.

(2) The results of the analysis of the relationship of agro and food industry business group reveal that cash flow ratios from operations to owner's equity, cash flow ratios from operations to total assets, cash flow ratios from operations to total liabilities, and cash flow ratios from operations to investing in fixed assets are significantly related to financial costs. As for controlled variable, which is business size, this is related to financial costs.

(3) The results of the analysis of the relationship of industrials business group reveal that cash flow ratios from operations to owner's equity, cash flow ratios from operations to total assets, cash flow ratios from operations to total liabilities, and cash flow ratios from operations to investing in fixed assets are significantly related to financial costs. As for controlled variable, which is business size, this is related to financial costs.

(4) The results of the analysis of the relationship of property and construction business group reveal that cash flow ratios from operations to owner's equity, cash flow ratios from operations to total assets, cash flow ratios from operations to operations earnings, and cash flow ratios from operations to total liabilities are significantly related to financial costs. As for controlled variable, which is business size, this is related to financial costs.

CONCLUSION

A study of cash flow ratios from operations to total liabilities, cash flow ratios from operations to total assets, cash flow ratios from operations to operations earnings, cash flow ratios from operations to owner's equity, cash flow ratios from operations to investing in fixed

assets, and cash flow ratios from operations to sales is related to future earnings, showing that the operations by companies bring in cash or that the companies have high liquidity, supporting the companies in acquisition of more future earnings and helping the companies in decreasing financial costs.

In the analysis of the sub-group of each business, cash flow ratios to investing in fixed assets are not related to future earnings. This may be because investing in fixed assets is not efficient, produces no profits, or there is little investing in business assets, which results in a reduced ability to make profits. Cash flow ratios from operations to owner's equity are not related to future earnings. This may be because cash flows from operations are not kept for accumulative profits but allocated for dividends resulting in little capital for business expansion.

Cash flow ratios from operations to sales and cash flows from operations to operations earnings are not related to financial costs. This may be because the companies do not put cash flows from operations into investment but rather borrow capital from other sources.

The research results state that cash flows from operations are activities of changes of cash, which shows the changing of financial position of the companies (Sloan, 1996), and shows the policy in managing cash flows including the planning of future financial decision making (Casey & Bartizan, 1985), which will help the management or entrepreneurs to learn the facts relating to cash flows. Moreover, users of financial budgets can use the analysis collaterally in making decisions efficiently (Barth, Cram & Nelson 2001), especially investors who can also use the research results in making decisions in investing in assets since cash flows are expected to be received by investors (Casey & Bartczak, 1985, Dechow, 1994).

TABLE 1 THE ANALYSIS OF THE RELATIONSHIP OF CASH FLOW RATIOS AND FUTURE EARNINGS OF ALL ANALYZED UNITS OF THE SAMPLE GROUP

Variable		future earnings	financial costs
CFOF	β	0.251	-0.824
	t-value	2.342	-1.421
	Sig.	0.019*	0.156
CFOL	β	0.262	-0.066
	t-value	15.474	-2.249
	Sig.	0.000***	0.025*
CFOA	β	0.059	-0.085

	t-value	3.680	-5.344
	Sig.	0.000***	0.000***
CFOS	β	0.043	-0.137
	t-value	2.519	-2.102
	Sig.	0.012*	0.036*
CFOP	β	0.059	-0.031
	t-value	3.434	-1.990
	Sig.	0.001***	0.047*
CFOE	β	0.045	0.077
	t-value	2.941	5.066
	Sig.	0.003**	0.000***
Size	β	0.335	0.672
	t-value	3.122	41.689
	Sig.	0.002***	0.000***
Risk	β	-0.129	0.878
	t-value	-8.300	1.499
	Sig.	0.000***	0.134
		$R^2 = 0.640$ $F = 356.421$	$R^2 = 0.558$ $F = 307.319$

TABLE2 THE ANALYSIS OF THE RELATIONSHIP BETWEEN CASH FLOW RATIOS AND FUTURE EARNINGS OF EACH BUSINESS

Variable		Finance business	Agro & Food Industry business	Industrials business	Property & Construction business
CFOF	β	0.461	0.659	0.407	0.112
	t-value	2.929	3.085	2.262	0.777
	Sig.	0.004**	0.002**	0.024*	0.437
CFOF	β	0.309	0.281	0.275	0.351
	t-value	10.043	7.242	8.235	15.829
	Sig.	0.000***	0.000***	0.000***	0.000***
CFOA	β	0.101	0.119	0.109	0.041
	t-value	3.177	2.787	3.143	1.986
	Sig.	0.002**	0.006*	0.002**	0.047*
CFOS	B	0.052	0.090	0.050	0.048
	t-value	1.576	2.032	1.353	2.258
	Sig.	0.116	0.043*	0.177	0.024***
CFOP	B	0.092	0.059	0.125	0.066
	t-value	2.704	1.309	3.352	3.059
	Sig.	0.007**	0.192	0.001**	0.002**
CFOE	B	0.043	0.043	0.057	0.018
	t-value	1.587	1.258	2.009	0.934
	Sig.	0.113	0.210	0.045*	0.350
Size	B	0.097	-0.072	0.168	0.422

	t-value	0.621	-0.340	0.934	2.937
	Sig.	0.535	0.734	0.351	0.003*
Risk	B	-0.086	-0.052	-0.021	-0.091
	t-value	-3.127	-1.548	-0.725	-4.655
	Sig.	0.002**	0.123	0.469	0.000***
		R ² = 0.709 F = 128.342	R ² = 0.697 F = 80.344	R ² = 0.722 F = 116.731	R ² = 0.657 F = 233.885

TABLE 3 THE ANALYSIS OF THE RELATIONSHIP BETWEEN CASH FLOW RATIOS AND FINANCIAL COSTS OF EACH BUSINESS

Variable		Finance business	Agro & Food Industry business	Industrials business	Property & Construction business
CFOF	B	-0.256	-0.279	-0.276	-0.631
	t-value	-2.195	-2.278	-2.061	-1.098
	Sig.	0.029*	0.023*	0.040*	0.272
CFOL	B	-0.109	-0.116	-0.092	-0.063
	t-value	-2.410	-2.393	-2.156	-1.975
	Sig.	0.016*	0.017*	0.032*	0.049*
CFOA	B	-0.125	-0.172	-0.135	-0.085
	t-value	-4.095	-4.301	-4.235	-4.088
	Sig.	0.000***	0.000***	0.000***	0.000***
CFOS	B	0.173	-0.038	0.212	-0.071
	t-value	1.246	-0.103	1.728	-0.711
	Sig.	0.213	0.918	0.085	0.477

CFOP	B	-0.056	-0.33	-0.039	-0.048
	t-value	-1.975	-0.932	-1.305	-2.358
	Sig.	0.049	0.352	0.193	0.019*
CFOE	B	0.158	0.193	0.198	0.067
	t-value	5.577	5.515	6.679	3.345
	Sig.	0.000***	0.000***	0.000***	0.001***
Size	B	0.672	0.657	0.683	0.676
	t-value	21.873	16.560	21.347	32.289
	Sig.	0.000***	0.000***	0.000***	0.000***
Risk	B	0.079	0.354	0.107	0.650
	t-value	0.432	0.910	0.593	1.110
	Sig.	0.666	0.364	0.553	0.267
		$R^2 = 0.610$	$R^2 = 0.610$	$R^2 = 0.630$	$R^2 = 0.537$
		F = 98.261	F = 64.342	F = 92.265	F = 171.100

CFOP = cash flow from operations to investing in fixed assets, CFOL = cash flow from operations to total liabilities,

CFOA = cash flow from operations to total assets, CFOS = cash flow from operations to sales, CFOP = cash flow from operations earnings from operations, CFOE = cash flow from operations to owner's equity

*Significant at the 0.05, **Significant at the 0.01, ***Significant at the 0.001

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The Strategic Management of Model of Happy Work Place Management for Sports Authority of Thailand

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Abstract

The objective of this research is to initiate strategic management of model of happy work place management for Sports Authority of Thailand. The sample group used in this research consists of 12 high level management members of the Sports Authority of Thailand, 10 middle level management members related to policy making and 5 interested persons of the organization. The research methodology includes in-depth interviews to find basic elements of the factors and of the initiation of management model for happy work place of the Sports Authority of Thailand, which resulted that activities and projects had to be developed to correlate with the research results from interviews for opinions of experienced and expert persons, to prepare for action and strategic plans. It was found that the building of an organization with happy work place needs the development of various factors according to the factors' weight, as related to the organization's well being, and related to the main principles' involvement

($\lambda_x = 0.68$).

Research Results

- 1) Organization Involvement in staying in the organization aspect ($\mu = 4.04$ $\sigma = 0.88$) with emphasis on promoting welfare development policy and employees' well being according to real needs
- 2) Organization Involvement in norm aspect ($\mu = 3.99$ $\sigma = 0.84$) with emphasis on initiation of activities and projects to promote sense of belonging and loyalty to the organization in the long run, which is a morally correct action appropriate towards an organization.
- 3) Organization Involvement in mental aspect ($\mu = 4.01$ $\sigma = 0.78$) with emphasis on activities in employees' mental development and rewards of appraisal, a monthly dedication of good service certificate, including color sports competition of internal offices and units to promote unity and in-a-family working atmosphere.

Keywords: Happy Work Place, Well being, Organization commitment

Introduction

“Human resources” are management resources which are very important and valuable to every organization. An organization can be successful in management by enrolling efficient personnel. What is hidden under the success of each organization is that personnel are happy in working and making a living as states by Abhichai Mongkol and others (2547) in Thai Psychological Health Index (Complete Version) in which definition of Happiness or Mental Health was given. In persona level and which is the same in Thai society surrounding (Abhichai Mongkol and others, 2544) states the meaning that “Happiness in life derives from the ability to eliminate problems in making a living, and the potential to self-develop for better quality of life, including mental virtue under changing social condition and environment.”

Happiness factors consist of 4 main elements as follows: 1. Mental State, meaning happy or suffering mental condition, the self-perception, physical illness that affects mental condition and mental illness. 2. Mental Capacity, meaning mental ability in building relationship with others and manage problems in living a peaceful life, 3. Mental Quality, meaning good characteristic of mental in living for the benefit of one-self and society, though sometimes, one has to sacrifice convenience or personal asset, and 4. Supporting Factor, meaning factors supporting people’s good mental health, which is a factor related to family members, community, working condition, earning, religious, personal belief, ability to work, including the feeling of security and safety in life and asset. Therefore, personnel with happiness in workplace are personnel with good characteristic of good workers, which is an important character needed by organization. When personnel are happy means personnel have happy mental health which will help develop the life of personnel to be valuable and meaningful, and develop personnel potential continuously both in physical and mental conditions and personnel are able to work effectively.

As mentioned by Sanguan Suthilertarun (2545, 361) that “there are good things revealed from working happily such as collection of assets for making a living and saving plays a part in making social progress, benefits general mental health, making life valuable, not boring, benefit human races, making happiness in human beings, an opportunity and tool of self-development.” Therefore, it can be said that persons with happiness in workplace are people with characteristic and ability to work well.

Apparently, Thai society at present emphasizes more happiness considering from the National Economic and Social Development Plan 10 (B.E. 2550-2555) which intends to acquire “sustainably happy society” under “sustainable economy philosophy” in His Majesty the King’s initiation (The Office of the National Economic and Social Development, 2549) including the network and organizations intending to develop the people’s better living as evidenced by the invention of Thai Happiness Indicators by the Mental Health Department which is a self-evaluation form (The Mental Health Department, 2544: 1) so that Thai people can perceive the

level of their own happiness and use as a way to develop better mental health and to complete a better living since mental problems impacting Thai people's livelihood nowadays.

Human beings are social animals that live together in communities and happiness is everyone's wish since it can make individual feel Self fulfillment, induce Self adjustment, and enjoy good quality of life (Luckasson, 1990, 212) meanwhile human beings spends most of their time working. The creation of happiness in the workplace is a very important factor in the smooth management of an organization because when the organization's personnel are happy, it will increase both quantity and quality of the products bringing creativity, innovation, reducing working stresses and conflicts, which helps the organization to progress (Janya Dasa, 2552).

Happiness at the Workplace is something personnel of an organization wish since if personnel work in a happy and heavenly organization, it will make personnel feel commitment to the organization. In comparison, an organization is people's second home, during working time, people are joyful with work at hands and intend to work at full ability (Ruamsiri Menabho, 2550).

Happiness in working is something everyone wishes. Personnel who are happy in working are directly satisfactory in working and are motivated to work with full potential. If personnel are not happy in working, it will affect in bad quality in life. Besides, happy organization will continue to create products effectively and efficiently as explained in "Warm Model" concept which proposed cultural royalty of 5 hearts relating to working where quality of working and good quality of life must begin at willingness, happiness, intention, pride, and cooperation (Wudhi Chinchanochokechai and Assaniya Suwannasirikul, 2549). Apparently, personnel's happiness and happy organization have a close relationship as Richmond (1999, 20-35) proposed creation of happiness according to Buddhist way that happy organization derived from the adjustment of personal mind to reflect personnel's spirit on to the work and expression behavior such as feeling good with oneself, broad minded, no selfishness, self-control, application of inner moral value in workplace, motivation, persistence, creativity, forgiveness and enjoying working.

The reason for the trend of happy workplace in Thailand to begin dispersing is that in this globalization era, there is a serious competition condition in both business sector and government sector including the way of life with stresses that effect in personnel's mental and physical health ruins. Problems derive from these factors effect directly to personnel and organization's feelings that are problems of management arise in all directions. There is division of groups, sectarians, in workplace. Personnel become bored of working effecting working efficiency.

Objective

The objective of this research is to develop strategic plan for the formation of management model for Sports Authority of Thailand as a happy organization.

Literature Survey

Sports Authority of Thailand

Sports Authority of Thailand is a state enterprise formerly under the Office of Prime Minister receiving annual expense budget from the government. The management of Sports Authority of Thailand is done by a Board of Committee of Sports Authority of Thailand consisted of committee members by positions and by recommendation by Cabinet Members, with the President of the Committee appointed by the Prime Minister or the Minister assigned by the Prime Minister, and the Governor of Sports Authority of Thailand who is responsible to the Committee in the management of the SAT until there was an announcement of a Parliament Act of Improvement of Ministries, Bureaus, and Departments B.E. 2545, Section 5, Item 14, specified an establishment of the Ministry of Tourism and Sports, with obligations and duties relating to the support, promotion and development of tourism industry, sports, physical education, recreation and other government issues as legally specified as obligations and duties of the Ministry of Tourism and Sports.

Concepts and Theories Relating to Happiness

Happiness and interests of human development, especially on the human needs mentioned by Abraham A H Maslow on human needs in the theory of the order of human needs in which Maslow believed that many of human behavior can be explained by personal trends in seeking for objectives to fulfill life with needs, wishes, and what's meaningful to life. It is true to say the process of motivation is the key to the Maslow's Theory of Personality in which it is believed that human is a "Wanting Animal" and it is hard that human will reach complete satisfaction.

The Office of Thai Health Promotion Foundation (2552, 24-28) reported that happiness in working must rely on the heart of happy organization by following this equation, Happy Workplace = Teamwork + Happy + Reactivity, which meant the creation of people in an organization to work as team, working happily together, and with creativeness of living together, and cooperation to develop. These must rely mainly on human resources. Human resources must have attitude in correlation with the organization. The process is the process of building good living quality for people in the organization.

To achieve THPF's commitment in emphasizing the role in development the strength of health system especially in local social segment and public policy segment, the THPF has no

direct task in servicing health but may support in the management health system in correlation with the development of the local social segment and public policy segment, relying on intention for Thais to have good health in all four aspects. The Office of Thai Health Promotion Foundation has proposed 8 happiness's model by Dr. Charnwit Wasanthanarat, Director of the Office for Supports of Happy Condition and concluded that the model was consisted of:

1. Happy body is physical happiness, having good health, strong body, clean and safe hygiene,
2. Happy heart is generosity, obligation, arrangement for buddy to work in place of each other,
3. Happy relax is knowing how to relax, arrangement for annual incursion for personnel's relaxation,
4. Happy brain is happiness from learning, pre-working training and arrangement of supplementary classes,
5. Happy soul is faith in religion and morality in making a living, opening up an opportunity for personnel to give opinion on organization's policy to build faith, and the management must be generous and supportive to personnel,
6. Happy money is knowing when to keep, when to apply, keeping away from being in debts by setting up a provident fund with 0% interest loans, and a bonus scheme,
7. Happy family is arrangement for family day for personnel to which personnel's family members cooperate with the company, and,
8. Happy society is the building of internal relationship within the organization (Sunantha Suksumit, 2556).

The Concepts on Organization Commitment Management

Organization involvement of personnel affects efficiency in the organization since high organization involvement will affect personnel to work at full capacity. Organization involvement is an important element to increase quality and the progress of organization performance (Northcraft& Neale, 2003, p. 401). Organization involvement is then more than an act of normal royalty because it is a close relationship and a push forward for personnel to be willing to devote themselves to create a better condition for the organization. On the contrary, if the organization cannot response to personal needs of personnel, cannot motivate, or initiate involvement of personnel, it will reduce the level of involvement of personnel to the organization, which in effect, personnel will lose working intention, avoid responsibility, refuse to work, refuse to initiate, limit quantity of work, lack of sincerity to the organization and look for an opportunity to change job when find a better organization.

Concepts and Theories on Behavior of Being Member of Happy Organization

Organ and Hammer (1982, p. 308) gave an opinion of the theory of being member of happy organization that behavior of being member of happy organization was personnel's behavior not specified in working details by the organization but were important to the organization, which in fact the behavior was hard to measure as model of good membership. Besides, a study by Organ and Hammer (1982, p.9) stated that in work performance, a person had to perform according to responsibility assigned but superiors might usually look for performance aside from that perspective, which was the behavior of being good member or the public caring meaning to help colleagues in times of problem, helping new workers in learning how to work, accepting stresses in sportsmanship, cooperating, supporting, and giving good suggestions to the organization or the superiors, trying to perform his obligation excellently, keeping the office clean, and bringing peace into the organization. Organ and Hammer believed that personnel could have done all these as they were very valuable to the organization.

Concepts on Model Building

Model is a simple prototype or scale down of phenomena that the proposer had studied and developed to show or explain phenomena for easier understanding, or in some cases, proposer may use for the benefit of predicting the coming phenomena, including the use as a way to manage further action. As for the model of this research, model means a conceptual model to help to perceive what to be understood as close to substantial as possible, to which there should be three elements, objective, variables, and relation structure of variables through the analysis of Structural equation modeling: SEM.

Problems and Solutions

Stress problem affects personnel and organization. If personnel are happy, satisfied with work and organization in which they work, there is a tendency to induce customers with higher satisfaction since those personnel would work attentively, whereas personnel who are not happy in the workplace will affect in a form of a high ratio of being sick, late, absent and errand leaves, and finally they will resign, which will result in high capital cost and low profit for the company. Resignation causes capital cost and affect several impacts i.e. first, Direct Expenses which means expense paid out for new employee selection process; second, Indirect Costs meaning impact on increasing workloads for others which will affect morale and spirit including decreasing satisfaction of customers. Besides, it can effect in leading other employees to resign by which customers may follow them, too; and third, Opportunity Costs meaning knowledge and intellectual lost and the work that cannot finish within the planned timeframe (Nathaya Sintrakarnphol, 2548).

The happiness in workplace is then the target of many organizations is trying to achieve nowadays to induce quality in working. From the above mentioned problems, the Office of Thai Health Promotion Foundation (THPF) which is an office to realize the promotion of happiness to

Thais and employees in organizations in Thailand by supporting Healthy Organizations, both governmental and private, with an objective to develop a policy to build knowhow and moving of network in promoting quality of living of employees, by emphasizing employees in organizations who are important and main power of the families, organizations, communities, society and the nation. At present, there are 70 governmental and private organizations cooperated in such project. As a result of the management, it is found that most organizations have similar policies and activity trends in building organizational happiness i.e. how can organizations make employees to feel happy, have good welfare, including recognizing the employees' family members (The Office of Thai Health Promotion Foundation, 2553). From the importance of the project as above mentioned, the Sports Authority of Thailand (SAT) as an office of promotion, supports, and development of national sports to progress to one of the top countries of the leaders of sports in Asia, by managing tasks that emphasize the continuous and complete development of sports for the sustainability. Aside from the sports development, the Sports Authority of Thailand emphasize on management of resources for the highest benefit, especially the development of human resources of Thailand, in which there are small number when compare with the tasks of the organization. Personnel are important driving force to drive for organization's strength and efficiency, which will affect the sustainable and continuous development of sports, and affect growth and reputation of Thailand sports; and Thailand will be able to compete with civilized countries all over the world.

Methodology

The tool used in this research is Structure Interview, by which questionnaire is checked for tool's Quality, and Reliability, by finding of Content Validity; and the analysis of basic data of this research, and frequency counts are calculate by Statistical Package for Social Science (SPSS) program, \bar{X} value, Percentage, and Standard Deviation.

Discussion

1. The factors affecting happiness organization will affect behavior of being member of happiness organization since the surrounding condition of Sports Authority of Thailand emphasizes making the organization to be as second home to employees. There is good welfare for every employee and employee's family member, which make the organization become real happiness organization and leads to being member of happiness organization clearly apparent from organizational culture in which every party cooperates, mutual dependent, and without serious happening even in conflicts.

2. Organization involvement affecting behavior of being member of happiness organization is a result of the good organization's surrounding and culture. Every employee has strong involvement to the organization. Apparently, the Sports Authority of Thailand has

resignation ratio of lower than 0.5 per cent, which affects almost 600 temporary employees since the Sports Authority of Thailand is limited by government's policy to stay on the same size, and not allowed to expand in number of personnel, therefore, every employee has to work harder. However, because of good feeling of involvement, employees of the Office of Sports Authority of Thailand will not resign. Only 6 – 7 employees who retired are replaced with new employees. This result in a policy of no position is available for outsiders, only a few positions are opened for temporary employees of at least 6 months attendance to move up. From a survey among temporary employees with year by year contracts, it is found that resignation rate is rather low. Most temporary employees are happy to extend their contracts year by year and wait to be appointed as regular employees.

3. Beside the prominent point of the Sports Authority of Thailand that affect the building of organization involvement and the brotherhood culture of the organization, the welfare planning in correlation with the organization's vision is also a prominent point. The Sports Authority of Thailand emphasizes the promotion of main capacity of its personnel. The limitation of the policy of keeping the same workforce by the government affects the Sports Authority of Thailand to emphasize to practice just evaluation, to undergo a research for organization development, from both personnel inside the organization and hiring of outside unit such as Chulalongkorn University, etc. for continuous development of the organization.

4. Organization involvement derives from factors of involvement by mentality, involvement by maintaining of the organization, and organization involvement by norm. The management suggests that every factor is important. Organization involvement must rely on the duration for construction since the Sports Authority of Thailand is not so large in size so, while working, each section participates well. These help forging the Sports Authority of Thailand to unify and follow by involvement. It is normal to have conflicts in the workplace and most management members feel it is good since conflicts can induce working enthusiasm; and do not see working as non-productive since the wish to win induces competition. Therefore, management members practice conflict management to a certain level as a part of the administration. When conflicts exist among employees, management members will not make judgment to whether who is right or who is wrong, but rather extend cooperation so that each party can see the other party's reason and bring about understanding between them.

Conclusions and Future work

From this research, it is found that the factors affecting the happening of the 8 aspects of happiness organization in the Sports Authority of Thailand or the factors affecting Happy Workplace are as follows: 1) Happy Body, 2) Happy Heart, 3) Happy Money, 4) Happy Relax, 5) Happy Brain, 6) Happy Soul, 7) Happy Family, 8) Happy Society, 9) Mind Involvement, 10) Remaining Involvement, and 11) Norm Involvement.

In the findings, the factors mentioned have element values in involvement variables at a high level so there is a need to inquire information from related experts to set up a strategic plan of the development of management model for the Sports Authority of Thailand to be a happy organization in the related issues as follows:

1) Organization involvement in remaining with the organization aspect ($\mu = 4.04$ $\sigma = 0.88$) to which experts suggest by concluding that emphasis should be put on the promotion of welfare development policy and the well being of employees in correlation to their real needs.

2) Organization involvement in the norm aspect ($\mu = 3.99$ $\sigma = 0.84$) to which experts suggest by concluding that emphasis should be put on the creation of activities and projects to induce the feeling of belonging and continuous organization royalty among employees which is morally correct and an appropriate action towards the organization.

3) Organization involvement in mentality aspect ($\mu = 4.01$ $\sigma = 0.78$) to which experts suggest by concluding that emphasis should be put on activities to develop employees' mind and rewards to show admiration by bestowing certificate of good performance and services every month, arrangement for sports competition matches among internal offices and working units for harmony and building the feeling of family hood.

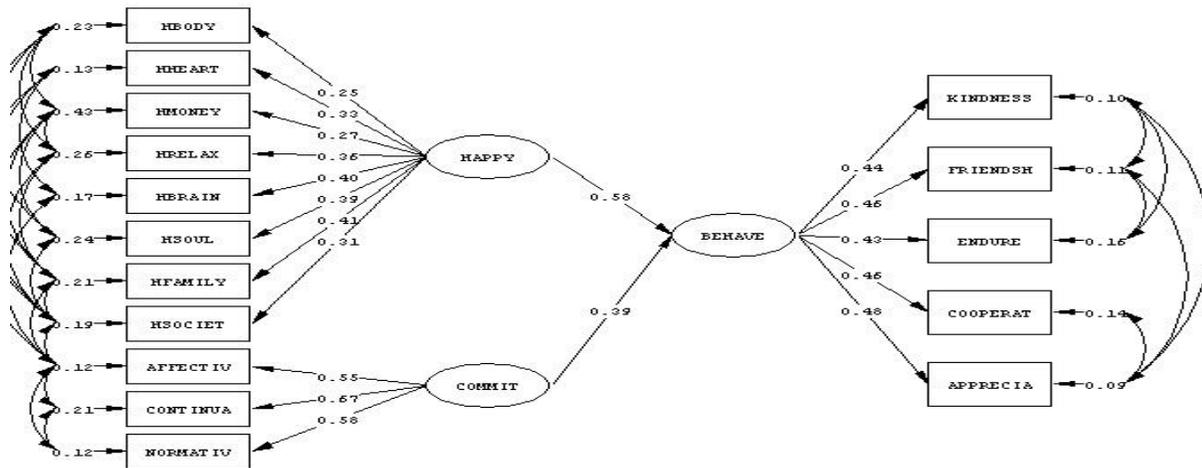
Future work

1. The factors affecting the coming of happiness organization in the Sports Authority of Thailand while related organization need to choose factors with results of high weighing values to develop strategies and promote first to save time, budget, and easily successful since analysis of data is done directly and indirectly.

2. This research is a cross-sectional research. Therefore, interested researchers who continue to keep on study for several years may find the difference or consistency of the research model already developed by the researcher.

3. Since the population from which the data are collected are experts related to policy and interested parties with the organization. For that reason, the samples' answers will lend benefits to the main organization but are not under main policy of the organization. Therefore, related parties have to help push for the realization of the research objective.

Appendices



Chi-Square=477.04, df=74, P-value=0.00000, RMSEA=0.067

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The Factors Influencing Fan Club Purchase Intention on Products and Services of Football Clubs Sponsors in Thai Premier League

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Abstract

The objective of this research is to study direct, indirect, and overall influences of factors affecting the intentions to buy goods and services of football clubs sponsors in Thai premier League. Sample groups used in this research are 1,100 fans of 18 football clubs in Thai premier league by multi-stage sampling.

Variables to be studied are factors influencing the intention in purchasing goods and services of football clubs sponsors of Thai premier league which include: (1) Involvement, (2) Affective Commitment, (3) Service Quality, (4) Team Attachment, (5) Sponsor Integrity, (6) Charity Motive, (7) Sport Image, (8) Core Brand Attitude, (9) Word of Mouth, and (10) Subjective Norm. The tool used in this research is a questionnaire developed by the researcher based on variable concept. Data analysis is done on Statistical Package for the Social Sciences (SPSS) program for analysis of descriptive statistics such as percentage, average, standard deviation, chi-square, and Pearson Correlation. LISREL program is used to analyze elements to confirm and check for correlation between types according to theory and empirical data.

The Research Results are as follows:

1. The basic reasons of the factors affecting the intention of purchasing goods and services of football clubs sponsors in Thai premier league which are developed have correlation values to final type of empirical data with statistical value of Chi-square =18.2, degrees of freedom value = 23, probability value = .75, estimate error of the square root value = 0.0, critical sample size value = 2535.58, index of square root value with averaged of fraction in standard score = 0.008, index of correlation value = 1.00, adapted index of correlation value = 0.99, and index of comparison adequacy value = 1.00. When taken into account the decision coefficient, it was found that the variables to be studied in types that could explain the variation of the intention to purchase goods and services of fans from football clubs in Thai premier league are 73 per cent.

2. The variables with overall influence to the intention to purchase goods and services

are in the following descendent order: (1) Sponsor Integrity and Sport Image = 1.00, next (2) Charity Motive = 0.59, (3) Core Brand Attitude = 0.43, (4) Team Attachment = 0.37, (5) Service Quality = 0.31 and Word of Mouth = 0.31, (6) Affective Commitment = 0.16, 7) Involvement = 0.13, (8) Subjective Norm = 0.03.

Keywords : Consumer Behavior, Purchase Intention, Sponsor Team, Sports Business

Introduction

Nowadays, sports play important role on international economy and become a business format with business volume at 3% of total global business volume, to which most of the sports business income derives from the management of professional sports matches of leagues of sports clubs including international matches such as FIFA Football World Cup, Formula One Grand Prix, and Major League Baseball: MLB and to which groups of product and services producers give supports in the form of continuous budgeting such as Coca-Cola, IBM, General Electric, and McDonald's since these sponsors have confidence and see opportunity in building added values to their businesses in sports industry. Moreover, they are continuously formal sponsors for the Olympic Games, FIFA World Cup, National Football League: NFL, and NASCAR, (Yang, Sparks & Li, 2008)

Sports have several outstanding characteristics that can influence progress towards internationalization or globalization of which the value of worldwide sponsorship is increasing continuously from the advertisement budget calculated at 7percent of global advertisement expenses. Nevertheless, as the Investment Experts Group: IEG estimated the total worldwide reproduction right of broadcasting in 2007 was around 42,700 billion US Dollars and in 2008, around 43,500 billion US Dollars, and predicted that between 2008-2012, worldwide reproduction right must be at least 60,000 billion US Dollars where sports sponsorship ratio was the top at 84 percent, the second was arts and culture at 6 percent, the third and the fourth were reproduction rights of other activities at 5 percent in that order. Later, it was found that sports sponsorship stayed in top ratio with higher percentage at 88, while the second was the Naming Rights at 5 percent, the third was arts and culture at 3 percent and the fourth was the reproduction rights of others activities at 2 percent in that order (The World Sponsorship Monitor, 2011).

Sports management in Thailand is a multi-level organization such as The Office of the Ministry, The Office of the Permanent Secretary, The Department of Physical Education and The Sports Authority of Thailand, under the management of The Ministry of Tourism and Sports, by which at the beginning a joint scheme, National Economic and Social Development Broad Scheme was used. Later, 4 National Sports Development Schemes were developed as follows:

National Sports Development Scheme 1 (1988 - 1996), National Sports Development Scheme 2 (1997 - 2001), National Sports Development Scheme 3 (2002 - 2006) and National Sports Development Scheme 4 (2007 - 2011). It is found that in Strategy Item 6, Sports Administration Development, there is an objective to increase the effectiveness of sports and personnel administration process in sports events at all levels, both government and private sector, sports investment promotion in private sector by introducing a benefit scheme for Sport Business (The Ministry of Tourism and Sports, 2552)

When private sector joins in to support, investment becomes an important factor to strengthen the development of professional sports since cooperation from different segments has been receive from which supports from private sector increase investment budgets (Thursby & Thursby, 2007) and initialize the development of sports clubs in team management, special event management, and channel management for souvenir. These phenomena motivate sports spectators to become fan club in long term and thus induce confidence in investors to be more interested in becoming owners of sports teams while sports clubs in the same league compete and compare among themselves in both match results and total earnings of the management of the sports clubs which bring the most popular sports club to its podium of the era. At present, the trend in Thailand is that the level of income for professional sports is rather high and more competition matches in league system are organized for which the league competition matches are clearly scheduled and appropriated for the sports clubs sponsorship (The Sports Authority of Thailand, 2552).

Thailand Professional Football League is influenced from the expansion of world sports business and the rules issued by the Federation International de Football Association: FIFA and announced to football clubs in member countries to enter registration of commercial legal entities under control of Asian Football Confederation: AFC to oversee competition standards in Asian countries including Thailand (International Federation of Football Associations[FIFA.], 2009). In 2008, AFC took up espousal from FIFA and announced the Criteria for Participation in AFC Champion League for selection of teams to play in competition matches arranged by AFC Champion League to upgrade professional football. The FIFA rules stated that the football clubs' teams entered into main competition matches must register as legal commercial entities and completely seek full benefits of businesses. If any member country cannot keep to the rules, it will be stripped off competition right in every case. The Criteria for Participation in AFC's standard competition includes: 1) Organization, 2) Technical Standard, 3) Attendance, 4) Governance and Soundness, 5) Marketing and Promotion, 6) Business Scale, 7) Game Operation, 8) Media, 9) Stadium Standard, and 10) Management of Clubs Member. The member clubs must enter into Club Licensing Agreement with present Thai Premier League Company Limited.

When the size of football business scale in Thailand expands as resulted from the larger amount of earning by the football clubs in Thailand the sponsorship for Thailand premier league football competition are in the forms of giving budget, goods and services including media partnership that is to support in media management during the competition and live broadcasting

of television all through the competition season in 2009. The all-out media efforts led to what was called “Football PTL Fever,” a trend supported by True Vision Company. With every match, the number of sport spectators in both groups, watching TV at home and cheering at the stadium, increased significantly. The number of football fans of professional football clubs also increased at a record-breaking rate in the Thai professional football history. The results of surveys on the earnings of gate receipts and merchandising during football competition of Thailand premier league in 2009, found that the total earning for gate receipts was 42,000 US Dollars and in the following year 2010, an increase to 1,041,746 US Dollars, an expansion of 2,480 times; and the total earning of merchandising in 2009 was 40,000 US Dollars and in the following year 2010, an increase to 536,930 US Dollars, an expansion of 1,342 times (Football Association in Thailand, 2009).

Team sponsorship is a worthwhile investment by sports club sponsors who invest in the form of cash or an event which is a form of commercial sponsorship most popular among today’s marketing media. In the football circle in Thailand, there are sponsors who invest and find that it is worthwhile in building the brand value, the virtue and pride in lending a hand as a part of the football team which will stay in fan clubs’ minds and in turns motivate the purchase intention of football fans to buy sponsors’ goods and services, an example seen in sponsorship of a total budget of 100 million baht for the duration of 3 years between 2011 – 2013 by SCG Plc, owner of Thai Cement products given to SCG Samut Songkhram FC, a professional football league in Thailand premier league. This is undeniable that product owners are courageous enough to such a high budget into sports arena. More importantly, they have to team up with sports and sponsor particular sports competition which will bring reputation to wider acceptance which is correlated with the view that SCG is seeing that is emphasis should be put on brand recognition and fan attachment.

Objectives

To study influences, direct, indirect and total of factors affecting the purchasing intention of goods and services of sponsors of football clubs in Thailand premier leagu

Literature Review

Concepts and Theories on Sports Fans Behavior

The comprehension of consumer behavior is important because consumer behavior can directly specify and affect the usage of goods and services which in turns affect the decision making process. While entrepreneurs and organizations at present must try to understand and adapt to consumer behavior to offer goods and services as the consumers expect and to gain advantage over competitors (Trail & James, 2001). Besides, entrepreneurs must be able to influence the consumers’ motivation, attitude, and behavior.

Nowadays, sports fans have several channels to consume sports such as events, televisions, radio broadcasts, newspapers, magazines, and internet. When the relationship of social psychology and other subjects is considered, it is found that it relates fine with consumer behavior in that sports consumer behavior consists of 2 elements, sports participants and sports attendants. The difference between the two groups above mentioned was explained that people in sports participation were sports players but sports spectators were those who do not play sports.

Milne and Nelson (1990) has studied the relationship between consumers and the activities of sports spectators whereas analysis of sub-group (Nich Analysis) was done and found that sports spectators could be divided into two groups: Sport Attendance and Sport Fans of which, a research found that the two sports spectators had different levels of motivation, high and low levels. Moreover, it was also found that spectators could be divided into two groups: 1) Spectators who watch sports on media such as television, radio, and internet and 2) Attendants who watch sports inside the arenas of which the level of commitment with the team was high and affected directly to the intention to buy merchandises and services in that order.

Concepts and Theories on Purchase Intention

There were several researchers who studied consumers' awareness of sponsors and recognition measures (Jain & Posavac, 2004). However, the relationship of consumers awareness and the direct affect to sponsorship effective and the purchasing behavior of which the index of the behavior of consumer involvement and the memory of sporting event sponsors was the consumers' satisfaction and the purchase intention

Concepts and Theories on Involvement

Sports activity involvement is the feeling of fans' positive attitude in participating in sports clubs and something happened from the involvement in clubs activities by watching and cheering with the club in which one is a member until the member and the club become one while a member has strong belief, dedication, and sacrifice to try hard for the benefits of the club. The sports involvement is like a core image and understanding of how sponsors work (Menagham, 2001).

Sports and leisure involvement is a structural and represents individual interest which is specifically an interest in a particular sport. The mentioned interest is a basic motivation, arousal, future interest, or associated products. Involvement is a theory with internal multi-dimensional elements which consists of 2 dimensions: 1) Involvement from attraction which is a person's perception from participation in activities and develops pleasure and enjoyment, 2) Involvement from centrality which a participant develops personal affection such as adapt into one's own life style.

Concepts and Theories on Affective Commitment

Allen and Meyer, (1990) have proposed a form of involvement with organization which consists of 3 aspects: 1) Affective Commitment which is the commitment from the employee's emotion in wishing to unify with an organization and to participate. Personnel who have this commitment show a wish to become members of an organization, 2) Continuance Commitment which is the commitment from realization of the capital relating to an organization. Being a part of an organization, one gains more than loose benefits. Employee with a commitment shows the need to stay in the organization, and 3) Normative Commitment means commitment from obligation, responsibility, binding, or gratitude which tie a person to continue to stay in an organization. A person with this type of commitment thinks he should stay in the organization. Staying in the organization is what he should do for the correctness and appropriateness in a society. These 3 aspects can result in different behavior for different people. Therefore, an organization has to understand the nature of commitment of personnel in the organization.

The difference of the basic elements of the 3 aspects is that a person has a commitment as resulted from emotion will stay in an organization because he wants to stay whereas another person with a commitment for the benefit needs to stay in the organization. A person with a commitment from his obligation thinks he ought to stay. Therefore, to gain more understanding of the relationship between an employee and an organization, it is necessary to consider the elements of the 3 aspects of commitment simultaneously. Allen and Meyer have set up a hypothesis that different elements of each aspect will also affect different working behavior.

Concepts and Theories on Service Quality

Parasuraman, Zeithaml, and Berry (1991) explained that evaluation of consumer service quality from factors specifying service quality by surveying management groups from service organizations and consumers who use services from those organizations. A study result found that a service quality index was the service according or exceeding the consumers' expectation and Service Quality Model was developed to explain the basic element of service quality.

“SERVQUAL” is a tool of quality evaluation of the factors in 5 aspects: Tangibles, Reliability, Responsiveness, Assurance, and Empathy. SERVQUAL consists of 22 questions divided into 2 parts: Part 1 Quality evaluation of services on expectation, and Part 2 Quality evaluation of services on perception of customers. Then, another tool has been developed to evaluate the service quality called “RATER,” an abbreviation of Reliability, Assurance, Tangibles, Empathy and Responsiveness. However, there are differences between “SERVQUAL” and “RATER” in that factors 1, 2 and 3: Tangibles, Reliability, and Responsiveness, from focus group interview in a research done in 1985, whereas factor 4 and 5:

Assurance and Empathy, of customers are new factors, by which consumers and evaluators prefer “SERVQUAL” as service quality evaluation tool and develop additional factors to 7 and 10 factors in that order, and become the concepts widely used in service quality evaluation as seen by customers.

Concepts and Theories on Team Attachment

Attachment Theory is a basic theory explaining human behavior in getting acceptance by group and society in which one lives of which basic needs derive from human’s basic needs called Maslow Hierarchy of Needs, a human’s Theory of Human Motivation, i.e. (1) Physiological Needs such as eating and drinking, (2) Safety Needs such as shelter and security of working position, (3) Social Needs such as love, friendship, closeness and commitment, accompaniment, entertainment, acceptance, membership of a group or several groups, (4) Esteem Needs such as pride, self-esteem, pleasure of success, self confidence and prestige, (5) Self-Actualization Needs such as a need to fulfill self-potential, to succeed in self-highest wished, progress, freedom in making decision and creativeness, ascending to higher position in the profession line, etc. The needs mentioned may or may not be accepted depend on the Attachment, by which a person and acceptance by general public is much needed.

Concepts and Theories on Sponsor Integrity

Integrity or Morality is an important and internal character of a person observed and studied empirical data by social researchers to transfer the values in planning related strategies since integrity is another important key factor to purchase intention of goods and services also (McConnell, 2001). It is found that integrity consists of 3 levels: 1) Basic integrity taking place internally and is unchangeable, 2) Personal integrity which is little changeable and 3) Trait or memory which is hardly changeable when accumulate for a long time.

As earlier mentioned, Sponsor Integrity is an index or pointer of the relation between sponsors and sponsored sporting teams, to which if the level of integrity is fan clubs’ or sponsored sporting teams’ internal feelings or thoughts to main sponsors’ goods and services i.e. when integrity is established, purchase of goods and services of sponsors can happen in every channel.

Fan clubs and club members with high level of integrity show commitment to the organization or commitment to come to future competitions, to purchase team’s merchandise, to purchase tickets for competitions, and purchase goods and services of the club. When fan clubs have integrity, it can result in sponsors keep on supporting in the longer run.

Concepts and Theories on Charity Motive

The motivation to do for charity is to sacrifice what is own in exchange for social cooperation. At present, a number of sponsors try to find strategies or methodologies to motivate and to response to consumers' needs for highest satisfaction (Cornwell, 2008). The results sponsors get from this exchange are as follows: 1) Property such as in sports competition, arts or culture exhibitions and events, they get earning or profits or loss in return, 2) Compensation from name brands which may not be in a form of money but rather in a form of satisfaction and reliability. Moreover, there are a number of researches that intend to study the consumers' acceptance and response from supports to motivate charity motive.

As mention, "Charity Motive" is another factor which influence consumers' purchase intention of goods and services and is very popular nowadays since it is persuading or convincing for sympathy and increasing interests in getting consumers' and related organizations' to support by giving benefits to the society together with giving for charity, too. There are a large number of formal sponsors that sacrifice their organizations' budgets, and goods and services, to sports competitions management bodies for a period of a long time only for a general acceptance from the society that they could make benefits. They are, for examples, Johnson & Johnson, Manulife Financial, and Lenovo Group which sponsor professional rugby competition of Springboks Rugby Team and South African National Sponsor Sasol. They also sponsor the US regional flowers garden exhibition and for PNC Bank to sponsor Philadelphia Flower Show.

Concepts and Theories on Sponsor Image

Image is very important to public relations since public relations is the work of designing the details relating to image or exhibiting the organization's characteristics, and goods and services, for the target group and consumers to build confidence. Moreover, the building of sponsorship image is what the sponsors want the consumers' to feel the awareness and perception towards goods and services which are supported by sponsors. Therefore, sponsor image is another way to build motivation and influential factor to induce purchase intention for goods and services.

An example of a study on sponsor image that affect earning, purchase intention for goods and services, and preference of name brand in a research a case study on Barclay's Bank and professional English football club which received sponsorship money from 1987 for every channel of main advertisement. Meanwhile, information of the bank being a main sponsor is publicized on every channel of mass media, television, radio, and press release which in turns, fan clubs and general consumers come to deposit money more with the bank. Moreover, the football club buys and sells their shares more through the service of Barclay's Bank since consumers are confidence and want to use the service of the sponsor of their club and feel that it is another way they can help their club. Another case study is done by Kohl and Otker (1985) on

sponsor image in entertainment industry of more than 250 world tour concerts of Philip and Dire Straits with all groups of consumers, kids, teenagers, working and retired. It is found that sponsor image can build consumers' commitment and motivation for more purchase behavior on Philip's goods and services from seeing its name brand and billboards, and touching the quality of the concert management and the quality of the sound of the concerts.

Concepts and Theories on Core Brand Attitude

Core brand attitude also has direct influence to purchase intention of goods and services during an expansion of the brand which correlates a study by Flaherty and Paps (2000) in which it believes that core brand attitude is a main factor and is important to purchase intention of goods and services, and core brand attitude has direct relation to purchase intention of goods and services.

Brand attitude is another variable in consumer motivation which is in affective stage and mostly derives from consumers. Attitude is one thing used to build strength of brand and to measure preference by evaluating personal attitude to objects and also evaluate consumers' general feeling Brand attitude has prominent characteristic and benefit relating to the brand whereas brand attitude can be apparent among consumers who do not have much information of that specific brand. Then, it is found that consumers basically show their attitudes from their behaviors such as making decision according to the brand of their past experiences from which consumers' behavior can be correctly predicted brand attitude is a main target for sponsors and companies to search for information since it can bring cooperation and build purchase intention of sponsors' goods and services.

Concepts and Theories on Word of Mouth

Word of mouth is a two-way interpersonal communication in which the sender of information and the receiver can interchange or interrelate with each other and the number of communicators may be 2 or 3 or more depending on the criteria Richin and Root-Shaffer (1988) divides word of mouth communication into 3 types as follows: 1. Word of mouth communication as source of information on products which is bold information of goods and services such as shape, characteristic, specification of the products, 2. Word of mouth communication as suggestion relating to opinion, feeling, and advice, and 3. Word of mouth communication as telling of personal experience, criticism of the characteristic and specification of goods and services.

Concepts and Theories on Subjective Norm

Compliance with the peers or subjective norm is a perception or belief that the society may force to act or not to act. Norm may be remote such as friends, colleagues, superiors or closed such as family members, children, wife or husband, etc. Theory of Planned Behavior: TPB is a social psychology developed from theory of reasoned action introduced. Theory of Planned Behavior explains that human behavior is led by 3 beliefs which are Behavioral Beliefs, Normative Beliefs, and Control Beliefs, by which each belief affects the variables.

Discussion

1. The factors influencing purchase intention of goods and services (as variable with direct influence) in this research are weighted to give statistical values according to variables' relationship, which is earlier mentioned. This is a presentation of factors influencing purchase intention of goods and services (as variables with direct influence) which is different from the presentation in the order of statistical values relating to general image and this type of presentation emphasizes the importance of influence since direct influence values affect better than indirect influence values in that they do not have to influence through other variables before they affect purchase intention for goods and services, which is an advantage for those who need to use these variables to develop action strategy. In addition, variables with direct influence have little error since they do not work through other variables or have better results than indirect influence variables, and they affect directly to purchase intention of goods and services. The results are as follows: 1) Charity Motive's relationship value = 0.59, 2) Involvement's relationship value = 0.16, and 3) Service Quality's relationship value = 0.31 in that order.

2. The factors influencing purchase intention of goods and services (within budget and time frame) are presented by order of statistically values and direct influence according to budget and time frame, because each club receives limited budget for marketing activities and there is a need to develop concise strategy and working plan, for the concrete evaluation and follow up. The researcher proposes this concept from the setting in Thailand where professional football is popular now, but there is taped rerun of the televised matches on free television for people who missed to watch important matches live to be able to watch the matches on television. Therefore, any sponsor who put advertisement for goods and services in the sports arena can motivate by putting latent advertisement or putting the sponsor's name brand in the arena, can motivate the increasing of consumers' perception to the services and name brand, and the integrity towards the sponsorship which follows, which affects the increasing of purchase intention of goods and services. At present, many clubs put more budgets into television advertisements since the integrity of sponsorship and sponsor image of the organization, and consumers' word of mouth are worth for the investment of the budgets and consumers can see the goods and services, both moving and still pictures from the advertisements during the match, by which consumers become familiar with the name brand affecting the integrity of sponsorship since they easily remember and remember for a long time from the short time investment. The

factors are in the following order: 1) Sponsor Integrity, 2) Sponsor Image, and 3) Word of Mouth.

The researcher choose survey research by analysis of linear structural equation and analysis of influence of factors affecting purchase intention of goods and services of sponsors of football teams in Thailand premier league using the LISREL program. The research collects data from the population which is 56,000 fan clubs in football clubs of Thailand premier league because the research is an analysis of the relationship model using high statistical data analysis and relationship model between variables influencing purchase intention of goods and services. Sample groups are considered and a number of free parameters are estimated for values using a ration between samples and number of free parameters. The researcher specifies sample groups using the mentioned criteria and then using Multi-Stage Random, all from fan clubs of football clubs in Thailand premier league 2012 of 18 clubs and a total of 1,100 people.

Variables to be studied are factors influencing purchase intention of goods and services of fan clubs of sponsors of football teams in Thailand premier league, and consist of: Affective Commitment, Service Quality, Team Attachment, Sponsor Integrity, Charity Motive, Sponsor Image, Core Brand Attitude, Word of Mouth, and Subjective Norm.

Methodology

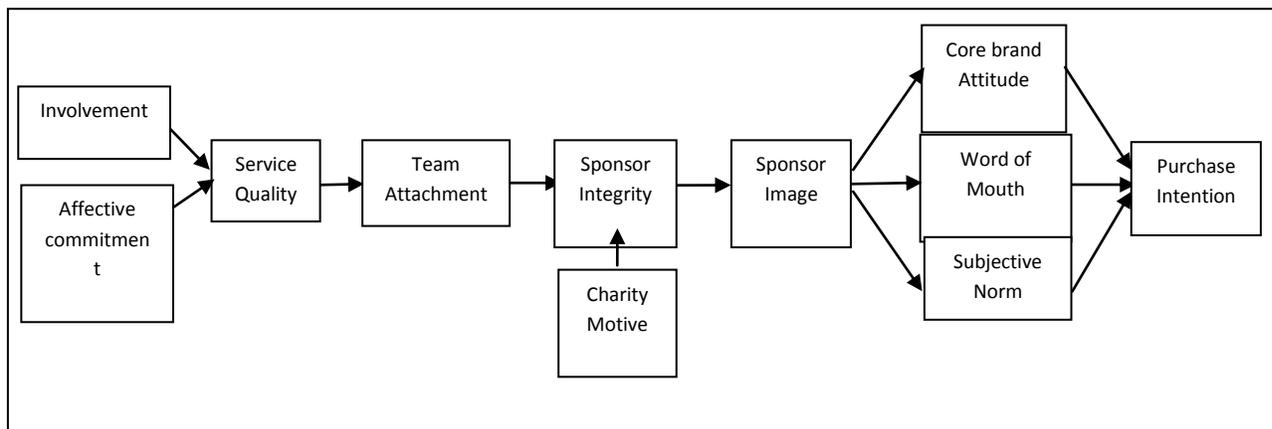


Figure 1 - Research Frameworks Development

The tool used in this research is a Questionnaire consists of 4 parts: Part 1 Personal data in Check List type, Part 2 Factors affecting purchase intention of goods and services of fan clubs of sponsors of football teams in Thailand premier league, in 5-level Rating Scale, Part 3 Factors increasing purchase intention of goods and services of fan clubs of sponsors of football teams in Thailand premier league, and Part 4 Opinions and suggestions, of which Parts 3 and 4 are in Open-Ended Questions type. The questionnaire has passed measurement in Quality, Reliability,

Content Validity, and Consistency. Moreover, the Index of Item - Objective Congruence: IOC. It is found that the questionnaire has an accuracy value at .892.

In the analysis of data of the research, basic data and frequency counts are calculated by SPSS (Statistical Package of the Social Sciences) program on \bar{X} value, Percentage, Standard Deviation, Skewness, and Kurtosis. Using SPSS, analysis of the relationship between variables using in the study, Pearson's Product-Moment Correlation Coefficient are calculated and data are tested for correlation of models in Confirmatory Factor Analysis. Data are tested for Construct Validity of variables in latent variable set by LISREL program. Finally, conclusion, suggestions and result findings are discussed.

Problems and Solutions

From the above mentioned, it is found that the sponsors can approve budgets for various units because they see worthwhile benefits in return from the increase of Sales Revenues, Market Share and clothes. The Marketers is very satisfactory from sports sponsorship (Koo, Quarterman, & Flynn, 2006) Sports sponsorship has been popular up to present. If sports associations, government units, and private organizations can manage to overcome their objectives in part by these elements and by far from good supports to boost faster potential development, and affect better order of position or statistics, better position of the association, and increase acceptance by international sports union in further development, and past studies of problems and obstacles, efficiency and effectiveness in sponsorship worthiness of being sports sponsors and various factors affecting the behavior of purchase intention of goods and services.

However, there is no evidence of study on cause model of factors affecting purchase intention of goods and services of sponsors of football clubs in Thailand premier league. In effect, there is a lack of important information in making decision for sponsors to use in management development which results in giving more sponsorship. If sponsors know what in fact the group of customers or fan clubs wants, how much of that factor, in what direction, and in relation to what variable, it is useful to their specification of budgets to reasonably provide to each sport, build marketing strategy in professional football and push for further continuous supports. Therefore, it is appropriate to initiate a study on "The Development of Cause Model of Factors Influencing Purchase Intention of goods and Services of Sponsors of Football Clubs in Thailand Premier League" to study and develop models, including testing of correlation, direct influence, indirect influence, and total influence of the factors. Moreover, analysis of relationship model using Linear Structure Relationship Model: LISREL, with prominent characteristic in correctness and reliability, and nearly all of high statistical data analysis techniques, including using as a tool to test theories that researcher wants to study in analyzing linear structural relationship model and Recursive or Non-recursive Model, division of

measurement of variation and incorrectness, test of correlation between models according to theories of empirical research, and when data are analysis, the results will be more correct . Besides, basic agreement on LISREL model is seen to be more relaxed than those of basic agreement on regression analysis or analysis of influence, which will better correlate with the statistical agreement, for which the study results will affect the highest effectiveness of data, and further management.

Conclusion and Future Work

Conclusion

Indirect Influence

Indirect Influence to purchase intention of goods and services

1. Involvement has a positive indirect influence to purchase intention of goods and services with a coefficient value at 0.13 ($t = 11.14$) and a statistical significance level of .05.
2. Affective Commitment has a positive indirect influence to purchase intention of goods and services with a coefficient value at 0.16 ($t = 13.51$) and a statistical significance level of .05.
3. Service Quality has a positive indirect influence to purchase intention of goods and services with a coefficient value at 0.31 ($t = 14.87$) and a statistical significance level of .05.
4. Team Attachment has a positive indirect influence to purchase intention of goods and services with a coefficient value at 0.37 ($t = 22.09$) and a statistical significance level of .05.
5. Sponsor Integrity has a positive indirect influence to purchase intention of goods and services with a coefficient value at 1.00 ($t = 33.62$) and a statistical significance level of .05.
6. Charity Motive has a positive indirect influence to purchase intention of goods and services with a coefficient value at 0.59 ($t = 32.54$) and a statistical significance level of .05.
7. Sponsor Image has a positive indirect influence to purchase intention of goods and services with a coefficient value at 1.00 (36.27) and a statistical significance level of .05.

Direct Influence

Direct Influence to purchase intention of goods and services

1. Core Brand Attitude has a positive direct influence to purchase intention of goods and services with a coefficient value at 0.43 ($t = 10.81$) and a statistical significance level of .05.

2. Word of Mouth has a positive direct influence to purchase intention of goods and services with a coefficient value at 0.31 ($t = 8.45$) and a statistical significance level of .05.

3. Subjective Norm has a positive direct influence to purchase intention of goods and services with a coefficient value at 0.33 ($t = 11.53$) and a statistical significance level of .05.

Total Influence

Total Influence to purchase intention of goods and services

1. Involvement has a positive total influence to purchase intention of goods and services with a coefficient value at 0.13 ($t = 11.14$) and a statistical significance level of .05.

2. Affective Commitment has a positive total influence to purchase intention of goods and services with a coefficient value at 0.16 ($t = 13.51$) and a statistical significance level of .05.

3. Service Quality has a positive total influence to purchase intention of goods and services with a coefficient value at 0.31 ($t = 14.87$) and a statistical significance level of .05.

4. Team Attachment has a positive total influence to purchase intention of goods and services with a coefficient value at 0.37 ($t = 22.09$) and a statistical significance level of .05.

5. Sponsor Integrity has a positive total influence to purchase intention of goods and services with a coefficient value at 1.00 ($t = 33.62$) and a statistical significance level of .05.

6. Charity Motive has a positive total influence to purchase intention of goods and services with a coefficient value at 0.59 ($t = 32.54$) and a statistical significance level of .05.

7. Sponsor Image has a positive total influence to purchase intention of goods and services with a coefficient value at 1.00 ($t = 32.27$) and a statistical significance level of .05.

Future work

1. Consideration should be made on other variables which may have influence to purchase intention of goods and services of fan clubs from sponsors of football clubs in Thailand premier league, such as Attraction, Mass Media, Trust, and Technology Acceptance, etc.

2. In future research, there should be development of 3 different models as options for testing the best appropriateness and the best one would be chosen to explain the variation of the variables to be studied.

3. There should be an action research using the same set of variables in this research to develop the purchase intention of goods and services of fan clubs and sponsors of football clubs in Thailand premier league or actually try in football clubs.

4. The research is a cross sectional research, therefore, if some researchers extend and continue the study, they may find out differences or consistencies of the model developed by the researcher.

5. This research's sample group is consisted of only fan clubs from sponsors of football clubs in Thailand premier league. It is suggested that wider samples should be collected such as the management, the sponsors, and mass media, for the comparison of results and apply in future research.

6. In next research, emphasis should be placed on model measurement by reviewing literatures on latent variables since research results with emphasis on variables and variable factors are needed for easier application.

Appendices

Personal Characteristics of Questionnaire Respondents

	Description	Frequency	Percentage
1. Gender	Male	751	68.30
	Female	349	31.70
2. Status	Single	727	66.09
	Married	360	32.72
	Widowed/Divorced/Separated	13	1.19
3. Age	Lower than/Equal to 25 years old	494	44.90
	26-35 years old	285	25.90
	36-45 years old	203	18.50

	Description	Frequency	Percentage
	46-55 years old	100	9.10
	More than 56 years old	18	1.60
4. Highest Education	Lower Secondary or Lower	131	12.00
	Higher Secondary	320	29.10
	Bachelor	568	51.70
	Master's	67	6.10
	Ph. D.	12	1.10
5. Profession	Business	88	8.00
	Government	193	17.50
	Employee	269	24.50
	Student/Pupil	373	33.90
	Retired	4	0.40
	Unemployed	30	2.70
	Others	143	13.00
6. Personal Earning (per month)	Lower/Equal to 5,000 baht	316	28.70
	5,001-10,000 baht	239	21.70
	10,001-20,000 baht	316	28.70
	20,001-30,000 baht	106	9.60
	30,001-40,000 baht	63	5.70
	More than/Equal to 40,001 baht	61	5.50
7. Which football club are you member?	Muangthong United	138	12.50
	Cholburi FC	156	14.20
	Buriram PEA	158	14.40

Description	Frequency	Percentage
Port Authority of Thailand FC	154	14.00
Bangkok Glass FC	101	9.20
Pattaya United	29	2.60
Osotsapa M150-Saraburi	59	5.40
BEC Terosasana	29	2.60
TTM FC Pijitr	39	3.50
SCG Samutsongkhram FC	49	4.50
TOT CAT FC	20	1.80
Eagles Friend of Police	39	3.50
Rajanavi Rayong	20	1.80
Military	20	1.80
Srisaket-Muangthai FC	20	1.80
Chiangrai United	20	1.80
Sriraja Suzuki FC	20	1.80
Khon Kaen FC	19	1.70

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A MODEL OF SERVICE MARKETING STRATEGY TO ENHANCE THE COMPETITIVE ADVANTAGE FOR THAI SEAFOOD BEACH RESTAURANT BUSINESSES

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ABSTRACT

Travelling to Hua Hin from Bangkok doesn't take Thai visitors long at all with convenient transportation. Therefore, the seafood restaurant business attracts many Thai tourists. There are 3 objectives as 1) To analyze the business management of marketing services for Thai seafood restaurants in Hua-Hin, Prachuap Khiri Khan Province., 2) To explore the significant factors of satisfaction by Thai customers for Thai seafood restaurant businesses in Hua-Hin, Prachuap Khiri Khan Province., 3) To verify a conformity of Overall Model Fit Measure, and the evaluation conformity of results in the important component of Model (Component Fit Measure) by using Confirmatory Factor Analysis (CFA) and present the model of service marketing strategy to enhance the competitive advantage for Thai seafood beach restaurant businesses in Hua-Hin, Prachuap Khiri Khan Province. This research was done using mixed-method techniques. The qualitative method was collected using a snowball sampling technique; the quantitative data was collected by a One-Short Study Survey involving 400 Thai Tourists at destination in the Hua Hin Area. The analysis of reliability and validity showed that the alpha coefficient was valued at a level of 0.910 validity. The research involved interviewing experts and entrepreneurs in Hua-Hin, the findings can be summarized that visiting a seafood restaurant was an important factor in Hua Hin being the chosen destination for Thai tourists. Mostly, they focus on the well-known seafood restaurants and the standard of the service. In the term of the tourists demand, this was related to price, freshness of raw seafood and the original flavour. With respect to the tourists' experience, the price of food and beverage and weather or not it was value for money. The results explore the significant factors of satisfaction were analysed using the Exploratory Factor Analysis (EFA). It stated that an appropriated 28 factors out of 5 factors. The results of the statistics were validated, fitted and verified using Confirmatory Factor Analysis (CFA). This indicated that 6'S Strategic models as the follows: 1) Service Excellence Strategy, 2) Sensible Price Strategy, 3) Sea Ambience Strategy, 4) Supporting Public Relation Strategy, 5) Sales Allowance Strategy and 6) Service Variety Strategy, respectively. There were presented the validated and fitted the empirical data due to the comprised indicators model of

service marketing strategy to enhance the competitive advantage for Thai seafood beach restaurant businesses.

Keywords: Model of Service Marketing strategy, Enhance the Competitive Advantage, Seafood Beach Restaurant Businesses

INTRODUCTION

Currently the government of Thailand is concerned about the approach to the promotion and development strategies used to develop the economy through the policy of the Eleventh National Economic and Social Development Plan (2012-2016). Thailand's tourism revenue is up 9 percent compared to its gross domestic product (GDP). The rate of individuals employed in the tourism industry and a related industry is 3 million per year. By the way, there are also problems and obstacles encountered. The report of a survey into tourism entrepreneurs in 2010 was an establishment of common data transported through standard assessment by the Office of Tourism Development. (Thailand, 2010, 2012a, 2012b).

A restaurant or food business is worth 15.1% percent of the travel business, therefore is essential that the food industry should be encouraged continuously. Income can be separated from a trip to the service of those found to have first reached 40.79 billion U.S. dollars from a trip to the second 32.94 billion U.S. dollars from the sale or the recall and the third 25.1 billion from the sale of food and beverages.(Thailand, 2012b, 2012c). The food and beverage sector of the tourism authority informed that they were affected by the economic crisis in 2010, However the economy has still developed continuously, due to Thailand huge tourist sector with its tourism services, especially the services industries.

Selecting appropriate areas or province to stimulate the selection is very important. Hua Hin was decided as the spotlight area, as it is not far from the capital Bangkok. A 3rd of Hua Hin revenue comes the Food and beverage industry, primarily the beach restaurant area which is very popular among Thai tourists who travel to Hua Hin to dine. It is also popular among Thai tourists for it's leisure facilities and beach, bringing an income of 6 billion per year with the number of tourists traveling to Hua Hin around 2 million people per year. (Homsud, Ampai, & Anekpattanakij, 2012). Other Statistics show that the Gross Provincial Product (GPP) was 60,538 million baht in 2009 and 66,299 million baht in 2010. Whereas the business service sector was 18,020 million baht in 2009 and 19,821 million baht in 2010. Mostly of local service business in hotel and restaurant had 4,148 and 4,363 million baht respectively.(Chankoson, 2013). Further support for Tourism development is needed in the beach restaurant area to promote Thai seafood beach restaurants and control the quality of service and food standards for a competitive, this was highlighted in the, Eleventh National Economic and Social Development Plan (2012-2016).

RESEARCH OBJECTIVES

The following three objectives have been focused on in this study:

1. To analyze the business management of marketing services for Thai seafood beach restaurant in Hua-Hin, Prachuap Khiri Khan Province.
2. To explore the significant factors that cause Thai customers to be satisfied with Thai seafood beach restaurant businesses in Hua-Hin, Prachuap Khiri Khan Province.

3. To verify a conformity of Overall Model Fit Measure, and the evaluation conformity of results in the important component of Model (Component Fit Measure) by using Confirmatory Factor Analysis (CFA) and present the model of service marketing strategy to enhance the competitive advantages for Thai seafood beach restaurant business in Hua-Hin, Prachuap Khiri Khan Province.

REVIEW OF LITERATURE

The Concept of Quality Management and Service Marketing have been focused in this study:

PDCA is a theory-based approach to the scheduling of Deming's Cycle action planning, monitoring and operation of the organization in order to increase the quality of the management. The Services Marketing Mix (7P's). (Kotler. P. and Armstrong, 2004) Service means the product is a service, which is a form of action. The satisfaction can be offered to the other party. It is something intangible and does not limit you to one particular thing. Therefore many researchers have said, the Services Marketing Mix is more than a conventional product, it involves 1) Product, 2) Price, 3) Place, 4) Promotion and business-related services are more popular in the marketing mix of the 3 as 5) People, 6) Process, 7) Physic Evidence to controlled to satisfy the audience.

Related research methods used in this study:

The Exploratory Factor Analysis and Confirmatory Factor Analysis as 1) (Chahal & Kumari, 2012) The researcher analyzed the dimensionality of the consumer perceived value (CPV) concept, development of a CPV scale through exploratory factor analysis, reliability and validity analysis, and confirmatory analysis. The result found that the healthcare sector is a multidimensional scale represented by 27 items, spread over six dimensions that are significant for consumer value measurement, and 2) (Olorunniwo, Hsu, & Udo, 2006) This study seeks to investigate, through the development of an operationalized service quality constructed in the context of a service factory, whether the typology to which a service belongs may explain the nature of the service quality (SQ) constructed and its relationship to customer satisfaction (SAT) and behavioral intentions (BI) through an exploratory factor analysis and second-order confirmatory factor analysis. The result found that SQ, SAT and BI and their interrelationships may be typology-specific. This knowledge is useful for benchmarking best practices among such industries.

METHODOLOGY

Population and sampling into three parts as follows:

The first survey which is a qualitative research study uses snowball interviews with stakeholders who are experts in the tourism sector and entrepreneurs in the Thai seafood beach restaurant business.

The second survey of quantitative research focuses on the tourist population in Thailand, splitting it into two groups: 1) Tourists and 2) Excursionists. Together a total of 1,357,787 people visiting Hua Hin. The research sampling size method was used for the convenience of data collection. The sample size was calculated for a sample of the formula which determined the level of deviation by 95%. (Silpcharu, 2012) Therefore the total number of samples which is 400 people, then adjusting the questionnaire and respondents are asked to return to the group.

The third survey of the qualitative research study will use interview samples, focus groups to confirmatory factor analysis by experts in tourism and entrepreneurs of the Thai seafood beach restaurant business.

Instruments and Data Collection:

This researcher using research tools followed the population and sample data as follows:

1. Semi-Structured Interviews using the PDCA for the interview by finding ways to manage each coast and control the quality of products and services.

2. Questionnaires using the Services Marketing Mix (7P's) theory. There are 4 parts to the questionnaire as follows: 1) General information about respondents, 2) General information for Thai tourist about the services of Thai seafood restaurants in Hua-Hin, Prachuap Khiri Khan Province, 3) The important factors that affect the marketing services for Thai seafood restaurants in Hua-Hin, Prachuap Khiri Khan Province, and 4) Other comments and suggestions for Thai seafood restaurants in Hua-Hin, Prachuap Khiri Khan Province.

3. Semi-Structured Interviews using focus group techniques to confirm elements and element groups of factors from Exploratory factor analysis and the confirmatory factor analysis by experts in tourism by entrepreneurs of the Thai seafood restaurant business.

Reliability and Validity:

The accuracy of the test (Validity) and the reliability of the questionnaire (Reliability) were maintained by setting the criteria at 95% of confident interval with a reliability value that was 0.910, Then it was taken to the experts who checked its content and appropriate use of language, making revisions where necessary, on average all of the Indexes of Consistency (IOC) was more than 0.50. (Silpcharu, 2012).

Data Analysis:

The first and second part of the questionnaire used statistics by Percentage, Frequency, Mean, and Standard Deviation. The third part used Exploratory Factor Analysis: EFA by using Principal Component Analysis (PCA) then rotation by the Varimax technique, this eliminated the lower factor score and retained the higher factor score. Confirmatory Factor Analysis : CFA used the results of Exploratory Factor Analysis to estimate the Overall Model Fit Measure and included Component Fit Measure by checking several fit indices χ^2 / df , RMSEA, RMR, GFI, AGFI, NFI, IFI, TLI, CFI and HOELTER (.05) (Jöreskog & Sörbom, 1996; N. Wiratchai, Jöreskog, & Sörbom, 1995; Nongluk Wiratchai, 1999) the last part of the questionnaire used only reviews and suggestions of the respondents.

RESULTS DISCUSSION AND CONCLUSION

The researcher divided the results into three parts through by objectives as follows:

1. The results of the business management of marketing services for Thai seafood restaurants in Hua-Hin, Prachuap Khiri Khan Province.

The research found the following using PDCA theory:

Plan - The majority of the tourists travel to Hua Hin and neighboring Cha-am because of its creative tourism such as The Venezia, Swiss Sheep Farm. Therefore entrepreneurs have a great opportunity in creating new tourism attractions that will attract customers to the area. Therefore the entrepreneur should focus more on planning and new channels of promotion, Focusing more about price, the variety of seafood on the menu and adjust the new or development plan continuously to fit with the changing demands of the tourism sector (Henderson, 2009; Mathisen, Einarsen, & Mykletun, 2012; Salem-Mhamdia & Ghadhab, 2012; Woodside, Crofts, & Harrill, 2007).

Do - The procedures for this section, the entrepreneur received the problem about implementation and planning. Because the entrepreneur has to focus on the raw material for the restaurant, especially raw seafood, ensuring it is as fresh as possible. In term of customer behavior, there is also the need for food to be cooked at the correct temperature; the entrepreneur needs to take the cooking temperature into consideration and ensure the food is suitable to the tastes of Thai people. (Boyce, Broz, & Binkley, 2008; Burusnukul, Binkley, & Sukalakamala, 2011; Ghezzi & Ayoun, 2013; Yip, Chan, & Poon, 2012).

Check - The expert and entrepreneur will have to focus on the quality of the monitoring and evaluation of the issues, it is important to continue with the operation and to obtain more useful information which will improve the quality during future operations. The monitoring can be compared to that of other seafood restaurants to see weather or not it will be beneficial to improve the quality of the food or service. (Hertzman & Barrash, 2007; Matos, Rossi, Veiga, & Vieira, 2009; Noone, Kimes, Mattila, & Wirtz, 2009; Yip et al., 2012).

Act - Mostly the experts and entrepreneurs recognize that they should focus on the volume of demanded from Thai tourist, especially at vacation times, public holidays and festivals. These are important times as they often generate very high profits for the business, Because of this it is essential that the entrepreneurs balance their supply of raw materials along with products offered and service quality. (Hadad, Keren, & Barkai, 2011; Park, Chung, & Woo, 2013; Rivera & Shani, 2013; Wang & Beise-Zee, 2013)

2. The results explore the significant factors leading to the satisfaction of Thai consumers of the Thai seafood beach restaurant business in Hua-Hin, Prachuap Khiri Khan Province. The second objective is the result from the satisfaction of the service marketing strategy which enhances the competitive advantage for Thai seafood beach restaurant businesses by using Principal Component Analysis (PCA) as one type of Common Factor Analysis then rotation by the Verimax technique which in turn eliminates the lower factor score and retains the higher.

(Jöreskog & Sörbom, 1996; N. Wiratchai et al., 1995; Nongluk Wiratchai, 1999). The result from exploratory factor analysis determines the factor score as follows:

Table 1 – The Exploratory Factor Analysis with Factor score is greater than 0.50

Exploratory Factor Analysis for (EFA)	Factor					
	1	2	3	4	5	6
Factor 1 : Service Excellence Strategy						
Cleanliness of the seafood beach restaurant, equipment and service.	0.76					
The validity of the order by the Customer.	0.73					
Cleanliness of the restroom.	0.72					
Speed of service.	0.70					
The presentation of the food.	0.67					
The accuracy of the bill.	0.65					
The setting and presentation of the table.	0.63					
Equal customer service at all levels.	0.61					
Friendliness of the staff.	0.60					
Employee's knowledge of the food served.	0.59					
Politeness of the staff.	0.57					
Factor 2 : Sensible Price Strategy						
Value of the goods received.		0.76				
The food prices are reasonable.		0.75				
Drink prices are reasonable.		0.75				
The value of the services received.		0.73				
The variation of the seafood.		0.62				
The freshness of the seafood.		0.53				
Factor 3 : Supporting Public Relation Strategy						
The advertising of the restaurant through government agencies.			0.76			
The opening of the seafood restaurant by a Festival.			0.72			
The advertising of the restaurant through local media.			0.68			
Linguistic diversity of the staff.			0.58			
The beauty of the decorative plates used.			0.52			
Factor 4 : Sea Ambience Strategy						
The closeness of the Seafood restaurant to the beach.				0.79		
Decor and ambience.				0.61		
Factor 5 : Service Variety Strategy						
The variety of dishes on the menu.					0.74	
The types of alcohol offered.					0.73	
Factor 6 : Sales Allowance Strategy						
Partnership discounts offered for hotel guests.						0.71
Credit card services for customers.						0.69

Note: Kaiser-Meyer-Olkin Measure of Sampling Adequacy: 0.947, Bartlett's Test of Sphericity: 8295.946, df: 595, p = 0.000

The result of Exploratory Factor Analysis found that the value of Kaiser-Meyer-Olkin Measure of Sampling Adequacy is equal to 0.947 and has a total Variance Explained value of 6 factors component which initial eigenvalues is greater than 1. There are 28 appropriated factors out of the 35 factors because the factor score is greater than 0.50 and where the factor score is lower than 0.50 it would be eliminated. Then the 28 factors could be used to confirmatory factor analysis in the next step.

3. The results of confirmatory of the Overall Model Fit Measure, and the evaluation conformity of results in the important component of the Model (Component Fit Measure) by using Confirmatory Factor Analysis : CFA using the results of Exploratory Factor Analysis to estimate the Overall Model Fit Measure and include the Component Fit Measure by checking several fit indices χ^2 / df , RMSEA, RMR, GFI, AGFI, NFI, IFI, TLI, CFI and HOELTER (.05) (Jöreskog & Sörbom, 1996; N. Wiratchai et al., 1995; Nongluk Wiratchai, 1999). The result from confirmatory factor analysis is determining factor score as following:

Table 2 – The Component Fit Measure by checking several fit indices

Index Value	Statistics	Criteria	Pass
χ^2 / df	1.092	< 2	✓
P	0.132	≥ 0.05	✓
GFI	0.948	≥ 0.90	✓
AGFI	0.928	≥ 0.90	✓
NFI	0.953	≥ 0.90	✓
RMR	0.031	< 0.08	✓
RMSEA	0.015	< 0.08	✓
TLI	0.995	≥ 0.90	✓
IFI	0.996	≥ 0.90	✓
CFI	0.996	≥ 0.90	✓
RMR	0.031	< 0.08	✓
RMSEA	0.015	< 0.08	✓
HOELTER	417	> 200	✓

The result from confirmatory factor analysis determines the component Fit Measure by checking several fit indices as $\chi^2 / df = 1.092$, $P = 0.132$, $GFI = 0.948$, $AGFI = 0.928$, $NFI = 0.953$, $RMR = 0.031$, $RMSEA = 0.015$, $TLI = 0.995$, $IFI = 0.996$, $CFI = 0.996$, $RMR = 0.031$, $RMSEA = 0.015$, and $HOELTER = 417$ that mean the overall Model are fit of measure. Therefore the model of service marketing strategy to enhance the competitive advantage for Thai seafood beach restaurant businesses was accepted and figure of the model could be shown that as following:

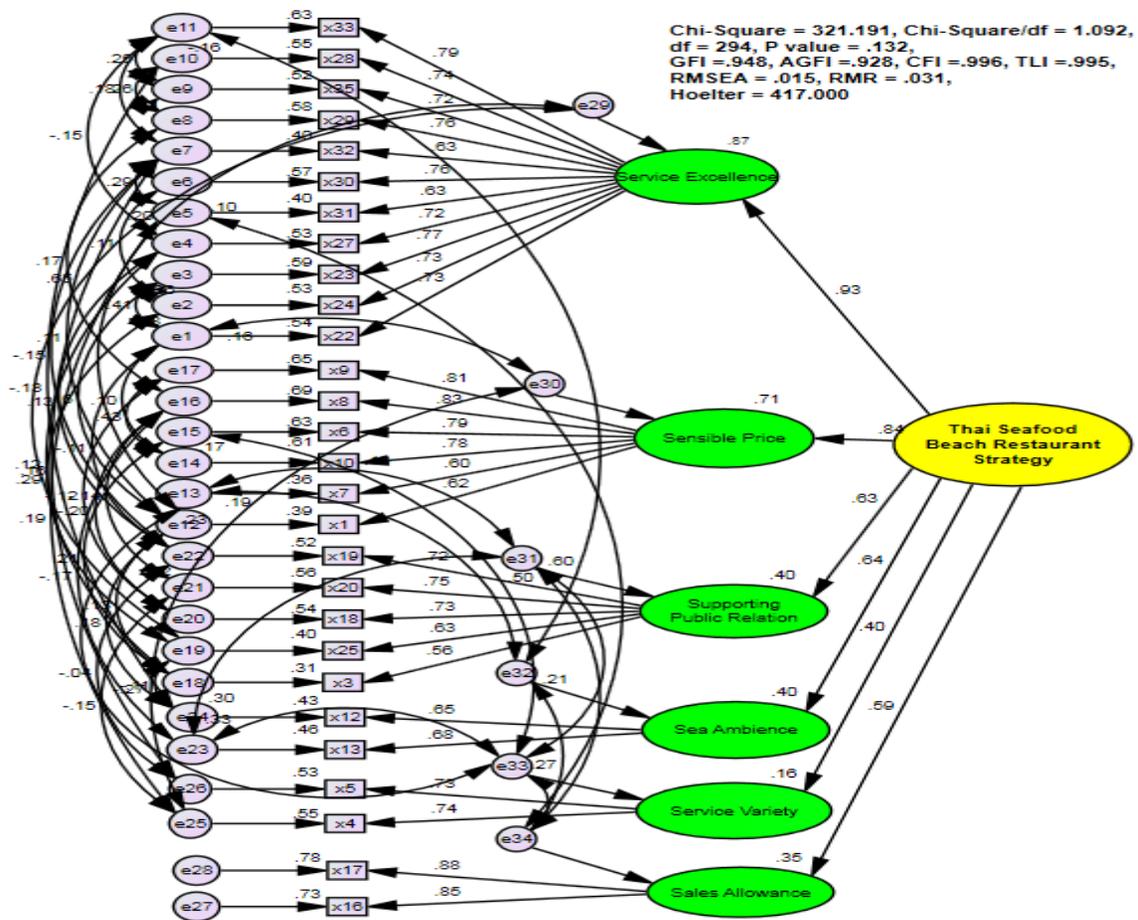


Figure 1 – The confirmatory factor analysis of the service marketing strategy to enhance the competitive advantage for Thai seafood beach restaurant businesses

This research found a 6'S strategy model for the service marketing strategy which enhances the competitive advantage for Thai seafood beach restaurant businesses. It demonstrates how 28 factors could be used, ranking them in priority of their loading factor. Each strategy was confirmed by a focus group, which included those with expert knowledge and entrepreneurs of the Thai seafood beach restaurant business. The strategy is as follows:

Table 3 – 6'S strategy of the model of service marketing strategy to enhance the competitive advantage for Thai seafood beach restaurant businesses

Model of 6'S Strategy of Thai Seafood Beach Business (CFA)	Factor Loading
Service Excellence Strategy	0.935
Cleanliness of the seafood beach restaurant, equipment and service.	0.795
Friendliness of the staff.	0.767
Speed of service.	0.765
The accuracy of the bill.	0.757
The validity of the order by the Customer.	0.742
Politeness of the staff.	0.733
Employee's knowledge of the food served.	0.730
Equal customer service at all levels.	0.725
Cleanliness of the restroom.	0.719
The presentation of the food.	0.634
The setting and presentation of the table.	0.629
Sensible Price Strategy	0.840
The food prices are reasonable.	0.832
Value of the goods received.	0.806
Drink prices are reasonable.	0.794
The value of the services received.	0.781
The freshness of the seafood.	0.621
The variation of the seafood.	0.604
Sea Ambience Strategy	0.636
Decor and ambience.	0.680
The closeness of the Seafood restaurant to the beach.	0.654
Supporting Public Relation Strategy	0.629
The opening of the seafood restaurant by a Festival.	0.746
The advertising of the restaurant through local media.	0.732
The advertising of the restaurant through government agencies.	0.724
Linguistic diversity of the staff.	0.630
The beauty of the decorative plates used.	0.556
Sales Allowance Strategy	0.589
Partnership discounts offered for hotel guests.	0.881
Credit card services for customers.	0.855
Sea Ambience Strategy	0.402
Decor and ambience.	0.739
The closeness of the Seafood restaurant to the beach.	0.729

The purpose of this study was to focus on each network effectively along with operational and strategic development, marketing and service innovation. The result depends on marketing, efficient operations, innovative services and the implemented marketing strategy. (Grönroos, 2000; Inkson & Minnaert, 2012; Yung-Sheng & Jui-Min, 2011)

The result of various factors. The priority to present the model. Experts and entrepreneurs need to confirm the factors that are reasonable and consistent with the fact that they will be introduced in the strategy. The results obtained from an examination of factors can be applied to all. Therefore, it can offer the following 6'S strategy as model of service marketing strategy to enhance the competitive advantage of Thai seafood beach restaurant businesses. (Fleming, Miller, & Washington, 2008) as follows:

1. Service Excellence Strategy comprises of 1.1) Cleanliness of the seafood beach restaurant, equipment and service, 1.2) Friendliness of the staff, 1.3) Speed of service, 1.4) The accuracy of the bill, 1.5) The validity of the order by the Customer, 1.6) Politeness of the staff, 1.7) Employee's knowledge of the food served, 1.8) Equal customer service at all levels, 1.9) Cleanliness of the restroom, 1.10) The presentation of the food, and 1.11) The setting and presentation of the table respectively. Excellent seafood restaurants must be located close to the beach and have an excellent level of service in terms of quality and affordability. In addition restaurants must be set in a clean and comfortable environment and the food served by warm and friendly people (Boyce et al., 2008; Fleming et al., 2008).

2. Sensible Price Strategy comprises of 2.1) the food prices are reasonable, 2.2) Value of the goods received, 2.3) Drink prices are reasonable, 2.4) the value of the services received, 2.5) the freshness of the seafood, and 2.6) the variation of the seafood. Pricing strategies are necessary and it is in the interest of vendors to focus on serving quality of food at a reasonable price. (Jared Hunt Daily Mail Capitol, 2012; Lundberg & Lundberg, 2012)

3. The Sea Ambience Strategy comprises of 3.1) Decor and ambience, and 3.2) the closeness of the Seafood restaurant to the beach. The Thai seafood beach business strategy is consistent with a restaurant and a beach restaurant; it focuses on the decor and the location of the restaurant which must be very attractive for visiting tourists. (Inkson & Minnaert, 2012; NewsBank, 2013; Vajir, 2008)

4. Supporting Public Relation Strategy comprises of 4.1) the opening of the seafood restaurant by a Festival, 4.2) the advertising of the restaurant through local media, 4.3) the advertising of the restaurant through government agencies, 4.4) Linguistic diversity of the staff, 4.5) the beauty of the decorative plates used respectively. A variety of media is a definite key to success, mediums may include; traditional direct mail, Magazines, newspapers, outdoor billboards and signs, radio, television and the Yellow Pages. Electronic forms such as mobiles, email, online/ interactive, and ads. A variety of media allows different audiences to be captured. Newspapers and radio have been recognized as a powerful medium for the majority of ads. Advertising in the media is limited to a specific set of media items such as daily newspapers and radio. Three of the effective mediums did not differ significantly according to local advertising agents, nor did the amount spent on advertising every day (Reid, King, Martin, & Soh, 2005)

5. Sales Allowance Strategy comprises of 5.1) Partnership discounts offered for hotel guests, and 5.2) Credit card services for customers, respectively. This strategy is concerned with making the sale of goods more comfortable and to show willingness to accept different payment methods for food and services. Several techniques, such as partners and sales allowance paid to the consistency of the royalty base allowance will depend on the application the vendors for the sale. (Ford & Suttora, 2011; Józsa & Keller, 2012)

6. Service Variety Strategy comprises of 6.1) the types of alcohol offered, and 6.2) the variety of dishes on the menu. The diversity and service strategy are concerns about the ability to create a decorative plate along with a combination of food and drink, taking into account the consumption of alcohol such as white wine and red wine which add flavour to several of seafood. Mixing Thai dishes and seafood with food and drink from the west is becoming increasingly popular and can be known as "Fusion Foods". It is essential that vendors have a greater Willingness to experiment and follow consumption trends, serving something like sparkling wine for seafood and pork. (Cook, 2008; StateWays, 2012)

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