The Affecting of Quality Service and Customer Satisfaction on Customer Repurchasing Behavior of Beverage Business

Chattawat Limpsurapong*, Sirirung Somwangsanga**

*Lecturer, Department of Business Management, Faculty of Liberal Arts and Management Science,

Kasetsart University, Thailand

E-mail: chattawat.l@ku.th

**Graduate Student of Kasetsart University, Thailand

E-mail: twisty_powder@hotmail.com

ABSTRACT

The purposes of this study were to; 1) examine the service quality of beverage business in Sakon Nakhon province 2) examine the customer satisfaction of beverage business 3) examine customer repurchasing behavior of beverage business 4) examine the different between service quality, customer satisfaction, and customer repurchasing behavior when classified by personal factors 5) investigate the affecting of service quality and customer satisfaction on repurchasing behavior of customer. In this the study population is the population living in Sakon Nakhon province. Calculated according to the formula of Cochran, sample size of 400 samples was selected by multistage sampling. Data collected were used from questionnaires with as follows items: 14 questions of service quality, 7 questions of customer satisfaction and 5 questions of customer repurchasing behavior. For appointment of questionnaires, validity of the method, content-validity, and to assess scale the reliability of the questionnaires, Cronbach's alpha coefficient was used. Reliability coefficient was calculated for the questionnaires. It was estimated to be .930 of service quality. .842 of customer satisfaction and .817 of customer repurchasing behavior.

The survey data of the respondents as follows. 56.70% were male and 43.30% were female. The respondents age, 20-30 year 43.25%, 31-40 year 23.25%, 41-50 year 30.00% and 51-60 year 3.50%. From the education categories, Pre-elementary education 3.25%, Primary education 0%, Secondary education 16.75%, Diploma 20.00%, Bachelor degree 56.75% and Upper bachelor degree 3.25%. Average income are as follows, under 10,000 bath 13.25%, 10,001-20,000 bath 40.00%, 20,001-30,000 bath 20.00% 30,001-40,000 bath 13.25%, 40,001-50,000 bath 10.0% and more than 50,000 bath 3.50%. The research found that results are service quality effects on customer satisfaction standardized coefficients (β) .833. However, service quality effects on customer repurchasing behavior standardized coefficients (β) .585. Customer satisfaction effects on customer repurchasing behavior standardized coefficients (β) .684.

Keywords-Service quality, Customer satisfaction, Customer repurchasing behavior

ABSTRACT

Background

Currently, the Thai beverage industry has a wide consumer base covering consumers from children to old age. As a result, there are different types of products in the market to support different consumption behaviors, such as non-alcoholic beverages and alcoholic beverages such as spirits, beer, wine, vodka and rum. During October 2015 - September 2016, non-alcoholic beverages are placed in the top order. The Fast Moving Consumer Goods (FMCG), which has a market capitalization of 203.3 billion baht and is growing at 4 to 5 percent per year, consists of drinking water, carbonated beverages, ready-to-drink tea, soy milk, juice, ready-to-drink yoghurt, energy drinks and sports drinks. From the variety, the product substitutes. Both in the manufacturers. Entrepreneurs, brands, merchants and importers. As a result, the industry has fierce competition among operators to seize market share.

However, even the beverage industry has a relatively high market value. By 2016, the beverage industry in Thailand has a market value of more than 468,924 million baht, but in 2017 (Jan-Jun) is likely to decline compared to the same period. Of the previous year. Part of the decline in purchasing behavior of people. The

economic slowdown. New tariff increase Consumers tend to be more cautious in their consumption. The regulations governing the consumption of certain products, such as the timing of the sale of alcoholic beverages, are available for two periods: 11.00 am - 14.00 pm and 17.00 pm - midnight.

Although the beverage industry is likely to decline in value. But the beverage business is a profitable business to double the investment budget is not high. It is a low risk business. So the competition is going to struggle with quality, taste, difference, and health in order to meet the needs of today's people. Nonetheless, the beverage business can still be found everywhere, and we have always seen the opening of the beverage business. Whether it's setting up a new beverage business or buying a franchise, the beverage business has a lot to offer.

As mentioned above, the beverage business is a highly competitive business. New competitors always grab the market share. But the key factor that can make the beverage business successful is the quality of service. It is a quality service. For service recipients to know. Goal is to satisfy or exceed the expectations of the service recipient. Finally, the service may be re-used. Service quality is to meet the needs of the service recipient. With fast response characteristics, impress understand the true needs of the service user. And can be used as a highlight of the business. To compete with other beverage businesses. If we constantly improve our service quality, we will have a competitive advantage. Can increase the number of new subscribers and maintain the same service recipients again.

SakonNakhon is a province in northeastern Thailand. You can see the beverage business in general. In recession various beverage businesses have experienced a drop in sales. The beverage business in SakonNakhon tries to adapt to this situation in order to find strategies or methods to maintain existing customers and increase new customers. For the above reasons, the researcher wanted to study the service quality, customer satisfaction and customer repurchase behavior. It is expected that the information obtained will guide the improvement of the service quality of the machine shop. To meet the needs of most customers.

Objectives

This research examines 5 objectives as follow:

- 1. To study the service quality of beverage business in SakonNakhon province
- 2. To studythe customer satisfaction of beverage business
- 3. To study customer repurchasing behavior of beverage business
- 4. To study the different between service quality, customer satisfaction, and customer repurchasing behavior when classified by personal factors
- 5. To study the affecting of service quality and customer satisfaction on repurchasing behavior of customer.

LITERATURE REVIEW

Service Quality

The review of the relevant literature scholars had to provide a meaning of service quality as follow: Quality of service means gaining a level of excellence and being required. Consistency with the needs and expectations of users by Webster [6]. If expectations are greater than performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs (Parasuraman et al.; Lewis and Mitchell)[5][11]. Perceived service quality results from comparisons by customers of expectations with their perceptions of service delivered by the suppliers Zeithaml et al., [12]. Parasuraman et al. have defined service quality as the ability of the organization to meet or exceed customer expectations [9]. It is the difference between customer expectations of service and perceived service Zeithaml et al., [12]. According to Parasuraman et al. [9], service quality can be defined as an overall judgment similar to attitude towards the service and generally accepted as an antecedent of overall customer satisfaction (Zeithaml and Bitner) [24]. Accordingly, service quality have been defined from the following perspectives: Service Quality is important. Due to the service sector throughout the decade. It is a business sector that is very important to the world economy. So companies or organizations that are in the service business are trying to create and define the quality of service to meet the expectations of the consumer to the best to keep the business survive (Ghobadian, Speller and Jones) [18]. Kotler identified service quality based on marketing concept [20]. In

competition in business services, service providers must create services equal to or better than the service quality expected by the service provider. If it is found that the service actually received in that situation is more than expected. Service recipients will be impressed and will return to service. V. ChalermJirarat define service quality is Compliance with customer requirements or level. The ability of the service to treat the needs of customers [28].Or customer satisfaction level after the service, and Etzel, Walker and Stanton meaning the level of service is not tangible but can be proven [29]. The customer is the judge of service quality. Service quality is the degree and direction of discrepancy betweencustomers' service perceptions and expectations byParasuraman, and Zeithaml [31].

Summarize the meaning of service quality is a service that can respond. The needs of the service. If the customer is satisfied, they will pay or pay the price. At the service provider. It can be proven or judged by anyone. The client is the judge. It is also a strategy for survival of today's business. To maintain existing customers and add new customers.

SERVQUAL is a multi-dimensional research instrument, designed to capture consumer expectations and perceptions of a service along the five dimensions that are believed to represent service quality. SERVQUAL is built on the expectancy-disconfirmation paradigm, which in simple terms means that service quality is understood as the extent to which consumers' pre-consumption expectations of quality are confirmed or disconfirmed by their actual perceptions of the service experience. When the SERVQUAL questionnaire was first published in 1988 by a team of academic researchers, Parasuraman et al. to measure quality in the service sector[8]. It represented a breakthrough in the measurement methods used for service quality research. The diagnostic value of the instrument is supported by the model of service quality which forms the conceptual framework for the development of the scale (i.e. instrument or questionnaire). The instrument has been widely applied in a variety of contexts and cultural settings and found to be relatively robust. It has become the dominant measurement scale in the area of service quality.

Table 1
Five dimensions of SERVQUAL

Dimension	Definition	
Reliability	The ability to perform the promised service dependably and	
	accurately.	
Assurance	The knowledge and courtesy of employees and their ability to	
	convey trust and confidence.	
Tangibles	The appearance of physical facilities, equipment, personnel and	
	communication materials.	
Empathy	The provision of caring, individualized attention to customer.	
Responsiveness	The willingness to help customers and to provide prompt service.	

Customer satisfaction

According to English business dictionary, customer satisfaction is the degree of satisfaction provided by the goods or services of a company as measured by thenumber of repeat customers. Despite extensive research in the years since Cardozo's classic article, researchers have yet to develop a consensual definition of consumer satisfaction [1]. Oliver addresses this definitional issue by paraphrasing the emotion literature, noting that "everyone knows what (satisfaction) is until asked to give a definition [26]. Then it seems, nobody knows". Based on the perception that satisfaction has been defined, most research focuses on testing models of consumer satisfaction (e.g., Mano and Oliver [15]; Oliver [16]; Oliver and DeSarbo [7]; Spreng, MacKenzie, and Olshavsky [23]; Tse and Wilton [10]) while definitional considerations have received little attention. As a result, the literature is replete with different definitions of consumer satisfaction. Customer satisfaction meaning the consumer's response to the evaluation of the perceived discrepancy between prior expectations (or some norm of performance) and the actual performance of the product as perceived after its consumption (Tse and Wilton) [10]. An overall postpurchase evaluation (Fornell) [13]. Oliver define customer satisfaction is Examined whether satisfaction was an emotion [14]. Concluded that satisfaction is a summary attribute phenomenon coexisting with other consumption emotions. Halstead, Hartman, and

Schmidt explain is a transaction-specific affective response resulting from the customer's comparison of product performance to some prepurchase standard [19]. Oliver explicates the consumer's fulfillment response [26]. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or overfulfillment and Tax, Brown and Chandrashekaran define Customer satisfaction has a positive impact on decision making or repeat customer service [25].

From the definition, it can be concluded that satisfaction is a feeling of satisfaction. When human needs are physically and psychologically responsive, satisfaction is a positive attitude. That shows the satisfaction of that.

Customer repurchasing behavior

First define the term "consumer". Walters provides such a definition by stating that "A consumer is an individual who purchases, has the capacity to repurchase, goods and services offered for sale by marketing institutions in orderto satisfy personal or household needs, wants, or desires" Definition of customer repurchasing behavior, different scholars have different views [2]. Customer repurchasing behavior is consumers are satisfied with the product or service will generate repeat purchase intention by Francken [4]. Is the customer purchases a product or service from the seller or service provider. And again after the service (Anderson, Fornell and Lehmann) [17]. Baldinger and Rubinson defined customer repurchasing behavior is customers with high brand loyalty [21]. I have the opportunity to return. Or use the service again. Customer repurchasing behavior is reaction to certain customer responses with intent to re-purchase or re-use the service in the future by Parasuraman et al. [22]. Cronin, et al. extend this definition customer repurchasing behavior is a customer has purchased a product or service and is satisfied and re-purchased or re-used [27]. And to tell the benefits. Or good experience about the product or service to others. And customer repurchasing behavior is the intent of the person or intent is to return to repurchase. Or use the service from the same shop or unit that was purchased. Or use the service from the past (Hellier, Geursen, Carr and Rickard) [30]. In summary, customer repurchasing behavior is the consumer or the service recipient. Have the intention to return to the service or purchase the next time or in the future, may be due to satisfaction, impression or positive attitude. Along with may be told Experience to persuade others to use the service.

The link between Service Quality, Customer Satisfaction and Customer repurchasing behavior

Research on the influence of service quality, customer satisfaction and customer repurchasing behavior was much in empirical evidence, Mosahab, Rahim, Mahamd, Osman and Ramayah T have stated that this research has Purpose to study the relationship between service quality and brand loyalty [32]. The customer satisfaction is a variable. The results show that all aspects of Service Quality are significantly correlated with customer satisfaction and Satisfaction was significantly correlated with loyalty found the statistics significant at 0.05. Curry and Gao stated that the researcher has studied the relationship between service quality, service satisfaction and customer repurchasing behavior (loyalty) in low cost airline customers in Europe [33]. The research found that service quality and customer satisfaction have a positive influence on customer repurchasing behavior (loyalty). It is found that customer satisfaction influences customer repurchasing behavior (loyalty) rather than service quality. Zoubi states that the researcher studies the relationship between service quality and loyalty [34]. Pearson correlation was used to determine the correlation between the service quality and the loyalty level significant at 0.05 level. Orel and Kara studied the influence of service quality of supermarkets. Individuals with satisfaction and customer loyalty in emerging markets [35]. The research found that service quality has a positive influence on customer satisfaction and customer satisfaction has a positive influence on customer loyalty.

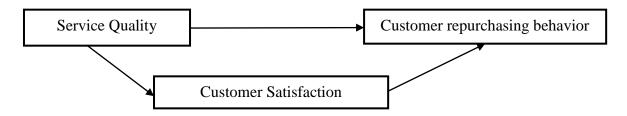
CONCEPTUAL MODEL AND HYPOTHESES

The research was mainly aimed to the affecting of service quality and customer satisfaction on customer repurchasing behavior of beverage business. Therefore the research hypotheses were:

H₁: Service quality and customer satisfaction had significantly positive influenced on customer repurchasing behavior of beverage business.

H₂: Service quality had a significantly positive influenced on customer satisfaction

Figure 1
A conceptual model



The research hypotheses can be explained in the forms of structural equations in order to show the relationship among variables and predict the dependent variable for hypotheses testing. The symbols used to represent the variables stated as follow:

SVQ = Service Quality
CMS = Customer Satisfaction

CRB = Customer repurchasing behavior

The structural equations can be described as follows:

CRB =
$$\beta_1 \text{ SVQ} + \beta_2 \text{CMS}$$
(1)
CMS = $\beta_3 \text{ SVQ}$ (2)

RESEARCH AND METHODOLOGY

This research was study in quantitative, the population is customers in in SakonNakhon province. The sample was 400 samples calculated by Cochran, Sampling was selected by multistage sampling [3]. Collect data was using questionnaire. The questionnaires of service quality have 14 items, the questionnaires on customer satisfaction were 7 items and questionnaires of customer repurchasing behavior with 5 items. The reliability test was data show in table 2.

Table 2 Reliability test

Variables Cronbach Alpha Coefficient	
Service quality	0.930
Customer satisfaction	0.842
Customer repurchasing behavior	0.817

The cronbach's alpha value of the scale of all variables is greater than 0.7, so it shows that the scale has very good reliability. Data were analyzed by descriptive statistics including frequency, percentage, mean, standard deviation (SD) and inferential statistics including the Pearson's Product-Moment Correlation and Path Analysis were used for hypothesis testing. The research results can be significantly analyzed with 95% confidence interval.

ANALYSIS OF DATA AND RESULTS OF THE STUDY

This research was used program for statistical analysis in social science to analysis of the data. The research finding and the hypotheses testing in this study were presented as follows show in Table 3.

Table 3 **Description of the respondents**

n = 400

Demographic Information		Number of respondents (NR)	Percentage of NR
Sex	Male	227	56.70%
Sex	Female	173	43.30%
	20-30 years	173	43.25%
	31-40 years	93	23.25%
Age	41-50 years	120	30.00%
	51-60 years	14	3.50%
	More than 60 years	0	0.0%
	Pre-elementary education	13	3.25%
	Primary education	0	0%
Education	Secondary education	67	16.75%
	Diploma	80	20.0%
	Bachelor degree	227	56.75%
	Upper bachelor degree	13	3.25%
	under 10,000 bath	53	13.25%
	10,001-20,000 bath	160	40.00%
A	20,001-30,000 bath	80	20.00%
Average income	30,001-40,000 bath	53	13.25%
	40,001-50,000 bath	40	10.00%
	more than 50,000 bath	14	3.50%

Table 4 showed that the variables was described by mean and standard deviation. The mean score of service quality, customer satisfaction and customer repurchasing behavior were at 4.231, 4.300 and 4.127 respectively. Standard deviation is 0.518, 0.466 and 0.560 respectively.

Table 4 Correlation analysis between variable

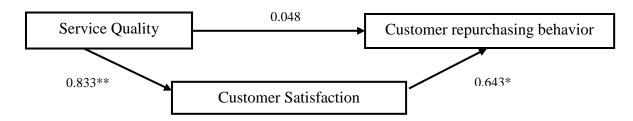
	SVQ	CMS	CRB
Mean	4.231	4.300	4.127
S.D.	0.518	0.466	0.560
SVQ	1		
CMS	0.833**	1	
CRB	0.585**	0.684**	1

^{**} Correlation is significant at the 0.01 level

For inferential statistics, in this research study, the analysis of the correlation coefficient between service quality and customer satisfaction is 0.833, service quality and customer repurchasing behavior is 0.585, and the correlation coefficient between customer satisfaction and customer repurchasing behavior is 0.684. All relationships mentioned are significant at 0.01 level and showed in Table 4.

The research results from hypotheses testing on the influence of service quality and customer satisfaction on customer repurchasing behavior of Beverage Business were presented in the forms of path analysis diagram as showed in Figure 2.

Figure 2
Research results



The result of equations was as follows.

$$CRB = 0.048 SVQ + 0.643 CMS \dots (3)$$
 $CMS = 0.833SVQ \dots (4)$

The statistical analysis for hypotheses testing found that service quality and customer satisfaction can explain the variation of customer repurchasing behavior 42.90% (Adjusted R-Square 0.429) at 0.05 significant. Service quality had statistically significant positive influenced customer satisfaction with standardized coefficients (β) of 0.833 at significant at 0.01 level. Service quality had positive influenced on customer repurchasing behavior with standardized coefficients (β) of 0.048 and not significant with path analysis. But customer satisfaction had statistically significant positive influenced on customer repurchasing behavior with standardized coefficients (β) of 0.643 at significant at 0.05 level by path analysis.

CONCLUSIONS AND DISCUSSION

This research study the affecting of service quality and customer satisfaction on customer repurchasing behavior of beverage business in Sakon Nakhon province in northeastern Thailand. The results shown that service quality and customer satisfaction had affect positive influenced on customer repurchasing behavior, service quality had significantly influenced on customer satisfaction, and customer satisfaction is a completely mediator. Therefore, the following suggestion from the research results can be applied as management guidelines with beverage business. The firstly, service quality is very critical success factor to generate customer satisfaction, customer satisfaction was main factor to maintain existing customers and increase new customers in the long run for beverage business in Sakon Nakhon province. Secondly service quality can raise customer repurchasing behavior but the performance is less than customer satisfaction. Therefore the service quality is high performance should make the customer satisfaction. Finally, beverage business in Sakon Nakhon province and others business should focus creating customer repurchasing behavior because in addition service quality, customer satisfaction there are other variables that contribute to customer repurchasing behavior.

REFERENCES

- [1] Cardozo, Richard N. (1965), "An Experimental Study of Consumer Effort, Expectation and Satisfaction", *Journal of Marketing Research*, Vol. 2, No. August, Pp. 244-249.
- [2] Walters, C. Glenn. (1974), "Consumer Behavior: Theory and Practice", *Richard D. Irwin*, Revised edition, Homewood.
- [3] Cochran, W.G. (1977), "Wiley: Sampling Techniques", John Wiley and Sons, 3rd edition, New York.

- [4] Francken, D. A. (1983), "Postpurchase consumer evaluation, complaint actions and repurchase behavior," *Journal of Economic Psychology*, Vol. 19, No. 4, Pp. 273-290.
- [5] Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, Vol.49, Pp. 41-50.
- [6] Webster, M. (1985), "Webster's ninth new collegiate dictionary", Webster Inc, Meriam.
- [7] Oliver, Richard L. & Wayne S. DeSarbo. (1988), "Response Determinants in Satisfaction Judgments", *Journal of Consumer Research*, Vol.14, No. March, Pp. 495-507.
- [8] Parasuraman, A, Ziethaml, V. A., & Berry, L.L. (1988), "SERVQUAL: A Multiple- Item Scale for Measuring Consumer Perceptions of Service Quality", *Journal of Retailing*, Vol.62, No.1, Pp. 22, 25 and 29.
- [9] Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988), "SERVQUAL: a Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality", *Journal of Retailing*, Vol.64, No. 1, Pp. 12-40.
- [10] Tse, David K. and Peter C. Wilton. (1988), "Models of Consumer Satisfaction: An Extension", *Journal of Marketing Research*, Vol. 25, No. May, Pp. 204-212.
- [11] Lewis, B.R. & Mitchell, V.W. (1990), "Defining and measuring the quality of customer service", *Marketing Intelligence and Planning*, Vol. 8, No. 6, Pp. 1-17.
- [12] Zeithaml, Valerie A., Parasuraman, A. & Berry, Leonard L. (1990), "Delivering Quality Service", *The Free Press*, New York.
- [13] Fornell, Claes. (1992), "A National Customer Satisfaction Barometer: The Swedish Experience", *Journal of Marketing*, Vol. 56, No. January, Pp. 6-21.
- [14] Oliver, Richard L. (1992), "An Investigation of the Attribute Basis of Emotion and Related Affects in Consumption: Suggestions for a Stage-Specific Satisfaction Framework", *Advances in Consumer Research*, Vol.19, John F. Sherry and Brian Sternthal. Ann Arbor, MI: Association for Consumer Research, Pp. 237-244.
- [15] Mano, Haim & Richard L. Oliver. (1993), "Assessing the Dimensionality and Structure of the Consumption Experience: Evaluation, Feeling, and Satisfaction.", *Journal of Consumer Research*, Vol. 20, No. December, Pp. 451-466.
- [16] Oliver, Richard L. (1993), "Cognitive, Affective, and Attribute Bases of the Satisfaction Response", *Journal of Consumer Research*, Vol. 20, No. December, Pp. 418-430.
- [17] Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994), "Customer satisfaction, marketshare, and profitability: Findings from Sweden", *Journal of Marketing*, Vol. 58, No. 3, Pp. 53-66.
- [18] Ghobadian, R., Speller, S. & Jones, W. (1994), "Service Quality Concepts and Models", *International Journal of Quality Management*. Vol.11, Pp. 43-66.
- [19] Halstead Diane, David Hartman & Sandra L. Schmidt. (1994), "Multisource Effects on the Satisfaction Formation Process", *Journal of the Academy of Marketing Science*, Vol. 22, No. Spring, Pp. 114-129.
- [20] Kotler, P. (1994), "Marketing management: Analysis planning implementation and control", *Prentice Hall*, 8th Editions, Englewood cliffs.
- [21] Baldinger, A. A., and Rubinson, J. (1996), "Brand loyalty: The link between attitude and behavior", *Journal of Advertising Research*, Vol. 36, No. 6. Pp. 22-34.
- [22] Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1996), "The behavioral consequences of service quality", *Journal of Marketing*, Vol.60, No. 2, Pp. 31-46.
- [23] Spreng, Richard A., Scott B. MacKenzie, & Richard W. Olshavsky. (1996), "A Reexamination of the Determinants of Consumer Satisfaction", *Journal of Marketing*, Vol. 60, No. July, Pp. 15-32.
- [24] Zeithaml, Valerie A. &Bitner, Mary J. (1996), "Services Marketing", McGraw-Hill, New York.
- [25] Tax, Stephen S., Stephen W. Brown, &MuraliChandrashekaran(1998), "Customer Evaluations of Service Complaint Experiences: Implications for Relationship Marketing", *Journal of Marketing*, Vol. 62, No. April, Pp. 60-76.
- [26] Oliver, Richard L. (1997)," Satisfaction: A Behavioral Perspective on the Consumer", *The McGraw-Hill Companies, Inc*, New York.
- [27] Cronin, J. J., Brady, M. K., &Hult, G. T. M. (2000), "Assessing the effects of quality, value and customer satisfaction on consumer behavioral intentions in service environments", *Journal of Retailing*, Vol. 76, No. 2, Pp. 193-218.

- [28] V. Chalermjirarat. (2000), "Quality in service", Prachachon limited, 2nd edition, Bangkok.
- [29] Etzel, M. J., Walker, B. J., & Stanton, W. J. (2001), "Marketing", McGraw-Hill, 12th Edition, Boston.
- [30] Hellier, P. K., Geursen, G. M., Carr, R. A., & Rickard, J. A. (2003), "Customer repurchase intention: A general structural equation model", *European Journal of Marketing*, Vol. 37, Pp. 1762-1800.
- [31] Parasuraman, A. & V. Zeithaml(2006), "Handbook of Marketing", Understanding and Improving Service Quality: A Literature Review and Research Agenda, Editors: In B. Weitz&R.Wensley, *Sage Publications*, London.
- [32] Mosahab, Rahim, Mahamd, Osman&Ramayah, T(2010), "Service Quality, Customer Satisfaction and Loyalty: A Test of Mediation", *International Business Research*, Vol. 3, No. October 2013, Pp. 72-80.
- [33] Neil, Currry&YuHui, Gao(2012), "Low-Cost Airlines A New Customer Relationship? An Analysis of Service Quality, Service Satisfaction, and Customer Loyalty in a Low- Cost Setting", *Marketing Quartely*, Vol.33, No. April 2012, Pp. 104-118.
- [34] Majed, Radi Al-Zoubi. (2013), "Service Quality Effects on Customer Loyalty among the Jordanian Telecom Sector Empirical Study", *International Journal of Business and Management*, Vol.8, No. March 2013, Pp. 35-45.
- [35] Demirci, O. F., & Kara, A. (2014), "Supermarket self-checkout service quality, customer satisfaction, and loyalty: Empirical evidence from an emerging market", *Journal of Retailing and Consumer Services*, Vol. 21, No. 2, Pp. 118-129.

Service Quality Affected on Customer Loyalty through Customer Satisfaction: A Case Study of Bank of Ayudhya Public Company Limited, Thailand

Chattawat Limpsurapong*, Panida Palee**

*Lecturer, Department of Business Management, Faculty of Liberal Arts and Management Science,

Kasetsart University, Thailand

E-mail: chattawat.l@ku.th

**Graduate Student of Kasetsart University, Thailand

Email: YuiPalee@gmail.com

ABSTRACT

This research is based on the assumption that service quality effect on customer loyalty. This hypothesis tested on the 5 dimensions of service quality: reliability, tangibles, responsiveness, assurance, empathy, customer satisfaction, and customer loyalty. The independent variables were reliability, tangibles, responsiveness, assurance, and empathy. The dependent variables were customer satisfaction, and customer loyalty. Amount 400 of Krungsri customers are the sample size in Sakon Nakhon province by the formula of Taro Yamane. The multi-stage sampling method is used to collect data via questionnaire.

The survey data of the respondents as follows, 43.3% were male, 56.7% were female, 40% were 31-40 years old, 50% were bachelor degree, 33.3% were government or state enterprise, and 36.7% were between 10,000-20,000 baht of monthly income. The research found that reliability mean at 4.33, tangibles mean at 4.25, responsiveness mean at 4.06, assurance mean at 4.28, and empathy mean at 4.16, customer satisfaction mean at 4.25, and customer loyalty mean at 3.96. The hypothesis testing found that assurance and empathy were the statistically significant positive influence on customer satisfaction standardized coefficients (β) .533 and 335 respectively. The service quality (reliability, tangibles, responsiveness, assurance, empathy) were not significant on the customer satisfaction. Customer satisfaction was statistically significant positive influence on customer loyalty standardized coefficients (β) .678. Therefore, it can be concluded that service quality (assurance, empathy) had statistically significant positive influence on customer satisfaction. However, customer satisfaction had statistically significant positive influence on customer loyalty of Krungsri customer in 3 branches in Sakon Nakhon.

Keywords-Service Quality, Customer Satisfaction, Customer Loyalty

INTRODUCTION

Background

Nowadays, financial institutions concentrate on quality of service as this factor is one of the critical key successes. Good service providing to targeted customers can enhance satisfaction and raise bank performance in competitive arena. The ability of the management to response to a customer's satisfaction is necessary to build customer loyalty in the long run. Most financial institutions need to assure their service providing in compatible with the demands of customer. Consequently, Thai banks develop core banking system to provide customers assurance, reliability, empathy, tangibles and responsiveness. In order to increase customer satisfaction. Financial institutions including the Bank of Ayudhya in Sakon Nakhon Province of Thailand is launched many campaign to promote satisfaction such as transaction convenience and quality of care, which can drive customer loyalty. Although the influence of service quality on customer satisfaction is well explored, a variable of customer loyalty that explain consequence of customer satisfaction remain unclear. The importance of the above reasons is the cause of the research.

Objectives

The objectives of this research are as follows. (1) To investigate the level of service quality, customer satisfaction, and customer loyalty of the Bank of Ayudhya in Sakon Nakhon Province of Thailand. (2) To explore the influence of service quality and customer satisfaction on customer loyalty of the Bank of Ayudhya in Sakon Nakhon Province of Thailand. (3) To apply the results of the research study as guidelines for determining the strategies in providing excellent service quality of financial institutions in the Thailand. The paper begins with a review of the concepts related to service quality and customer satisfaction affecting on customer loyalty in order to conceptualize the framework and hypotheses. Next, the research methodology, analysis of data and findings are presented. Finally, conclusion and discussion of the research results as well as managerial implications and suggestions for future research are described.

LITERATURE REVIEW

Service Quality

Service quality is critically significant in providing a competitive advantage to organization especially for service company like financial institution, as it is influential on various factors such as customer satisfaction [19], customer loyalty [20], and customer value perceptions [21] Zeithaml, V.A. et al. [4] stated that the quality of service is the concept and practice in the assessment of patients by making comparisons between service expectations to service providing, which is a real perception from service providers. It can be seen that if the provider can give a consistent service to meet the needs of the client; or the service creates a higher level of pleasure, it will make customer tremendous satisfaction with the service received. Parasuraman, A. et al. [6] identified service quality as the perception of the customer after the act of buying. Another research study on service quality is presented by Grönroos, C. [13]who focuses on a comparison between customer expectations of the service and their experience of the service they have received before. This model is named "total perceived service quality". Various researchers emphasize on what customer is really looking for and what they actually receive. Thus, service quality is one of the most important factors to promote customer contentment and loyalty. Several instruments have been developed to measure and explain service quality dimensions. Service quality model, SERVQUAL, is the most commonly used instrument which links the perception of service quality receiving to the expectations[18]. The conceptual framework of this research was applied service quality model (SERVQUAL) based on Zeithaml, V.A. et al. [4]including five dimensions; tangibility, trustworthiness, responsiveness, assurance, and empathy. In addition, various research studies have empirically explored the relationships between service quality, satisfaction and loyalty of customers in businesses [10]; consequently, this study aimed to investigate such relationships.

Customer Satisfaction

Definitions of customer satisfaction from the literature reviews are documented in various studies. The literature on customer satisfaction is based on many definitions relating the concepts of experience or quality of service, expectations, perceived value and consequent measurement of service [22].Kotler, P. [8]stated that satisfaction is a person's sense of pleasure as a result of a comparison of the product or service performance and the expectations. Hill, N. and Alexander, J. [12]defined customer satisfaction as a performance measurement of product or service providing in correspondence to the needs and requirements of customers. Customer satisfaction is also described as the capability of business to accomplish the emotional, business and psychological needs of the targeted customers [14]. The level of satisfaction is the difference between the service receiving and the visible expectations. If the person recognizes the service's performance lower than expected, it will result in the person dissatisfaction, but if the level of the service meets the expectations, the person will satisfy and affect the decision makingtogether with being a repeat customer [8]. The conceptual framework of this research was applied Aday, L.N. and Andersen, R. [3] specified the basic theory of six categories related to the satisfaction of the customers as follows; convenience, coordination, information, courtesy, quality of care, and service cost. Satisfied customers are more intended to be loyal or to be good relationship, in which producing several benefits for business [17],[15]. High customer satisfaction brings many advantages that support sustainable businesses, including sustained profitability, increased long-term customer retention and loyalty, improved image and enhanced sustainability [11]. As many previous studies show that there are the relationships among service quality, customer satisfaction, and customer loyalty[23],[26]; as results, this study aimed to investigate such relationships

Customer Loyalty

Loyalty of customer is quite important concept in the study of organization theory and behavior. Oliver, R.L.[7] defined customer loyalty as the true commitment of a customer to repeat a purchase. It seems that despite the changing circumstances and other marketing efforts, it does not change the customers' behavior of buying such product or service. Grönroos, C. [13] explained that customer loyalty is defined as the willingness of customers to support or provide benefits to the organization in the long run. Customer loyalty; or in other words customer retention, is very essential. As customer retention can retain existing targeted purchaser or service receiver. It can be achieved by establishing attitudinal and behavioral loyalty leading to not much interest in competitive offerings[5]. It can be seen that the importance of customer loyalty is well documented in services literature. Loyal customers are likely to purchase more, generate more benefit, forgive unintentional service failure, resist competitive offerings, and cost less to retain[25]. There are three main conceptualizations of customer loyalty[9],[24]; a behavioral perspective, attitude perspective, and composite construct combining both a behavioral and attitudinal dimension. The conceptual framework of this research was used customer loyalty adapted from Hoy, W.K. and Rees, R. [2], in which characterized by three components; cognitive aspect, behavioral aspect, and affective aspect. As Ali, J.F. et al. [16]investigated a model for the relationship of service quality, customer satisfaction and customer retention and found strong relationships among them; more exploration in financial institution in Thailand should be further investigated. To conclude, from the literature reviews, it was seen that there are some relationships among these three variables to further investigate and conceptualize in the conceptual framework with hypotheses development.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

From the reviews of the literature, the conceptual framework of this research study was presented in figure 1. It depicts the influence of service quality and customer satisfaction on customer loyalty of the Bank of Ayudhya in Sakon Nakhon Province of Thailand. The conceptual framework has been tested on the basis of the bodies of literature including service quality, customer satisfaction and customer loyalty, cited above, as well as the researcher's own context about the relationship among variables.

Figure 1
Research Conceptual Framework



Based on the reviews of the literature of the constructs with the conceptualization of the relationships among variables, the hypotheses suggested by the conceptual framework can be laid out as follows:

H₁: Service quality and customer satisfaction had significantly positive influenced on customer loyalty of the Bank of Ayudhya in Sakon Nakhon Province of Thailand.

H₂: Service quality had a significantly positive influenced on customer satisfaction of the Bank of Ayudhya in Sakon Nakhon Province of Thailand.

The research hypotheses can be explained in the forms of structural equations in order to show the relationship among variables and predict the dependent variable for hypotheses testing. The symbols used to represent the variables stated as follows:

.....(2)

RESEARCH METHODOLOGY

 $CMS = \beta 3 SVQ$

This research study aimed to investigate the influence of service quality and customer satisfaction on customer loyalty of the Bank of Ayudhya in Sakon Nakhon Province of Thailand. The research study was a quantitative research method. The population of this research could not specify. The samples of 400 respondents were determined by using simple random sampling based on Taro Yamane [1]formula. Data were collected through 5-point Likert scale questionnaire surveys. This research study was cross-sectional as the data were collected at a single point of time from the key respondents. Content validity was applied to ensure the accuracy of an assessment tool. Cronbach's alpha was conducted to test for reliability with Cronbach's alpha coefficient of service quality, customer satisfaction, and customer loyalty of 0.842, 0.704, and 0.771, respectively as shown in Table 1. The Cronbach's alpha value of the scale of all variables is greater than 0.7, so it shows that the scale has very good reliability. Data were analyzed by descriptive statistics including frequency, percentage, mean, standard deviation; and inferential statistics including the Pearson's Product-Moment Correlation and Path Analysis. The research results can be significantly analyzed with 95% confidence interval.

Table 1
Cronbach's alpha coefficient of variables

Variables	Cronbach's alpha
Service Quality	0.842
Customer Satisfaction	0.704
Customer Loyalty	0.771

ANALYSIS OF THE DATA AND RESULTS OF THE STUDY

The research results were analyzed by using the statistical package for social science. The research finding and the hypotheses testing in this study were presented as follows. For description of the respondents, the research finding showed that the survey data of the respondents were made up of 56.70% female. The averages ages of the respondent were between 31-40 years up to 40.00%. For the education, the respondents had earned bachelor degree of 50.00%. They were government or state enterprise up to 33.30%. The average monthly income is amounted to between 10,000-20,000 Baht up to 36.70% as stated in Table 2.

Table 2
Description of the respondents

n = 30

Demo	ographic Information	Numbers of respondents	Percentage
Sex	Male	13	43.3
Sex	Female	17	56.7
	Less than 20 years	1	3.3
	21-30 years	10	33.3
A ~~	31-40 years	12	40.0
Age	41-50 years	4	13.3
	51-60 years	3	10.0
	More than 60 years	0	0.0
	Under High School	0	0.0
	High School or Vocational	2	6.7
Education	Diploma	5	16.7
	Bachelor Degree	15	50.0
	Upper Bachelor Degree	8	26.7
	Government or State Enterprises	10	33.3
	Company Employee	7	23.3
	Private Business	5	16.7
Career	Student	5	16.7
	Freelance	3	10.0
	Merchant	0	0.0
	Another	0	0.0
	Under 10,000 baht	4	13.3
Monthly Income	Between 10,000-20,000 Baht	11	36.7
	Between 20,000-30,000 Baht	6	20.0
	Between 30,000-40,000 Baht	4	13.3
	Between 40,000-50,000 Baht	4	13.3
	More than 50,000 Baht	1	3.3

For descriptive statistics, the collected data were analyzed by using means and standard deviation. The means score of customers' opinion on service quality, customer satisfaction, and customer loyalty were at the highest levels; mean of 4.22, 4.25, and 3.96, respectively. To explain in details; reliability, tangibles, responsiveness, assurance, and empathy, means score were at 4.33, 4.25, 4.06, 4.28, and 4.16, respectively.

For inferential statistics, in this research study, the analysis of the correlation coefficient between the two independent variables was explored. Pearson's Product-MomentCorrelation was used to determine the relationship of the independent variables according to research conceptual framework. The objective was to find the magnitude of correlation among the variables. Path Analysis was used to test hypotheses in order to investigate the influence of service quality and customer satisfaction on customer loyalty. Multicollinearity was tested on predictor variables to avoid unreliable and unstable estimates of regression coefficients. Thus, correlation analysis between the independent variables was shown in Table 3.

 $\label{eq:Table 3} \textbf{Correlation analysis between the independent variables}$

	•	<u> </u>	
	SVQ	CMS	CML
Mean	4.22	4.25	3.96
S.D.	0.349	0.482	0.569
SVQ	1		
CMS	.602*	1	
CML	.562*	.678*	1

^{*.} Correlation is significant at the 0.05 level

Table 3 showed the relationship between the independent variables that correlation coefficients (r) are not exceed 0.80. As Hair et al. (2010) described the relationship between the variables that must be less than 0.80; if such relationship is more than 0.80, it may cause multicollinearity. This research study found that the relationship between the independent variables with the highest value was 0.602, in which it was not exceed 0.80. Multicollinearity problem was not found. Therefore, it can be tested by using Path Analysis, in which estimating linear models.

The research results from hypotheses testing on the influence of service quality and customer satisfaction on customer loyalty of the Bank of Ayudhya in Sakon Nakhon Province of Thailand were presented in the forms of path diagram as showed in Figure 2.

Figure 2
Research Results



In addition, the research results from hypotheses testing can be depicted in the following structural equations as presented below:

$$CML = 0.562 \text{ SVQ} + 0.678 \text{ CMS}$$
 (3)
 $CMS = 0.602 \text{ SVO}$ (4)

The hypotheses testing found that service quality and customer satisfaction can explain the variation of customer loyalty had Adjusted R-Square 0.460 at 0.05 significant level. Service quality and customer satisfaction had statistically significant positive influenced on customer loyalty with standardized coefficients (β) of 0.533 and 0.241, respectively. Service quality had a statistically significant positive influenced on customer satisfaction with standardized coefficients (β) of 0.602. The measurement factors of service quality and customer satisfaction should be further investigated to find the most impact. The symbols used to represent the predictors stated as follows:

SVQ1 = Tangibles SVQ2 = Reliability SVQ3 = Responsiveness SVQ4 = Assurance SVQ5 = Empathy CML = Customer Loyalty

The research results of measurement factors showed the statistically significant positive influenced of assurance, empathy, tangibility, reliability and responsiveness on customer loyalty with standardized coefficients (β) of 0.533, 0.335, 0.203, -0.043 and-0.179 respectively as presented in the forms of structural equations below:

$$CML = 0.533 \text{ SVQ4} + 0.335 \text{ SVQ5} + 0.203 \text{ SVQ1} + (-0.043) \text{ SVQ3} \dots (5)$$

In conclusion, according to hypotheses testing, service quality and customer satisfaction had significantly influenced on customer loyalty of the Bank of Ayudhya in Sakon Nakhon Province of Thailand providing management to focus on these critical factors in order to promote customer loyalty.

CONCLUSION AND DISCUSSION

This research study aimed to investigate the influence of service quality and customer satisfaction on customer loyalty of the Bank of Ayudhya in Sakon Nakhon Province of Thailand. The results shown that service quality and customer satisfaction had significantly influenced on customer loyalty. Thus, the following suggestions from the research results can be applied as management guidelines. Firstly, service quality seems to be very critical success factor to raise customer satisfaction and keep targeted customer in the long run for financial institution in Thailand. To increase satisfaction of the customer, empathy, tangibles, assurance, and responsiveness should be strengthening. Secondly, most customer satisfaction dimensions, except for courtesy can enhance customer loyalty in the long run. Thirdly, financial institution in Thailand should focus on assurance, empathy, tangibles, and responsiveness in order to increase customer loyalty. To conclude, service quality and customer satisfaction had significantly influenced on customer loyalty of the Bank of Ayudhya in Sakon Nakhon Province of Thailand. However, there are many other factors that can be expected to promote customer loyalty such as corporate image, service environment, or motivation for further research.

REFERENCES

- [1] Yamane, T. (1973), "Statistics: An Introductory Analysis", Harper & Row, 2nd Edition, New York.
- [2] Hoy, W.K. and Rees, R. (1974), Subordinate Loyalty to Immediate Superior: A Neglected Concept in Study of Educational Administration, Sociology of Education. Vol. 47, Pp. 274-275.
- [3] Aday, L.N. and Anderson, R. (1978), "Theoretical Methodelogical Issues in Socialogical Studies of Consumer Satisfaction with Medical Care", Social Science and Medicine, Pp. 12-28.
- [4] Zeithaml, V.A., Parasuraman, A., and Berry, L.L. (1990), "Delivering Quality Service: Balancing Perceptions and Expectations", *The Free Press*, New York.
- [5] Dick, A. and Basu, K. (1994), "Customer Loyalty: Toward an Integrated Conceptual Framework", *Journal of the Academy of Marketing Science*. Vol. 22, No. 2, Pp. 99-113.
- [6] Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1994), "Reassessment of Expectations as a Comparison Standard in Measuring Service Quality: Implications for Further Research", *Journal of Marketing*, Vol. 58, No. 1, Pp. 111-124.
- [7] Oliver, R.L. (1999), "Whence Consumer Loyalty?", Journal of Marketing, Vol.63, Pp. 33-44.
- [8] Kotler, P. (2000), "Marketing management: Analyzing consumer marketing and Buyer behavior (The Millennium)", *Prentice Hall*, New Jersey.
- [9] Bowen, J. and Chen, S. (2001), "The relationship between customer loyalty and customer Satisfaction", *International Journal of Contemporary Hospitality Management*, Vol. 13, No. 4/5, Pp. 213-217.
- [10] Caruana, A. (2002), "Service loyalty: the effects of service quality and the mediating role of customer satisfaction", *European Journal of Marketing*, Vol. 36, No. 7, Pp. 811-828.
- [11] Ahearne, M., Mathieu, J. and Rapp, A. (2005), "To empower or not to empower your sales force? An empirical examination of the influence of leadership empowerment behavioron customer satisfaction and performance", *Journal of Applied Psychology*, Vol. 90, No. 5, Pp. 945-955.
- [12] Hill, N. and Alexander, J. (2006), "The Handbook of Customer Satisfaction and Loyalty Measurement", *Gower Publishing Limited*, 3rd Edition.
- [13] Grönroos, C. (2007), "Service Management and Marketing: Customer Management in Service Competition", John Wiley & Sons Ltd., 3rd Edition, England.
- [14] Pairot, R. (2008), "Members' satisfaction of fitness service quality: a case study of California Wow Xperience Public Company Limited", presented in partial fulfillment of the requirements for the Master of Arts Degree in Business English for international communication, Srinakharinwirot University.
- [15] Jamal, A. and Anastasiadou, K. (2009), "Investigating the effects of service qualitydimensions and expertise on loyalty", *European Journal of Marketing*, Vol. 43, No.3/4, Pp. 398-420.
- [16] Ali, J.F., Ali, I., Rehman, K., Yilmaz, A., Safwan, N. and Afzal, H. (2010), "Determinants of consumer retention in cellular industry of Pakistan", *African Journal of Business Management*, Vol. 4, No. 12, Pp. 2402-2408.

- [17] Chang, H.H. and Wang, H.W. (2011), "The Moderating Effect of Customer Perceived Value on Online Shopping Behavior", *Online Information Review*, Vol. 35, No. 3, Pp. 333-359.
 - [18] Ali, J.F., Khan, A. and Rehman, F. (2012), "An assessment of the service quality using gap analysis: a study conducted at Chitral, Pakistan", *Interdisciplinary Journal of ContemporaryResearch in Business*, Vol. 4, No. 3, Pp. 259-266.
- [19] Amin, M., Yahya, Z., Ismayatim, W.F., Nasharuddin, S.Z. and Kassim, E. (2013), "Service quality dimension and customer satisfaction: an empirical study in the Malaysian hotel industry", *Services Marketing Quarterly*, Vol. 34, No. 2, Pp. 115-125.
- [20] Kim, T.H., Ko, Y.J. and Park, C.M. (2013), "The influence of event quality on revisit intention", *Managing Service Quality*, Vol. 23, No. 3, Pp. 205-224.
- [21] Wu, H.C. (2013), "An empirical study of the effects of service quality, perceived value, corporate image and customer satisfaction on behavioral intentions in the Taiwan quick service restaurant industry", Journal of Quality Assurance in Hospitality & Tourism, Vol. 14, No. 4, Pp. 364-390.
- [22] Ali, J.F. and Amin, M. (2014), "The influence of physical environment on emotions, customer satisfaction and behavioural intentions in Chinese resort hotel industry", *Journal for GlobalBusiness Advancement*, Vol. 7, No. 3, Pp. 249-266.
- [23] Emre, S.D.(2014), "Assessing the effects of satisfaction and value on customer loyalty behaviors in service environments: High-speed railway in Turkey as a case study", *Management Research Review*, Vol. 37, No. 8, Pp. 706-727.
- [24] Anne, F., Audrain, P. and Marc, V. (2016), "Where do customer loyalties really lie, and why? Gender differences in store loyalty", *International Journal of Retail & Distribution Management*, Vol. 44, No. 8, Pp. 799-813.
- [25] Dahlia, E.M. (2016), "Enhancing customer loyalty: critical switching cost factors", *Journal of Service Management*, Vol. 27, No. 2, Pp. 144-169
- [26] Subrahmanyam, A. and Raja, S.B. (2016), "The effects of service quality on student loyalty: the mediating role of student satisfaction", *Journal of Modeling inManagement*, Vol. 11, No. 2, Pp. 446-462

Factors Affecting Employee Organizational Commitment of Government Saving Bank in the Sanook Province Group, Thailand

Chattawat Limpsurapong*, Parichat Sriprathumporn**

*Lecturer, Department of Business Management, Faculty of Liberal Arts and Management Science,

Kasetsart University, Thailand

E-mail: chattawat.l@ku.th

**Graduate Student of Kasetsart University, Thailand

E-mail: parichat.srip@ku.th

ABSTRACT

The objectives of this research were as follow 1) to study the employee organizational commitment of the Government Saving Bank in Sanook province group 2) to study the different on employee organizational commitment when classified by personal factors 3) to investigate the factors influence on employee organizational commitment.

In this research the target population include, employees of Government Saving Bank in The SanookProvinc Group in part of Government Saving Bank amount of 322 employees. Calculated according to the formula sample size of 212 samples was selected by multistage sampling. Data collected were used from questionnaires with as follows items: 20 questions of motivation factors, 30 questions of hygiene factors, 14 questions of commitment. For appointment of questionnaires, validity of the method, content-related validity, and to assess scale the reliability of the questionnaires, Cronbach's alpha coefficient was used. Reliability coefficient was calculated for the questionnaires. It was estimated to be .942 of motivators factors, .970 of hygiene factors and .910 of employee commitment respectively.

The survey data of the respondents as follows. 46.7% were male and 53.3% were female. The Respondents age, less than 30 year 40.0%, 30-40 year 36.7%, 41-50 year 10.0% and more than 50 year 13.3%. From the education categories, there was under bachelor degree 10.0%, bachelor degree 56.7% and upper bachelor degree 33.3%. The operation levels were manager 26.7%, operator 46.7%, employee replacement 26.7%. The employee salaries are as follows, between 15,000-35,000 baht 66.7%, between 35,001-55,000 baht 6.7%, between 55,001-75,000 baht 10.0% and more than 75,000 baht 16.7%. The working experiences the details were as follows, under 5 years 36.7%, between 5-10 years 33.3%, between 11-15 years 3.3%, more than 15 years 26.7%. It was found that the motivators factors and hygiene factors were the statistically significant positive influence on employee commitment standardized coefficients (β) .856 and .756 respectively. Therefore, it can be concluded that the motivation factors and hygiene factors had statistically significant positive influence on employee commitment of Government Saving Bank in The Sanook Provinc Group.

Keywords- Motivation factors, Hygiene factors, Employee commitment.

INTRODUCTION

Background

Now a day, there are many rapidly changes in Thailand such as economic, social, and political. Critical success factors of business composed of speed, service quality, cost control, innovation, and other factors, human resource in organization is vital to the success of those factors. Thus, organization must to maintain its human resource to stay with the firm and finding how to create their commitment to the organization. Business banking is another business where employees work in different positions, it is important to work in order to meet the goals of the entire organization as well as the operating staff and management. They are important to the income of the bank. Government Savings Bank employees had need to patience and try to

work harder than other jobs. It is a work that focuses on how to make customers get the most satisfied on banking services, and also must deal with other bank competitors. This was the cause that affected employees lose their quality of work life. As a result, the banking business had begun to increase in turnover rate. Furthermore Government Saving Bank had loss the skillful and knowledge employee and also the employee cost of the investment and the secret of the bank.

Organizations must give priority to the treatment and to motivate the employees in the organization. Focusing on increasing the commitment t of employees per organization. Commitment to cause the organization to accept the goals and focuses of the organization's success[4].

The purpose of this research was to study the important factors affecting employee organizational commitment of Government Saving Bank in the Sanook Province Group, Thailand. To provide guidance in the planning, management, human resources, performance. By finding how to create commitment and organization of the attitude estimation. To the commitment responding to the policies of organization safeguard interests of the organization and to reduce the turnover rate of employees who are likely to be higher every year.

Objectives

This paper examines 3 objectives as follow:

- 1. To study the employee organizational commitment of the Government Saving Bank in Sanook province group.
 - 2. To study the different on employee organizational commitment when classified by personal factors.
 - 3. To investigate the factors influence on employee organizational commitment.

LITERATURE REVIEW

Two factor theory (Motivation factors and Hygiene factors)

The most popular conventional motivation theories in human resources management include two-factor Hertzberg theory of motivation[5]. The two factor theory of job satisfaction from Herzberg et al. is developed on the basis of the occurrence of events (critical incidents) technique. The theory distinguishes between dissatisfiers (hygiene factors) and satisfiers (motivation factors) of a job. The hygiene factors or dissatisfiers are intrinsic to a job, these are: working conditions, policies and administrative practices, salary and benefits, work itself, supervision, subordinates, peers, status, job security, co-workers and personal life. The absence of hygiene factors creates job dissatisfaction but the presence of hygiene factors does not create satisfaction or motivation. Employees are not satisfied when hygiene factors are absent however when they are present the satisfaction is only temporary and they will begin to strive to more satisfaction; hygiene factors can only produce short term changes in job attitudes and do not enrich a person's job. In contrast to the hygiene factors the motivating factors are associated with long term positive effects in job attitudes; they enrich a person's job. According to the theory the hygiene factors must be on a minimum level before the motivating factors can be used to stimulate a person[1].

Employee commitment

Organizational commitment of the employee organization as dedication on the job responsibilities. Consequence, the employees are happy and loyalty. The employee has faith in work and organization. Organizational commitment is the level goal of organization and as the needs of employees who are working for organization. Organization to provide the employee with an employee's obligation towards employee commitment and employee engagement. Because of the employee commitment is correlated with turnover rate. If an employee has an organizational commitment to high turnover rate low. Therefore, the organization is therefore important to employee engagement and employee commitment[8].

This research had applied the organizational commitment based on the concept of Steers. Steers provide the meaning of organization commitment is the level of feeling at one with the staff organization. Values are in harmony with the other members of the organization of the people and are willing to devote to missions are to achieve the goals of organization. Three-component model of organizational commitment as follow1) The convictions accepted goals and core values of organization. Employees are proud and proud to

be an employee2)Willingness to devoted considerable effort to the organization. The employees of effort to voluntarily dedicate physical strength their intelligence to work. Focusing on the quality of work done within the bounds of time affect the success and is good for an overview oforganization 3)A strong desire to maintain the membership of organization. Employees want to work strong. Without moving or changing work attempted to maintain the organization's membership, does not think there is no need to resign from membership of organization. There is the intention and trying to stay true to the organization. Make the organization goals and achievements as part of the organization[2].

The Link between Two factor theory (Motivation factors and Hygiene factors) and Employee commitment

Organizational commitment is the level belief and acceptance of employee organization goals. Employees are required to work for an organization. Organizational commitment and satisfaction with the Organization will have a mutual influence[3]. Using two factor theory of job satisfaction from Herzberg et al. proposes that the dissatisfaction-satisfaction makes the motivation to work as a result of 1 extrinsic conditions or hygiene factors as a factor that reduces satisfaction in work 2 intrinsic conditions ormotivating factors as a factor that stimulates the work[6].

CONCEPTUAL MODELAND HYPOTHESES

The research war mainly aimed to investigate the Factors Affecting Employee Organizational Commitment of Government Saving Bank in the Sanook Province Group. Below are my proposed hypotheses.

- H₁: Personal factors was different influence on employee organizational commitment.
- H₂: Motivators factors have a direct positive influence on employee commitment.
- H₃: Hygiene factors have a direct positive influence on employee commitment.

Personal Factors

Motivators Factors

Organizational Commitment

Hygiene Factors

Figure 1
Research Conceptual Framework

RESEARCH METHODOLOGY

This research was used quantitative study, population consisting of employees of Government Saving Bank in The Sanook Provinc Group in part of Government Saving Bank amount of 322 employees. Calculated according to the formula sample size of 200 samples was selected by multistage sampling. Data collected were used from questionnaires with as follows items: 20 questions of motivation factors, 30 questions of hygiene factors, 14 questions of commitment. For appointment of questionnaires, validity of the method, content-related validity, and to assess scale the reliability of the questionnaires, Cronbach's alpha coefficient was used. Reliability coefficient was calculated for the questionnaires. It was estimated to be .942 of motivators factors, .970 of hygiene factors and .910 of employee commitment, respectively as shown in Table 1.

Table 1 Reliability test

Variables	Cronbach's alpha coefficient
Motivators factors	0.942
Hygiene factors	0.970
Organizational Commitment	0.910

ANALYSIS OF DATA AND RESULTS OF THE STUDY

The research results were analyzed by using the statistical package for social science. The research finding and the hypotheses testing in this study were described as follows.

The survey data of the respondents as follows. 46.7% were male and 53.3% were female. The Respondents age, less than 30 year 40.0%, 30-40 year 36.7%, 41-50 year 10.0% and more than 50 year 13.3%. From the education categories, there was under bachelor degree 10.0%, bachelor degree 56.7% and upper bachelor degree 33.3%. The operation levels were manager 26.7%, operator 46.7%, employee replacement 26.7%. The employee salaries are as follows, between 15,000-35,000 baht 66.7%, between 35,001-55,000 baht 6.7%, between 55,001-75,000 baht 10.0% and more than 75,000 baht 16.7%. The working experiences the details were as follows, under 5 years 36.7%, between 5-10 years 33.3%, between 11-15 years 3.3%, more than 15 years 26.7% as stated in Table 2.

Table 2
Description of the respondents

n =

212

Demographic Information		Percentage of NR to number of TR*
Ç	Male	46.70%
Sex	Female	53.30%
	Less than 30 Years	40.00%
A	30-40 Years	36.70%
Age	41-50 Years	10.00%
	More Than 50 Years	13.30%
	Under Bachelor's Degree	10.00%
Education	Bachelor's Degree	56.70%
	Upper Bachelor's Degree	33.30%
	Manager	26.70%
Operation levels	Operator	46.70%
	Employee replacement	26.70%
	15,000-35,000 baht	66.70%
Emmlesses colonics	35,001-55,000 baht	6.70%
Employee salaries	55,001-75,000 baht	10.00%
	More than 75,000 baht	16.70%
Working experiences	Under 5 years	36.70%
	5-10 Years	33.30%
	11-15 Years	3.30%
	More Than 15 Years	26.70%

^{*} TR denotes total respondents.

The hypothesis 1: Personal factors were significantly different at the 0.01 level, namely, age, operation levels, employee salaries and working experiences showed a significant impact on organizational commitment. Shown in Table 3.

Table 3

Analysis of organizational commitment by age, operation levels, employee salaries and working experiences

Variable	Personal factors	F	Sig.
Decision making behavior	Age	5.699	0.004
	Operation levels	10.274	0.000
	Employee salaries	10.886	0.000
	Working experiences	11.451	0.000

For inferential statistics, in this research study, the analysis of the correlation coefficient between the two independent variables was explored. Pearson's Product-Moment Correlation was used to determine the relationship of the independent variables according to research conceptual model. The objective was to find the magnitude of correlation among the variables. Multiple Regression Analysis was used to test hypotheses in order to investigate the influence of motivation factors and hygiene factors on organizational commitment. Multicollinearity was tested on predictor variables to avoid unreliable and unstable estimates of regression coefficients [7]. Thus, correlation analysis between the independent variables was shown in Table 4.

Table 4
Correlation analysis between the independent variables

	MOV	HYG	COM
Mean	4.19	3.99	4.19
S.D.	0.556	0.757	0.597
MOV	1		
HYG	.894**	1	
COM	.856**	.756**	1

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Mean value of the motivation factors is 4.19 and that is higher than the mean value of hygiene factors, which indicates employees are more organizational commitment with the hygiene factors.

The research equations to predict influence of factors affecting employee organizational commitment of Government Saving Bank in the Sanook Province Group, Thailand. The symbols used to represent the variables stated as follows:

MOV = Motivation Factors
HYG = Hygiene Factors
COM = Organizational Commitment

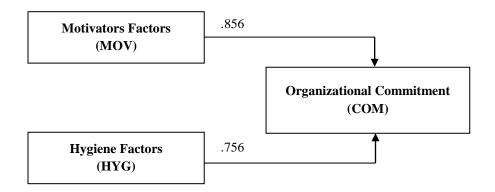
The structural equation can be described as follows:

The result of equations was as follows.

$$COM = .856MOV + .756HYG$$
 (2)
(8.769) (6.117)

Equations can be showed in the from of Path Analysis as below.

Figure 2
Research Results



The hypotheses testing found that motivation factors and hygiene factors can explain the variation of organizational commitment up to 72.40% (Adjusted R-Square 0.724) and 55.70% (Adjusted R-Square 0.557) at 0.01 significant level. Motivation factors and hygiene factors had statistically significant positive influenced on organizational commitment with standardized coefficients (β) of 0.856 and 0.756, respectively.

CONCLUSION AND DISCUSSION

This research study aimed to investigate motivation factors and hygiene factors influencing on organizational commitment of Government Saving Bank in the Sanook Province Group, Thailand. The results shown that motivation factors and hygiene factors had significantly influenced on organizational commitment. Also, according to the research results of Preekamon and Supada result shown that awareness on overall and each aspect of motivate factors and hygiene factors were moderate positively related to affective commitment, continuance commitment, and normative commitment at statistical significance of 0.01 levels[10]. Chaiwat results are as follows: Hygiene factors and motivation factors are related to the overall organizational commitment of employees in the organization at statistically 0.01 significant level [9]. It was confirmed that project members' participation in decision-making. However, there are many other factors that can be expected to enhance a commitment to the organization such as leadership or quality of work life for further research.

REFERENCES

- [1] Frederick Herzberg, Bernard Mausner, &Barbara B. Snyderman (1959), "The Motivation to Work", New York, *Johnson Wiley and Sons, Inc.*, 2nd, Pp. 59-83.
- [2] Steers, R. M. (1997), "Antecedents and outcomes of organizational commitment", *Administrative Science Quarterly*, Vol. 22, Pp. 46-56.
- [3] Mathis R. W. and Jackson J. H. (2003), "Strategic Human Resource Management", Editors: Phichit Thepwon, *Se-Education Publishing Co., Ltd.*, Bangkok, Pp. 175.
- [4] Ivancevich, J. M. (2004), "Strategic Human Resource Management", Editors: Phichit Thepwon, *Se-Education Publishing Co., Ltd.*, Bangkok, Pp. 25.
- [5] J. R. Schermerhorn (2006), "Management", New York, Johnson Wiley and Sons, Inc., Pp. 350-393.
- [6] John M. Ivancevich, Robert Konopaske, and Michael T. Matteson(2009), "Oganizational Behavior and Management", Editors: Suthum Rattanachod, *Top Publishing Co., Ltd.*, Bangkok, Pp. 114-118.
- [7] Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010), "Multivariate data analysis",7th ed. *Prentice Hall, Englewood Cliffs*.
- [8] Phichit Thepwon (2011), "Strategic Human Resource Management", Se-Education Publishing Co., Ltd., Bangkok, Pp. 176.

- [9] Chaiwat Osotumnuaychoke (2012), "Motivation factors related to the organization commitment of an it consultant company employees. Case study: one of it consultant company employees", *Srinakharinwirot University*, Bangkok.
- [10] Preekamon Jittananon and Supada Sirikutta(2014), "Motivation and hygiene factors corporate culture related to the organizational commitment of the government officers working in the Government Revenue Office in Nakhon Pathom Area", *Srinakharinwirot University*, Bangkok.

The Influence of Marketing Mix on the Customer Buying Decision Making of Construction Material Store

Chattawat Limpsurapong*, Nattaya Tangwikrai**

*Lecturer, Department of Business Management, Faculty of Liberal Arts and Management Science,

Kasetsart University, Thailand

E-mail: chattawat.l@ku.th

**Graduate Student of Kasetsart University, Thailand

E-mail: nattaya.tangwikrai@gmail.com

ABSTRACT

This independent study purpose to study the market composition factors that affect to the decision to purchase the construction material in the area of Nakae district, Nakhon Phanom province. The primary data, using questionnaire as tool, were collected the consumer's decision who purchase the construction's material in the construction stores in Nakae district, Nakhon Phanom province. The questionnaires were distributed in 5 construction stores in Nakae district, Nakhon Phanom province and analyze by using descriptive statistics and Standard Deviation. The samples of 389.

The study of marketing mix factors affecting the purchasing decision making on construction materials in Nakae Sub-district, Nakae district, Nakhon Phanom Province found that the participants paid the high important level for the factors namely promotion, product, place, process, price, respectively. However, people, physical evidence were at moderate level. In terms of product factor, the participants paid the high importance on the various products, followed by product guarantee and reliability of brand products, respectively. In terms of price factor, the participants paid the high importance on the selling price is appropriate, followed by price as other competitors and the possibility to ask for bargain, respectively. In terms of place factor, the participants paid the high importance on the delivery service, followed by the location not far from the store and convenience for purchasing from employees, respectively. In terms of promotion factor, the participants paid the high importance on discount paying, the credit, the payment and advertising through media coverage, respectively. In terms of people factor, the participants paid the high importance on employees understand the needs of customers, followed by providing advice and solutions to customers and employees have good human relations, beaming, respectively. In terms of physical evidence factor, the participants paid the high importance on convenient parking place, followed by placement of a product category and storage correctly, respectively. In terms of process factor, the participants paid the high importance on rapidity of product delivery, correct order, followed by convenient service, and telephone ordering, respectively.

Keywords- Marketing mix, Customer buying decision making, Construction materials store

INTRODUCTION

Background

Retail sales of construction materials and home furnishings in Thailand have a high growth potential due to increased purchasing power of consumers and the growth of the real estate sector. From that causes it make this business gets more competition. The major construction business players continue to expand the branch especially in the provinces in many regions, and they are also changing the business model to meet the needs in each area. In addition to retail sales of construction materials and home furnishings have grown significantly due to the changing behavior of consumers who are buying more of modern trade goods over the last few years. Major construction businesses that are use "the Big Box model" has been a big leap forward. Owning a location before a competitor is very advantageous, as the location is closer to the city and closer to the habitat is more expensive. In addition, the expansion of one branch takes 6-9 months to build, it will respond to consumers in the area faster, especially in places where there are no

modern trade competitors. As a result, the competitiveness of the construction materials business in the upcountry has intensified. Customer satisfaction is the key to customer buying decision making. Marketing mix refers to the marketing tool composed of product, price, place, promotion, people, process, and physical evidence that used by a business to achieve marketing objectives and customer satisfaction. These factors are the key to the success of today's construction materials business.

Objectives

- 1. To study the customer satisfaction on the marketing mix of the retail sales of construction materials
- 2. To study the customer buying decision making of the retail sales of construction materials
- 3. To study the different between customer satisfaction on the marketing mix and the customer buying decision making when classified by personal factor
- 4. To study investigate the influence of customer satisfaction on the marketing mix affecting to the customer buying decision making.

LITERATURE REVIEW

The Theory of Service Marketing Mix (7Ps)

The reviews of the relevant literatures conceptualized the meanings of marketing as stated in previous researches. According to Cambridge Dictionary (n.d.), service marketing mix is "a selection of services developed to offer customers a choice within a particular range, with its elements namely product, price, place, promotions, participants, physical evidence, and process". The definitions and indicators of each variables in the 7P's are adopted from several authors. Product is the combination of goods and services that offered by the firm to the target market. [19]. Price is the amount the consumer must exchange to receive the offering. [27]. Place is the distribution channels that are primarily set up to perform economic functions in society, bridging the gap between production and consumption. [17]. Promotion is a range of activities that implemented by the firms' marketers to inform their products and attract potential customers to buy. [23]. Physical evidence is the environment in which the service is delivered, where the firm and customers interact, and any tangible components to facilitate the performance or communication of the service. [25]. Process is concerning of how far the firm can go as a customer-oriented and systematic procedures to pursue a successful service delivery process. It is represented in the day-to-day operations, mechanism, and flow of activities. [21]. People is the one of the key factors that can distinguish service marketing from physical product marketing and include as a main parameter to rate in the service marketing mix. [4].

Concepts and theories about consumer behavior.

American Marketing Association (AMA) have given the definition of consumer's behavior as "human's action that directly relates to cognition, understanding, behavior, and situation which mutually affect reciprocation for human life's existence". Thomyachati has mentioned that consumers' behavior are the decision making process which related upon the characteristic of individual in evaluating, acquiring, using and disposing goods and services. [24]. Schiffman and Kanuk described consumer behavior is that behavior consumer expression, Whether it is to buy, use, evaluate or consume a product and other concepts that consumers are expected to meet their needs, and study of consumers' decision to use existing resources to money, time and power to consume products and services. [8]. It contains questions such as what to buy, why to buy, where to buy and how often. Kotler and Keller have given the definition of consumer's behavior as The consumer behavior is a study of the behavior of a person, group or organization about the purchase and use of goods and services for response to them request. [18]. Mahé has supported that consumer behavior is the study of how and why people decided to purchase goods and services. There are many factors influencing consumer on decision making of purchasing products or services. Generally, consumer expects the products or services that best responded their need. [18]. Consumer behavior is defined as "the process and activities people engage in when searching for, selecting, purchasing, using, evaluating, and disposing of products and services so as to satisfy their needs and desires". [10]. "including the decision processes that precede and follow these actions". [9]. This definition indicates the comprehensiveness of this area and the wide scope that it covers. As consumers behave differently, models of purchase decision-making behavior

are adapted in different ways by different individuals. In this section, some of the variations in behavior, described in previous literature, are explained. The focus has been on search and purchase behavior of consumers. Jarunee has also defined consumer behavior as a means of expressing the consumer's decision to buy consumer products [26]. Understanding consumer preferences and behaviors can benefit business in terms of marketing strategy creation to meet the satisfaction of consumers and enhance decision making. Sproles has The consumer decision-making patterns are initially described as "a mental orientation characterizing a consumer approach to making choices" [5]. The previous researches further suggested that the concept of the decision-making patterns of the basic consumer is similar to the individual personality in psychology. Researchers have attempted to analyze several aspects and factors influencing on decision making. Marketing mix and psychological factors are interesting to explore in this research. From the literature review, it was shown that there are some relationships among these three variables to further investigate and conceptualize in the conceptual framework with hypotheses development.

Customer Decision Making.

One of the fundamental issues in consumer behavior is the way consumers develop, adapt and use decision-making strategies. [15]. Consumer decision making could be defined as the "behavior patterns of consumers, that precede, determine and follow on the decision process for the acquisition of need satisfying products, ideas or services". [6].

Consumer decision making has long been of great interest to researchers. Early decision making studies concentrated on the purchase action. [7]. It was only after the 1950's that modern concepts of marketing were incorporated into studies of consumer decision making, including a wider range of activities. [9]. The contemporary research indicates that more activities are involved than the purchase itself. Many other factors influence the consumer decision making than the final outcome. Vast numbers of studies have investigated this issue and many models have been developed accordingly. Models aim to depict the purchase decision-making process and its influential factors. They are discussed in detail in the following chapter. According to more recent studies, the consumer purchase decision-making process can be explained by an information processing approach. [3].

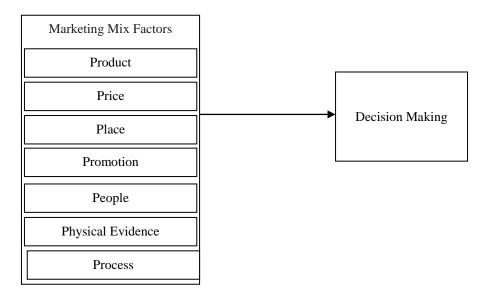
Consumers find the information, evaluate it and make a choice. Various models have been developed in order to describe this behavior. The purchase decision-making process is constructive and is shaped by the consumer and the context of decision making. [11]. It therefore varies across individuals, decisions, and contexts. [14]. Exploring consumer information processing behaviour in traditional purchasing, which occurs though physical shops, has long attracted the attention of researchers, resulting in comprehensive knowledge of behavior in this setting. [16].

Consumers purchase products or services which they necessarily do not need. However when the actual need arises, the consumer goes through a process before making the buying decision. Problem recognition, information search, evaluation of alternatives and product choice are steps recognized for this process. [13]. Studies show that the clothes increase the feeling of belonging to a society and impacts purchasing behavior. The bigger the fashion involvement in a society is the more people buy clothes. [12].

CONCEPTUAL MODEL AND HYPOTHESES

From the reviews of the literature, the conceptual model of this research study was presented in figure 1

Figure 1
Research Conceptual Framework



Based on the reviews of the literature of the frameworks with the conceptualization of the relationships among variables, the hypotheses suggested by the conceptual model can be explained as follows:

- H₁: Product factor affect consumers' decision to purchase construction materials.
- H₂: Price factor affect consumers' decision to purchase construction materials.
- H₃: Place/Channel distribution factor affect consumers' decision to purchase construction materials.
 - H4: Promotion factor affect consumers' decision to purchase construction materials.
- H_5 : People factor affect consumers' decision to purchase construction materials.
- H₆: Physical evidence factor affect consumers' decision to purchase construction materials.
- H₇: Process factor affect consumers' decision to purchase construction materials.

The research hypotheses can be explained in the forms of structural equations in order to show the relationship among variables and predict the dependent variable for hypotheses testing.

RESEARCH AND METHODOLOGY

In this research the target populations include, people of Nakae District, Nakhon Phanom Province amount of 14,605 household. Calculate according to the formula of Taro Yamane. [2]. Sample size of 389 samples was selected by multistage sampling. Data collected were used from questionnaires with as follows items: 4 questions of product factor, 4 questions of price factor, 4 questions of place factor, 4 questions of marketing promotion factor, 4 questions of people factor, 4 questions of physical evidence factor, 4 questions of process factor, and 9 questions of decision factor. For appointment of questionnaire, validity of the method, content-related validity, and to assess scale the reliability of questionnaires, Data were collected through 5-point Likert scale questionnaire surveys.

In the questionnaire's reliability test, the research adopted Cronbach's Coefficient Alpha in order to analyze the confidence coefficience (α). [1]. Reliability coefficient was calculated for the questionnaires. It was estimated to be .729 of product, .724 of price, .757 of place, .789 of promotion, .789 of people, .749 of physical evidence, .744 of process, and .742 of customer buying decision making.

Table 1
Cronbach's alpha coefficient of variables

Variables	Cronbach's alpha
Product	.729
Price	.724
Place	.757
Promotion	.789
People	.749
Physical evidence	.745
Process	.744
Decision making	.742

ANALYSIS OF DATA AND RESULTS OF THE STUDY

The research results were analyzed by using the statistical package for social science. The research finding and the hypotheses testing in this study were presented as follows.

For description of the respondents, the research finding showed that the survey data of the respondents were made up of 83.30% male. The averages ages of the respondent were between 36-45 years up to 34.70%. In terms of the marital status, the respondents were married of 59.90%. For the education, the respondents had earned diploma or below degree of 43.40%. They were technical/engineer up to 29.80%. The average monthly household income was amounted to 50,000 Baht up to 53.00%

For descriptive statistics, the collected data were analyzed by using means and standard deviation. The 7P's; consist of product, price, place, promotion, people, physical evidence and process means score were at 4.05, 4.16, 3.93, 4.05, 4.13, 4.04, and 4.11, respectively. In addition, decision making mean score was 4.13.

Pearson's Correlation was used to determine the relationship of the independent variables according to research conceptual model. The objective was to find multicollinearity among the independent variables to avoid unreliable and unstable estimates of regression coefficients. Thus, correlation analysis between the independent variables was showed in Table 2.

For inferential statistics, in this research study, the analysis of the correlation coefficient between the independent variables was investigated. Pearson's Product-Moment Correlation was used to determine the relationship of the independent variables according to research conceptual model. The objective was to find the magnitude of correlation among the variables. Multiple Regression Analysis was used to test hypotheses in order to study the influence of the marketing mix factors (7 P's) on decision making. Multicollinearity was tested on predictor variables to avoid unreliable and unstable estimates of regression coefficients. Thus, correlation analysis between the independent variables was shown in Table 2.

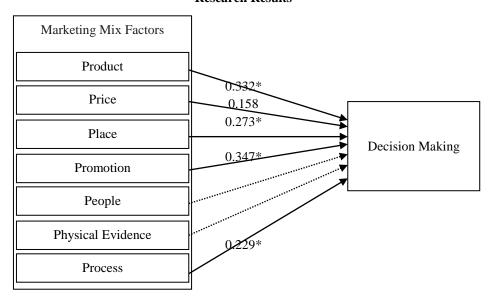
Table 2
Correlation analysis between the independent variables

	Product	Price	Place	Promotion	People	Physical evidence	Process	Decision
Mean	4.0488	4.1645	3.9319	4.0488	4.1337	4.0398	4.1086	4.1288
S.D.	.44497	.33568	.49598	.57621	.48740	.51681	.46522	.37033
Product	1							
Price	.540*	1						
Place	.278*	.462*	1					
Promotion	.413*	.461*	.588*	1				
People	.482*	.249*	.618*	.730*	1			
Physical	.534*	.494*	.636*	.616*	602*	1		
evidence								
Process	.480*	.408*	.604*	.496*	.638*	.731*	1	
Decision	.602*	.419*	.668*	.722*	.735*	.693*	.696*	1
Adjusted $R^2 = 76.0\%$ SEE = 0.181								

^{*}Correlation is significant at the 0.01 level

Table 2 showed the relationship between the independent variables that correlation coefficients (r) are not exceeding 0.80. As Hair described the relationship between the variables that must be less than 0.80; if such relationship is more than 0.80, it may cause Multicollinearity. This research found that the relationship between the independent variables with the highest value was 0.735, in which it was not exceed 0.80. Multicollinearity problem was not found. Therefore, it can be tested by using Multiple Regression Analysis. in which estimating linear models [22]., the Multicollinearity problem was not founding this research and for next step can be tested by Multiple Regression Analysis, showed on figure 2.

Figure 2
Research Results



The hypotheses testing found that marketing mix can explain the variation of decision making up to 76.00% (Adjusted R-Square 0.760) at 0.05 significant level. Marketing mix (7P's) factors had statistically significant positive influenced on decision making with standardized coefficients (β) 0.347 of promotion, 0.332 of product, 0.273 of place, 0.229 of process and 0.158 of price, respectively.

Table 3

Multiple regression analysis between a marketing mix factor and decision making

Marketing mix factor affecting	Std. Error	β
the decision making		
(Constant)	.131	
Product	.030	.332
Price	.040	.158
Place	.029	.273
Promotion	.027	.347
People	.036	.035
Physical evidence	.031	.018
Process	.032	.229

The first hypothesis testing can explain that the marketing mix were affecting customer to decision making 76.0 % (R-square .760), at statistically significant level .05 and the second hypothesis testing found that , promotion factor of marketing mix was positive influence for the customer decision making standard coefficients(β) .347 at statistically significant level .05

CONCLUSION AND DISCUSSION

Based on a literature review of the structure, the conceptual relationship between the hypotheses proposed by the conceptual framework can be described as follows. This research study aimed to investigate marketing mix factors (7P's) affecting on customer decision making of construction material store in Nakae district, Nakhon Phanom province, Thailand. The marketing mix factors had statistically significant positive influenced on decision making behaviors of product purchasing. Thus, the following suggestions from the research results can be used as guidelines. Firstly, marketing mix factors seem to be one of the key success factors to enhance decision making of construction material store in Nakae district, Nakhon Phanom province, Thailand. To increase decision making on product purchasing, business should strengthen the physical evidence and people aspects. The presence of construction material in the marketplace or good branding and efficient entire systems on business running can reflect customer satisfaction and enhance decision making behavior. Secondly, promotion and product factor of marketing mix, especially motivation and recognition can increase product purchasing behavior. The consumer's awareness, quality, benefit, and trustworthy standards on products are closely associated with the consumer's decision making. From research result give benefits for retail entrepreneur or retail business to deal with the changes(e.g. new technology, life style, economy) and guiding to the best strategy for entrepreneur to get more profits. This research had study limited to area of study that scope in Nakae district, Nakhon Phanom province of Thailand. In the future research may be expanding to total area of Thailand for better results.

REFERENCES

- [1] Cronbach, L. J. (1951), "Coefficient Alpha and the Internal Structure of Tests", *Psychometrika*. Vol.16, Pp.297-334
- [2] Yamane. (1967). Taro Statistic: An Introductory Analysis. New York: Harper &row.
- [3] James R. Bettman (1979), "Issues in Research on Consumer Choice", in NA Advances in Consumer Research Volume 06, eds. William L. Wilkie, Ann Abor, MI: Association for Consumer Research, Pp. 214-217.
- [4] Booms, B. & Bitner, M. J. (1981). Marketing Strategies and Organizational Structures for Service Firms. Marketing of Services, James H. Donnelly and William R. George, eds. Chicago: American Marketing Association, Pp.47-51.
- [5] Sproles, G.B. & Kendall, E., (1986), "A methodology for profiling consumers' decision-making styles", *The Journal of Consumer Affairs*, Vol. 20 No. 2, Pp. 267-279.

- [6] Du Plessis, P. J., Rousseau, G. G., and Blem, N. H. (1991). Consumer behavior. A South African perspective Pretoria, Sigma.
- [7] Loudon, D. L., and Bitta, A. J. D. (1993). Consumer behavior: concepts and applications, (4th ed.) McGraw Hill.
- [8] Schiffman, L. G., & Kanuk, L. L. (1994). Consumer behavior. (5th ed.). Englewood Cliffs, N. J.: Prentice-Hall.
- [9] Engel, J., Blackwell, R. D., and Miniard, P. (1995). Consumer Behavior, (8th ed.) Forth Worth, TX: Dryden.
- [10] Belch, G. E., Belch, M.A. (1998). Advertising and promotion: an integrated marketing communications perspective, (4 ed.) Irwin, McGraw-Hill.
- [11] Bettman, J.R., Luce, M.F. and Payne, J.W. (1998) Constructive Consumer Choice Processes. Journal of Consumer Research, Vol.25, Pp.187-217.
- [12] O'Cass A. (2000) An Assessment of consumers product, purchase decision, advertising and consumption involvement in fashion clothing. Journal of Economic Psychology.
- [13] Solomon M., Bamossy G. and Askegaard S., (2002) Consumer Behaviour; A European Perspective, 2nd ed. UK: Prentice Hall Europe.
- [14] Xia, L., and Sudharshan, D. (2002). "Effects of interruptions on consumer online decision processes," Journal of Consumer Psychology (12:3), Pp. 265-280.
- [15] Moon, B. J. (2004), "Consumer adoption of the internet as an information search and product purchase channel: some research hypotheses," International Journal of Internet Marketing and Advertising (1:1), Pp. 104-118.
- [16] Su, B. C. (2007). "Consumer e-tailer choice strategies at on-line shopping comparison sites," International Journal of Electronic Commerce (11:3), Pp. 135-159.
- [17] Kotler, P., Armstrong, G., Wong, V., & Saunders, J. (2008). Principle of Marketing (5th ed.). Harlow, England: Pearson Education Limited.
- [18] Kotler, P., & Keller, K. (2009). Marketing management (13th ed.). Pearson Prentice Hall, Upper Saddle River, New Jersey.
- [19] Kotler, P., & Armstrong, G. (2010). Principle of Marketing (13th ed.) Pearson Prentice Hall, Upper Saddle River, New Jersey.
- [20] Mahé, T. (2010). Are Stated Preferences Confirmed by Purchasing Behaviors? The Case of Fair Trade-Certified Bananas in Switzerland. Journal of Business Ethics, Pp. 301-315.
- [21] Ramseook-Munhurrun, P., Lukea-Bhiwajee, S. D., & Naidoo, P. (2010). Service Quality in the Public Service.
 - International Journal of Management and Marketing Research.
- [22] Hair, J. F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010), "Multivariate data analysis", 7th ed. *Prentice Hall, Englewood Cliffs*.
- [23] Singh, M. (2012). Marketing Mix of 4P's for Competitive Advantage. IOSR Journal of Business and Management, Pp.40-45.
- [24] Thomyachati, K. (2012). Satisfaction of Customers at Coffee Shop In Gas Station In Bangkok.
- [25] Azila-Gbettor, E. M., Kwodjo Avorga, S. M., Danku, L. S., & Atatsi, E. A. (2013). Physical Evidence and Quality Service Delivery in Public Hospitals in Ghana. International Review of Management and Marketing, Pp. 153-163.
- [26] Jarunee, S. (2013), "Consumer Behavior, Faculty of Management Science", *Rajabhat Songkhla University*.
- [27] Friesner, T. (2014). Marketing Teacher. Retrieved from Marketing Teacher Web Site: http://www.marketingteacher.com/marketing-mix/

The Inimitable Blend of Poetics and Politics: Reading Narendra Modi and Pablo Neruda as the Poets of People

Falguni P Desai

Shri M.R. Desai Arts & E.E. Laher Kosadia Commerce College, Chikhili, Dist. Navsari, Gujarat, India. Email: fpdesai2012@gmail.com

ABSTRACT

Inventively the present paper evaluates and shares the experiences of exploring poetics and politics in the poetry of Narendra Modi and Pablo Neruda. It traces the course of discovering the poet's expression as the journey within, a divine communion with cosmic consciousness an idea of nation building and collective harmony. This paper is an attempt to decipher the blend of poetics and politics with poet's universal vision of harmony and their idea of nation building discovered while close reading of their poetry. This quest of comparative reading of Narendra Modi and Pablo Neruda as poets of people began long back in 2011. I am glad to present this study after working on it gradually for long, in this paper, poems of Modi and Neruda are selected for close reading and conclusions are drawn thereby. The paper focuses that the synthesis poetics and politics can be taken as power and it is undoubtedly linked with national identity. In the process of closely reading both the poets they are seen celebrating the spirit of individual, society, nation and the grandeur of universe in a holistic loom. In their creative writing each of them is explicit as poet as well as a leader with multiplicity of stands. The paper projects how and why poet Narendra Modi and leader Narendra Modi, is promising. Why and how Poet Pablo Neruda and leader Pablo Neruda appeals. Their works reflect that the poet in their individuality chant about internal order of man, while the leader relates to the external ordering of men. A quest for internal order in a given epoch coincides with the external ordering and this finally leads to construction of better society, new nation and a new world. The present study is progressively morphed into concern with cosmic rhythm instead of simply looking for influences and forerunners of poetry and politics in various periods. I have gravitated towards sharing my zest of reading the poems of both these poets. I have considered the poems from AANKH AA DHANYA CHHE by Modi and Neruda's ESAPANA EN EL CORAZON and RESIDENCIA EN LA TIERRA as a more radical investigation into the possibilities and limits of poetics and politics as field of human activity. Attempting this study is like promoting of inquest, the interchange of human spirit, language and the objects of nature, corresponding to the interplay of poet and public. I conclude and elaborate on following points related to present study - The paper explores the predicament in Narendra Modi and Pablo Neruda's commitment to poetry, public and politics. They are though broadly different in ability, are inseparably interdependent. Poetics and politics both are characterized by a renewed momentum for change and by a sway to go further than their own realization. It cannot be overlooked that socially concerned and politically charged poems are evidently produced during mature and diversely experienced age after an equally serious period of personal experiences of these poets. The final poetic result is a unified whole, a holistic design where no associated thoughts can be bisected. Well balanced and likewise important dedication: towards poetry and public are graciously approving each other in the poetry and politics of both these poets.

Key Words: poetics, politics, public, harmony, nation building.

AN ANALYSIS ON THE INFLUENCE OF SERVICE QUALITY FOR SATISFACTION LEVEL AMONG INDONESIAN WORKERS IN MALAYSIA IN MANUFACTURING AND SERVICES SECTORS

ARIF MURTI ROZAMURI¹, NUR RIZA MOHD SURADI²

¹Universitas Pertamina, ²Universiti Kebangsaan Malaysia Email: arifmurti.rozamuri@gmail.com

ABSTRACT

This research concerns an analysis on the service quality among Indonesian workers in Malaysia in manufacturing and services sector. Indonesian labour is one of the highest employee in Malaysia. Although complementing one another, managing the Indonesian workforce is not without challenges. Among them is the type of work not in accordance with the employment agreement, over time work with no additional allowance, termination of employment and repatriation of employees without their rights granted. Therefore, the main point of this study is to analyze the effect of service quality on Indonesia's level of job satisfaction. This is to see the extent of the influence of dimension of tangibles, reliability, responsiveness, assurance, and empathy towards employee satisfaction. This study was conducted using quantitative methods, while the respondents were Indonesian workers in Malaysia in the services and manufacturing sectors. The analysis of this study uses SPSS (Statistical Package for Social Sciences) software 19.0 and using PLS (Partial Least Squares) software. This study shows that 5 dimensions of service quality have an influence on the level of satisfaction. However, the dimension of responsiveness has a big impact on Indonesia's level of job satisfaction.

Keywords: Indonesian Workers, Service Quality, Manufacturing and Services.

EVALUATING THE DEGREE OF EFFECTIVENESS OF MULTIMEDIA IN MEDICAL SCIENCE AND ENGINEERING

Saeed Ahmed Kasi

Global development Institute (GDI), The University of Manchester, Chief Operating Officer, Balochistan Education Endowment Fund, Fulbright Scholar/Alumni, Maxwell School, SU, New York. British Chevening Scholar 2015/16. ahmedsaeedkasi@yahoo.com

ABSTRACT

The past decade witnessed a significant growth in the use of multimedia in various educational institutions, corporate sectors, trainings and seminars. Today, it has become an important part of higher education in medical science, engineering, management sciences and other field of studies.. With the advent of computer based innovation, this mode of learning has highly flourished across the globe. This paper explores the degree of effectiveness of multimedia in medical science and engineering. The results of this study shows that the multimedia application in the aforesaid disciplines seems much more effective if it is blended with the traditional mode of instructions. The cognitive loads of learning, specifically the Intrinsic Load and the Extraneous Load which multimedia exerts on the students of these disciplines suggest that this media should be blended with the traditional mode of instructions for optimum outcomes in terms of learning. The study also suggests certain technical measures to make the multimedia application more effective for the medical science and engineering studies. This research provides theoretical and practical guidelines to academics of the medical science and engineering disciplines.

KEY WORDS: Multimedia; Extraneous Load; Intrinsic Load; Interactive multimedia technology; Cognitive Theory of Learning;

INTRODUCTION

This paper comprehensively examines the degree of effectiveness of multimedia in two major disciplines of education vis-à-vis the medical science and the engineering. Ever since the advent of computer technology, the tools of multimedia are used for e-learning in educational institutions, corporate sectors, industries, trainings and seminars. The effectiveness of this technology in the spectrum of e-learning cannot be denied. However, the degree of its effectiveness is not uniform for all the disciplines of education. The paper analysis this fact on the basis of world renowned literature and a case study wherein data has been collected from the students of 03 educational institutions in Pakistan, namely the Bolan Medical College Quetta, The Hamdard Medical University Karachi and The Khuzdar Engineering University Balochistan. Unlike most of the existing literature on multimedia role in e- learning, this studies focuses on two specific components of education and evaluate its degree of effectiveness on the basis of primary and secondary data, including the major theories pertaining to this technology.

LITERATURE REVIEW

Definitions:

E-Learning is defined as instruction that is delivered via a digital device that is intended to promote learning (Clark & Mayer, 2016). The digital device can be any electronic device that is controlled by a computer chip, including a desktop computer, laptop computer, tablet, smart phone, game console or wearable devices such as head mounted virtual reality displays, Mayer, R. E. (2017). Multimedia instructional messages are presentations of material using words and pictures that are intended to foster learning. The pictures can be static graphics such as photos, drawings, maps, charts, figures, and tables or dynamic graphics such as video or animation, Richard E. Mayer (2002). E-learning is also called Web-based learning, online learning, distributed learning, computer-assisted instruction, or Internet-based learning, J. G. Ruiz et al (2006). The rationale for computer-based multimedia instruction is that people learn better from words and pictures than

from words alone, Mayer, R. E. (2017). According to R. Brunken, et al (2010) the computer-based instrument provides a direct and objective measure that overcomes many of the shortcomings of other indirect and subjective methods that will enable researchers to validate empirically theoretical predictions of CLT(Cognitive Load Theory).

The Cognitive Load:

The Cognitive Load Theory by Sweller (1994) cited by Brame C.J (2015) has 03 components: The Intrinsic Load which is inherent to the subject under study and is determined by the degree of connectivity with in the subject. The Germane Load which is level of cognitive activity necessary to reach the desired learning outcome. The Extraneous Load which is cognitive effort that does not help the learner towards the desired learning outcome. It is often termed as the load that rises from a poorly designed lessons.

The Cognitive Theory of Multimedia Learning:

The Cognitive Theory of Multimedia Learning (CTML) was presented by Richard E. Mayer (2012). According to Richard E. Mayer, this theory is based on three cognitive science principles of learning: the human information processing system includes dual channels for visual/pictorial and auditory/verbal processing (i.e. dual-channels assumption); each channel has limited capacity for processing (i.e. limited capacity assumption); and active learning entails carrying out a coordinated set of cognitive processes during learning (i.e. active processing assumption).

Literature background of Multimedia usage in Medical and Engineering Sciences:

Multimedia presents a number of challenges and opportunities which must be addressed if it is to be used effectively in an educational context, J. Carter (2002). Although adding pictures to words did not result in better remembering of the words, it did result in much better understanding, Mayer, R. E. (2017). Multimedia learning is widely used in life science education where the use of pictures and text can bring complex structures and processes to life. However the impact on academic performance and deeper understanding is not well documented, V. E. Rolfe and D. Gray (2011). Similar views are presented by Jorge G. et al (2006) who argued as: 'E-learning can be used by medical educators to improve the efficiency and effectiveness of educational interventions...; however, its use is highly variable among medical schools and appears to be more common in basic science courses than in clinical clerkships'. Due to these reasons Dewhurst et al. (1994) and Gibbons (2004) recommend a blend of the two means of instructions. According to these scholars 'multimedia instruction is a well established means of instructional delivery in the life sciences and is often used to complement or blend with traditional didactic elements (Pereira et al. 2007) or replace other 'traditional' teaching methods altogether (cited by V. E. Rolfe and D. Gray, 2011).

Electronic courses in science and engineering are not as widespread as courses in other disciplines in higher education. The reasons for this are that, science and engineering education has, traditionally, been content centered, design-oriented, and is permeated by the development of problem-solving skills (Bourne, 2005), cited in S. Junaidu (2008). Often one of the difficulties in presenting science or engineering content is that the concepts being portrayed are microscopic in detail. From biological cell structures to the structures of atoms, learner understanding of the content is often limited by the media that is being used to present it. Frequently science and engineering texts provide abstract, two dimensional drawings, which require interpretation by the reader. More often than not, spatial ability wanes and thus student understanding of such drawings, and the microscopic details they represent, is hindered, J. L. Mohler and W. Lafayette (2001). Laboratories are a mainstay of engineering education, as are mathematical foundations and design tools. Laboratories (Grose, 2003; Peterson, 2002) are notably difficult to provide online because of the traditional desire for the direct operation of instruments, S. Junaidu (2008). Well-designed laboratory experiments provide the best means to learn Medical Education. However, there are many barriers on the use of real laboratory experiments. As a result of these difficulties, computer simulations have created several physiological phenomena that can be used to supplement traditional laboratories and lectures, providing students with many more opportunities to learn by experimentation, S. Arulsamy (2012).

Multimedia as well as any environment in which there is little or no interaction, can fall quite short for learning, J. L. Mohler and W. Lafayette (2001). Although engineering content lends itself well to interactive multimedia techniques for delivery, most materials are still traditionally based, J. L. Mohler and W. Lafayette (2001). The content through multimedia is grasped well if it is designed properly. Indeed, proper design of multimedia instructions decrease the magnitude of Extraneous Load associated with the Cognitive Theory of Learning. According to N. Issa, et al (2013) 'Effective designs help learners attend to relevant information, organise it into a coherent mental representation, and integrate it with prior knowledge. Poorly designed multimedia materials may overwhelm and confuse learners'. Jorge G et al (2006) recommends a bled of the two ways of instructions by saying as: 'There is evidence for the effectiveness and acceptance of e-learning within the medical education community, especially when combined with traditional teacher led activities in a blended-learning educational experience'.

METHODOLOGY

This paper is based on qualitative methods of research. Qualitative research is not directed to a single objective reality; rather, the focus is on how people invest their experiences with meaning and the assumption is that such subjective interpretations will vary across individuals, Miller (2013:137). 'To design a study, particularly a qualitative study, you can't just develop (or borrow) a logical strategy in advance and then implement it faithfully. Design in qualitative research is an ongoing process', J. A. Maxwell (2005:3). Whenever necessary, the comparative methods of research will also be used to overcome the issues of accuracy in data.

The data for this research is obtained both from primary and secondary sources. The primary data include the data from the questionnaires delivered to 450 students ,while the secondary data include the literature of the renowned scholars, and peer reviewed articles.

CASE STUDY:

This study is conducted in three Universities of medical and engineering sciences, namely the Hamdard Medical University Karachi, and the Bolan Medical College (BMC), Quetta and the Khuzdar Engineering University Balochistan. In Hamdard Medical University Karachi, the class lectures are mostly delivered via multimedia where as in the remaining two institutions the class instructions are mostly via the traditional way of teaching . A total of 450 students, 150 from each institutions was given the questionnaire . The students selected from the Hamdard University were of $3^{\rm rd}$ year professional and that of Bolan Medical College Quetta and the Khuzdar Engineering University were from the $2^{\rm nd}$ year professional. From each of these institutions, a sample population of N=150 was selected and a questionnaire was handed over to them with following questions;

Which means of instructions in the class do you prefer and why?

(a) Multimedia; (b) The traditional way; (c) Blend of the two Medias of instructions; (d) Reasons/justification

The replies to the aforesaid questionnaire are tabulated below. Out of 450, 386 students replied to the questionnaire. Their replies and reasons/justifications are tabulated below in Table 1 and Table 2.

Table 1

Name of Institutions	Total No. of students replied	No. of students who supported multimedia applications	No. of students who opposed multimedia applications	No. of students who favoured a blend of the two medias
Humdard	141	58	02	81
University Karachi				
%age	94%	41%	1.5%	57%
Bolan Medical	127	53	16	58
College Quetta				
%age	84%	42%	12.5 %	46%
Khuzdar	118	32	18	68
Engineering				
University				
Balochistan				
%age	79%	27%	15%	58%

Table 2

Case No.	Majority views
1. Students who supported Multimedia	Better and easy understanding of lectures.
	Easy access to knowledge.
2. Students who supported traditional way of	Multimedia create confusion; Laboratory instruction
instructions.	can't be easily understandable through multimedia
	learning.
3. Students who favoured blend of the two means of	Practical instruction should be through traditional
instructions.	means of laboratories and theoretical aspect should
	be through multimedia.

FINDINGS:

The aforesaid case study explores the following major points towards the subject research:

- > The medical science and engineering instructions require both the traditional and multimedia sources of learning.
- > All the instructions to medical and engineering students can't be possible solely by means of multimedia sources.

- ➤ If we apply the Cognitive Theory of Multimedia Learning (CTML) to students of case 2 in Table B, then we may suggest that it is the extraneous load due to which some students preferred the traditional way of instructions.
- The case 3 in Table B, that is the blend of the two means of instructions seems highly effective in the context of medical and engineering studies.

DISCUSSION

Both the literature review and the case study suggest that unlike other disciplines, the studies of medical science and engineering cannot be instructed via multimedia only. Due to the complications of the medical and engineering studies, including practical and laboratory aspects of these science, the traditional means of instructions cannot be abolished from these disciplines at all.

The extraneous load and the intrinsic load in the courses of medical science and engineering are also optimum as compared to other disciplines of studies. To overcome the issue it is imperative that both the traditional and multimedia sources be utilized to get maximum learning from the instructors in medical and engineering institutions.

CONCLUSION

This paper reviewed the degree of effectiveness of multimedia usage both in medical science and engineering on the basis of renowned literature and peer reviewed articles. The case study conducted in medical and engineering institutions was also analyzed. Both the literature review and the case study concluded that a blend of the multimedia instructions and the traditional way of teaching in medical and engineering institutions is imperative for optimum learning. Due to the complexity of these sciences and the laboratory aspect of the practical involved in such kind of education, the traditional way of instructions cannot be abolished from its instructions . Thus, a blend of the two medias of instructions is the answer towards the effective learning of these disciplines.

REFERENCES

Brame C.J. (2015). Effective Educational Videos', Center for Teaching, Vanderbilt University, available online https://cft.vanderbilt.edu/guides-sub-pages/effective-educational-videos/

James L. Mohler, W. Lafayette. (2001). 'Using Interactive Multimedia Mechnologies to improve student understanding of spatially-dependent Engineering Concepts', Department of Computer Graphics Purdue University. .

Jim Carter (2002). 'A framework for the development of multimedia systems for use in engineering education, Computers and Education', Vol. 39, Issue 2, pp. 111-128.

Jorge G. Ruiz, MD, Michael J. Mintzer, MD, and Rosanne M. Leipzig (2006). 'The Impact of E-Learning in Medical Education', Academic Medicine, Vol. 81, No. 3.

Mayer, R. E. (2017). 'Using multimedia for e-learning', Journal of Computer Assisted Learning, Vol. 33: Issue 5, pp. 403–423.

Nabil Issa, Richard E. Mayer, Mary Schuller, Edward Wang, Michael B. Shapiro & Debra A. DaRosa (2013). 'Teaching for understanding in medical classrooms using multimedia design principles', Medical Education Journal, Vol. 47, pp. 388–396.

Richard E. Mayer (2002). 'Multimedia Learning', Psychology of Learning and Motivation, Vol. 41, pp.85-139.

Richard E. Mayer (2012). 'Introduction to Multimedia Learning' in the Cambridge Handbook of Multimedia learning, the Cambridge University Press, pp 1-16.

Ronald Brunken, Jan L. Plass, Detlev Leutner (2010). 'Direct Measurement of Cognitive Load in Multimedia Learning', Journal Educational Psychologist, Vol. 38, Issue 1, available online https://doi.org/10.1207/S15326985EP3801 7

Sahalu junaidu (2008). 'Effectiveness of Multimedia in Learning and Teaching Data Structures Online', Turkish Online Journal of Distance Education, Vol. 9 No. 4

S. Arulsamy (2012). Multimedia in Medical Education', Journal of Medical Sciences Vol. 1(1), pp. 7-11.

Vivien E Rolfe and Douglas Gray (2011). 'Are Multimedia Resources Effective in Life Science Education? A Meta-Analysis', Bioscience Education, Vol.18, pp. 1-14. Effect of the use of mother tongue (igbo language) in teaching and learning of basic science among rural primary school pupils in Anambra State, Nigeria

Anne Ndidi Meremikwu, Anulika Chinyere Okpara, Inyang Maurice Asuquo

Department of Science Education, University of Calabar, Calabar, Nigeria Email: annemeremikwu@yahoo.com

ABSTRACT

Rationale: The National Educational policy in Nigeria recommends the use of mother tongue in primary schools but the implementation of this has been very slow partly because of the ethnic diversity and limited indigenous data on the effectiveness of this model of instruction.

Objective: This study examined the effect of the use of Igbo language in teaching and learning of basic science among rural primary school pupils in Anambra State, Nigeria whose mother tongue is *Igbo* language. The main null hypothesis test by the study is that using Igbo language as a medium of instruction for basic primary school science will not significantly influence the learning outcome.

Methodology: Quasi experimental design was adopted for the study to test the null hypothesis. Stratified sampling including purposive sampling and simple random sampling techniques were used to select a sample of 392 primary school pupils drawn from the population of 1242 pupils in eight public and private schools. A 10-item Comparative Assessment Test (CAT) was designed and used for data collection. Data generated from the administration of the instruments were scored and analysed with SPSS version 20 using analysis of variance.

Results: The results showed that pupils taught basic science using mother tongue significantly differed in learning outcome from those pupils taught using English language in the research area by performing significantly better in the assessment test (F-statistic = 130.465, p-value < 0.01; Adjusted R-squared = 0.246); and that gender did not significantly influence learning outcome in basic science among these pupils.

Conclusion and recommendation: It is therefore concluded that appropriate adoption of the mother tongue (Igbo language) as the medium of instruction would significantly improve learning of basic science in primary schools. We recommend the regular use of mother tongue (Igbo language) as the medium of teaching basic science in Primary schools the study area (Anambra State). This would serve as a good example for others States in Nigeria and other African countries to emulate.

Role of AACSB, PRME and Faculty to Reshape Businesses: A Case of King Abdulaziz University's Economics and Admin Faculty

Tameem Albassam¹, Seita Almandeel², Mohammad Yamin³

1,2,3 Faculty of Economics and Administration
King Abdulaziz University
Jeddah, 21589, Saudi Arabia

1talbassam@kau.edu.sa, 2Sialmandeel@kau.edu.sa, 3myamin@kau.edu.sa

ABSTRACT

Association to Advance Collegiate Schools of Business (AACSB) is providing accreditation to hundreds of business schools and institutes around the world. As part of the process to gain accreditation, business faculties participate in a range of training programs, workshops, seminars, conferences, campus visits and other forms of regular meetings. In addition, AACSB laisses with business entities and provides consultation, guidance and networking of academic faculty members and business executives. The Business faculties, especially the ones accredited by AACSB, are expected to extend the role of guidance and networking, provide a platform to exchange views, and liaise with local entities of education and business on a continuous basis. Faculty of Economics and Administration (FEA) of the King Abdulaziz University is the first AACSB accredited faculty in Saudi Arabia. The FEA is also accredited by EPAS and AMBA, and a member of Principles for Responsible Management Education (PRME). The faculty has been encouraging and supporting other faculties in the country to undergo the AACSB accreditations and become a member of PRME. The FEA is also striving hard to support local businesses by way of organising seminars, conferences, symposia, workshops and lending targeted support on one to one basis. The aim of this article is to review the role and policies of AACSB, PRME, and the efforts of FEA in promoting awareness and help to the local businesses.

Keywords— Business, Entrepreneurship, AACSB, Social Responsibility, Community Service, Academic Institutions.

Decision Making Behavior of Online Stores Customer in Northeastern Thailand

Chattawat Limpsurapong* & Thanyawan Sangnual**

*Lecturer, Department of Business Management, Faculty of Liberal Arts and Management Science,

Kasetsart University, Thailand

E-mail: chattawat.l@ku.th

**Graduate Student of Kasetsart University, Thailand

E-mail: thanyawan.sangnual@ktb.co.th

ABSTRACT

This research objectives were 1) To study the demographic factors affecting the decision making behavior of online shops. 2) To study the marketing mix factors affecting the decision making behavior of online shop. 3) To know how to improve the online store to meet the needs and satisfaction of customers in the online store.

A quantitative method was used as a major approach of this research. Unknown population, to formulate the sampling size was used of the Cochran thus the sample size was 400 samples, and used proportional sampling and simple random sampling [1]. A questionnaire was use to collect data, and divided into 3 parts. The independent variables are marketing mix (product, price, place, promotion, people, and process) Kotler, P. [13]. The dependent variable is behavior decision making buy product in online stores. The quality control of this research was adopted by reviewing the literature for content validity, and the reliability test was used Cronbach's Alpha method. The results showed that The independent variables are marketing mix and The dependent variable is behavior decision making were .951 and .892 respectively. The data analysis was used frequency, percentage, mean, standard deviation, and the hypothesis testing was used t-test, F-test (One way ANOVA), Pearson product moment coefficient, and multiple regressions.

The survey data of the respondents as follows 73.3% were female and 26.7% were male. The Respondents age, 25-34 year 63.3%, 35-44 year 23.3%, 45-54 year 10.0%, less than 25 year 3.3%. From the education categories there was bachelor degree 80.0%, under bachelor degree 13.3% and master degree 6.7%. Average monthly income between 10,000-20,000 30%, between 20,000-30,000 30%, more than 40,000 10%, between 30,001-40,000 10% and under 10,000 bath. Product type cosmetics 20%, Clothing 63.3%, game 6.7%, and other 10%. The hypothesis testing results were found that promotion has effect to behavior decision making buy product in online stores at the standard coefficient of .758 and statistical significant level of .006.

Keywords- Marketing Mix, Behavior decision making buy product, Online Stores

INTRODUCTION

Background

At present, the society has changed a lot in technology. The technology is important in many ways of life, the development of communication equipment as well as the network signal to help communicate more easily and quickly. Make it comfortable in daily life. Technology plays an important role in many aspects. Education Transportation Business communication etc.

With the development of more technological growth. The use of technology to be more effective. And technology is used to make more useful. Especially social media. Nowadays, social media has entered the business sector successfully. It is popular and essential to human life. Social networking is becoming a marketplace for buying and selling products. The Internet is a trading hub between traders and traders. There are many shops and businesses that need this marketing space. It has a high return and low cost. Do not go through the middleman. Customers have no limit on the amount of time and place. Can reach customers or groups in large numbers and meet the needs and the fastest.

So entrepreneurs Or business owners, so see the benefits of online media. And want to develop their own online business. Because if the business can know the needs of the customer how much. Means business opportunity to enter the market. It consists of many factors. Affecting consumer buying behavior. To help entrepreneurs know and improve online stores to meet the needs of more consumers, so it is a source of education.

Research Objectives

This paper was investigating 4 objectives as follow:

- 1. To study the factors affecting the decision making behavior of online store.
- 2. To analyze the factors affecting the decision making behavior of the online store.
- 3. To know how to improve the online store to meet the needs and satisfaction of customers in the online store.

LITERATURE REVIEW

Marketing Mix

Thongchai, S. Meaning the marketing mix is a unifying combination of pricing. Promotion Products sold the distribution is designed to reach the target audience [4]. Saree, W. (1999) Marketing Mix It means having a product that can meet the needs of the target customers. Consumers accept the price. And consumers pay because of the value. It also distributes and distributes products to customers. And try to create incentives in the product [5]. Kotler, P. Meaning that the marketing mix is a marketing tool that can be used to meet the needs and satisfaction of target customers. The marketing mix consists of everything that the business uses to have. Influence the product demand of the business [8]. Siriwan, S., et al. Marketing mix refers to a controlled marketing variable. The company is used to satisfy customers, target group Contains the following tools. Product refers to what the company offers to sell to attract interest by consuming or using the service that can satisfy its customers [12]. Armstrong and Kotler satisfaction may come. From the touch or impression, such as packaging, color, brand, product quality. The reputation of the manufacturer or distributor. It can be either in the form of identity or innocence. Just that the product. Utilization of utility and value in the eyes of consumers who are consumers of such products. Price refers to the amount of money that must be paid in order to receive a product or product services of the business Or maybe all the customer value. To benefit from the use of products, products or services value for money paid. Armstrong and Kotler place refers to the distribution channel of goods and services. Including how to bring products and services to the consumer to keep up with the demand. The criteria that must be considered. Who is the target audience? and should distribute products and services to consumers. Which channel would be most appropriate [11]. Thbusinessinfo marketing Promotion means marketing communication tools to create motivation, thinking, feeling, need and satisfaction in products and services. This will be used to motivate target customers. Need to remind or remember the product itself. People means employees who work for the benefit of various organizations, including business owners. Senior manager Middle management Bottom management General staff, housewives and so on. Personnel can be considered as an important marketing ingredient. As a planner and performer to drive the organization in a strategic direction in addition, one of the important roles of the personnel is the interaction and the friendliness of the customers. It is important to give the customer satisfaction and long-term commitment to the organization. Physical characteristics mean that the customer can experience the choice product or service of the organization. It creates distinctive and distinctive qualities such as decoration. Form of food plate arrangement the costume of the staff in the shop speaking to customer fast service, etc. This is essential for business operations, especially the service business, which should be built on the overall quality. That is in terms of physical condition customer. Can be seen Physical characteristics that customer satisfaction and the novelty of the condition different physics from different providers [17], similarly Somwong, P. states that physical attributes are tangible to customers while still using goods and / or services. Symbols that customers understand the meaning of getting information from marketing communications into the public. Process means It is an activity related to the methodology and practice of the service offered to the user to provide the service quickly, with each process can have many activities. The format and operation of the organization. If activities Within the process, there

are links and harmonics. Will make the process overall efficiency the customer satisfaction. The process In the field of services, a clear workflow design is required to all employees within the organization. View Profile Can be done in the same direction accurately and smoothly [7]. Just like Kanokpun, S. [16].

Online Marketing Mix

Vichien, W. and Chitlada, V. Discuss the online marketing mix. It is a new marketing component. 6 P's include: Product, Price, Place, Promotion, Privacy and personal service by the mix online marketing is all about the relevance and importance of online marketing, which includes: 1. Product is offered to meet the needs of customers. Target group is divided into 3 categories physical goods, digital goods, and services.2. Price is the value of the product in terms of currency or is that worth acceptance of the proposed product exchange. It is necessary to take into account factors in pricing. The product must take into account the market price. Transportation cost Cheap products may not always sell. Focus on ease of purchase. And products that are too cheap may be sold in bulk or sold in bulk. 3. Place or distribution is the process of moving. Product from manufacturers to consumers or target markets. The factors in determining the channel selling products online, with the website as a distribution channel. The factors that should be considered are website must be easy to use. Website access or quick download the information presented is clear. And data security. 4. Marketing Promotion is the marketing communication between the seller and the seller buy or target Its purpose is to alert, inform, or induce the demand for products and purchase decisions. The publicity must be prepared before the information is ready to complete the site to make it easy to remember. Create a lively atmosphere by participating in the activities and consider the target audience and budget. There are many ways to promote. To know and recognize the product or service. Buy and buy more. By using different tools such as banner advertising (billboards), advertising via email, ads, free of charge with other websites. Advertising with the system member introductions advertising by exchanging links with other websites. Search Engines or web directory. 5. Privacy is a policy that operators or organizations. It was announced to the public that. How do you protect your personal information? Operators should set policies. To build credibility In particular, information about privacy such as address, telephone number, credit card number, etc. 6. Personalization is an interactive service. One to One Marketing to offer customers exactly what they want. Customer service and customer friendliness [10][14].

Decision making

Walters Explain that Decision means choosing to do something by choosing from several alternatives [2]. Schiffman and Kanuk is the process of choosing from two alternatives. Consumers will consider the decision-making process in terms of both mental (mental) and physical (physical) behaviors. Buying is a psychological and physical activity that occurs over a period of time. Both of these activities lead to buying and buying behavior [3]. Kotler (2000) Consumer decision-making is driven by motivation, perception, learning, personality, and attitudes that show the need and awareness of the range of products available. Existence or information provided by the manufacturer, and finally, the valuation of those choices [6].

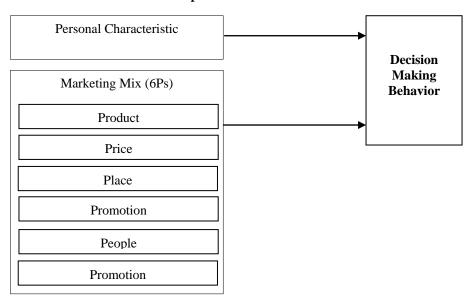
CONCEPTUAL MODEL AND HYPOTHESES

The research hypothesis and conceptual framework were as follow:

H₁: Age, gender, education level, occupation, consumer income, would have a positive effect on decision making behavior in online stores.

H₂: Product price place promotion people and processes In online stores, it is likely to have a positive effect on the decision to shop in an online store.

Figure 1
A conceptual model of this research



RESEARCH AND METHODOLOGY

In this research, the target population using the internet and ever shop online National Statistical Office total amount was un-identified. Aquantitative method was used as a major approach of this research [15]. Unknown population, to formulate the sampling size was used of the Cochran, thus the sample size was 400 samples, and used proportional sampling and simple random sampling. A questionnaire was use to collect data, collected data was used questionnaires, with as follows items: 25 questions of marketing mix (6Ps) and 3 questions of decision making behavior. The quality control of this research was adopted by reviewing the literature for content validity, and the reliability test was used Cronbach's Alpha method. The results showed that The independent variables are marketing mix and The dependent variable is behavior decision making were .951 and .892 respectively. The data analysis was used frequency, percentage, mean, standard deviation, and the hypothesis testing was used t-test, F-test (One way ANOVA), Pearson product moment coefficient, and multiple regressions [1].

Table 1
Mean, standard deviation, and Cronbach's alpha of research variables

Variables	Indicator	Mean	S.D.	Cronbach's Alpha
Market Mix (6Ps)	Product	4.084	.617	.763
	Price	4.025	.617	.770
	Place	4.436	.564	.850
	Promotion	3.805	.727	.849
	People	3.955	.736	.933
	Process	4.085	.643	.887
Decision Mal	king Behavior	3.847	.818	.892

ANALYSIS OF DATA AND RESULTS OF THE STUDY

This research was used program for statistical analysis in social science to analysis of the data. The research finding and the hypothesis testing in this study were as follows.

Table 2
Number and percentage of samples classified by personal factors

Person	nal factors	Number of samples	Percent
Com	Male	99	24.8
Sex	Female	Female 301 Less than 25 years old 31 25-34 years 241 35 - 44 years 107 45 - 54 years 18 55 years 3 Under Bachelor's Degree 42 Bachelor's Degree 283 Master's Degree 75 Student 21 Civil / State Enterprises 191	75.3
	Less than 25 years old	31	7.8
	25-34 years	241	60.3
Age	35 - 44 years	107	26.8
	45 - 54 years	18	4.5
	55 years	3	0.8
	Under Bachelor's Degree	42	10.5
Education	Bachelor's Degree	283	70.8
	Master's Degree	75	18.8
	Student	21	5.3
	Civil / State Enterprises	191	47.8
accumation	Company Employee	128	32.0
occupation	Business Owner	46	11.5
	Home Maker	3	0.8
	Other	11	2.8
	Under 20,000 baht	169	42.3
Income	20,000 - 30,000 baht	136	34.0
income	30,000 - 40,000 baht	43	10.8
	More Than 40,000 baht	52	13.0

Table 3
Personal Characteristic by t-test

Variables	t	sig
1. Sex	1.108	.268

Table 4
Personal Characteristic by F-test (one way ANOVA)

Variables	F	sig
1. Age	5.445	.000
2. Graduation	2.174	.015
3. Job	3.441	.000

Table 5
Is showed the statistical relationship between a marketing mix factor and decision making that calculated and analyzed by multiple regression

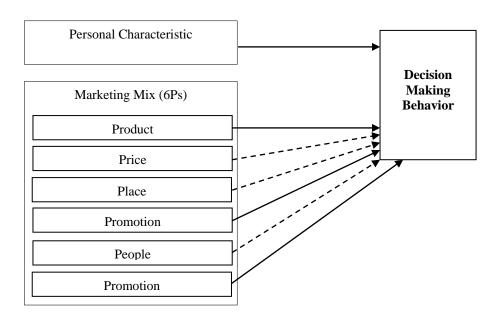
Variables	Std. Error	Beta	Sig.
1. Product	.089	.252	.000
2. Price	.083	018	.778
3. Place	.080	.021	.703
4. Promotion	.070	.257	.000
5. People	.085	136	.076
6. Process	.092	.320	.000

Table 6 Correlation analysis

	Product	Price	Place	Promotion	People	Process	Decision Making
Product	1						
Price	.728	1					
Place	.657	.586	1				
Promotion	.636	.612	.505	1			
People	.614	.599	.521	.717	1		
Process	.623	.604	.545	.641	.814	1	
Decision Making	.532	.447	.409	.525	.463	.532	1

^{*.} Correlation is significant at the 0.01 level

Figure 2
Research Results



CONCLUSION AND DISCUSSION

The study can conclude that consumers who decide to shop in online stores are mostly 25-34 year olds. Bachelor's degree is a government official or state enterprise the average monthly income is less than 20,000

baht. Therefore, this group of customers is a key customer who decides to shop in an online store. The appropriate marketing mix should include: product quality, variety, choice there is a new modern and reliability. Promotion there should be continuous marketing promotion activities such as promotion, discount, demo, usage warranty. And the process the system should be fast, accurate, easy to check.

REFERENCES

- [1] Cochran, W. G. (1977), "Sampling Techniques", 3rd ed., New York: Wiley.
- [2] Walters. (1978), "Adaptive Management of Renewable Resources", New York: Mc Graw Hill.
- [3] Schiffman, Leon G. and Kanuk Leslie Lazar. (1991), "Consumer Behavior", 4th ed. *New Jersey: Englewood Cliffs*.
- [4] Thongchai, Santiwong. (1996), "Consumer behavior in marketing". Bangkok: Thai Wattana Panich.
- [5] Saree Wongthum. (1999: 11), Marketing mix.[Online] http://spssthesis.blogspot.com/ (Retrieved on March 30, 2015)
- [6] Kotler, P. (2000). Marketing management (10th ed.). New Jersey: Prentice –Hall,Inc
- [7] Somwong, Phongsathaporn. (2003), Practical IMC (Integrated Marketing Communications Practice). Bangkok: *Brandage Book*.
- [8] Kotler, Philip. (2003), Marketing Management. Englewood Cliffs: Prentice Hall.
- [9] Wiklund, J., & Shepherd D. (2005), "Entrepreneurial orientation performance relationships," *Journal of Business Venturing*, 20(1): 71-91.
- [10] Vichian Wongnitchakul (2007). Marketing promotion administration. Bangkok University, Press.
- [11] Armstrong, G., & Kotler, P. (2009), Marketing: An introduction (9th ed.). Upper Saddle River, *NJ: Prentice Hall*.
- [12] Siriwan Sareerarat and colleagues (2009: 80-81). Marketing mix.[Online] .http://spssthesis.blogspot.com/ (Retrieved on March 30, 2015)
- [13] Kotler, Philip. (2010). Marketing Management. New Jersey: Prentice Hall.
- [14] Chitralada Viwatcharoenwong. (2010). Online marketing mix. [Online]: http://spssthesis.blogspot.sg/
- [15] National Statistical Office Ministry of Information and Communication Technology 2555. Report on Internet user behavior survey in Thailand, 2560. Search. https://www.etda.or.th/publishing-detail/thailand-internet-user-profile-2017.html
- [16] Kanokpan Suksitit. (2014) Marketing mix, service and restaurant use behavior. Japanese Community Mall in Bangkok. Business Administration Theses Graduate School of Marketing Srinakarinwirot University.
- [17] Knowledge of business partners. (2015) Study the target group with the 6W1H Model. http://tbusinessinfo.blogspot.com/2015/02/6w-1h-model.html

Quality of Work Life and Employee Organizational Commitment of Krung Thai Bank Public Company Limited, Thailand

Chattawat Limpsurapong* & Janejira Chatchomni**

*Lecturer, Department of Business Management, Faculty of Liberal Arts and Management Science,

Kasetsart University, Thailand

E-mail: chattawat.l@ku.th

**Graduate Student of Kasetsart University, Thailand

E-mail: janejira.chatchomni@ktb.co.th

ABSTRACT

The research purposes were: 1) to study the employee quality of work life of Krung Thai Bank Public Company Limited 2) to study the employee organizational commitment of Krung Thai Bank Public Company Limited 3) to study the different in quality of work life and employee organizational commitment when classified by personal factors 4) to investigate the influence of quality of work life on employee organizational commitment.

In this research the target population include, employees of Krung Thai Bank Public Company Limited in past of Krung Thai Bank agricultural industry's amount of 1,414 employees. Calculated according to the formula of Taro Yamane [1], simple size of 312 samples was selected by multistage sampling. Data collected were used from questionnaries with as follows item 36 questions of quality of work life and 17 questions of organizational commitment for appointment of questionnaries, Validity of the method content-related validity and to assess scales the reliability of the questionnaries. Cronbach's alpha coefficient was used. Reliability coefficient was calculated for the questionnaries. It was estimated to be .960 of quality of work life and .953 of organizational commitment. The data analysis was used frequency, percentage, mean, standard deviation, and the hypothesis testing was used t-test, F-test (One way ANOVA), and multiple regressions.

The survey data of the respondents as follows 17.9% were male and 82.1% were female. The Respondents age, 30-40 year 42.0%, less than 30 year 32.7%, 41-50 year 15.7% and more than 50 year 9.6%. From the education categories there was bachelor's degree 76.3% and upper bachelor's degree 23.7%. The operation levels were classified as Senior Supervisor 36.9%, Supervisor 27.6%, head leader 16.0% Deputy Manager 11.20%, authorities 7.7% and Manager 6.0%. The working experiences the details were as follows, under 5 year 34.9%, between 5-10 years 29.2%, more than 15 year 23.7% and between 11-15 year 12.2%. The employee salaries are as follows, between 15,000-25,000 baht 52.2%, more than 35,000 baht 26.3% and between 25,001-35,000 baht 21.5%. It was found that the quality of work life and organizational commitment were the statistically significant positive influence on organizational commitment standardized coefficients (β) . 669 respectively. Therefore, it can be concluded that the quality of work life and organizational commitment had statistically positive influence on organizational commitment of Krung Thai Bank Public Company Limited.

Keywords-quality of work life, organizational commitment1. Introduction

INTRODUCTION

The competition for human resources between banks in the past two years, it was 12% increase in staff turnover, up from a few years ago with only 4-5%. The survey information conducted in the first half of this year 2017. In comparison with other banks, Thai Farmers Bank had a resignation rate of 8.45%, which is 8.80% of Bank of Ayudhya, Siam Commercial Bank 7.02% and Bangkok Bank and Krung Thai Bank 5% and 1.47%, respectively. The competition in the banking sector was quite strong, such as the SMEs staff,

customer relationship management staff, including foreign affairs staff. Some employees have increased their new income from move to the other bank by 50%, 80% or some 100%. In addition to factors affecting human resource management in line with the changing trend in the banking business was both competitions from domestic and foreign. More over the entry to ASEAN Economic Community or AEC, there was a shortage of human resources in banking business, especially potential employees. The turnover of employees was a cause risk of data leakage. Furthermore, the domestic financial system is now more competitive, causing the banks to accelerate developing employees to be effective in their knowledge, skill, and working attitude to achieve the Bank's get more in efficiency and goals. As a result, Thai banking employees become more stressed, which may result in lower working efficiency as well as lower quality of work life, and the resignation of the job. It is a matter of urgency and importance of the bank executives to find ways to improve the quality of work life as well as organizational commitment. From the reasons above was the cause of this research.

The objectives of this research are as follows: 1) to study the employee quality of work life of Krung Thai Bank Public Company Limited. 2) to study the employee organizational commitment of Krung Thai Bank Public Company Limited. 3) to study the different in quality of work life and employee organizational commitment when classified by personal factors. 4) to investigate the influence of quality of work life on employee organizational commitment. The paper begins with a review of the concepts related to the quality of work life factors influencing on organizational commitment in order to conceptualize the model and develop the hypotheses. Next, the research methodology, analysis of data and findings are presented. Finally, conclusion and discussion of the research results along with managerial implications and suggestions for future research are described.

LITERATURE REVIEW

Quality of work life

The Definitions of quality of work life from the literature reviews are documented in many studies as follows. Napapat Tasing has defined the quality of work life as the nature of performed based on the model of Delamotte and Takezawa has defined the quality of work life as the development employees of a good living environment. The employees have good working conditions. Is under proper operation be safe. The benefits and rights are fair and equality in society [8]. In addition, Schermerhorn has defined the quality of work life as the quality of work life is a measure of the total quality of workplace [7]. This research had applied the quality of work life based on the concept of Walton determine the quality of work life by eight components as stated follows; 1) Adequate and fair compensation 2) Safe and healthy working conditions 3) Opportunity for developing and using human capacity 4) Future opportunity for developing continue growth and security 5) Social integration the work organization 6) Constitutionalism in the work organization 7) Work and the total lift space and 8) The social relevance of work life [2]. consequently, this study aimed to investigate such relationship in the Krung Thai Bank Public Company Limited.

Organizational commitment

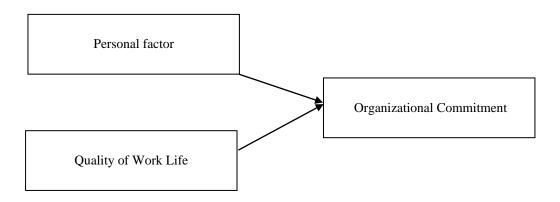
Reviews of the literature from the past until now, scholars have given the definition of the organizational commitment as follows. Mowday et al. has defined organizational commitment is more expressive than the usual allegiance. It is a strong relationship and it encourages people to dedicate themselves to creating a better organization [5]. In addition, Allen and Meyer proposed a model of there are three types of organizational commitment:1)mental commitment It consists of four factors: Personality, Job characteristics, Working Experience, and Structural features. 2) Commitment to persistence. 3) Commitment to norms [6]. Buchanan have given the definition of the organizational commitment meaning it is the satisfaction of the person to adhere to the goals and values of the organization, Role that is related to goals and values of the organization, or the need to give yourself a part of the organization. There are 3 types as follows, Identification Involvement and Loyalty [3]. This research had applied the organizational commitment based on the concept of Steers in which characterized organizational commitment by three components as stated follows; 1) a strong belief in and acceptance of the organization's goals and values, 2) a willingness to focus effort on helping the organization to achieve its goals, and 3) a strong desire to maintain membership in the

organization [4]. From the literature reviews, it can be seen that there are some relationship among these three variables to further investigate and conceptualize in the conceptual model with hypotheses development.

CONCEPTUAL MODEL AND HYPOTHESES

From the reviews of the literature, the conceptual model of this research study was presented in figure 1. It described the influence of quality of work life on organizational commitment of Krung Thai Bank Public Company Limited, Thailand. The conceptual model has been tested on the basis of the bodies of literature including quality of work life and organizational commitment, cited above, as well as the researcher's own context about the relationship among variables. The research conceptual framework were as follow:

Figure 1
Research Conceptual framework



Based on the reviews of the literature of the frameworks with the conceptualization of the relationships among variables, the hypotheses suggested by the conceptual model can be explained as follows:

H₁: Employee organizational commitment was different when classified by personal factors.

H₂: Quality of work life had positive Influencing on employee organizational commitment of Krung Thai Bank Public Company Limited, Thailand.

The research hypotheses can be described in the forms of structural equations in order to show the relationship among variables and predict the dependent variable for hypotheses testing. The symbols used to represent the variables stated as follows:

QWL = Quality of Work Life
ORC = Organizational Commitment

The structural equation can be described as follows:

ORC = β QWL(1)

RESEARCH METHODOLOGY

This research study aimed to investigate quality of work life and employee organizational commitment of Krung Thai Bank Public Company Limited, Thailand. The research study was a quantitative research method. In this research the target population include, employees of Krung Thai Bank Public Company Limited in past of Krung Thai Bank agricultural industry's amount of 1,414 employees Calculated according

to the formula of Taro Yamane [1], simple size of 312 samples was selected by multistage sampling. collected data was used questionnaires, Data were collected through 5-point Likert scale questionnaire surveys., with as follows items: 36 questions of quality of work life adapted from Walton [2] and 17 questions of organizational commitment adapted from Steers [4]. Validity of the method content-related validity and to assess scales the reliability of the questionnaries. Cronbach's alpha coefficient was used. Reliability coefficient was calculated for the questionnaries. It was estimated to be .960 of quality of work life and .953 of organizational commitment. as shown in Table 1. The cronbach's alpha value of the scale of all variables is greater than 0.7, so it shows that the scale has very good reliability. The data analysis was used frequency, percentage, mean, standard deviation, and the hypothesis testing was used t-test, F-test (One way ANOVA), Pearson product moment coefficient, and multiple regressions. The research results can be significantly analyzed with 95% confidence interval.

ANALYSIS OF DATA AND RESULTS OF THE STUDY

This research was used program for statistical analysis in social science to analysis of the data. The research finding and the hypothesis testing in this study were as follows.

Table 1
Mean, standard deviation, and Cronbach's alpha of research variables

Variables	Mean	S.D.	Cronbach's Alpha
Quality of Work Life	4.19	4.35	.960
Organizational Commitment	0.446	0.461	.953

For descriptive statistics, the collected data were analyzed by using means and standard deviation. The means score of staffs' opinion on quality of work life and organizational commitment were at high levels; mean of 4.19 and 4.35, respectively. The standard deviation score of quality of work life and organizational commitment were 0.446 and 0.461, respectively.

The survey data of the respondents as follows 20.0% were male and 80.0% were female. The Respondents age, 30-40 year 43.3%, less than 30 year 30.0%, 45-50 year 16.7% and more than 50 year 10.0%. From the education categories there was bachelor degree 83.3% and upper bachelor degree 16.7%. The operation levels were classified as Senior Supervisor 43.3%, Supervisor 30.0%, Deputy Manager 16.7%, head leader 6.7% and authorities 3.3%. The working experiences the details were as follows, between 5-10 years 36.7%, under 5 year 26.7%, more than 15 year 26.7% and between 11-15 year 10%. The employee salaries are as follows, between 15,000-25,000 baht 50.0%, more than 35,000 baht 30.0% and between 25,001-35,000 baht 20%. as stated in Table 2.

Table 2
Description of the respondents

n = 312

Demographic Information		Numbers of respondents (NR)	Percentage of NR to number of TR*
Sex	Male	62	20.00%
SCA	Female	250	80.00%
	less than 30 year	94	30.00%
Age	30-40 Year	135	43.30%
1180	41-50 Year	52	16.70%
	More Than 50 Year	31	10.00%
T do and an	Bachelor's Degree	260	83.30%
Education	Upper Bachelor's Degree	52	16.70%
	Deputy Manager	52	16.70%
	Head leader	21	6.70%
Operation Levels	Senior Supervisor	135	43.30%
	Supervisor	94	30.00%
	Authorities	10	3.30%
	under 5 year	83	26.70%
working avmanianass	5-10 years	115	36.70%
working experiences	11-15 year	31	10.00%
	more than 15 year	83	26.70%
	15,000-25,000 Baht	156	50.00%
Monthly Income	25,001-35,000 Baht	62	20.00%
	More Than 35,000 Baht	94	30.00%
Tronung Income			

^{*} TR denotes total respondents.

H₁: Employee organizational commitment was different when classified by personal factors.

The first hypothesis was employee organizational commitment was different when classified by personal factors. The research finding by t-test, and F-test (One Way ANOVA) was as follow:

Table-3 The different of organizational commitment when classified by sex

Sex	Organizational Commitment				
	\overline{x} S.D. t Sig.				
Male	4.560	.377		00044	
Female	4.291	.514	-3.702	.000**	

Table 4

The different of organizational commitment when classified by age

Age	Organizational Commitment					
	\overline{x} S.D. F Sig.					
More than 50 year	4.837	.177				
41-50 year	4.395	.416	14.920	.000**		
30-40 year	4.324	.507				
Less than 30 year	4.187	.506				

Table 5

The different of organizational commitment when classified by education

Education	Organizational Commitment			
	$\overline{\mathbf{x}}$	S.D.	t	Sig.
Upper bachelor degree	4.494	.513		
Bachelor degree	4.292	.490	3.064	.002**

 ${\bf Table~6}$ The different of organizational commitment when classified by operation levels

Operation levels	Organizational Commitment			
	$\bar{\mathbf{x}}$	S.D.	F	Sig.
Manager	4.941	.083	11.455	.000**
Deputy Manager	4.783	.345		
Head leader	4.436	.451		
Senior Supervisor	4.317	.443		
Supervisor	4.219	.486		
Authorities	3.985	.647		

Table 7

The different of organizational commitment when classified by working experiences

Working experiences		Organizational Commitment		
	$\overline{\mathbf{x}}$	S.D.	F	Sig.
More than 15	4.581	.407		
Between 11-15 year	4.557	.425	15.206 .000**	000**
Between 5-10 year	4.269	.499		.000**
Under 5 year	4.159	.501	-	

Table 8

The different of organizational commitment when classified by income

Income	Organizational Commitment			
	$\overline{\mathbf{X}}$	S.D.	F	Sig.
more than 35,000 baht	4.617	.402	20.176	00044
between 25,001-35,000 baht	4.322	.493	20.456	.000**
between 15,000-25,000 baht	4.207	.497		

The results of the hypothesis testing, when classified by personal factors, found that there were six statistically significant differences at . 05 level, Therefore, personal factors effect to organizational commitment, including sex, age, education, operation levels, working experiences, and income.

H₂: Quality of work life had positive Influencing on employee organizational commitment of Krung Thai Bank Public Company Limited, Thailand.

For inferential statistics, in this research study, the analysis of the correlation coefficient between the independent variables was explored. Pearson's Product-Moment Correlation was used to determine the

relationship of the independent variables according to research conceptual model. The objective was to find the magnitude of correlation among the variables. Multiple Regression Analysis was used to test hypotheses in order to investigate the influence of quality of work life on organizational commitment. Multicollinearity was tested on predictor variables to avoid unreliable and unstable estimates of regression coefficients. Thus, correlation analysis the independent variables was shown in Table 8.

Table 9
Correlation analysis between the independent variables

	QWL	ORC
Mean	4.157	4.340
S.D.	0.431	0.502
QWL	1	
ORC	.669 *	1
Adjusted $R^2 = 44.60\%$		

^{*.} Correlation is significant at the 0.05 level

Table 8 showed the relationship between the independent variables that correlation coefficients are not exceed 0.80. As Hair *et al.* stated the relationship between the variables that must be less than 0.80; if such relationship is more than 0.80, it may cause Multicollinearity [9]. This research found that the relationship between the independent variables with the highest value was 0.669, in which it was not exceed 0.80. Multicollinearity problem was not found. Therefore, it can be tested by using Multiple Regression Analysis.

The research results from hypotheses testing the influence of quality of work life and employee organizational commitment of Krung Thai Bank Public Company Limited, Thailand were presented in the forms of path diagram as showed in Figure 2.

Figure 2
Research Results



In addition, the research results from hypotheses testing can be presented in the following structural equation as presented below:

$$COM = 0.669 QWL$$
 (2) (15.855)

The hypotheses testing found that quality of work life can explain the variation of organizational commitment up to 44.60% (Adjusted R-Square 0.446) at 0.05 significant level. Quality of work life had statistically significant positive influenced on organizational commitment with standardized coefficients (β) of 0.669.

In conclusion, according to hypotheses testing, quality of work life had significantly influenced on organizational commitment of Krung Thai Bank Public Company Limited, Thailand providing management to focus on these critical factors in order to promote organizational commitment.

CONCLUSIONS

This research study aimed to investigate quality of work life factors influencing on organizational Commitment of Krung Thai Bank Public Company Limited, Thailand. The results shown that quality of work life factors had significantly influenced on organizational commitment. It was found that the quality of work life and organizational commitment were the statistically significant positive influence on organizational commitment standardized coefficients (β) .669. Therefore, it can be concluded that the quality of work life and organizational commitment had statistically positive influence on organizational commitment of Krung Thai Bank Public Company Limited.

REFERENCES

- [1] Yamane, T. (1973), "Statistics an introduction analysis", New York: Harper & Row.
- [2] Walton, R.E. (1973), "Quality of working lift: what is it", Stone Management Review, Pp 12-16.
- [3] Buchanan, B. (1974), "Building organizational commitment: The socialization of managers in work organizations", *Administrative Science Quarterly*.
- [4] Steers, R.M. (1977), "Antecedents and Outcomes of Organizational Commitment", *Administrative Science Quarterly*, Vol. 22, Pp. 46-56.
- [5] Mowday, R.T. (1982), "Employee Organization Linkage: The Psychology of Commitment, Absenteeism and Turnover", *New York: Academic Press*.
- [6] Allen, N. J., and Meyer, J. P. (1990), "The measurement and antecedents of affective, continuance and normative commitment to the organization", *Journal of Occupational Psychology*, 63, Pp. 1-18.
- [7] J. R. Schermerhorn (2006), "Management", New York, Johnson Wiley and Sons, Inc., Pp. 350-393.
- [8] Napapat Tasing (2009), "Quality of working life of municipality officers in Saraburi province", *Valaya Alongkorn Rajabhat University under the Royal Patronage*. Pathum Thani.
- [9] Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010), "Multivariate data analysis",7th ed. *Prentice Hall, Englewood Cliffs*.

The Influence of Quality of Work Life on Employee Loyalty through Organizational Commitment of Bank for Agriculture and Agricultural Cooperative, Thailand

Chattawat Limpsurapong* & Kessirintorn Phonngern**

*Lecturer, Department of Business Management, Faculty of Liberal Arts and Management Science,

Kasetsart University, Thailand

E-mail: chattawat.l@ku.th

**Graduate Student of Kasetsart University, Thailand

E-mail: koykoy_a@hotmail.com

ABSTRACT

The objectives of the research was aim to 1) to study the employees' quality of work life of Bank for Agriculture and Agricultural Cooperatives 2) to study the employees' organizational commitment 3) to study the employees' loyalty 4) to study the different between quality of work life, organizational commitment, and employee loyalty when classified by personal factors 5) to investigate the influence of quality of work life on employee loyalty through organizational commitment. In this research the target population include, employee of The Bank for Agriculture and Agricultural Cooperatives, Kalasin Province amount of 373 employees. Sample size of 279 was select by multistage sampling. Data collected were use from questionnaires with as follows items: 35 questions of quality of work life. 13 questions of organization commitment. 14 questions of employee loyalty. For appointment of questionnaires, validity of method, content-related validity and to access scales the reliability of questionnaires. Cronbach's alpha coefficient was used. Reliability coefficient was calculated for the questionnaires. It was estimated to be .899 of quality of work life, .858 of organization commitment and .890 of employee loyalty.

The survey data of the respondents as follows 51.3% were female. The respondents age, between 31-40 year 49.5%. From the education categories, there was bachelor degree 90.7%. The employee salaries are follows, between 20,001-25,000 bath 41.2%. The Job position is credit business officer 45.5%. The result of this study from hypothesis testing found that the quality of work lifewas the statistically significant positive influence on organization commitment standardized coefficient (B) .552. The quality of work lifewas the statistically significant positive influence onemployee loyaltystandardized coefficient (B) .174. The organization commitment was the statistically significant positive influence onemployee loyaltystandardized coefficient (B) .506. Therefore, it can be conclude that the quality of work life and the organization commitment had statistically significant positive influence on employee loyalty of the Bank for Agriculture and Agricultural Cooperatives, Kalasin Province.

Keywords- Quality of work life, Organization commitment, Employee loyalty.

INTRODUCTION

In 1967, the Bank for Agriculture and Agricultural Cooperatives was established under the Bank for Agriculture and Agricultural Cooperatives Act, the purpose was to provide financial assistance to farmers, agricultural cooperatives, and agriculture related occupations, to increase income or improve the quality of life of farmers or families of farmers. Bank for Agriculture and Agricultural Cooperatives is now entering to the fifth decade; bank is still committed to rural development under the philosophy of sufficiency economy, especially promoting the quality of life of small farmers. It also extends credit services to individuals, entrepreneurs, and village or community funds, also related organizations and all types of cooperatives, to provide farmers with better living and living conditions. It also creates a corporate culture for employees to work as a team and honest, take responsibility and living on the same standard. All the time, Bank for Agriculture and Agricultural Cooperatives had been committed to the mission to the farmers continuously to

help and support farmers and the agricultural in rural areas to grow sustainably. Those missions as mentioned had resulted in a lot of harder work for the Bank's employees as well as competition from other banks. The quality of life and loyalty of the employees were decreased. It affects on the efficiency and effectiveness of the work. Furthermore, organizational commitment and employee loyalty are more importance to organizations, because it can predict the rate of entry, resignation and turnover better than job satisfaction. The organizational commitment is more comprehensive, organizational commitment reflects the employee's perception of the organization, which is cover concept more than job satisfaction. The organizational commitment is more comprehensive, organizational commitment reflects the employee's perception of the organization, which is cover concept more than job satisfaction. From above reasons, it becomes the causes of this research. The objectives of the research was aim to 1) to study the employees' quality of work life of Bank for Agriculture and Agricultural Cooperatives 2) to study the employees' organizational commitment 3) to study the employees' loyalty 4) to study the different between quality of work life, organizational commitment, and employee loyalty when classified by personal factors 5) to investigate the influence of quality of work life on employee loyalty through organizational commitment. The paper begins with a review of the concepts related to quality of work life, organization commitment affecting on employee loyaltyin order to conceptualize the framework and hypotheses. Next, the research methodology, analysis of data and findings are presented. Finally, conclusion and discussion of the research results as well as managerial implications and suggestions for future research are described.

LITERATURE REVIEW

Quality of work life

The review of the relevant literature scholars had to provide a meaning of quality of work life as follow: quality of work life as a characteristic of work that responds to the needs of the person based on the characteristics of the person or the organization of the organization is successful by Walton [4]. Quality of work life has gained widespread attention in industrialized countries. The country is developing business. They all pay attention to the people who are important resources to the organization. If the quality of life in the workplace is good, it will give them satisfaction. This results in efficient and effective work. As a result, the organization can achieve its goals. Quality of work life It involves balancing the work and life of a person. The quality of work life emphasizes the effect of work on the individual and organizational performance. Including the satisfaction of personnel with the solution and decision of the organization. Accordingly, quality of work lifehave been defined from various perspective in the literature. Walton provides the definition of The quality of work life as a characteristic of work that responds to the needs of the person based on the characteristics of the person or the organization of the organization is successful[4]. Schermerhorn et al. defined the quality of work life has gained deserved prominence in organizational behavior as an indicator of the overall quality of human experience in the workplace[14]. Kumar and Iyer defined the quality of work life is possible to have a good mind, to work in an environment, to be recognized and to realize the goals of work [18].

Researchers have concluded that the quality of life is characterized by good physical condition, happiness of mind and body of employees. While working, there is a consistent relationship between work and lifestyle. Employees in the organization have morale in the performance of efficiency and effectiveness.

The quality of life is better viewed as a strategy or a mechanism that improves or enhances the quality of the relationship between employees and conditions in the work environment, which in turn leads to better organizational effectiveness. Walton's suggested an eight-criterion conceptual model for quality ofworklife[4].

- 1. Adequate and fair compensation is compensation and benefits from work sufficient to live in a reasonable standard. It is fair to compare the work and the performance.
 - 2. Safe and healthy working is employees should be in a good working environment.
- 3. Immediate opportunity to use and develop human capacities is opportunity to show employees the ability to work fully include participation in the work to provide employees with a sense of challenge and improve their skills to work better.

- 4. Opportunity for continued growth and security is creating opportunities for growth and stability in the workplace.
- 5. Social integration in the work organization is promote social relationships between colleagues and the commander to have a good relationship.
- 6. Constitutionalism in the work organization is a democratic principle in work. There are rules of fair policy. Respect for privacy and equality and freedom of speech.
 - 7. Work and the total life space is organizing a balance between work and personal life.
- 8. The social relevance of work life is take pride in your job, do not do anything unprofitable and cause a scandal to the organization and society.

Organization commitment

Organizational commitment that expression is more than the usual loyalty. It is a tight relationship. It is also important for people to be willing to devote themselves to creating a good organization by Mowday et al. [5]. Steers and Porter have defined themeaning of organizational commitment as referring to a person's perceived self-esteem. Accept the goals of the organization willingness to dedicate to the organization and the desire to remain in the organization[6]. Organization commitment have been defined from various perspective in the literature. Mowday *et al.* defined organizational commitment that expression is more than the usual loyalty. It is a tight relationship. It is also important for people to be willing to devote themselves to creating a good organization[5]. Steers and Porter defined Organization commitment is a person's sense of self-respect accept the goals of the organization willingness to dedicate to the organization and wish to remain in organization[6]. Allen and Meyer defined Organizational commitment is the sense that employees have toward the organization. It is an anchor to keep the staff and dedicated to working for the organization [9].

Researchers have concluded that organizational commitment is characterized by a person's sense of attitude and good intentions. It is dedicated to working fully to succeed in the job and to succeed with the organization. People will be satisfied and honest in their work. This will affect the desire to remain a member of the organization.

Organizational commitment is the relationship between members and organizations expressed in different behaviors. Steers and Porter suggested a three-criterion conceptual model for organizational commitment [6].

- 1. Identifying with an organization and its goal and values is employees have a sense of belonging to the organization, accept the goals and values of the organization.
- 2. A strong desire to maintain investment with the organization is staff dedicate themselves to physical strength complete the work for the organization.
- 3. Willingness to work extra hard on behalf of the organization is the staff needs to perform the task in the organization, there is no need to resign from the organization.

Employee loyalty

Employee loyalty is very important to the organization. This is because it shows the willingness of individual members who are ready to dedicate themselves and fully dedicated to fulfilling the duties assigned to achieve the organization's goals fully. Employee loyalty is expressing the relationship between the person and the organization. If the performers are highly loyal to the organization the tendency for individuals to quit or leave their organization will be less by less by Hoy & Rees[3]. Employee loyalty have been defined from various perspective in the literature. Hoy & Rees defined employee loyalty is expressing the relationship between the person and the organization. If the employees are highly loyal to the organization the tendency for individuals to quit or leave their organization will be less [3]. Withey & Cooperdefined loyalty is both attitude and behavior. Organizational loyalty is a component of organizational commitment. But behavior is a manifestation of loyalty to the organization [8]. Robert A. Barondefined employee loyalty is a commitment to the organization or attitudes toward the organization that will reflect the relevance of the person's beliefs, beliefs, affection, and cherish to the organizations they belong to high level of satisfaction is associated with being in the organization today[7]. Dennis G. Mccarthy defined loyalty is a bond between the company and employees. It is said that personal factors are one of the contributing

factors to the satisfaction of the employees until they transform into organizational commitment and bring loyalty[12]. Robbins defined loyalty is a person's vitality, and the charm or joy of doing things. This is the core of the community. Include the desire. Be in touch with other people and be part of that community [13].

Researchers have concluded that employee loyalty means that employees have a positive attitude towards the organization. It is believed to be committed to cooperate with a dedicated commitment to achieve the goal in all aspects of the organization to succeed responsible for integrity, ethics and ethics continuous and think of the organization as part of the family affect the intention to stay with the organization forever.

Employee loyalty will be a good willing to stay in the organization to work together and resist leaving. In addition, employees feel they are important to the organization, so rewarding, dedicated, willing to work, will follow the rules, values or norms of the organization and use the ability to fully work. Steers points to the importance of loyalty to management. Loyalty predicts the rate of entry and exit of the work, as well as the motivation of workers to work dedicated to the organization in which they work. It is also a measure of the effectiveness of the organization[6]. Hoy & Rees suggested an three-criterion conceptual model for loyalty 1)Behavioral aspect 2) Affective aspect and 3) Cognitive aspect.[3].

Employee loyalty is important to the management of the organization. It is a manifestation of the willingness of individual members who are ready to dedicate themselves fully and fully to fulfilling the duties assigned to achieve the goals of the organization. The desire to be a member of the organization. Employee loyalty is an essential attribute that will help the organization to be effective. Therefore, executives as representatives of the organization must recruit qualified personnel. Dedicated to work and loyalty to the organization to lead the organization to achieve its objectives and goals.

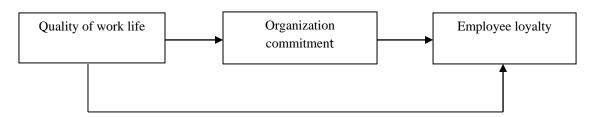
The link between Quality of work life, Organization commitment and Employee loyalty.

Research on the influence of Quality of work life, Organization commitment and employee loyalty was much in empirical evidence. Settasart Chaiyasaengstated that the researcher has studied therelationship between quality of work life and organizational commitment. The results show that the difference in population statistics, such as age, sex, number of years worked, salaries, has no influence on level of organization commitment; the difference in educational levels and marital status has a significance influence on the level of organization commitment at .01 level, the overall quality of work life has a positive relationship with the level of organization commitment at .01 level[17]. Kittipong Suwanmajostated that the researcher has studied the relationship between the quality of working life and organizational commitmentwas also found that the quality of working life of are associated with the engagement overall in the same direction, which is relatively moderate level of correlation. Statistically significant at the 0.05 level by the most in a relationship is equality and justice in the organization [20]. Nungreathai Noithastated that the researcher has studied the relationship between quality of work life and employee loyalty. The study found that the quality of life in all eight dimension and employee loyalty were statistically significant at .05 level [18]. Thitima Lukthongstated that the researcher has studied Organization commitmentamong employee working for automotive part company statistically significant relationships were found between the employees' amount of income, work length, types of work, and work experience and their organizational commitment at a significant level of 0.05[21].

CONCEPTUAL MODELAND HYPOTHESES

From the reviews of the literature, the conceptual framework of this research study was presented in figure 1. It depicts the Influence of quality of work life on employee loyalty through organizational commitment of Bank for Agriculture and Agricultural Cooperative, Kalasin Province, Thailand. The conceptual framework has been tested on the basis of the bodies of literature including the quality of work life and the organization commitment on employee loyalty, cited above, as well as the researcher's own context about the relationship among variables.

Figure 1
Research Conceptual Framework



Based on the reviews of the literature of the constructs with the conceptualization of the relationships among variables, the hypotheses suggested by the conceptual framework can be laid out as follows:

H₁: Quality of work life and organization commitmenthad significantly positive influenced on employee loyalty of the Bank for Agriculture and Agricultural Cooperatives, Kalasin Province, Thailand.

H₂:Quality of work life had a significantly positive influenced on organization commitment Bank for Agriculture and Agricultural Cooperatives, Kalasin Province, Thailand.

The research hypotheses can be explained in the forms of structural equations in order to show the relationship among variables and predict the dependent variable for hypotheses testing. The symbols used to represent the variables stated as follows:

QWL = Quality of Work Life

COM = Organization Commitment

EML = Employee Loyalty

The structural equation can be described as follows:

$$EML = \beta_1 QWL + \beta_2 COM \qquad (1)$$

$$EML = \beta_3 QWL \qquad (2)$$

RESEARCH METHODOLOGY

This research study aimed to investigate the influence of quality of work life on employee loyalty through organizational commitment of Bank for Agriculture and Agricultural Cooperative, Kalasin Province, Thailand. The research study was a quantitative research method. The population of this research was of 373 employees. Sample size of 279 was select by multistage sampling. Data were collected through 5-point Likert scale questionnaire surveys. This research study was cross-sectional as the data were collected at a single point of time from the key respondents. Content validity was applied to ensure the accuracy of an assessment tool. Cronbach's alpha was conducted to test for reliability with cronbach's alpha coefficient of the quality of work life, organization commitment and employee loyalty of0.899, 0.858, and 0.890, respectively as shown in Table 1.The cronbach's alpha value of the scale of all variables is greater than 0.7, so it shows that the scale has very good reliability. Data were analyzed by descriptive statistics including frequency, percentage, mean, standard deviation; and inferential statistics including the Pearson's Product-Moment Correlation and Path Analysis. The research results can be significantly analyzed with 95% confidence interval.

Table 1
Cronbach's alpha coefficient of variables

Variables	Cronbach's alpha
Quality of Work life	0.899
Organization Commitment	0.858
Employee Loyalty	0.890

ANALYSISOF DATA AND RESULTS OF THE STUDY

The research results were analyzed by using the statistical package for social science. The research finding and the hypotheses testing in this study were presented as follows.

For description of the respondents, the research finding showed that the survey data of the respondents as follows51.3% were female. The respondents age, between 31- 40 year 49.5%. From the education categories, there was bachelor degree 90.7%. The employee salaries are follows, between 20,001-25,000 bath 41.2%. The job position is credit business officer 45.5% as stated in Table 2.

Table 2
Description of the respondents

n = 279

Demographic Information		Numbers of respondents (NR)	Percentage of NR to number of TR*
Gender	Male	136	48.70%
Gender	Female	143	51.30 %
	21 – 30 Years	55	19.70 %
A ==	31 - 40 Years	138	49.50 %
Age	41- 50 Years	61	21.90 %
	51-6 0 Years	25	9.00%
	Single	134	48.00 %
Marital Status	Married	139	49.80 %
	Divorce	6	2.20 %
Education	Bachelor's Degree	253	90.70 %
Education	Master's Degree	26	9.30 %
	15,000 – 20,000 Bath	63	22.60 %
Monthly Income	20,001 – 25,000 Bath	115	41.20 %
Monthly Income	25,001 – 30,000 Bath	23	8.20 %
	More Than 30,000 Bath	78	28.00 %
	Administrator officer	17	6.10%
Position	Credit business officer	127	45.50%
	Teller	67	24.00%
rosidon	Supervisor	35	12.50%
	Assistant Branch Manager	20	7.20 %
	Branch Manager	13	4.70%

^{*} TR denotes total respondents.

For descriptive statistics, the collected data were analyzed by using means and standard deviation. The means score of employee' opinion on quality of work life, organization commitment, and employee loyalty were atthe highest levels; mean of 4.56, 4.29, and 4.45, respectively.

For inferential statistics, in this research study, the analysis of the correlation coefficient between the two independent variables was explored. Pearson's Product-Moment Correlation was used to determine the relationship of the independent variables according to research conceptual framework. The objective was to

find the magnitude of correlation among the variables. Path Analysis was used to test hypotheses in order to investigate the influence of quality of work life on employee loyalty through organizational commitment. Multicollinearity was tested on predictor variables to avoid unreliable and unstable estimates of regression coefficients. Thus, correlation analysis between the independent variables was shown in Table 3.

Table 3
Correlation analysis between the independent variables

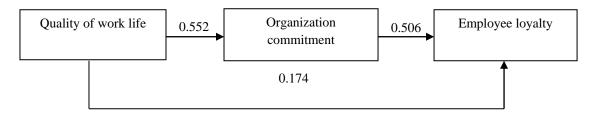
	QWL	COM	EML
Mean	4.56	4.29	4.45
S.D.	0.359	0.357	0.386
QWL	1		
COM	. 552**	1	
EML	.454**	.603**	1
Adjusted $R^2 = 38.00\%$ SEE = 0.304			

^{**}Correlation is significant at the 0.01 level

Table 3 showed therelationship between the independent variables that correlation coefficients (r) are notexceed 0.80. As Hair *et al.* described the relationship between the variables that must be less than 0.80; if such relationship is more than 0.80, it may cause Multicollinearity [15]. This research study found that the relationship between the independent variables with the highest value was 0.552, in which it was not exceed 0.80. Multicollinearity problem was not found. Therefore, it can be tested by using Path Analysis, in which estimating linear models.

The research results from hypotheses testing on the influence of quality of work life on employee loyalty through organizational commitment of Bank for Agriculture and Agricultural Cooperative, Kalasin Province, Thailand were presented in the forms of path diagram as showed in Figure 2.

Figure 2
Research Results



In addition, the research results from hypotheses testing can be depicted in the following structural equations as presented below:

EML =
$$0.174 \text{ QWL} + 0.506 \text{ COM}$$
 (3)
 (3.077) (8.936) (4)
COM = 0.552 QWL (4)
 (11.028)

The hypotheses testing found that quality of work life and organization commitment can explain the variation of employee loyalty up to 38.0% (Adjusted R-Square 0.380) at 0.01 significant level. Quality of work life influence on organization commitment standardized coefficient (\$\beta\$) .552. The quality of work lifewas the statistically significant positive influence onemployee loyaltystandardized coefficient (\$\beta\$) .174. The organization commitment was the statistically significant positive influence onemployee loyaltystandardized coefficient (\$\beta\$) .506. The measurement factors of quality of work life and organization commitment should be further investigated to find the most impact.

In conclusion, according to hypotheses testing, the quality of work life and the organization commitment had statistically significant positive influence on employee loyalty of the Bank for Agriculture and Agricultural Cooperatives, Kalasin Province, Thailand. The quality of work life through organizational commitment will have a significantly greater effect on employee loyaltyproviding management to focus on these critical factors in order to promote employee loyalty.

CONCLUSION AND DISCUSSION

This research study aimed to investigate the influence of quality of work life on employee loyalty through organizational commitment of the Bank for Agriculture and Agricultural Cooperatives in Kalasin Province, Thailand. The results shown that quality of work life and organizational commitment had significantly influenced on employee loyalty. Thus, the following suggestions from the research results can be applied as management guidelines. Quality of work life seems to be very critical success factor to raise organization commitment and keep targeted employee in the long run for financial institution in Thailand.

REFERENCES

- [1] Cooper, A. M. (1958) **How to supervise people**. New York: McGraw–Hill.
- [2] Buchanan, B. (1974) **Building organizational commitment: The socialization of managers in work organizations.** Administrative Science Quarterly, 35(40),15–20.
- [3] Hoy, W. K., & Rees, R. (1974)Subordinate Loyalty to immediate superior: A Neglected concept in the study of educational administration. Sociology of Education, 47, 268-286
- [4] Walton, R. E.(1975) "Criteria for Quality of Working Life." In L. E. Davis, and A. B. Cherns.eds.). **The Quality of Working Life.** New York: The Free Press, 88-97.
- [5] Mowday, R.T.(1982) Employee Organization Linkage: The Psychology of Commitment, Absenteeism and Turnover. New York: Academic Press.
- [6] Steers, R. M. and L. W. Porter. (1983) **Motivation and Work Behavior.** 3rd ed. New York: McGraw-Hill.
- [7] Baron, R. A. (1986)**Behavior in organization**. Massachusetts: Allyn & Bacon.
- [8] Withey, M. J., & Cooper, W. H. (1989)**Predicting exit voice, loyalty & neglect**. Administrative Science Quarterly, 34(4), (521–539)
- [9] Allen, N. J. and J. P. Meyer. (1990) "The measurement and antecedents of affective, continuance and normative commitment to the organization." Journal of Occupational Psychology 63 (1): 1-18.
- [10] Meyer, J. P., and Allen, N. J. (1991)"A three-component conceptualization of organizational commitment." Human resource management review 1 (1): 61-89.
- [11] Meyer, J., & Allen, N.(1997) Commitment in the workplace. Thousand Oaks, CA: Sage.
- [12] McCarthy, Dennis G. (1998)**Seven Steps to Guarantee Failure**. Word Executive's Digest, Singapore: Times Printers Co., Ltd.
- [13] Robbin, S.P. (2001) Organization behavior. New Jersey: Prentice Hall.
- [14] Schermerhorn, J. R. et al. (2005) Organizational Behavior. 9th ed. New York: John Wiley & Sons.
- [15] Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. (2010). **Multivariate data analysis.**7th ed. Prentice Hall, Englewood Cliffs.
- [16] Normala, D (2010) "**Investigating the Relationship between Quality of Work Life and Organizational Commitment amongst Employees in Malaysian Firms**."International Journal of Business & Management 5 (10).
- [17] Settasart Chaiyasaeng (2011) "The relationship between Quality of Work Life and Organizational Commitment of Ratchaphruek College's Personnel", Center for research and Development, Ratchaphruek College, Thailand.
- [18] Nungreathai Noitha (2012) "The relationship between quality of work life and employee loyalty". Naresuan University, Thailand.
- [19] Kumar, S. J., &Iyer, VidyaRajaram. (2012). **Emotional intelligence and quality of work-life among employees in the educational institutions.** SIES Journal of Management, 8(2), 21-26.
- [20] Kittipong Suwanmajo (2013) "The relationship between the quality of working life and organizational commitment", Nation university, Thailand.
- [21] Thitima Lukthong (2014) "Organization commitment among employee working for automotive part company in Amata Nakorn Industrail Estate Chonburi Province, Burapha University, Thailand

Hydroponics Vegetable Business Plan in the Northeastern of Thailand

Phurichchaya Taeporamaysamai* and Nantawat Settakulsit**

**Puritchaya Taeporamaysamai, Department of Social Science and Physical Education, Faculty of Liberal Arts and Management Science, Kasetsart University, Thailand E-mail: ornuma.t@ku.th @ku.th

*Nantawat Settakulsit, Graduate Student of Business Administration, Faculty of Liberal Arts and Management Science, Kasetsart University, Thailand E-mail: nickname.21133@gmail.com

ABSTRACT

This study of a business plan for a hydroponic farm aims to analyze business factors. The results from this study discuss internal and external factors of business, marketing plans, business competition, as well as finances. The plan for a hydroponic farm being built by an Agricultural cooperative in Sakon Nakhon province which they have invested about one million baht. The distribution for the product will be located at a school, a hospital in the community. The payback period was found to be 3 years and 1 month while Net Present Value (NPV) and Internal Rate of Return (IRR) were 1,504,598 and 43.11% respectively. In addition, consumer behavior has been studied and 400 questionnaires were used to collect data from 4 main districts. The results have been show that there are significant differences between personal characteristics of consumers and behavior (Sig. < 0.05). In the aspect of consumer behavior, the result shows that most customers (82%) selects as a snack. Also, in the aspect of marketing mix study the results show that most customers are concerned with the taste of hydroponic product which is an important factor

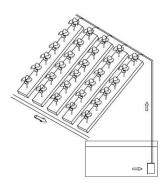
Keywords-business plan, hydroponic, consume behavior.

INTRODUCTION

A business plan is an important thing for the entrepreneur. The business plan is the final result from consideration and the decision making process for business opportunities. In addition, the business plan can increase the reliability and understanding of the business for co-investors.

The hydroponic farm of agricultural cooperative in Sakon Nakhon province is used to study of business plan. The Nutrient Film Technique system is used in the hydroponic farm as shown in Figure.1

Figure 1
Nutrient Film Technique system from: [5]



Currently, there are many hydroponic farms in the north-east of Thailand which is a good trend indicator for more consumption vegetables and care of their health. So the entrepreneur should know two things clearly production and investment knowledge. The objectives of study are to analyze a business plan for the hydroponic farm of AGRICULTURAL COOPERATIVE and to study each of the factors related by agriculture hydroponic consumption in Sakon Nakhon province of Thailand.

The results from this study can be used for decision making for the entrepreneur and can also be used to invest with other agriculture business models as well. The business plan is a device to create reliability in an organization. Also, the results can be a guided for business conducting. It can also be for management planning for other business models in the future. It may also be used for investors.

LITERATURE REVIEW

Gierej [12] studied business model of Internet Of thing (IOT) for industry. The objective of this study to development the concept involve business model of industry. The result shows that there are no concepts of business model to promote companies for Internet Of thing (IOT) for industry. According to need of marketing, the collect of difference of business model into the concept is recommended.

Wiedenmann, S. and J. Geldermann [7] studied of supplier planning for processing of agricultural raw materials. The objective of this study to determine problem management model according to supplier of agricultural raw materials. The result shows that a two-stage stochastic program can be used to plan for supplier planning for processing of agricultural raw materials.

Consumer behavior

Consumer behavior is an important thing because it is the primary data used to marketing strategies. Also, It is used for planning as well as appropriate communications and strategies. Consumer behavior can define the direction of the business model as well.

There are many advantages to a study of consumer behavior which can be used to understand influence factors affecting the decision for consumption. It define a method to influence the decision for consumption. If we know consumer behavior, we can match the needs of consumers and define of strategies to produce competitive marketing. [4]

Porter's Five Forces

Porter's Five For cesis used to analyze competition to determine the viability of a business in terms of profitability. The concept of Porter's Five Forces is also a simple for identifying a strategy's potential profitability as shown in Figure 2.1

Figure 2
Porter's Five Forces



SWOT analysis

SWOT analysis is strategic planning technique. It include 4 elements: strengths weaknesses opportunities and threats. In addition, it can be defined as the development methodology to solve any problem[14].

Financial structure

The meaning of financial structure is the mix of long term debt and equity and Shareholders' Equity on the balance sheet. The financial structure is used to calculate the current liabilities, non-current liabilities and shareholder's equity [10].

RESEARCH METHODOLOGY

The first part of this study is business plan for an agriculture hydroponic farm as an investigative tool. Net Present Value (NPV) and Internal Rate of Return (IRR) were used to evaluate the business plan. NPV should be more than zero which means the project should invest while IRR from calculation should also more than the prediction.

The second part of this study investigates consumer behaviors. 400 questionnaires were used to collect data from 4 main districts in SaKonnaKhon. Quota sampling method is used in this study which is in accordance with the proportion of the population in 4 main districts as shown below:

Table 3
Population proportion in each district

District	population	proportion %
Muang	194,274	40.67
Panna	80,087	16.76
PangKhon	52,753	11.04
Sawang Daen Din	150,591	31.52
Total	477,705	100

The questionnaire volume was calculated in accordance with the population proportions in each district. The volume from calculations are in Table 3.2 as shown below:

Table 4
The volume of questionnaire

District	Proportion %	Questionnaire Volume
Muang	40.7	163
Panna	16.8	67
PangKhon	11.0	44
Sawang daendin	31.5	126
Total	100.0	400

Descriptive statistics (mean value and standard deviation value) and Inferential statistics (T test, F test and ANOVA) were used to analyze the relationship between each factors affected by agricultural hydroponic consumption. For the consideration of Inferential statistics, mean values from each group are used to significantly consider, Sig. or P-value are used to analyze at 95% confidentially and alpha 5% (0.05).

RESULTS OF THE STUDY

Result

Firstly, agricultural cooperative has invested for hydroponic farm around one million baht. The business model for the agricultural hydroponic farm were found Net Present Value (NPV) within three years and Internal Rate of Return (IRR) were 1,504,598 baht and 43.11% respectively. It means the agriculture hydroponic farm is a lucrative investment.

Secondly, agricultural hydroponic product consumer behavior in Sakon Nakhon province was studied, questionnaires were used to collect data the results are as follow:

Characteristics of answers about hydroponic consumption found that most consumers are women, age range around 20-29 years old, they are married and most of them are employed with an income of about 20,001-30,000 baht per month. In respect to of agricultural hydroponic product consumption in Sakon Nakhon most of the customers like to consume Green Oak hydroponic products as a snack, the frequency for consumption is around 5-6 times per month, they can pay about 201-300 baht. When they buy agricultural hydroponic products at the supermarket and trade show booth.

In the aspect of consumer behavior, data were collected from 400 questionnaires and the proportion of each was calculated as in table 4.1

Table 5
General data from questionnaires

No.	List	Portion (%)
1	Type of Lettuce	31.75
2	Consume product as a snack	82.00
3	5 - 6 times / month for consumption	70.75
4	Payment / time for consumption 201-300 baht	79.75
5	buy hydroponic product at supermarket	53.00
6	Customers knows about product from trade show.	37.00
7	Decision making from themself	73.50

From the table 4.1, it can be seen that most customers consume hydroponic product as a snack (82%), so the products from this farm should have Product transformation strategy because it can add the profit of products

Also, in the aspect of marketing mix affecting for decision making to agricultural hydroponic product consumption was studied. The result shows that "taste" is an important factor for consideration to consume agricultural hydroponic products. The service is a secondary factor for consideration as shown in Figure 4.1

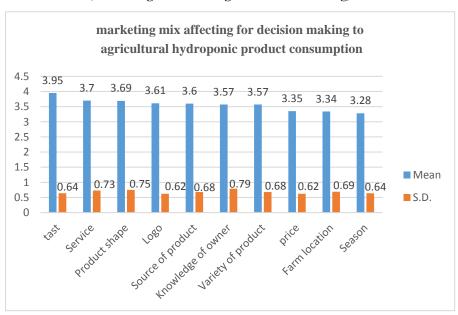


Figure 3 (Marketing mix affecting for decision making)

From the figure 3important factors affecting to consume agriculture hydroponic product is "taste" (mean equal to 3.95). Each hydroponic product attempts to control the taste and decrease bitterness in accordance with the production process. Also, service is an important factor for all businesses which should produce the first impression of a customer, while season is the last factor to consider for consumption because customer desire to consume almost all year (mean equal to 3.28).

From one million of the investment of agriculture hydroponic farm in Sakon Nakhon province were found that this project can be invested due to there are many demand for consumption.

Most customers in Sakon Nakhon province selected Green Oak hydroponic products. Green Oak is mostly used in restaurants or salad bars and consume it as a snack (82%)So, transformation of the product might be the best strategy because it can be added the profit of business. Generally, the types of lettuce from each farm in Sakon Nakhon province are Green Oak, Red Oak, Course and Butterhead. Mostly, they will buy 5-6 times per month.

CONCLUSION AND DISCUSSION

The study of a business plan for agricultural hydroponic products can help us to understand details about each procedure of the business. In addition, such business plan can be analyzed through strength weakness opportunity and threats for consideration and strategy creation. From one million of the investment of agriculture hydroponic farm in Sakon Nakhon province were found that this project can be invested due to there are many demand for consumption.

Most customers in Sakon Nakhon province selected Green Oak hydroponic products. Green Oak is mostly used in restaurants or salad bars and consume it as a snack (82%) So, transformation of the product might be the best strategy because it can be added the profit of business. Generally, the types of lettuce from each farm in SaKonnaKhon province are Green Oak, Red Oak, Course and Butterhead. Mostly, they will buy 5-6 times per month. In this study have divided into 2 as follow:

Business plan for agricultural hydroponic farm

The business plan for an agricultural hydroponic farm has predicted a return within 3 years and 1 month. Such project has invested one million baht. Also, Net Present Value (NPV) and Internal Rate of Return (IRR) were used to evaluate the value from investment and were found to be 1,504,598 and 43.11% respectively, so this project is interesting as an investment.

Hydroponic product consumer behavior

The results have shown that there are significantly different hydroponic product consumption patterns of gender, especially women consume more than men. Most customers choose hydroponic products as a snack (82%). Finally, the taste is the most important factor for consumption of hydroponic products, so it should have prominent in the marketing strategy.

Future work

The future work this study will be studying with demand size of hydroponic products other provinces for production planning. Also, the study of logistic system for hydroponic products will be done to support demand in the future.

ACKNOWLEDGEMENTS

The concept and methodology for this research were recommended from my advisor of Business Administration, Faculty of Liberal Arts and Management Science, Kasetsart University, Thailand. I thank for her very helpful remarks during my operation within research, which coordinated by Agricultural Cooperative. I also thank the anonymous reviewers for their very constructive comments and suggestions.

REFERENCES

- [1]. Nantakit, I. (2009) Hydroponics Systems (NFT). https://kasetvilize.blogspot.com/2017/03/nft.htm
- [2]. Santos, J. D. d. (2013). Development of a vinasse nutritive solution for hydroponics. Journal of Environmental Management 114: 8-12.
- [3]. Transaeng, S. (2013) Hydroponics Vegetable Business in Northeastern Thailand And industrial development. Journal Vol.1, Pp. 56-62
- [4]. Aouhaon. W. (2014) The Theory of Consumer Behavior.
- http://poundtv5.blogspot.com/2014/10/theory-of-consumer-behavior.html
- [5]. Department of Agricultural Extension Ministry of Agriculture and Cooperatives (2015) Vegetable Growing Hydroponics.
- [6]. Mohamed Bilal Bashaa, et al. (2015). INTERNATIONAL ACCOUNTING AND BUSINESS CONFERENCE 2015, IABC 2015 Consumers Attitude Towards Organic Food. Procedia Economics and Finance 31 444 452.
- [7]. Wiedenmann, S, J. G. (2015). Supply planning for processors of agricultural raw materials. European Journal of Operational Research 242: Pp.606–619.
- [8]. Johanna Suhla, et al (2016). Advanced aquaponics: Evaluation of intensive tomato production in aquaponics vs. conventional hydroponics. Agricultural Water Management 178 335–344.
- [9]. Sutpeerasir, N. (2016) Cost Analysis and Sensitivity Analysis of Sugarcane Plantings Hydroponics In Bangkok. Veridian E-Journal, Silpakorn University.
- [10]. Bernstein, R. (2016) Finance structure. https://online.husson.edu/consumer-behavior-theories/
- [11]. Freund, F (2017). Sustainable business model research and practice: Emerging field or passing fancy?. Journal of Cleaner Production: Pp.1-11.
- [12]. Gierej, S. (2017). The Framework of Business Model in the Context of Industrial Internet of Things. Procedia Engineering 182: Pp.206 212.
- [13] Jason Pottsa, T. K. (2017). Economics of innovation in Australian agricultural economics and policy. Economic Analysis and Policy 54: 96–104.
- [14]. Wongkiew, S. (2017). "Nitrogen transformations in aquaponic systems: A review." Aquacultural Engineering 76: Pp.9–19.
- [15]. Passorn (2017) Five Force Model. http://inc.karmins.com/author/passorn/

Competitive Advantages of Natural Dyed Cotton Fabric and Weaving Community Enterprise in Sakon Nakhon Province, Thailand

Nattanan Saksamrit

Lecturer, Department of Business Management, Faculty of Liberal Arts and Management Science, Kasetsart University, Thailand E-mail: nattanan.sak@ku.th

ABSTRACT

The objectives of this research are to analyze competitive advantages of the natural dyed cotton community enterprise in Sakon Nakhon province and to analyze the export opportunities using the cluster concept. The research methodology is the qualitative method. The research design: 1) the investigation is composed of documentary research and interviews of community enterprise experts to construct the primary conceptual framework for content validity 2) data collecting conducted by in-depth interviewing of key informants who are concerned with the natural dyed cotton fabric community enterprise using triangulation methods to recheck data between groups for reliability 3) content analysis and interpretation are used in the synthesis of findings and 4) focus group for conclusions and recommendations. The population is comprised experts and scholars on strategic management, the group leader of natural dyed cotton cloth and weaving, and government officials.

The SWOT analysis concludes as follows: the strongest (S) point found that in the production process the natural raw materials are selected for the dyeing, and the dye is still used natural processes (chemical free) which meet the needs of customers both domestic and abroad. The key weaknesses (W) are: the production process is not able to control color stability to meet the needs of customers and the lack of business continuity to the next generation. The opportunity (O) is that domestic and foreign markets demand has also increased, as well as government support at both the provincial and local levels. Major threats (T) include a product or a replacement product can be copied easily, resulting in more intense competition. The competitive advantage analysis found that most products lack the competitive advantage in making a differentiation, lack of value added, value creation, and innovation. In addition, the vertical strategy should be applied to the business operation. Export opportunities also had many problems to resolve before expanding the market. The important problem that has become the most obvious barrier is lack of standardized and duplicate production.

Keywords-Natural Dyed Cotton Fabric and Weaving, Competitive Advantage

INTRODUCTION

Background

International trade has played a crucial role in the Thai economy. [20] In the year 2016, textile and clothing exports are worth 230,017 million baht accounting for 3.2 percent of total export. Cotton export quantity is 10,971.8 tons and the value is 283.8 million baht that increased 42.33 percent comparing to the previous year. The Asean Economic Community (ASEAN) has been the largest market for Thailand textile and garment export, valued at 53,050.8 million baht. Thailand's natural dyed cotton has inherited the wisdom of the past especially in the Northeastern and Northern of Thailand. It is considered a local product that creates economic and social value. As the dyed cotton is a natural product of high quality and with unique patterns, the product is in demand especially in ASEAN, USA, EU and Japan.

Sakon Nakhon or another name "Muang Nong Han Luang" is a province in the northeastern of Thailand. Sakon Nakhon is a community from prehistoric times to the present, also an important and diverse city in terms of natural environment, history, society, politics, religion and culture both nationally and

locally. Sakon Nakhon is famous for making natural dyed cotton fabric. For long time the natural dyes cotton fabric craft has been conveyed from generation to generation. Highlights of the natural dyed cotton are the complete production processes of fiber production, planting, dyeing, using energy-saving stoves, cold dying, and washing systems. The Tourism Authority of Thailand (TAT) expects visitors to experience the miracle of natural dyed cotton fabrics. In this current situation, the natural dyes cotton fabric and weaving community enterprise in Sakon Nakhon province is faced with rapidly changing economics, technologies and competitiveness. To be able to adapt to keep pace with the change efficiently, community enterprises need to realize the potential and competitiveness of natural dyed cotton and create competitive advantages, and expand the export channels to increase the sustainability of the business.

Objectives

This research examines 2 objectives as follows:

- 1. To analyze the competitive advantage ability of natural dyed cotton fabric and weaving in Sakon Nakhon province.
- 2. To analyze the export opportunities of natural dyed cotton fabric and weaving in Sakon Nakhon province.

LITERATURE REVIEW

The literature review of this research is composed of the concepts and theories that concern with competitiveness of business firm or community enterprise as follows:

SWOT Analysis

SWOT analysis (or SWOT matrix) is a strategic planning technique used to help a person or organization identify the Strengths, Weaknesses, Opportunities, and Threats related to business competition or project planning [13]. SWOT analysis is divided content of environment in 2 areas, first is the internal environment analysis composed of 1) Strengths: characteristics of the business or project that give it an advantage over others 2) Weaknesses: characteristics of the business that place the business or project at a disadvantage relative to others, and second is external environment analysis composed of 1) Opportunities: elements in the environment that the business or project could exploit to its advantage 2) Threats: elements in the environment that could cause trouble for the business or project.

Diamond Model

Porter (1998) [7] presented the Diamond Model that is involved with a nation's competitiveness. The four main components in the Diamond Model are interrelated to create a competitive advantage as follows: 1) Factor conditions: factor conditions are factors that exist in each country such as natural resources, capital resources, and human resources. 2) Relation and Supporting Industries: to make the supporting factors competitive and advantageous, it is important that the relevant industries should support and coordinate with each other. 3) Demand conditions, the complex needs of consumers, which started with the customer needs in the country are the impulse that makes the product and service providers attempt to improve the quality of products and services to meet the customer needs. 4) Firm Strategy, structure and rivalry. [8] The competitive advantage comes from success in targeting, strategic management, and internal business management. In addition, intense domestic competition will lead to a strong and competitive international business organization.

Porter's Generic Competitive Strategies Concept

Porter (1985) explains the fundamental basis of above average profitability in the long run is sustainable competitive advantage [2]. There are two basic types of competitive advantage a firm can possess: low cost or differentiation. The two basic types of competitive advantage combined with the scope of activities for which a firm seeks to achieve them, lead to three generic strategies for achieving above average performance in an industry: cost leadership, differentiation, and focus. The focus strategy has two variants, cost focus and differentiation focus. 1) In cost leadership, a firm sets out to become the low cost producer in its industry.

They may include the pursuit of economies of scale, proprietary technology, preferential access to raw materials and other factors. 2) In a differentiation strategy a firm seeks to be unique in its industry along some dimensions that are widely valued by buyers. It is rewarded for its uniqueness with a premium price. 3) The generic strategy of focus rests on the choice of a narrow competitive scope within an industry. The focuser selects a segment or group of segments in the industry and tailors its strategy to serve them to the exclusion of others.

Cluster Analysis

There are many concepts that concern clusters. Sutatvaniya (2001) [11] explains the four major characteristics of cluster are: 1) Connectivity can be considered as a key feature of the cluster. This connectivity is not restricted within the group, but includes suppliers, customers, research institutes and other organizations. 2) Collaboration. Members of the cluster collaborate in many areas, especially in the areas of mutual benefit. 3) Competition. Cluster is not a cartel that aims to set a price or quantity mechanism for mutual benefit among members, but cluster is a collaboration based on the competition. 4) Collective Efficiency: Overall, collaboration, and knowledge and human resources linkage will make the cluster more efficient. Office of the National Economic and Social Development Board (2009) [15] explains cluster is a grouping of entrepreneurs who excel in the development of products and / or services quality for all members continuously. The complete cluster can be integrated operators from the upstream to the downstream. Department of Industrial Promotion (2015) [19] explains cluster is a group of businesses and involved institutions to conduct businesses in nearby area (Geographic Proximity) link and complement each other (Commonality and Complementary) in both vertical and horizontal paths.

Export Opportunities

There are several studies conducted on the determinants of export opportunities [18],[17],[12]. The several studies classified the determinants of export opportunities into internal and external factors. Specially, internal determinants are justified by resource-base theory (RBV), while external determinants are supported by contingency theory. The resource-based paradigm posits that a firm's export opportunities are base on firm level activities such as size, firm experience and competencies [9]. In contrast, the contingency paradigm suggests that environment factors influence the firm's strategies and export opportunities. As per the reviews, internal factors related to determinant of firm's export are export marketing strategy (EMS), firm characteristics (FC), and management characteristics (MC). External factors related to determinant of firm's export opportunities are foreign market characteristics (FMC) and domestic market characteristics (DMC).

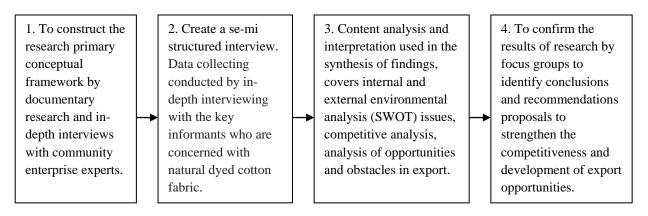
In terms of internal factor, export marketing strategy (EMS), Carlos et al., (2008) and Zhou & Stan, (1998) a large number of studies have explored the importance of export marketing strategy on export opportunities, particularly the extent to which the elements of the marketing program (product, price, place, promotion) are standardized or adapted across markets [17],[9]. In addition, another determinant that is also crucial for export opportunities is market research. In term of firm characteristics (FC), the reviews indicates that the size of the firm, the international experience, and the firm's capabilities and competencies (e.g. resource commitment, customer relationship, product uniqueness, product quality, quickness and quickness and flexibility to respond to market change) were the most cited determinants in this category. Sorin et al., (2017) larger firms benefit from economies of scale and scope in terms of production, managerial talent, finance, and marketing resources [21]. Also, Cavusgil & Zou (1994) explain that the firm's international experience helps the firm know the differences in environmental conditions and select the attractive market and adapt the marketing strategy to accommodate the specific needs of those markets [5]. Among management characteristics (MC), commitment and support was the most common determinant because commitment at the top management level is crucial for the export success of the firm. When managers are committed, they carefully plan the entry and allocate sufficient managerial and financial resources. Dean et al. (2000) other variables were included in this category as determinants of export are educational background and innovative and professional experience, previous studies on export determinant indicate that better-educated managers with a good command of foreign languages and extensive professional experience tend to be more successful in exporting [10].

In term of external factors, Erramilli & Rao (1993); Style & Ambler (1994) explain in the previous reviews on export opportunities indicate that foreign market characteristics (FMC), such as governmental regulations, influence export performance [4],[6]. Lages & Montgomery (2005) the extent of government intervention can affect the operations of the firm. Finally, the recent studies define that the domestic market characteristics (DMC); existence of programs sponsored by government and non-government agencies designed to firms' export activities contributed positively to the firm's export opportunities [14].

METHODS

The research was mainly aimed to study competitive advantage of natural dyed cotton fabric and weaving in Sakon Nakhon province and the export opportunities by using qualitative methods. The research framework is in Figure 1.

Figure 1
The research conceptual framework



Target Population

- 1. Target population in step 1 is composed of: the head of the provincial community development office and related staff, business management expert organization, Kasetsart University, experts from the Chamber of Commerce, and officials from the provincial industry.
- 2. Target population in step 2 is composed of: data of this research were gathered by the primary data collection method. A total of 4 groups takes part in this study. Data was conducted by interviewing 16 people (group leader, group committee, and group member) key informants of each natural dyed cotton fabric community enterprise group in Sakon Nakhon Province, Thailand. There are in total 32 community enterprise groups that there were 4 groups of natural dyed cotton fabric and weaving. The participants consisted of four groups namely 1) Ban Un Kok group 2) Ban Koksomboon group 3) Ban Nonsuwan group 4) Ban Nhongpakteim group.
- 3. Target population in step 3 is composed of: to confirm the results of research, by focus groups to identify conclusions and recommendations. At this stage, the stakeholders were included in the focus group as follows; representative from Provincial community development, Chamber of commerce, provincial industry expert from Kasetsart University, leader and committee of community enterprise.

Research Tools

- 1. The instrument used in the first step: the researcher used a semi-structured interview. The question items composed of the current situation of the natural dyed cotton fabric and weaving, the competitiveness of the community enterprise, and the export situation. In addition, the research also provides an opportunity for experts to suggest other factors that influence the enhancement of competitiveness and export to achieve a more complete research framework.
- 2. The instrument used in the second step was a semi-structured interview. The questions are designed according to the concept of SWOT analysis [13], Diamond model [7], and Porter's generic competitive

strategies of [2], Cluster concept of [11], and Export opportunities [15]. The interview consisted of questions about the personal information and the community enterprise group information in terms of background, human resources, technology, finance, marketing, support factors, competition, cluster, market size, economic intensity, geographic and language distance, and regional trade agreements (RTAs). To measure the accuracy of the data, the researcher used triangulation methods to check the consistency of the data from the various groups involved [1].

- 3. The instrument used in the third step, data analysis using the analytic induction method from in-depth interviews and observations to link between the research framework and the field data, and the researcher used content analysis to organizing data, describe, and explain the phenomenon. Descriptive phenomenon was divided into 3 parts as follows: 1) general section of natural dyed cotton products and in terms of SWOT analysis consisting of external environment and internal environment (production, marketing, and management) 2) analysis of competitiveness 3) cluster analysis and 4) export opportunities.
- 4. The instrument used in the fourth step: focus group to confirm the conclusions and recommendations to enhance competitiveness and ways to increase export opportunities by the emphasis on participation from stakeholders. The researcher will make the final conclusion from the focus group.

RESULTS

The results of this research were interpreted using Content analysis in a synthesis of findings covering internal and external environmental analysis (SWOT) issues, Diamond model, competitive analysis, Cluster analysis, analysis of opportunities and obstacles in export, including confirmation of the results by focus groups to identify conclusions and recommendations proposals to strengthen the competitiveness and development of export opportunities.

SWOT Analysis

The SWOT analysis was divided into 2 categories: 1) Internal analysis 2) External analysis. 1) Internal Analysis; Strengths (S) were composed of: the using of natural raw materials in the dyeing process, and the dye is chemical free which meets the needs of customers both domestic and abroad, skilled workers with expertise and experience, a long-standing culture, knowledge capital, constant government support policy, and locations near the natural source of raw materials. Weaknesses (W) were: the production process is not able to control color stability to meet the needs of customers; lack of appropriate design for the new generation customer, and lack of business continuity to the next generation, decreasing of skilled workers, lacking of new technology, deficiency in competent designers, few standard quality control systems, scanty branding and marketing strategies, misunderstanding of the benefits of the cluster. 2) External analysis: Opportunity (O) were variety of customer need and need for unique style products, OTOP and cluster supporting policy of the government, the advanced communication technology, and AEC Lastly, threats (T) were: product or a replacement product can be copied easily, resulting in a more intense competition, cotton supply, domestic economic depression, factory working trend of Thai rural people, and intense competition in AEC.

Competitiveness Analysis

The research results based on the Diamond model in figure 2 were considered in 4 aspects as follows: 1) Factor conditions were that cotton, the main raw material to produce, tended to decrease in availability. Nevertheless, the natural dyed raw materials are abundant. The community enterprises still mainly use labor intensive practice; most workers are more interested in working in the factory than in rural areas, causing labor shortage problems; include the scarcity of specialized knowledge workers, and most workers were elderly and joining the community enterprise as a supplementary career. Furthermore, there is a lack of new technology, innovation and research in term of development of raw materials and new production, shortage of systematic and standardized quality control. 2) Relation and Supporting Industries: most of the backward linkage industries were in the area. However, the forward link industries are located far away. In terms of supporting institutions, there are a number of institutions such as Kasetsart University Chalermphrakiat Sakon Nakhon Province Campus, Rajabhat Sakon Nakhon University, and Khon Kaen University that

support both the provinces and Northeastern community enterprises. But, the cooperation between the groups was quite rare. 3) Demand conditions: the demand for natural dyed cotton fabric and weaving are likely to increase. As well, there is government policy supporting natural dyed cotton wearing. In terms of overseas customers, the number is decreasing due to the fact that the change of government caused the promotion of community enterprise/OTOP exports to discontinue. In terms of social trends, need for nontoxic product was likely to increase. Yet, the skills in the design of new fabric patterns, packaging and their story creating that increased product value, are not developed, so the product cannot be sold at high prices. 4) Firm strategy: structure and rivalry, vision, mission, goals, and plans are not clearly set. There is a division of command and duty is divided by skill or expertise. In terms of production strategy, the products have high quality using pure quality cotton and specialized dyeing and weaving, but lack their own unique pattern. In terms of strategic marketing, only Ban Un Kok had their own brand and received the three-star OTOP award in 2012. The price is determined by the cost of raw materials and the price of the competitors not by their own labor cost. Most of the community enterprise groups had two major channels of distribution, governmental customers or middlemen; it is the source of lower prices and late payments. The other channel is trade fairs organized by government agencies. Government has crucial influences in helping the group develop their competitive advantage.

Figure 2

Diamond Model Analysis Organization Strategies Context for Firm - Few knowledge of management Strategy and Rivalry - Insufficient marketing knowledge A Local context that + Skilled and expertise labor encourages efficiency, Insufficient production investment, and sustained Factor (Input) Demand upgrading Conditions Conditions Open and vigorous Competition among Raw materials locally based rivals Domestic demand - Cotton decreased. + More unique natural Related and - Cotton seasonally available products need Supporting but lack of funds to stock up. Industries + Wearing local textiles + Sufficient natural dyed provincial campaign material. **Human Resource** + Labor force with skills and **Related Industry Institute** experience + Upstream industry - Shortage of skilled workers - Downstream business - Shortage of young workers - Deficient knowledge in packaging - Shortage of design worker design and branding Basic structure - Inadequate collaboration between + Access infrastructure groups - Inconvenient transportation

Competitiveness analyzed by Porter's Generic Competitive Strategies Concept, there are 3 aspects as follows: 1) in cost leadership strategy; community enterprise in the present era is faced with many constraints, obstacles to business operations and the cost of production has increased from several factors such as labor and cost of raw materials. Therefore, community enterprises need to adjust their business processes to reduce production costs to increase productivity for survival. 2) In a differentiation strategy, inability to create a different and unique of dyed cotton process and production is the weakness point because of a lack of the knowledge and skills to analyze the needs of consumers and the market; therefore

and transportation

they were not able to develop their products to meet the needs of the rapidly changing market. The community enterprise should develop their product with innovative, local wisdom, and add value by bringing in the advantages of biodiversity, identity, wisdom, art and culture. 3) The generic strategy of focus rested on the choice of a narrow competitive scope within an industry, to focusing on what firm was good at and expertise can create a competitive advantage. Focus on the niche market, the community enterprise needed to adopt a unique strategy to suit the demands of the niche market. This was also a weakness of the community enterprise because it lacked of the knowledge and understanding of the focus or niche strategy.

Based on the key characteristics of the Cluster, the results of this study were summarized into four aspects. Firstly, connectivity, the groups had connectivity of both vertical and horizontal, but still at a relatively low level. Secondly, collaboration, the each group did not sufficiently cooperate. Thirdly, competition, cotton dyeing in Sakon Nakhon province is more competitive that cause development of quality and efficiency of natural dyed cotton. Lastly, Collective Efficiency, there was no cooperation in the transfer of knowledge that causes increasing quality of each manufacturer and not affect to the overall efficiency.

Export Opportunities

The export opportunities analysis was analyzed into 5 aspects: 1) export marketing strategy (EMS) 2) firm characteristics (FC) 3) management characteristics (MC) 4) foreign market characteristics (FMC) and 5) domestic market characteristics (DMC). 1) Export marketing strategy (EMS), the products have quality because they are of pure quality cotton, the raw materials used in the dyeing process are natural, which meet the needs of customers both domestic and abroad, but lack their own unique pattern. The price is reasonable. The channels of export, government are still a crucial supporter for exporting. The community enterprise has insufficient knowledge of promotion strategy and market research. 2) Firm characteristics (FC), the community enterprise is small group composing 10-30 members. Thus, they were not able to gain benefit from economies of scale and scope in terms of production, managerial talent, finance, and marketing resources. 3) Management Characteristics (MC), most of the community enterprise heads have no education and do not speak English. Moreover, they do not have international experience helping them know the differences in environmental conditions, identify opportunities, select the attractive market and adapting the marketing strategy to meet the specific needs of markets. 4) Foreign Market Characteristics (FMC), there are some benefit to the ASEAN Economic Community (AEC) that is a mainstream market such as expanding exports opportunity, tariff and non-tariff barriers are abolished and the free movement of goods. 5) Domestic Market Characteristics (DMC): there are several programs sponsored by the Thai government that contributed positively to the community enterprise export such as The SUPPORT Arts and Crafts International Centre of Thailand (Public Organization) promote marketing support and expanding the foreign and domestic market.

Although, the natural dyed cotton fabric and weaving community enterprise is being increasingly challenged by lower cost competitors in neighboring countries, like Laos People's Democratic Republic, high-quality by community enterprise spinners and weavers focused on high-end quality manufacturing are still in high demand. Overall improved competitiveness enabling existing spinners and weavers to better compete in both the international and domestic markets lead to an increase in overall exports of textiles and garments to mainstream markets; ASEAN, Japan, EU and USA, this year. Thus, if the community enterprises were be able to improve marketing strategies and quality control, there were still export opportunities of Sakon Nakhon natural dyed cotton that is unique, non-toxic, and distinctive weaving style.

CONCLUSION AND FUTURE WORK

Recommendations: Competitive advantage ability of natural dyed cotton fabric and weaving in Sakon Nakhon province would be able to increase by 1) enhancing the existing cluster to become a complete enterprise cluster. 2) The group should manage and solve the shortage of cotton, which is the main raw material of the product as well as the shortage of new generations of skilled workers. 3) Community enterprises need to analyze both domestic and foreign customer demand in order to increase customer satisfaction. 4) Adding value to products such as informing customer about the history, origin of raw materials and process. 5) Community enterprises need to adjust their business processes to reduce production costs to increase productivity for survival. 6) Community enterprise should be developing their product with

innovative, local wisdom, and add value, by bringing in the advantage of biodiversity, identity, wisdom, art and culture.

Export opportunities of natural dyed cotton fabric and weaving in Sakon Nakhon province can be done by 1) community enterprises developing their product quality and maintaining non - toxic materials that are the strength and differentiate the products. 2) To help the natural dyed cotton industry be sustainable, the government needs to support the industry in terms of knowledge and understanding in management and marketing such as organizing and human resource management.

Limitations and directions for future research are: 1) this research focuses on the weaving group in Sakon Nakhon Province only. In fact, the indigo fabric industry also has weaving groups in other provinces such as Nakhon Phanom province, Mukdahan province, and Udon Thani province. 2) In addition, the Department of Industrial Promotion (2017) also commented that the problem with the packaging format was not standard and not distinctive enough to attract the attention of buyers. Therefore, it is an urgent need to solve the problem of product development to compete with manufacturers from other countries. It can be developed for export opportunities in the future [2].

REFERENCES

- [1] Norman K. Denzin (1970), "The Research Act: A Theoretical Introduction to Sociological Methods" *Transaction Publishers*.
- [2] Michael E. Porter (1985), "Competitive Advantage: Creating and Sustaining Superior Performance" *Simon and Schuster*.
- [3] Ditchtl, E., Koeglmayr, H.-G. & Mueller, S. (1990), "International Orientation as a Precondition for Export Success" *Journal of International Business Studies*, Vol.21, Pp. 23-40.
- [4] Erramilli, M.K. & Rao, C.P. (1993), "Service Firms' International Entry Mode Choice: a Modified Transaction Cost Approach" *Journal of Marketing*, Vol.57, Pp. 19-38.
- [5] Cavusgil, S.T. & Zou, S. (1994), "Marketing Strategy Performance Relationship: an Investigation of the Empirical Link in Export Market Venture" *Journal of Marketing*, Vol.58, Pp. 1-21.
- [6] Style, C. & Ambler, T. (1994), "Successful Export Practice: the UK Experience" *International Marketing Review*, Vol.11, Pp. 23-47.
- [7] Michael E. Porter (1998), "On Competition". (n.p.): A Harvard Business Review Book.
- [8] Michael E. Porter (1998), "The Competitive Advantage of Nations (With a New Introduction)" (n.p.): Macmillan.
- [9] Zou, S. & Stan, S. (1998), "The Determinants of Export Performance: A Review of the Empirical Literature Between 1987 and 1997" *International Marketing Reviews*, Vol.15, Pp. 333-356.
- [10] Dean, D.L., Menguc, B. and Myers, C.P. (2000), "Revisiting Firm Characteristics, Strategy, and Export Performance Relationship: A Survey of the Literature and an Investigation of New Zealand Small Manufacturing Firms" *Industrial Marketing Management*, Vol.29, Pp. 461-477.
- [11] Sutham Vanichsenee (2001), "The Concept of Cluster and Competitiveness" *Cluster for Competitiveness (C4C) Group.*
- [12] Zhou, H. & Zou, S. (2002), "The Impact of Industry Concentration and Firm Location on Export Propensity and Intensity: an Empirical Analysis of Chinese Manufacturing Firms" *Journal of International Marketing*, Vol.10, Pp. 52-71.
- [13] Humphrey, A. (2005), "SWOT Analysis for Management Consulting" *SRI Alumni Newsletter*. SRI International, United States.
- [14] Lages, L.F. & Montgomery, D.B. (2005), "The Relationship between Export Assistance and Performance Improvement in Portuguese Export Ventures: an Empirical Test of the Mediating Role of Pricing Strategy Adaptation" *European Journal of Marketing*, Vol.39, Pp. 755-784.
- [15] Office of the National Economic and Social Development Board (2005), "Cluster Development in Thailand" www.nesdb.go.th
- [16] Zerrillo P.C., and Gregory M.T. (2007), "Developing Brand and Emerging Market: An Empirical Application." *Place Branding and Public Diplomacy*.

- [17] Carlos M.P. Sousa, Francisco J. Martinez-Lopez and Filipe Coelho (2008), "The Determinants of Export Performance: A Review of the Research in the Literature between 1998 and 2005" *International Journal of Management Reviews*, Vol.10, No. 4, Pp. 343-374.
- [18] Arpita Agnihotri and Saurabh Bhattacharya (2015), "Determinants of Export Intensity in Emerging Markets: An Upper Echelon Perspective" *Journal of World Business*, Vol.50, Pp.687-695.
- [19] Department of Industrial Promotion (2015), "Integration and Linkage Industry Development Project" www.ipc4.dip.go.th
- [20] The National Economic and Social Development Board, National Statistical Office (2018), "Garment and Textile Export Report" www.thaitextile.org
- [21] Sorin M.S. Krammer, Roger Strange & Addisu Lashitew (2018), "The Export Performance of Emerging Economy Firms: The Influence of Firm Capabilities and Institutional Environments", *International Business Review*, Vol.2, Pp. 218-230.

The Antecedents and Consequence of Envy on Social Network Sites

Hsiu-Hua Cheng

Chaoyang University of Technology 168, Jifeng E. Rd., Wufeng District, Taichung, 41349 Taiwan, R.O.C. 886-4-23323000 natashac09@gmail.com

ABSTRACT

Recently, using social network sites has become a popular online activity. On social network sites, people can build and maintain interpersonal relationships via posting social information and consuming social information. Despite these benefits, some studies have found negative impacts of social network sites. Envy could be a common negative consequence of consuming social information on social network sites. Even though envy may lead social network sites avoidance and increase switching intention, few studies uncover these issues. For managers of social network websites and brand managers of social network sites, understanding the issue on envy is important. Thus, the research focuses on antecedents and consequence of users' envy on social network sites based on envy dual focus perspective and social network perspective. Understanding these issues will contribute to research issues of social network sites and switching intention, and will help managers of social network websites and brand managers of social network sites to obtain advantages in the face of environmental stresses.

CCS Concepts

• Information systems → Web and social media search

Keywords: Social network sites; Envy; Switching intention

1. INTRODUCTION

Recently, using social network sites has become a popular online activity. Kaplan and Hawnlein [16] indicated that over 75% of Internet users adopt social network sites. Previous study indicated that consuming information is a key activity on social network sites [34].

Although social network sites can help us to build and maintain the interpersonal relationships [10], some scholars propose a warning that the usage of social network sites may product some negative outcomes [27]. Previous study indicated that envy is a common negative result that is produced by following other users and consuming information that is posted from other users [27]. On social network sites, users often engage positive self-presentation [32]. That is, most of users on social network sites sharing information about their positive and successful events [22]. Thus, users on social network sites often expose to positive information that is shared by other users. Exposing to positive information that is shared by other users may lead to envy because users who consume information may always feel that the experiences they have are inferior to others. Chou and Edge [8] found that individuals who often use Facebook are likely to think that other users have a better life than themselves. Krasnova et al. [18] proposed a new term "Facebook envy" that refers to envy that is felt after consuming information about other users on Facebook. The envy feelings can damage users' well-being and life satisfaction [27]. For decreasing the envy feelings, individuals may consciously reduce the usage of social network sites [18]. This may damage the website performance. Thus, for managers of social network sites, understanding the issue about envy that users experience on social network sites is important. In other word, for managers of social network sites, reducing the envy feelings on social network sites is imperative.

Smith [26] proposed the envy dual focus perspective and argued that envy can be understood as "a combination of both a focus on one's own disadvantage and on the other person's advantage", and in envy, "there may be an inherent shifting back and forth between self and other focus". Regarding on a focus on one's own disadvantage, this study takes perceived behavior control as a kind of the focus on one's disadvantage. While a focus user on social network site perceives that the difference between he and other users with advantage can't change, that is he can't control the difference (low perceived behavior control), negative emotion is experienced [21]. On the aspect of a focus on the other person's advantage, this study proposes degree centrality to be a variable of a focus on the other person's advantage based on social

network theory. When a focus user locates at a high degree centrality which can deliver rich social information, he can obtain huge information about the advantage of other persons, and then experience envy feeling. Moreover, previous study demonstrated that the impact of envy on switching intention [19]. Thus, this study combines the envy dual focus perspective and social network theory to explore the antecedents and consequence of envy on social network sites.

2. LITERATURE

2.1 Social Network Sites (SNS)

Social network sites have become a popular tool for online social interaction and sharing emotion [14]. Previous study indicated that social network site is a website that can build an online community, and this website can assist users to overcome barriers of time, culture and geography to interact with each other [23]. People can share information, opinions, ideas, interests, views, and experiences to known persons, and to unknown persons to build new interpersonal relationships on social network sites [15]. People can create individual profile, share pictures and individual information to others, and add friends on lists on social network sites [13]. When users join social network sites, they are asked to fill individual information including age, interest, about me, etc [5]. Users can be identified to communicate with other members on social network sites based on individual information.

Shao [24] indicated that the activities on social network sites can be classified in to consuming, participating, and producing. Consuming means users read, observe and view contents silently on websites. When a user interacts with others by posting messages, asking questions, and sharing information on social network site, it is called participating. Producing refers to an advanced usage, that is only not sharing information, but also creating picture, video, music, news, articles, etc

2.2 Switching Intention

According to theories of reasoned action, Verplanken and Orbell [31] indicated that intention refers people make decisions consciously. Intention means a subjective probability of engaging a behavior [11]. Switching intention means a psychological tendency that customers intend to stop using current products or to switch from current brand to another [17]. Shin and Kim [25] defined switching intention as an intention degree that customers end the transactional relationship with service provider. On the area of information technology, switching intention refers to users give up the usage of the websites they are adopting currently and turn to adopt new website [35].

2.3 Envy

Envy is defined as a painful emotion that emerges as a result upward comparison to others with advantages [27]. Advantaged others mean persons have something that we desire [27]. Envy can be classified into malicious envy and benign envy [27]. Benign envy can lead to moving-up motivation. For instance, persons can improve themselves to achieve a better performance [30]. Malicious envy causes a pulling-down motivation, such as harm the envied object [30].

Smith [26] proposed the envy dual focus perspective. Smith [26] argued that envy is a feeling that might arise from shifting back and forth between self and other focus. Smith [26] indicated that envy can be understood as "a combination of both a focus on one's own disadvantage and on the other person's advantage". The focus on one's disadvantage may cause a feeling of inferiority, and then produce depressive feeling [28]. The focus on the other person's advantage can conduct to a sense that the advantage that other persons are underserved, and then produce resentment [28]. The envy dual focus perspective proposed by Smith [26] argues that envy is a feeling that might arise from a focus on one's own disadvantage and a focus on the other person's advantage

2.4 Perceived Behavior Control

Perceived behavior control means an individual perception of his ability to perform a particular behavior [1]. Theory planned behavior argues that perceived behavior control refers to the resources and opportunities that an individual perceived that he actually opposes while performing a particular behavior. Theory planned behavior indicates that attainable control beliefs can determine behavior control that people perceive. These attainable control beliefs refer to an individual perception about the existence resources and opportunities required to perform a particular behavior, and the evaluation of the level of importance of these resources and opportunities [1].

Previous studies indicated that perceived behavioral control includes two components: internal component and external component [3]. While an individual perceives that he has control over personal resources, such as requisite skills, confidence, and ability to execute the behavior, this behavior may be internally controllable [3]. This concept is similar to self-efficacy proposed by Bandura [4]. Self-efficacy refers a

measure of perceived confidence in a person's ability to perform a particular behavior [9]. An individual with high perceived internal control may be likely to execute a behavior. Regarding on external component, when a behavior is perceived as easy to perform, the behavior is externally controllably. The concept of external control is related to environment, such as time, opportunity, and dependence on others [1]. Besides, the concept of external control is similar to the facilitating condition proposed by Triandis [29]. That is, when a behavior is easy to perform, people are likely to execute a behavior.

2.5 Social Network Theory

A social network is composed of ties between social entities [33]. Social entities refer to actors, such as individuals, teams, or companies; Ties refer to the linkages between two actors [33]. The network is built by social entities via mutual communication and interaction [12]. It can help understand the locations and communicative channels of social entities. The degree centrality of a node represents the number of its direct ties [33]. The more direct ties a focus actor has, the higher degree centrality he locates at.

3. MODEL AND HYPOTHESES

This study combines the envy dual focus perspective and social network theory to explore the antecedents and consequence of envy on social network sites. The relationships among perceived behavioral control, degree centrality, and envy, and the relationship between envy and switching intention are explored in this study.

Smith [26] argued that envy is a feeling that arises from shifting back and forth between a focus on one's own disadvantage and a focus on the other person's advantage. This study argues that perceived behavior control can reflect a focus on one's own disadvantage.

Previous study on upward comparison demonstrated that the importance of perceived control in an individual reactions to upward comparison [20]. Studies indicate that the beliefs that the discrepancy between advantaged others and themselves is unchangeable are linked to the judgment of advantages that others possess [20]. Scholars indicated when the discrepancy is unchangeable, negative emotion will produce [21]. Study expressed that perceived control can change the meaning and importance of these discrepancies and alter their responses to these discrepancies [20]. McMullen et al. [21] pointed out when people have high perceive control, negative emotion should be less experienced. Perceived behavioral control is a kind of perceived control. Perceived behavioral control refers to an individual perception of his ability to perform a particular behavior [1]. Thus, people with high perceived behavior control can believe these discrepancies can be change and they could be like advantaged persons. In this case, envy may be less experienced.

Most users on social network sites share their positive and successful information [22]. Users on social network sites frequently access positive and successful information shared by other users. In this situation, the focus user perceives that other users have advantages that they desire. If the focus user has low perceived behavioral control, he may believe that he never possesses the abilities or opportunities to experience pleasure and well-being life, and then produces envy [21]. Therefore, this study proposes H1.

H1: Perceived behavioral control has a negative impact on envy.

Regarding on a focus on the other person's advantage, this study proposes degree centrality to reflect the other person's advantage. Degree centrality refers to the number of direct ties that a focus actor has [33]. That is, the more direct ties a focus actor has, the higher degree centrality he locates at [6]. A large number of direct ties can bring rich information [7]. Thus, a focus user on social network sites with high degree centrality means he can observe and access many positive and successful information shared by other users who are advantaged persons by a large number of direct ties. In this situation, the focus user with high degree centrality on social network sites is easy to believe that their experiences are inferior to others to lead to envy feeling. Therefore, this study proposes H2.

H2: Degree centrality has a positive impact on envy.

Lim and Yang [19] argued that the more envy feelings an individual experiences, the higher switching intention an individual has. On social network sites, while a focus user experiences envy, he may avoid to use this website to reduce envy feeling. Thus, this study proposes H3.

H3: Envy has a positive impact on switching intention.

The research model is shown in Figure 1.

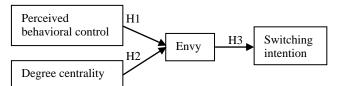


Figure 1. Research Model

4. CONCLUSION

Based on the envy dual focus perspective and social network theory, this study proposes a research model to examine the antecedents and consequence of envy on social network sites. Understanding these issues will contribute to research issues of social network sites and switching intention, and will help managers of social network websites and brand managers of social network sites to obtain advantages. Future works can collect and analyze empirical data to verify this research model.

5. ACKNOWLEDGMENTS

This work was supported by the Ministry of Science and Technology, R.O.C., under grant numbers MOST106-2410-H-324-004-MY2.

6. REFERENCES

- [1] Ajzen, I. 1991. The theory of planned behavior. Organ. Behav. Hum. Dec. 50 (1991), 179-211.
- [2] Ajzen, I. 1998. Models of human social behavior and their application to health psychology. *Psychol. Health.* 13, 4 (1998), 735-739
- [3] Armitage, C.J., Conner, M. Loach, J., and Willetts, D. 1999, Different perceptions of control: Applying an extended theory of planned behavior to legal and illegal drug use. *Basic. Appl. Soc. Psych.* 21 (1999), 301-316.
- [4] Bandura, A. 1997. Self-efficacy: The Exercise of Control. W.H. Freeman, New York.
- [5] Boyd, D. and Ellison, N. 2007. Social network sites: Definition, history, and scholarship. *J. Comput-Mediat. Comm.* 13, 1 (2007), 210-230.
- [6] Burt, R.S. 1982. Toward A Structural Theory of Action: Network Models of Social Structure Perception and Action. Academic Press, New York.
- [7] Burt, R.S. 1992, Structural Holes: The Social Structure of Competition. Harvard University Press, MA.
- [8] Chou, H.T.G. and Edge, N. 2012. "They are happier and having better lives than I am": The impact of using Facebook on perceptions of others' lives. *Cyberpsych. Beh. Soc. N.* 15, 2 (2012), 117-121.
- [9] Conner, M. and Armitage, C.J. 1998. Extending the theory of planned behavior: A review and avenues for further research. *J. Appl. Soc. Psychol.* 28 (1998), 1429-1464.
- [10] Ellison, N. B., Steinfield, C., and Lampe, C. 2007. The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *J. Comput-Mediat. Comm.* 12, 4 (2007), 1143-1168.
- [11] Fishbein, M. and Ajzen, I. 1975. Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Addison Wesley, MA.
- [12] Freeman, L.C. 1979. Centrality in social networks: Conceptualizations clarification. *Soc Networks*, 1 (1979), 215-239.
- [13] Hew, K.F. 2011. Students' and teachers' use of Facebook. Comput. Hum. Behav. 27 (2011), 662-676.
- [14] Hoadley, C.M., Xu, H., Lee, J.J., and Rosson, M.B. 2010. Privacy as information access and illusory control: The case of the Facebook news feed privacy outcry. *Electron. Commer. R. A.* 9, 1 (2010), 50-60.
- [15] Jafarkarimi, H., Saadatdoost, R., Sim, A.T.H., and Hee, J.M. 2016. Behavioral intention in social networking sites ethical dilemmas: An extended model based on Theory of Planned Behavior. *Comput. Hum. Behav.* 62 (2016), 545-561.
- [16] Kaplan, A. and Haenlein, M. 2010. Users of the world, unite! The challenges and opportunities of social media, *Bus. Horizons*. 53, 1 (2010), 59-68.

- [17] Keaveney, S.M. 1995. Customer switching behavior in service industries: An exploratory study. *J. Marketing*, 59 (1995), 71-82.
- [18] Krasnova, H., Wenninger, H., Widjaja, T., and Buxmann, P. 2013. Envy on Facebook: A hidden threat to users' life satisfaction? In *Proceedings of 11th International Conference on Wirtschaftsinformatik* (Leipzig, Germany, 2013).
- [19] Lim, M. and Yang, Y. 2015. Effects of users' envy and shame on social comparison that occurs on social network services. *Comput. Hum. Behav.* 51 (2015), 300-311.
- [20] Major, B., Testa, M., and Bylsma, W.H. 1991. Responses to upward and downward comparisons: The impact of esteem-relevance and perceived control, In *Social Comparison: Contemporary Theory and Research*, J. Suls, & T.A.Wills, Eds. (pp. 237-260). Lawrence Erlbaum, Hillsdale, NJ.
- [21] McMullen, M.N., Markman, K.D., and Gavinski, I. 1995. Living in neither the best nor worst of all possible worlds: Antecedents and consequences of upward and downward counterfactual thinking. In *What Might Have Been: The Social Psychology of Counterfactual Thinking*, N.J. Roese, & J.M.Olson, Eds. (pp. 133-167). Lawrence Erlbaum, Mahwah, NJ.
- [22] Mehdizadeh, S. 2010. Self-presentation 2.0: Narcissism and self-esteem on Facebook. *Cyberpsych. Beh. Soc. N.* 13 (2010), 357-364.
- [23] Reynolds, G.W. 2011. Ethics in Information Technology (3rd ed.). Cengage Learning, Boston, MA, USA.
- [24] Shao, G. 2009. Understanding the appeal of user-generated media: A uses an gratification perspective. *Internet. Res.* 19, 1 (2009), 7-25.
- [25] Shin, D.H. and Kim, W.U. 2008. Forecasting customer switching intention in mobile service: An exploratory study of predictive factors in mobile number portability. *Technol. Forecast. Soc.* 75, 6 (2008), 854-874.
- [26] Smith, R.H. 2000. Assimilative and contrastive emotional reactions to upward and downward social comparisons. In *Handbook of Social Comparison: Theory and Research*, J. Suls & L.Wheeler, Eds. (pp. 173-200). Plenum, New York.
- [27] Smith, R.H. and Kim, S.H. 2007, Comprehending envy, Psychol. Bull. 133 (2007), 46-64.
- [28] Smith, R.H., Parrott, W.G., Ozer, D., and Moniz, A. 1994. Subjective injustice and inferiority as predictors of hostile and depressive feelings in envy. *Pers. Soc. Psychol. B.* 20 (1994), 705-711.
- [29] Triandis, H.C. 1977. Interpersonal Behavior. Brooks/Cole, Monterey, CA.
- [30] Van de Ven, N., Zeelenberg, M., and Pieters, R. 2011. The envy premium in product evaluation. *J. Consum. Res.* 37, 6 (2001), 984-998.
- [31] Verplanken, B. and Orbell, S. 2003. Reflections on past behavior: A self-report index of habit strength. *J. Appl. Soc. Psychol.* 33, 6 (2003), 1313-1330.
- [32] Walther, J.B. 2007. Selective self-presentation in computer-mediated communication: Hyperpersonal dimensions of technology, language, and cognition. *Comput. Hum. Behav.* 23, 5 (2007), 2538-2557.
- [33] Wasserman, S. and Faust, K. 1994. *Social Network Analysis: Methods and Applications*. Cambridge University Press, Cambridge.
- [34] Wise, K., Alhabash, S., and Park, H. 2010. Emotional responses during social information seeking on Facebook. *Cyberpsych. Beh. Soc. N.* 13 (2010), 555-562.
- [35] Zengyan, C., Yinping, Y., and Lim, J. 2009. Cyber migration: An empirical investigation on factors that affect users' switch intentions in social networking sites. In *Proceedings of the 42nd Hawaii International Conference on*

AN EMPIRICAL STUDY OF THE RELATIONSHIP BETWEEN STAFF TRAINING AND OVERALL JOB SATISFACTION: A CASE STUDY OF A SRI LANKAN LEADING PRIVATE BANK

Sooriyabandara W.M.S.L.H ¹, Perera G ²

¹ School of Management, Cardiff Metropolitan University, (UK)
² School of Management, Cardiff Metropolitan University, (UK)

¹ <u>lakshmisooriyabandara@yahoo.com</u>

² dgayaan@yahoo.com

ABSTRACT

Training is a formal process of changing employee behavior and motivation in the way that will enhance employee job performance that ultimately leads to organizational overall performance. When considering Sri Lankan banking sector it is highly competitive with market players. Moreover, providing necessary training opportunities are crucial. At the same time overall employee job satisfaction is a key competitive advantage to retain the competent employees in the Sri Lankan Banking industry. Many research studies on employee job satisfaction were not addressed on satisfaction with workplace training as an important factor of overall job satisfaction. Therefore, this study empirically examines training factors affecting overall job satisfaction of a leading Sri Lankan private bank. This study developed a model which adopted employee commitment on training, type of training, time spent in training, training methodology with overall job satisfaction. A survey questionnaire was conducted to investigate the critical factors affecting employee overall job satisfaction. Questionnaire was distributed among 100 employees and 67 were responded actively. The collected data was analyzed using SPSS. The data analysis categorized under two main statistical techniques such as, "Descriptive Statistics" & "Inferential Statistics". The relationship between all the four independent variables and overall job satisfactions were tested using bivariate analysis. Further this study also tries to answer if there any differences in perception of overall employee job satisfaction in terms demographic variables such as Age, Gender, Designation, Department, Qualification, Years of served. The results highlighted that employee commitment on training, type of training, training methodology are the critical factors affecting overall job satisfaction and there was no significant relationship in-between time spent in training and overall job satisfaction. The results also showed that there were no differences in perception in terms of Age, Gender, Designation, Department, Qualification, Years of served.

Keywords: training, employee overall job satisfaction,

THE ECONOMIC, POLITICAL AND SOCIAL DIMENSION OF RESOURCE ABUNDANCE: A SURVEY

Ruba Aljarallah

School of Management, Cranfield University, United Kingdom Email: ra.aljarallah@gmail.com

Shahzad Alvi

Department of Economics, School of Social Sciences and Humanities, National University of Sciences and Technology, Pakistan Email: shahzad.alvi@s3h.nust.edu.pk

ABSTRACT

Resource abundance as a curse or blessing has been an overarching topic of research for both academics and policy makers. This paper aims to study the economic, political and social dimension of resource abundance. The extensive literature regarding economic dimension of resource abundance indicates the negative correlation between resource abundance and economic growth. Literature exploring political dimensions overwhelmingly reports the deterioration of political institutions in the form of rent seeking and corruption in face of resource abundance. The literature regarding social dimensions is also compatible with the findings stated for economic and political dimensions. However, a good deal of studies also reveal that the relationship between resource abundance and all three dimensions of nation life is not straight forward and depends on several factors among which institutional quality and the level of economic growth are of utmost importance. Due to favourable economic, political and social factors resource abundance can become a blessing rather than a curse.

Keywords: Resource Curse, Dutch Disease, Institution Quality, Human Capital

Analyzing of Economic Value Source of Manado City Revenue in Bunaken National Park

Ai Nuri Barkiah

Faculty of Economic and Bussiness, Universitas Padjadjaran, Indonesia E-mail: nuri.97barkiah@gmail.com

Raudatu Figro Safarina

Faculty of Fisheries and Marine Science, Universitas Padjadjaran, Indonesia E-mail: raudatufs@gmail.com

Rima Ismatul Khadijah

Faculty of Economic and Bussiness, Universitas Padjadjaran, Indonesia E-mail: ismatulrima@gmail.com

Stanijuanita Marantika

Faculty of Social and Political Science, Universitas Padjadjaran, Indonesia E-mail: stanijuanita@gmail.com

ABSTRACT

Indonesia is an archipelagic country, with a ratio of land area and waters 1: 3 Dan internationally recognized (UNCLOS 1982) which was then ratified by Indonesia with Law No.17 Year 1985.Based on UNCLOS'82 data The extent of Indonesian territorial territory includes an area of 3.1 million km2, consisting of 2.8 million km2 of coastal territory and 0.3 million km2 of marine territory. No wonder if nature tourism, especially its maritime tourism is more advanced and become the main attraction for tourists both tourists local and international.Bunaken National Marine Park in North Sulawesi is representative of tropical water ecosystems in Indonesia consisting of mangroves, seagrass, coral reefs and coastal is one of the flagship objects of tourism that is in great demand by both National and International tourists and is also an asset that can help the economy of Manado people in particular and North Sulawesi in general.Namun series ng with the growth of ecotourism activities This study aims to determine and learn the economic value of Bunaken National Park based on travel costs to visit and study factors that influence visitors to paythe benefits of the existence of Bunaken National Park.

Keywords: Bunaken National Park, Bunaken community income, Economic Value

332

Language Skill Improvement Planning of Hotel Businesses in Urban Center of Northeast, Thailand

Kullanun Sripongpun

Lecturer, Department of Business Management, Faculty of Liberal Arts and Management Science, Kasetsart University, Thailand E-mail: kullanun.s@ku.th

ABSTRACT

The ASEAN Economic Community (AEC) is now focused (both of ASEAN countries and outsiders) on preparing themselves to face changes from the ASEAN member countries cooperation. As well as the hotel businesses in Thailand, those who are affected by the service liberalization, have planned and prepared language skill improvement for their staff. The purpose of this study is 1) to explore the perception of AEC after it started in 2015 and 2) to investigate the planning procedures of language skill improvement in the hotel businesses. Data was collected by semi-structured interviewing with key informants of each hotel in urban centers of northeast of Thailand (Khon Kaen Province, Udon Thani Province and Nong Khai Province).

The results suggested that each hotel received information about AEC from many types of media, including offline media and online media. However, the results showed that the channels of public relations from AEC are not enough. The government or the mass media should have more roles and try to spread AEC news to all Thai people. Furthermore, the procedures of language skill improvement, there were many different ways that each hotel trained their staff. For example, some hotels hired outsiders, some hotels sent their staff to train with the government's projects or cooperate with an independent foundation. Most of them believed that the training program for improving language skills was very important for their business and should continue to be supported. Moreover, implications, limitations and directions for the future research are outlined in this study.

Keywords- AEC, Hotel businesses, Language skill improvement

INTRODUCTION

Nowadays, the advance technology has changed our world. Each country attempts to develop their country to move forward. It is the truth that some countries move forward very fast, but some countries need help from others. Therefore, the cooperation between countries in each group has occurred for working together in many aspects, especially in economic development.

ASEAN (Association of Southeast Asian Nations) was established in 1967. The objectives were created for the members to collaborate and develop their economy, society and culture to grow together by promoting the cooperation between them. As a result of the collaboration, the leader of ASEAN attempts to develop ASEAN to be "ASEAN Community" in 2015. For AEC, it is the combination for the economic unity among the member countries. It covers the liberalization and facilitation for the free flow of capital, free flow of skilled labor. Moreover, every member countries have to improve the customs rules for establishing the same standard rules and have to control the quality of products and the economic policies. The combination of AEC is more interesting to ASEAN countries and it also impacts the increasing of bargaining power with other countries [21]. There is a creation of the AEC Blueprint for determining the direction or for planning the things that have to do under the specified period. The main aspects are (1) Single market and production base (free flow of goods, free flow of services, free flow of investment, free flow of skilled labor and free flow of capital) (2) High competitive economic region (3) Equitable economic development and (4) Integration into global economy [18].

According to the point "Single market and production base", the one important aspect is service liberalization. In the area of trade in services, ASEAN formalized its integration commitment through the signing of the ASEAN Framework Agreement on Services (AFAS) by the ASEAN Economic Ministers (AEM) on 15 December 1995 in Bangkok, Thailand [20]. The objectives of AFAS are (1) to enhance cooperation in services among ASEAN Member States (AMS) (2) to eliminate substantial restrictions to trade services amongst ASEAN member states (3) to liberalize trade in services undertaken by ASEAN member states under the General Agreement on Trade in Services (GATS) with the aim to realizing a free trade area in services and (4) to provide for the recognition of education or experience obtained,

requirements met, or licences or certification granted for the purpose in the form of a mutual recognition arrangement [3].

The hotel business is the service business that relates to tourism [19]. It has to prepare for the sudden change of service liberalization in 2015 [35]. Most hotels in Thailand are high quality; there are several price levels and several types for the tourists. The phrase "Thailand is a land of smile", is always attracting the foreign tourists. However, a limitation of language skill is also a big problem of Thai people [22]. Therefore, this point is interesting to the researcher and I want to examine the research questions: how do the hotel businesses prepare their staff for language skills to support the foreign tourists towards the AEC? The main objectives of this study are (1) to explore the perception of the AEC of the hotel businesses in Khon Kaen Province, Udon Thani Province and Nong Khai Province; (2) to explore the procedures of language skill improvement for the hotel staffs.

LITERATURE REVIEW

Hospitality: the important of language skill in hotel business

In a service business, it is important to improve and develop the staff to have a high ability, to be service minded and pay attention to service quality [12]. Especially in the hotel business, the staffs have to have an efficiency in communication skills. In addition, the perception of service quality is an influential component of customer satisfaction and it will be reflected in the return of the customer or long-term loyalty [7].

Language reflects the culture and it is an important tool that is used to communicate (Dawson and others 2011). The failure of communication leads to uncertainty, anxiety and mistrust [17]. Therefore, communication with the customer is learning what the customer wants and attempting to respond to it [4]. In fact, the hotel industry often faces problems about low standard services. One factor is the staff have poor language ability and communication skills [9]. Therefore, the hotel, whether big or small, must concentrate on providing training for their staff [11]. Furthermore, skill and quality of the staffs are the powerful factors that can influence the business to have a competitive advantage [12].

Perception

Perception is the process for exposure the information, attention and comprehension the meaning [16]. Generally, perception is a process that happens unconsciously or inadvertently. Furthermore, it is usually created by an accumulation of experience from society [15]. People have a different attention span and also will perceive information differently. The difference of perception is occurred from many types of filling [35]. For example, motivations, past experience, frame of reference, environment and mental and emotional state.

The process of perception has three major stages [10] that are Perceptual, Selection, Perceptual Organization and Perceptual Interpretation. Moreover, there are many components that impact individual perception [16] such as;

- The qualification of the recipients: it affects the different individual perception. For example, need, attitude, personality or personal adjustment.
- Attention and Perception: generally, people will focus on something that matches with their needs and interest.
- Personality: personality will affect perception in regards to about the relationship between attitude and society.
- Early Experience: the primary experience or old knowledge will influence the interpretation of the meaning of perception.

Training

Training is the process that is associated with skill and expertise [6]. Training is significant for the understanding of the business goals [11]. Moreover, it improves the performance of the individual by adding more knowledge, skill and attitude for achieving the main objective and it can help people perform their duties effectively [13].

There are many objectives of training [6], for example, to amend and develop the staff's knowledge or to increase the skill and the expertise that can make the staffs can do better jobs and can decide or solve problems by themselves. To handle increasing authority and responsibility effectively, it often depends on training that develops and enhances the skills necessary for employees [1]. The training process is developed and designed for controlling employees to understand the organizational values, and to instill, shape and reinforce the appropriate attitudes [2].

The importance of training programs is indicated significantly in the hotel business. Many people have commented that the training programs are not a waste of time, money and effort [23]. There are three basic factors affecting the efficiency of training efforts:

- (1) Individual Factors: such as behaviors toward the job and personality, the educational level of the individuals, training expectations or motivation levels of the individuals.
- (2) Organizational Factors: such as the vision of the top manager, supporting from superiors and colleagues or practicing of training with enough financial support.
 - (3) Training Programs Factors: such as perception of training or particularity of the trainers [11].

Therefore, training has the important role of developing skill and performance [23]. It can increase the quality of touristic goods and services. At the same time, the training programs are needed to increase the productivity of the hotel staff. It can say that the objective of each training program focuses to improve and provide the best skill for individuals [11].

METHODS

The data was collected from 16 hotels; 6 hotels from Khon Kaen Province, 5 hotels from Udon Thani Province and 5 hotels from Nong Khai Province. The criterion used to select the hotels was location. The researcher chose the hotels that are located in Amphoe Muang of three provinces. In addition, the crucial criterion for selecting the hotels was the reputation of the hotels in each province, high standardization in every aspect and the completion of the facilities. After the researcher contacted the selected hotels, some hotels did not allow for the collecting of data. Therefore, the criterion for choosing the hotels had to change by reducing the qualifications. The data was collected by semi-structured interviewing with key informants such as the business owners, the assistant manager/the manager or the assistant human resource manager/the human resource manager from each hotel. The voice recorder was used for recording the conversation. After the data was collected, the researcher systematized and analyzed the data in each area using the interpretation method. After that, categorizing the meaning of the data and analyzing it again before summarizing.

RESULTS

The Perception of AEC

The hotels which are the member of Esan Hotel Association receive the information from AEC via letter. Furthermore, they are informed about introductive data of AEC by the Tourism Business Association and the Chamber of Commerce of each province via letter or invite to attend the meetings or seminars. In addition, the AEC followed up the information with many messages on television, magazines, newspapers and the Internet. The information was recognized only in the primary data, not focusing into any details.

The interviewees all commented about the public relations of AEC insofar as mass media and the government had not promoted the information enough. If a person was not in the business or had worked in this field, they would not know. The information did not spread to the provincial area; it clustered only in the center. Moreover, the coordination between the various sectors and the entrepreneur was insufficient.

Improvement of Language Skill

The procedures for language skill improvement of each hotel are different. Some hotels hire outside personnel for teaching as a training course every year. The frequency for training is also different, for example: quarterly, two times a year or once a year and the length of a course is about 1 month. Some hotels hire an outsider to be a permanent trainer. Mainly, they are foreign teachers who come to work in Thailand. The curriculum of the training are not the same; they are organized for the staff based on suitability and the ability of each position such as, the receptionist or the front office personnel, the food and beverage server, the driver, the housekeeper or the security guard. In this regard, some hotels have a test for the trainees; if they pass the test, they will pass to other levels of training and it will affect their salary, too. Additionally, there are some training projects from the government, such as the English training programs for the hotel staff from the Department of Skill Development. Some hotels try to cooperate with the local authority such as, Provincial Administrative Organization, to support the budget for the training course or cooperate with an independent foundation by sending the foreign volunteers to train in English conversation for the staff.

Mainly, the hotel will choose the front office personnel or the receptionists to train before other departments because they are the first to interact with the customers. After the training course, most staff have more confidence and are not nervous to speak English with foreign tourists. Generally, the tourists (except native English speakers and other nationalities who speak English) also try to communicate with the staff in English although they do not want to speak. This situation shows that English is very important language that it could be used worldwide.

In addition, the interviewees were asked for their opinions on the topic of ASEAN language. They said that most of the member countries tried to push Indonesian (Bahasa Indonesia) to be an ASEAN language. Therefore, it does not seem strange that now Indonesia tries to offer their language as a second international language in ASEAN after English". Furthermore, they suggested that if the second language is Indonesian, it will not affect their businesses in the early period because of the location, Khon Kaen province, Udon Thani province and Nong Khai province were not the important areas and still far away from Indonesia. Moreover, if rank the important languages that the interviewees chose, they were Chinese, Vietnamese, Japanese and Korean, respectively.

CONCLUSION

According to AEC changes that came, the hotel businesses in the important provinces in the urban centers of Northeast Thailand like Khon Kaen Province, Udon Thani Province and Nong Khai Province try to prepare for the changes. About the perception of AEC, all of the interviewees have the same comments that they think the government or the mass media should have more of a role. The news from AEC should be presented in many media outlets such as, television, radio, newspaper or the Internet. They think that it will be too late, if the government or the mass media plan to spread this news in the next year or two. Similarly, they would like the suggestions from the government about how the businesses should prepare themselves for the AEC. They would like more deep information and the strategy to adjust or improve their businesses in advance. Furthermore, each organization and government sector should operate together and still support the training projects because the cost for training is very high. Therefore, it will be good if the government pay attention and try to help the entrepreneurs.

Moreover, all of hotel businesses plan to improve the language skills of their staffs. Most of the hotels attempt to improve language skills in English because they believe that English is a common language that can be used to communicate with other people in the world [8]. On the other hand, other languages that they think will impact them after AEC are Chinese, Vietnamese, Japanese and Korean. The reasons that they choose these languages are based on the number of tourists who visit. Most of the interviewees commented that the improvement of language skills for the staffs was very important for the hotel business and it was more powerful if a superior incorporated the training program for language skills [14]. In a service industry, training is crucial for success [5]. Having quality staff will help the business compete with other competitors and finally, its result is the profitable of business and it will be a competitive advantage strategy that using for creating a business sustainability.

For the topic of the second language that is used in ASEAN after English, their opinions are: Chinese is the number one language need because China will be the country that has the most power after AEC is established. This can be supported from the evidence that now many schools or many universities attempt to push the Chinese language to be a subject in their curriculum. As well as the Vietnamese language, because it is not far from Thailand and it is easy for them to come to invest in Thailand and now there are many Vietnamese people who have lived in Thailand too. Moreover, a large number of foreign tourists who come to visit Khon Kaen Province, Udon Thani Province and Nong Khai Province are Japanese and Korean. It is certain that in the future these two languages will have more influence. Furthermore, they suggested that another language that involves their provinces is Laotian because it is the language used in the Northeast of Thailand. Therefore, it is not a problem for the staff to communicate with Laotian tourists.

Implications, limitations and directions for future research

The data presented here suggests a number of implications. The results of this study can be utilized as a direction to suggest to other hotels about the important of the language skills improvement for the staffs. In addition, it can help the business owners know which way that the business can go to prepare. Moreover, it can motivate the business to show concern about preparing themselves to support the coming of AEC. However, a limitation is found in this study. It involves the qualification of the selected hotels. This will affect the results of the study about the different perceptions of AEC and the different levels of attention for preparing training. As in the result of this study, big hotels pay more attention or show more concern about this change than the small hotels. Therefore, it can be related to the future research that could examine these issues in the hotels that have the same qualifications. Furthermore, further research could determine hotel readiness in other aspects of the AEC. For example, the readiness of improvement of service quality, the directions or the approaches for adaptation to be a green hotel or the readiness about the free flow of labors. Not only in the hotel business, but these suggestions also can be used in other businesses.

REFERENCES

- [1] Brymer, R. (1991), "Employee empowerment: a guest-driven leadership strategy", *Cornell Hotel & Restaurant Administration Quarterly*, Vol. 32, No. 1, Pp. 58-68.
- [2] Hales, C. (1994), "Internal Marketing as an approach to human resource management: a new perspective or a metaphor too far?", *Human Resource Management Journal*, Vol. 5, No. 1, Pp. 50-71.
- [3] Tan Tai Hiong. (1995), "ASEAN Framework Agreement on Services (AFAS)", URL: http://www.aseansec.org/Fact% 20Sheet/AEC/AEC-02.pdf.
- [4] McLaughlin, C.P., & Fitzsimmons, J.A. (1996), "Strategies for globalizing service operations", *International Journal of Service Industry Management*, Vol. 7, No. 4, Pp. 43-57.
- [5] D'Annunzio-Green, N. (1997), "Developing international managers in the hospitality Industry", *International Journal of Contemporary Hospitality Management*, Vol. 9, No. 5/6, Pp. 199-208.
- [6] Kongjan, T. (1998), "Human Resources Development And Hotel Business Training System: Case Study Of Accor Hotel Chain", Master thesis of Arts (Political Science), *Ramkhamhaeng University*, Thailand.
- [7] Mattsson, J., & J. den Haring, M. (1998), "Communication dynamics in the service encounter: A linguistic study in a hotel conference department", *International Journal of Service Industry Management*, Vol. 9, No. 5, Pp. 416-435.
- [8] Kameda, N. (2000), "Communication competency of Japanese managers in Singapore", *Corporate Communications: An International Journal*, Vol. 5, No. 4, Pp. 204-209.
- [9] Tsang, N., & Qu, H. (2000), "Service quality in China's hotel industry: a perspective from tourists and hotel managers", *International Journal of Contemporary Hospitality Management*, Vol. 12, No. 5, Pp. 316-326.
- [10] Kaewwirun, W. (2004), "The perception of information and the motivation factors to travel in Chulachomklao Royal Military Academy", Master thesis of Arts (Communication), Department of Business Communication, *Dhurakij Pundit University*, Thailand.
- [11] Aksu, A.A. (2005), "Defining training needs of five-star hotel personnel: an application in the Antalya Region of Turkey", *Managerial Auditing Journal*, Vol. 20, No. 9, Pp. 945-953.
- [12] Hai-yan, K., & Baum, T. (2006), "Skills and work in the hospitality sector: The case of hotel front office employees in China", *International Journal of Contemporary Hospitality Management*, Vol. 18, No. 6, Pp. 509-518.
- [13] Sangsookwow, P. (2006), "The Development of a Training Curriculum to Enhance English Language Skills for Tourism Personnel", Doctoral thesis of Education, *Khon Kaen University*, Thailand.
- [14] Klidas, A., Van den Berg, P.T. & Wilderom, C.P.M. (2007), "Managing employee empowerment in luxury hotels in Europe", *International Journal of Service Industry Management*, Vol. 18, No.1, Pp. 70-88.
- [15] Pratyawutthirat, P. (2007), "Exposure and Awareness of Bangkok Metropolitan Administration officials toward Internal Public Relations Media Case Study: The Family Savings Management Support Center Project", Master thesis of Journalism, *Thammasat University*, Thailand.
- [16] Khumjing, P. (2009), "The Political Information Reception of the Students in Rajamangala University of Technology Isan", Master thesis of Education in Social Studies, *Khon Kaen University*, Thailand.
- [17] Blenkinsopp, J., & Pajouh, M.S. (2010), "Lost in translation? Culture, language and the role of the translator in international business", *Critical Perspective on International Business*, Vol. 6, No. 1, Pp. 38-52.
- [18] Department of Foreign Trade, Ministry of Commerce. (2010), "AFTA (ASEAN Free Trade Area) & AEC (ASEAN Economic Community)", URL: http://www.dft.go.th/LinkClick.aspx?fileticket=3A112E3CyxU%3D&tabid=401.
- [19] KSMECARE. (2010), "The road to AEC for Thai SMEs", URL: http://www.ksmecare.com/FileUpload/Editor/DocumentUpload/WebContent/AEC_SMEs_TH_401.pdf
- [20] ASEAN Secretariat Paper (2011), "Strategies to Enhance Competitiveness and Facilitate Regional Trade and Investment in Services", URL: http://www.pecc.org/resources/doc_view/1715-asean-integration-in-trade-in-services-development-challenges-and-way-forward-paper.
- [21] Econnews, (2011), "What is AEC?" [Electronics version], Econnews, Vol. 21, No. 523, Pp. 19-21.
- [22] EXIM Bank. (2011), "Tourism Business of the liberalisation of ASEAN" [Electronics version], *Direction of exports and investment*, No. 14, Pp. 204-213.
- [23] Kalargyrou, V., & Woods, R.H. (2011), "Wanted: training competencies for the twenty-first century", International Journal of Contemporary Hospitality Management, Vol. 23, No. 3, Pp. 361-376.

The Influence of Job Design and Human Resource Development on

Employee Performance of Bangkok Bank Public Company Limited, Thailand

Watcharapong Intarawong*, Pattama Suriyakulnaayudhya** & Oracha Chaiyapong***

ABSTRACT

The objectives of this research were 1) to study job design system of Bangkok Bank Public Company Limited 2) to study human resource development of Bangkok Bank Public Company Limited 3) to study staff performance of Bangkok Bank Public Company Limited 4) to compare the different of job design, human resource development, and performance when classified by personal factor 5) to study the influence of job design and human resource development on employee performance. This research was a survey research and used quantitative approach. The population consisted of 3,040 staffs; sample size was calculated by Taro Yamane formula [1], 390 samples was include Bangkok Bank Public Company Limited's staffs in the northeastern of Thailand, and used proportional sampling and simple random sampling. Questionnaires were used to collect data. Reliability testing was used Cronbach's alpha coefficient as follow job design was .924, human resource development was .918, and staff performance was .962. Respondents' general data on respondents, job design, human resource development and staff performance were analyzed by descriptive statistics composed of frequency, percentage, mean, and standard deviation. Hypothesis testing was used t-test, F-test, Pearson product-moment correlation coefficient, and multiple regression analysis.

The research findings found that the mean score of job design, human resource development, and staff performance were 3.82, 3.75, and 3.68 respectively. The first hypothesis, there was no difference in staff opinion toward job design, human resource development, and staff performance when classified by personal factors. The second hypothesis, there was found only human resource development had positive statistical influence at 0.05 on staff performance. The human resource development could be explained the variance of staff performance (Adjusted R Square .818) by 81.8%, with a standardized coefficient (Beta) of .904. Based on the research results, it could be concluded that there was no difference in the opinions of the staffs on the job design, human resource development, and performance when classified by personal factors. The human resource development had a positive influence on performance of Bangkok Bank Public Company Limited.

Keywords- Job Design, Human Resource Development, Staff Performance

INTRODUCTION

The overall banking sector has changed dramatically. There is also more intense competition. The bank wants to expand its market share, with the acquisition of more revenue in the current situation. Bangkok Bank Public Company Limited the motto is "to be a partner in the home" as a key to working in earnest. Because of this principle, the bank has always been successful. In addition to providing customer service, the firm also provides quality, efficient and beneficial service to our customers. The three main functions are: acting as a bank officer in a professional manner, building relationships with customers, understanding the

customers thoroughly. And think creatively in product offerings. And the service that best suits the needs of our customers. When considering the banking business in terms of providing value to customers, the basic activity is to provide services that support the value chain. Human Resource Management Service providers are the agents of the business to deliver goods to customers under the service. Development of services and activities to support innovation. Peter [12] draws attention to six factors that are vital to productivity of intellectual workers, but as the demands of the intellectual worker's organization and performance environment vary, these factors may have a different influence and prospects of achievement. Sarnovics [18] The most important factors that influence labor productivity of an organization intellectual workers are the employee's understanding of the core of the task and the goals to be achieved; a chance to take part in and contribute their ability to the management processes of both their work and the whole organization; a chance to continually learn and develop; the selection of qualitative work assessment methods; work conditions and the organization's inner culture that is both motivating and promotes a creative work atmosphere. Human resources are an important resource in organizations. It is important to manage the organization to the success of the organization. It is good because human knowledge, ability, intelligence and ability to develop without limit. And no tools or technologies can truly replace human beings. The past, corporate management focused on other management factors such as finance, accounting, production, sales, tools and technology in production, and focused on the success of the organization through profit. One of the reasons the organization gives more attention to people is because people as a resource are already the only thing that has more value in the organization. Unlike many tools and technologies, it should be developed for people to have a variety of skills appropriate to the task that the development of the cooperation of all units to the evaluation of the work. This is a great way to achieve success. The important of human resource tools to strengthen the capacity of human resources in the organization; the design of the job includes a variety of factors like tasks involved, knowledge, social and contextual characteristics as well. According to Belias and Sklikas [21] a job should be designed keeping employee's expectations in mind. Job rotation help employees to explore various departments and flexibility to move from one task to another in a given period of time and increasing their productivity, job enrichment helps build the recognition, responsibility and stimulated the work and job enlargement to incorporate different tasks and help employee increase their learning. All these three factors contribute to the job design which in turn contributes to employee's performance and loyalty towards the organization. Job design has always played a vital role and one of the most effective tools in maximizing the performance of the employees. A well-designed job design will help increasing employee involvement and satisfaction and motivates them to perform well by giving their best to their work. It helps employees to become highly productive and increases their loyalty towards the organization as well. Designing an effective job design helps bringing the involvement of an employee in his work-related activities which helps in forecasting the employee output, departmental productivity and company's success (Bates, 2004; Harter, 2002; Baumruk, 2004). In addition to job design, human resource development is also an important tool to enhance employee capability as well. Human resource development (HRD) is a part of human resource management. It deals with the all round development of an employee within an organization, career development, training, counseling, updating with the latest technology, helping employee explore their potential and develop skills, which would prove beneficial to both the employee and the organization in achieving the organization goals. It also means allocation of resources for the development of the employee. From the reason above are the causes of this research. The objectives are as follows; 1) to study job design system of Bangkok Bank Public Company Limited 2) to study human resource development of Bangkok Bank Public Company Limited 3) to study employee performance of Bangkok Bank Public Company Limited 4) to compare the different between job design, human resource development, and performance 5) to study the influence of job design and human resource development on employee performance.

LITERATURE REVIEW

Job Design

The definition of job design from literature review is outlined in numerous studies. Mondy et al. [6] defined the job design as a design process as the process of determining the specific characteristics of the

work to be performed. Determine the relationship with other organizations. Parker [7] job design is a core function of human resource management and it is related to the specification of contents, methods and relationship of jobs in order to satisfy technological and organizational requirements as well as the social and personal requirements of the job holder or the employee. Its principles are geared towards how the nature of a person's job affects their attitudes and behavior at work, particularly relating to characteristics such as skill variety and autonomy. The aim of a job design is to improve job satisfaction, to improve through-put, to improve quality and to reduce employee problems (e.g., grievances, absenteeism). Hackman and Oldham [3] presented a theory of job characteristics that would explain one of the best motivational theories, suggesting that if employees were motivated at work, employees would be able to express themselves and good performance. Job Characteristics Model composed of 1) job description 2) psychological condition 3) personal and job outcomes. In addition, Hackman and Oldham [2] were presented model describes jobs in terms of five characteristics: 1) Skill variety: the extent to which a job requires a variety of skills to carry out the tasks involved 2) Task identity: the degree to which a job requires completing a "whole" piece of work from beginning to end (e.g., building an entire component or resolving a customer's complaint 3) Task significance: the extent to which the job has an important impact on the lives of other people. 4) Autonomy: the degree to which the job allows an individual to make decisions about the way the work will be carried out 5) Feedback: the extent to which a person receives clears information about performance effectiveness from the work itself. Bremner and Carriere [19] had defined job design in 5 dimensions like Hackman and Oldham [3]. Thus, it can be conclude that the job design principle focuses on the motivational aspects of jobs to make them more interesting and challenging to employees. In this research was adapted the conceptual framework from Hackman and Oldham [3]; Bremner and Carriere [19], job design composed of 5 elements as follows; 1) Skill variety 2) Task identity 3) Task significance 4) Autonomy 5) Feedback.

Human Resource Development

The reviews of the relevant literatures conceptualized the meanings of Human Resource Development Heathfield [17] provides the definition of human resource development as Human Resource Development (HRD) as a framework for helping people. The organization provides knowledge, skills and abilities, as well as opportunities for people to develop, through professional development training, self-management, wellbeing, and follow-up. Accurate with Woolner [4] states that human resource development refers to the development of a learning organization. Gilley and Jerry [9]. There are three fundamental component areas of human resource development (HRD): 1) individual development (personal), 2) career development (professional), and 3) organizational development. The importance of each component will vary from organization to organization according to the complexity of the operation, the criticality of human resources to organizational efficiency, and the organization's commitment to improved human resources. But all three have one focus individual performance improvement. Since individual performance improvement is the heart of an HRD program, HRD can be described as the "area of congruence" among the three components. Individual development refers to the development of new knowledge, skills, and/or improved behaviors that result in performance enhancement and improvement related to one's current job (training). Learning may involve formal programs, but is most often accomplished through informal, on-the-job training activities. Pope [15] career development is the lifelong process of managing learning, work, leisure, and transitions in order to move toward a personally determined and evolving preferred future. In educational development, career development provides a person, often a student, and focus for selecting a career or subject to undertake in the future. Often educational institutions provide career counselors to assist students with their educational development. Gilley and Jerry [9] career development focuses on providing the analysis necessary to identify the individual interests, values, competencies, activities, and assignments needed to develop skills for future jobs (development). Career development includes both individual and organizational activities. Individual activities include career planning, career awareness, and utilizing career resource centers. Organizational activities include job posting systems, mentoring systems, career resource center development and maintenance, using managers as career counselors, providing career development workshops and seminars, human resource planning, performance appraisal, and career path programs. In the part of Organization development (OD) Schultz, Schultz, and Ellen [11] OD is the study of successful organizational change and performance. OD emerged from human relations studies in the 1930s, during which psychologists realized that organizational structures and processes influence worker behavior and motivation. More recently, work on OD has expanded to focus on aligning organizations with their rapidly changing and complex environments through organizational learning, knowledge management and transformation of organizational norms and values. Key concepts of OD theory include: organizational climate (the mood or unique "personality" of an organization, which includes attitudes and beliefs that influence members' collective behavior), organizational culture (the deeply-seated norms, values and behaviors that members share) and organizational strategies (how an organization identifies problems, plans action, negotiates change and evaluates progress). Gilley and Jerry [9] Organizational development is directed at developing new and creative organization solutions to performance problems by enhancing congruence among the organization's structure, culture, processes, and strategies within the human resources domain. In other words, the organization should become a more functional unit as a result of a closer working relationship among these elements. The ultimate goal of organizational development is to develop the organization's self-renewing capacity. This refers to the organization's ability to look introspectively and discover its problems and weaknesses and to direct the resources necessary for improvement. As a result, the organization will be able to regenerate itself over and over again as it confronts new and ever-challenging circumstances. This occurs through collaboration of organizational members with a change agent (an HRD practitioner), using behavioral science theory, research, and technology. In addition to the above, Heathfield [10] Human Resource Development (HRD) is the frameworks for helping employees develop their personal and organizational skills, knowledge, and abilities. HRD is one of the most significant opportunities that employees seek when they consider you as an employer. The ability, and encouragement, to continue to develop their skills help you to retain and motivate employees. Human Resource Development includes such opportunities as employee training, employee career development, performance management and development, coaching, mentoring, succession planning, key employee identification, tuition assistance, and organization development. In this research was adapted Human Resource Development concept from Gilley and Jerry [9] and Heathfield [25], the components of HRD were as follows; 1) individual development composed of training, coaching, mentoring 2) career development 3) organization development focus on performance management, development of knowledge, skills, and behavior in work to be ready to perform the tasks of the organization, sufficient resources are allocated to enable efficient operation, the linked between organization-level targeting work and personal levels.

Employee Performance

Performance is a multidimensional construct. It may be defined as the record of an individual accomplishment. Schermerhorn et al. [5] gave the definition of performance is the behavior that the individual fulfills for the task assigned to it. Patterson (1998) there is no general, overarching theory about employee performance. The effectiveness with which organizations manage, develop and stimulate their employees is an important cornerstone for how organizations perform. Because of this, people management has a significant impact on performance. Viswesvaran and Ones [8] Performance can be traced back to the behavior of people on the shop floor. Employees work in a certain way or behave in a way that contributes to (the goals of) the organization.. Dugguh and Dennis [22] the factors that are used in performance ratings are varied but Campbell et al suggest that studies should look at the dimensions separately because the general factor cannot possibly represent the best fit when rating employee performance. Several measures have been developed to measure employee performance. Though the measures vary in terms of how carefully and distinctively they are conceptualized with respect to affective or cognitive job satisfaction and so on. Other measures that may combine those mentioned above include quality of work (input), quantity of work (output), time management, punctuality, goal setting, cost reduction on materials, money, people, information and energy, interpersonal skills and compliance, absenteeism, morale and anxiety. Hakala [14] Performance measurement uses the following indicators of performance, as well as assessments of those indicators composed of; 1) Quantity: The number of units produced, processed or sold is a good objective indicator of performance. Be careful of placing too much emphasis on quantity, lest quality suffer. 2) Quality: The quality of work performed can be measured by several means. The percentage of work output that must be redone or is rejected is one such indicator. In a sales environment, the percentage of inquiries

converted to sales is an indicator of salesmanship quality. In this research adapted employee performance measurement from the concept of Hakala [14], and Dugguh and Dennis [22].

The link between Job Design, Human Resource Development (HRD), and Employee Performance

There are many empirical evidences that reveal the relation between job design, Human Resource Development, and employee performance. Mohamed Ali [23] had study "Impact of job design on employees' performance (with special reference to school teachers in the Kalmunai Zone)", the hypothesis that was concerned with relationship between perceived level of job design and perceived degree of employees' performance the Pearson Product-Movement Correlation technique was applied. The results of the study showed a significant and positive relationship between perceived level of job design and perceived degree of employees' performance in the schools, Ali and Zia-ur-Rehman [23] had study "Impact of Job Design on Employee Performance, Mediating Role of Job Satisfaction: A Study of FMCG's Sector in Pakistan", The present study intends to measure the effect of job design on employee performance while the mediation effect is job satisfaction, although the job design has several methods but we use JCM model (Oldman and Hackman) [2], which has five dimensions of Job Characteristics Model (skill variety, task identity, task significance, job autonomy and feedback) on employee performance. Findings of the present research indicate a positive relationship between job design and employee performance. While the mediating effect of Job satisfaction is also found having a positive effect on employee's performance. Organizations always have quest of finding the unique ways in order to enhance the performance of the employees, and employee performance as follows. Tahir et al. [24] was study "The Impact of Training and Development on Employees Performance and Productivity a case study of United Bank Limited Peshawar City, Pakistan", this paper main objective was to investigate whether training and development has impact on employees' performance and productivity. This paper is quantitative in nature. The result showed that there was significant relationship between the variables. Okechukwu [20] the research was explored on the influence of training and development, employee performance on job satisfaction among the staff of School of Technology Management and Logistics (STML).

CONCEPTUAL MODEL AND HYPOTHESES

From the literature review above, the researcher was developed the research conceptual framework as figure 1.

Personal Factors Job Design 1. Skill Varity 2. Task Identity 3. Task Significance 4. Job Autonomy 5. Feed Back **Employee Human Resource Development (HRD)** Performance 1. Training 2. Coaching 3. Mentoring 4. Self Learning 5. Career Development 6. Performance Management

Figure 1
Research conceptual framework

The research hypothesis was defined as follows.

H₁: Job design, human resources development, and employee performance are different when classified by personal factors.

H₂: Job design and human resource development have a positive influence on the employee performance.

RESEARCH METHODOLOGY

This research was a survey research and used quantitative approach. The population consisted of 3,040 staffs; sample size was calculated by Taro Yamane formula [1]. 354 samples was include Bangkok Bank Public Company Limited's staffs in the northeastern of Thailand, and used proportional sampling and simple random sampling. Questionnaires were used to collect data. Job design was adapted from the concepts of Hackman and Oldham [3]; Bremner and Carriere [19], job design composed of 5 elements as follows; 1) Skill variety 2) Task identity 3) Task significance 4) Autonomy 5) Feedback, human resource development was adapted from the concepts of Gilley and Jerry [9]; and Heathfield [25], the components of HRD were as follows; 1) individual development composed of training, coaching, mentoring 2) career development 3) organization development, and staff performance was adapted from the concepts of Hakala [14], and Dugguh and Dennis [22]. Reliability testing was used Cronbach's alpha coefficient as follow job design was .924, human resource development was .918, and employee performance was .962. Respondents' general data on respondents, job design, human resource development and staff performance were analyzed by descriptive statistics composed of frequency, percentage, mean, and standard deviation. Hypothesis testing was used t-test, F-test, Pearson product-moment correlation coefficient, and multiple regression analysis. The research results can be significantly analyzed with 95% confidence interval.

ANALYSIS OF THE DATA

The analysis of data was arranged according to the research objectives, the results were as follows. 1) The descriptive statistic of respondents was as. The descriptive statistic of respondents was show that, the proportion of male and female respondents was similar. Most respondent age was between 30-50 years, education was bachelor and under bachelor degree. Monthly income the group of 30,000 - 45,000 Baht had more than other groups, and most employees was belong to risk department. 2) The job design system of Bangkok Bank Public Company Limited, the data analysis was as follows. The highest mean was task significant ($\overline{X} = 4.14$), the second was task identity ($\overline{X} = 4.13$), the third was feed back ($\overline{X} = 4.04$), the fourth was skill Varity ($\overline{X} = 3.89$), and the last was job autonomy ($\overline{X} = 3.75$) respectively. 3) Human resource development (HRD) of Bangkok Bank Public Company Limited, the data analysis was as follows. The highest mean was training ($\overline{X} = 4.00$), the second was mentoring ($\overline{X} = 3.99$), the third was coaching and self learning ($\overline{X} = 3.88$), the fourth was performance management ($\overline{X} = 3.87$), and the last was career development ($\overline{X} = 3.76$) respectively. 4. Employee performance was defined in 3 aspects; the highest mean was in the aspect of customer satisfaction ($\overline{X} = 4.40$), the second was the aspect of quantitative performance ($\overline{X} = 4.35$), the third was qualitative performance ($\overline{X} = 3.96$). 5)The hypothesis testing results was as follows.

H₁: Job design, human resources development, and employee performance are different when classified by personal factors, t-test, and F-test (One Way ANOVA) was used for testing. The first hypothesis testing results show that, 1) there was not statistically significant at 0.05 levels different between male and female 2) In terms of age, there were statistically significant differences in all variables. In terms of age, there were statistically significant differences in all variables, by the age under 30 years had the opinion that job design, and human resource development was not appropriate than other groups. 3) Education; there was statistically significant at 0.05 levels different in job design and human resource development. The group of above bachelor degree had opinion in job design and human resource development was not appropriate than other groups. 4) Monthly income; there was statistically significant at 0.05 levels different in job design and human resource development. The less than 30,000 Baht had opinion in job design and human resource development was not appropriate than other groups. 5) Department; there were statistically significant

differences in all variables. The accounting and finance department had mean of opinion on the job design, human resource development, and performance less than other departments. It can be concluded that some parts of first hypothesis were accepted.

H₂: Job design and human resource development have a positive influence on the employee performance. The research hypotheses can be described in the forms of structural equations in order to show the relationship among variables and predict the dependent variable for hypotheses testing. The symbols used to represent the variables stated as follows:

JBD = Job Design HRP = Human Resource Development

EPF = Employee Performance

Table 1
Correlation analysis between the independent variables

	JBD	HRP	EPF
Mean	3.99	3.92	4.25
S.D.	0.300	0.486	0.431
JBD	1		
HRP	0.501**	1	
EPF	0.039	.158*	1

The structural equation can be described as follows:

$$EPF = \beta 1 JBD + \beta_2 HRD$$
(1)

The result of the structural equation analysis was as follows.

EPF = .186HRD (1) (3.039) Adjusted
$$R^2$$
 =0.27, SEE. = .426, F = 4.892, Sig of F = .008

The structural equation was reveal that, the independent variables (job design and human resource development) can explained variance (R^2) of dependent variable (employee performance) at 27.0%, only human resource development had statistic significant at 0.05 levels influence on employee performance by the standardize coefficient (β) was .186, while job design had not statistic significant at 0.05 levels influence on employee performance. It can be concluded that some parts of second hypothesis were accepted.

CONCLUSION

This research study aimed to investigate influence of job design and human resource development (HRD) on employee performance of Bangkok Bank Public Company Limited in the Northeastern region of Thailand. The results of this research was show that 1) the employee opinion toward job design, human resource development, and employee performance were different when classified by personal factors 2) only human resource development had an influence on the employee performance of Bangkok Bank employees. Therefore, the administrator of Bangkok Bank Public Company Limited should be focus on the group of age under 30 years, education above bachelor degree, monthly income less than 30,000 Baht, department of risk management, these groups had mean of opinions on design, development, human resources, and performance less than others. Additional qualitative studies should be used to gain insights into such issues. The limitation of this research, eestablishing a tool for measuring employee performance in this research was used self-efficacy assessment, which may result in bias and reliability. Future research should develop tools that can measure performance more reliably, by using the company's evaluation or using supervisory assessments. However, the results of this research provide empirical evidence that explains the impact of

human resource development on employee performance. Thus, future studies should include a more detailed study of human resource development that covers all three aspects; individual development, career development, and organization development, how do these factors influence on employee performance.

REFERENCES

- [1] Yamane, Taro (1973), "Statistics: An Introductory Analysis", Third editio. *Harper and Row Publication*.:Newyork.
- [2] Hackman, J. R. & G. R.Oldham. (1976), "Motivation through the design of work: Test of a Theory", *Organisational Behavior and Human Performance*.
- [3] Hackman J. R. & G. R. Oldham. (1980) Work Redesign. Philippines: Addison-Wesley.
- [4] Woolner, P. (1992), "The Purposes and Stages of the Learning Organization", Thresholds in Education", Vol. XVII. No.2-3.
- [5] Schermerhorn, J. R., J. G. Hunt, & R. N. Osborn. (1996), "Managing Organizational Behavior. 5 th ed", John Wiley & sons:USA.
- [6] Mondy, R. W., R. M. Noe, & S. R. Premeaux. (1999), "Human resource management 7 th ed", *Prentice Hall*: New Jersey.
- [7] Parker, S. K., T. D. Wall, J. & L. Cordery. (2001), "Future work design research and practice: towards an elaborated model of work design", J. Occup. Organ.\Psychol.
- [8] Viswesvaran, C., & Ones, D. S. (2000), "Perspectives on Models of Job Performance", *International Journal of Selection and Assessment*, Vol.8, No.4, Pp. 216-226.
- [9] Gilley, J. W., Eggland, S. A., & Gilley, A. M. (2002), "Principles of human resource development (2nd ed.)", *Cambridge, MA*: Perseus.
- [10] Heathfield, S. M. (2006), "How to Make Values Live in Your Organization", http://humanresources.about.com/od.htm.
- [11] Schultz, Ellen E. & Theo Francis (2006), "How safe is you pension?", *Wall Street Journal*, January 12,2006.
- [12] Peter, F. (2007), "The Essential Drucker: Selections from the Management Works of Peter F. Drucker", Butterworth-Heinemann, 2007, Pp. 275.
- [13] Kahya, E. (2007), "The effects of job characteristics and working conditions on job Performance", *International Journal of Industrial Ergonomics*, No.37, Pp.515–523.
- [14] Hakala, D. (2008), "How to Measure Employee Performance, 16 Ways. HR World Newsletter", http://www.hrworld.com/features/16-ways-measure-perfromance-021908/.
- [15] Pope, M. (2009). "Jesse Buttrick Davis (1871-1955): Pioneer of Vocational Guidance in the Schools",
- The Career Development Quarterly: Special Section: The 100th Anniversary of Vocational Guidance, Val.57, No.3, Pp.248-258.
- [16] Hair, J. F., Jr., Black, W. C., Babin, B. J., & R. E. Anderson. (2010), "Multivariate data Analysis", *Prentice Hall*: Upper Saddle River, NJ.
- [17] Heathfield, S. M. (2010), "More Tips to Reduce Employee Turnover: You Can Reduce Employee Turnover", http://humanresources.about.com/od/retention/a/turnover_tips.htm.
- [18] Sarnovics (2010), "Financial literacy of young generation in changing European Environment: Evidence From Germany and Latvia", *Journal of Technology Innovation and Industrial Management*, Pp.161.
- [19] Bremner, N. & Carriere, J. (2011), "The Effects of skill variety, task significance, task identity and autonomy on occupational burnout in a hospital setting and the mediating effect of work meaningfulness", *Telfer school of Management*, WP. 11.02.
- [20] Okechukwu, C.A., El Ayadi, A.M., Tamers, S.L., Sabbath, E.L., & Berkman, L. (2012). "Household food insufficiency, financial strain, work–family spillover, and depressive symptoms in the working class: The Work, Family, and Health Network study", *American Journal of Public Health*, No.102, Pp.126-133.
- [21] Belias D., & Sklikas D.. 2013. "Aspects of Job Design", *International Journal of Human Resource Management and Research*, Val.3, No. 4, Pp.85–94.

- [22] Dugguh, S. & Dennis, A. (2014). "Job satisfaction theories", Traceability to employee performance in organizations. *Journal of Business and Management*, Vol.16, No.5, Pp.11-18.
- [23] Ali, N., & M.Zia-ur-Rehman. (2014), "Impact of job design on employee performance, mediating role of jop satisfaction: A study of FMCG's sector in Pakistan", International Journal of Business and Manage-ment, Vol.9, No.2, Pp.70-79.
- [24] Tahir, L., Abdullah, T., Ali, F., & Daud, K. (2014). "Academics transformational leadership: an investigation of heads of department leadership behaviours in Malaysian public universities", *Educational Studies*, Vol.40, No.5, Pp. 473-495.
- [25] Heathfield, S. M. (2016), "What is human resource management", https://www.thebalance.com/what-is-human-resource-management-1918143.

Firm Performance the Consequence of Organizational Dynamic Capabilities through Innovation

Watcharapong Intarawong*, Pattama Suriyakul Na Ayudhya**& Jitti Kittilertpaisan***

*Lecturer, Department of Business Management, Faculty of Liberal Arts and Management Science, Kasetsart University, Thailand

E-Mail: Watcharapong.intr@ku.th

**Assistant Professor, Department of Business Management, Faculty of Liberal Arts and Management Science Kasetsart University, Thailand

E-Mail: Pattama.s@ku.th

***Associate Professor, Business Economics Program, Faculty of Management Science, Sakon Nakhon Rajabhat University, Thailand E-Mail: Jitti.kit@snru.ac.th

ABSTRACT

The objectives of this research were; firstly to study the level of organizational dynamic, innovation, and firm performance of SMEs, secondly to examine the different of organizational dynamic capabilities, innovation, and firm performance of SMEs when classified by organizational factors, thirdly to investigate the influence of organizational dynamic capabilities on firm performance through innovation.

The research methodology was used quantitative method; the population was the SMEs entrepreneurs in the upper northeastern area 2 of Thailand, the sample size was 389 samples, sampling techniques were used proportional sampling and simple random sampling. The researchers were construct model and variables by literature review for validity. Questionnaire was used Likert's 5 rating scales for data collecting. The reliability of variables was testing by Cronbach alpha coefficient, the results were as follow; .891 for organizational dynamic capabilities, .892 for innovation, and .824 for firm performance. Data analysis was used frequency, percentage, mean, and standard deviation. Hypothesis was testing by Pearson product coefficient, and path analysis.

The research finding found that; organizational dynamic capability and innovation of SMEs were high level, but the firm performance was moderate. The hypothesis testing revealed that organizational dynamic capability had statistic significance at 0.05 level high positive influences on firm performance through innovation. Therefore, it should be conclude that SMEs firm performance was the consequence of organizational dynamic capabilities through innovation.

Keywords-Organizational Dynamic Capabilities, Innovation, Firm Performance

INTRODUCTION

Businesses in the past decade faced many challenges in their business organization system and business environment include the internal and external environment. Therefore, the organization should create their competitive advantage for the modern business era. If the organization ceases to adapt and develop, it will affect the survival of the organization. Small and medium enterprises (SMEs) are very important to Thailand economic development [1]. According to statistics, there are 2.65 million entrepreneurs. There are 11 million employees or 83.90% of total employment. Export value was 2.07 trillion baht, accounting for 29.90 % of the total export value. And increase the economic value of at least 3.86 trillion baht However, there are only 5% of small and medium enterprises that will succeed. In finally, the average business life cycle is not over 1-2 years, which is not good situation for Thailand economic. Most small and medium enterprises are located in the Northeast accounted for 34.6%, followed by Northern Region 20.9% and Bangkok and its vicinity 18.8% (Office of Small and Medium Enterprises Promotion-OSMEP, 2016) [1]. In the upper northeast area 2, there were 4,501 SMEs, with 46,525 employees [2].

Although the government had used a lot of budget, also law and regulations have been amended to facilitate the business of SMEs. Many SMEs are still experiencing various problems. This can be concluding

major problems of SMEs as follows. First, Marketing problem, most SMEs often meet the needs of local markets or the domestic market, the lack of knowledge in marketing especially the foreign market, the ease of transportation and trade liberalization. Make large enterprises including foreign products to compete with local products produced by SMEs. Second, Financial problem, SMEs are often facing problems borrowing from formal financial institutions. This is because there is no systematic accounting and lack of collateral for loans, so it is necessary to rely from other sources loans, and pay high interest rates. Third, Labor problems, workers in SMEs have high resignation problems. That is, when workers have more knowledge and more skilled, they will move out to work in larger factories with better pay and benefit. Therefore, the qualities of SMEs workers are discontinuous and affects to the firms productivity. Fourth, Technology problem, SMEs often use inadequate production techniques due to their low investment and lack of basic knowledge and skills in modern techniques, thus resulting in lack of product development, as well as quality improvement. Fifth, Management problem, SMEs often lack knowledge of management or systematic management. The experience of learning is misleading. Management by family or relatives helps with this kind of internal management despite the advantages of thorough care. But when the business starts to expand, if it does not improve the management system, then the problem will happen. Finally, Access to state promotion services problem, SMEs is establishment of informal businesses, such as home-based production, the factory line without a factory registration and commercial registration. Include the practice is rarely right about the tax, environmental treatment. This is the reason why SMEs cannot receive support from both the public and private sectors.

The guidelines to solve the problem of small and medium businesses that concluded from previous researches are as follows. First, SMEs need to develop their dynamic capabilities to make their business operations more responsive and adapt to the changing environment. Peteraf and Maritan [3] pointed the dynamic capabilities to provide an organization with the capacity to purposefully create, extend, or modify its resource base. Dynamic capabilities are about change. To identify the need or opportunity for change and to accomplish this change, the organization uses processes, search processes, decision-making processes, change management processes, and others [3]. The organizational dynamic capabilities have positive effects on innovation and organizational performance and organizational dynamic capabilities underpin companies "competitive advantages as well as their ability to respond internal and external change [4]-[7]. Current literature is focused on mainly large enterprises, with some interest on SMEs. However there is little research attempting to understand the applicability of organizational capability theories on micro enterprises or SMEs [7].

In this paper we propose a research framework and a research agenda for addressing this gap. For the reason, the importances of organizational dynamics capabilities for small and medium businesses are evident. However, this concept is also limited to specialized examine in large business organizations. In Thailand, there are still few examine SMEs in the northeast. This is the first important cause and reason for this research. Second, Innovation in enhancing competitiveness in SMEs, Innovation is a driving force for value creation and productivity. This will bring new opportunities for competition in the global market by offering new products or application of process. Innovation helps small and medium enterprises (SMEs) to create distinctive competency with exotic products and services target customers. It can generate huge returns without the need to rely on abundant natural resources and end the competition on the basis of cost and price [1]. In addition, innovation are also the way to enhance strengthen and stimulate the economy, to create a bargaining power in the business of small and medium enterprises (SMEs), which is considered to be very useful for business operations in the technological advancement. If a business firms create innovation within the organization, it will bring competitive advantage and business results [8]. Dr. Somkid Jatusripitak, Deputy Prime Minister for Economic Affairs, has ideas to promote innovation for SMEs, the government will support some funds and the rest will come from the private sector [9]. Furthermore, the Thai government has set the policy of Thailand 4.0 as a policy vision for Thailand economic development. Under the leadership of General Prayut Chan-ocha, Prime Minister, who came to the country on a vision of a stable, prosperous and sustainable country with a mission to drive reforms, to adjust the direction of the system and create a way to develop the country can handle the new opportunities and threats that change quickly in the 21st century. And it must be developed in innovation, science, technology, research and development. It is focused on creating business by creating new products, process, and services based on

innovation combined with doing business. It also promotes SMEs as an important mechanism to drive the country's economy. Based on the second solution, innovation is very important to businesses today. However, innovation is still a new concept in Thai SMEs. This should be further studied to explore various forms of innovation and the impact of innovation on SMEs firm performance [10].

From the background and causes above, the reasons of this research desire to study the consequence of organizational dynamics capabilities and innovations of SMEs in upper northeastern area 2 of Thailand. It covers SMEs types of manufacturing, retail and wholesale, and services business. The objectives of this research were to; 1) study the level of organization dynamic capabilities, innovation, and firm performance of SMEs 2) to examine the different of organization dynamic capabilities, innovation, and firm performance of SMEs when classified by organizational factors 3) to investigate the influence of organizational dynamic capabilities and when classified as sub-elements (sensing capability, seizing capability, and transforming capability) on innovation and firm performance and 4) to investigate the influence of innovation and when classified as sub-elements (product innovation, process innovation, and organizational innovation) on firm performance.

LITERATURE REVIEW

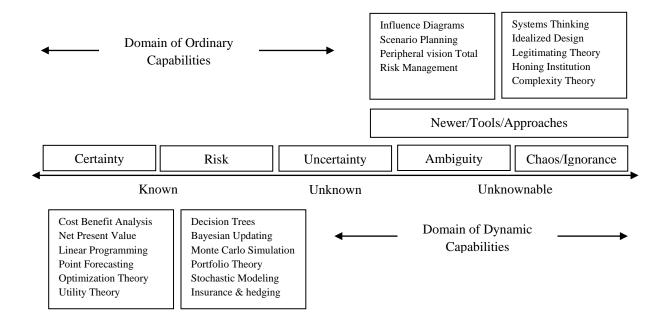
Organizational Dynamic Capabilities

The term "dynamic capabilities" was first introduced by Prahalad and Hamel [11]. It is an outgrowth of multinational strategy research, which led to his article "Core Competences of the Corporation". The concept was defined by Teece, Pisano and Shuen [12] as "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments". Ludwig and Pemberton proposed the Resource-Based View (RBV) of the firm emphasizes sustainable competitive advantage; the dynamic capabilities view, on the other hand, they focused on the issue of competitive survival in responsibility to rapidly change contemporary business conditions. Moreover, this research is one of the few empirical studied that focused on the topic called for clarification of the specific processes of organizational dynamic capability building in particular industries to make the concept more useful to senior managers who set directions for their firms [13].

Teece was pointed the question of "how do firm build long-run competitive advantage?", and his research explained the organization with deep uncertainty, strong asset orchestration, internally and externally, coupled with good strategy and the astute assembly of resources undergirds Dynamic Capabilities which enables supernormal profits. The strength of a firm's dynamic capabilities is vital in many ways to its ability to maintain profitability over the long term, including the ability to design and adjust business models [14]. Teece was proposed and the tools for environment analysis as shows in figure 1.

Organizational dynamic capabilities can divide in 3 categories, 1) Sensing: identification of opportunities and threats at home and abroad 2) Seizing: mobilization of resources to deliver value and shape markets 3) Transforming: continuous renewal and periodic major strategic shifts. These activities are required if the firm is to sustain itself as markets and technologies change, although some firms will be stronger than others in performing some or all of these tasks [15]. Kump, Engelmann, Kessler, and Schweiger had develop organizational dynamic capability scale to measuring sensing, seizing, and transforming [16]. In this research, they adapted a conceptual framework and measurement tools from previous researches presented in [15]-[16]. Hence, we said that an organizational dynamic capabilities composed of; 1) sensing capability, 2) seizing capability, and 3) transforming capability.

Figure 1 (Capabilities and tools required for stable and uncertain environments)



Innovation

Innovation can be defined simply as a "new idea, device or method". However, innovation is often also viewed as the application of better solutions that meet new requirements, unarticulated needs, or existing market needs [17]. Ward [18] mentioned an innovation as improvement or something better and a good business innovation definition would be developing new products or improving existing technologies, processes, designs and marketing to solve problems and reach new customers [18]. Then, the big challenge for business innovation is digital. Aurik, Managing Partner and Chairman of GII Knowledge Partner A.T. Kearney, the global consultancy, says: "Digital has become a primary driver of strategy development and innovation for business in almost all sectors; I am convinced we are only at the beginning. Notably for established organizations, the challenge lies in finding ways to successfully innovate by using and transforming existing resources and business practices. Realizing success in today's new landscape requires creative, forward-thinking strategies that embrace digital and address the need to change the fundamental ways of working in the company" [19]. In addition to innovation definition, researchers have studied the classification dimensions of innovation. The literature and research presented in this issue are as follows.

The important of innovation was as follows; OECD; an innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations, innovation is important for growth at all stages of development, specifically by creating and diffusing new technologies; different types of innovation play different roles at various developmental stages, innovation plays a key role in the economy and society by contributing to growth and jobs and helping address social and environmental challenges [23]. Innovation will engage in many organizations such as; Innovative firms, firms are the main locus of innovation in market economies. These firms most often are founded by entrepreneurs and characterized as 1) innovative businesses, 2) young and high-growth businesses and 3) small and mediumsized enterprises (SMEs). The public sector, public entities are also increasingly engaged in innovation activities, undertaken by a variety of actors composed of individuals, organizations, and communities, and often involved in social innovation, that is, innovations that seek new answers to social problems. Universities and public research institutes, PRIs play many roles in innovation systems including education, training, creation and diffusion of knowledge, development of new instrumentation, and storage and transmission of knowledge [24]. Literature review related to innovation find a variety of classifications of innovation. To be consistent with the context of the study, this research divides the innovation into three

dimensions as follows; 1) product innovation 2) process innovation 3) organizational innovation, by adapted from the concept of OECD and Baer [22]-[23].

Table 1
Dimensions of innovation

Authors	Types of innovation
OECD	1. Product innovation: A good or service that is new or significantly improved. This includes
[20]	significant improvements in technical specifications, components and materials, software in the
	product, user friendliness or other functional characteristics.
	2. Process innovation: A new or significantly improved production or delivery method. This
	includes significant changes in techniques, equipment and/or software.
	3. Marketing innovation: A new marketing method involving significant changes in product
	design or packaging, product placement, product promotion or pricing.
	4. Organisational innovation: A new organisational method in business practices, workplace
	organisation or external relations.
Zapfl	1. Product innovation: Products concern both material products and intangible services, such as
[21]	services that satisfy customer needs and are therefore acquired by the customer. With product
	innovations a company earns its money and tries to differentiate itself from the competition.
	2. Service innovation: Service innovations are like product innovations when It comes to
	placing them directly to the customer, e.g. insurance or a business consultancy. Even if services
	are not actively sold, such as manufacturing companies, every company brings services to their
	customers, such as logistics, complaints, sales advice, etc.
	3. Business Model Innovation: The business model is the way a company works and earns
	money. The business model innovation includes innovations in strategy, marketing, supply
	chains, value creation, pricing or cost structures.
	4. Process and technology innovation: As the name implies, technological innovations are the way products are created and/or rendered, or cost savings are often associated with process and
	technology innovations
	5. Organizational Innovation: Organizational innovations relate to the organizational structure
	of the organization. This may include organizational process innovations or management
	innovations, e.g. New tools for measuring customer satisfaction or optimizing delivery
	processes for cost reduction.
Baer	1. Product innovation can come in three different forms. 1) The development of a new product,
[22]	such as the Fitbit or Amazon's Kindle. 2) An improvement of the performance of the existing
	product, such as an increase in the digital camera resolution of the iPhone7. 3) A new feature to
	an existing product,
	Such as power windows to a car.
	2. Process innovation; Process is the combination of facilities, skills, and technologies used to
	produce, deliver, and support a product or provide a service. Process innovation can include
	changes in the equipment and technology used in manufacturing (including the software used in
	product design and development), improvement in the tools, techniques, and software solutions
	used to help in supply chain and delivery system, changes in the tools used to sell and maintain
	your good, as well as methods used for accounting and customer service.
	3. Organizational innovation does not necessarily imply changes in the product or even in the
	production process, but in the way as it is brought to the market. Whereas both product and
	process innovation can be incremental and moderate, organizational innovation is almost always radical, risky, and transformative.
	aiways faulcai, fisky, and transformative.

The important of innovation was as follows; OECD; an innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations, innovation is

important for growth at all stages of development, specifically by creating and diffusing new technologies; different types of innovation play different roles at various developmental stages, innovation plays a key role in the economy and society by contributing to growth and jobs and helping address social and environmental challenges [23]. Innovation will engage in many organizations such as; Innovative firms, firms are the main locus of innovation in market economies. These firms most often are founded by entrepreneurs and characterized as 1) innovative businesses, 2) young and high-growth businesses and 3) small and medium-sized enterprises (SMEs). The public sector, public entities are also increasingly engaged in innovation activities, undertaken by a variety of actors composed of individuals, organizations, and communities, and often involved in social innovation, that is, innovations that seek new answers to social problems. Universities and public research institutes, PRIs play many roles in innovation systems including education, training, creation and diffusion of knowledge, development of new instrumentation, and storage and transmission of knowledge [24]. Literature review related to innovation find a variety of classifications of innovation. To be consistent with the context of the study, this research divides the innovation into three dimensions as follows; 1) product innovation 2) process innovation 3) organizational innovation, by adapted from the concept of OECD and Baer [22]-[23].

Firm Performance

The organizational result from the literature review is based on two types of words; 1) the organizational performance and 2) the firm performance. In this research, determine in the term of "firm performance". Richard's research mentioned firm performance comprising of actual output or results of an organization as measured against its intended outputs (or goals and objectives). Firm performance encompasses three specific areas of firm outcomes; 1) financial performance (profits, return on assets, return on investment, etc., 2) product market performance (sales, market share, etc.), and 3) shareholder return (total shareholder return, economic value added, etc.). The term organizational effectiveness is broader. Specialists in many fields are concerned with organizational performance including strategic planners, operations, finance, legal, and organizational development [25]. Civelek [26] viewed firm performance as a multidimensional concept defining the success of a business in other words, the level of achieving the objectives of a business. The short-term goals of firms were improving efficiency, reducing the level of inventories, and shortening the rate of turnover; their long-term objective is increasing their market share and profitability. Firm performance also represents the responsibilities of the organization towards its stakeholders. If a company achieves its profit target in an effective and efficient way, this, at the same time, will mean that it has fulfilled its duty to its stakeholders. However, measuring firm performance in terms of profit and cost is a very narrow perspective, because the most important components in having a competitive advantage against an organization's rivals are not only sales and firm size. When firm performance is evaluated considering sales, firm size, efficiency, and effectiveness, it is then expressed in full meaning. Thus, thinking of the dimensions of firm performance all together, they include sales, firm size, efficiency, and effectiveness [26]. In addition, Firm performance in the concept of Balance Score Card (BSC); by measuring organizational performance across four balanced perspectives, the BSC complements traditional financial indicators with measures for customers, internal processes, and innovation and improvement activities which in turn must all be linked to the organizations strategic vision. This innovative tool is unique in two ways compared to the traditional performance measurement tools. They are: 1) It considers the financial indices as well the nonfinancial ones in determining the corporate performance level and 2) It is not just a performance measurement tool but is also a performance management system. In the words of the proponents of this tool the BSC retains traditional measures. But, financial measures tell the story of past events, an adequate story for industrial age companies for which investment in long-term capabilities and were not critical for success. These financial measures are inadequate however, for guiding and evaluating the journey that information age companies must make to create future value through investment in customers, suppliers, employees, processes, technologies and innovation. This tool is a comprehensive framework which considers the following perspectives and tries to get answers to the following questions: 1) Financial Perspective - How do we look at shareholders? 2) Customer Perspective -How should we appear to our customers? 3) Internal Business Processes Perspective - What must we excel at? 4) Learning and Growth Perspective - Can we continue to improve and create value? While, it is proved now that the number of these views is different based on contain and scope of attention related to efficiency of strategy [27]. From the above literature review, it can be concluded that the measurement of SMEs firm performance can be divided into two aspects: 1) financial performance such as; profits, return on assets, return on investment, and 2) non-financial performance aspects such as customer satisfaction, market share, which was determine firm performance by adapted from [26].

RELATED WORKS

There are a linkage between organizational dynamic capabilities, innovation, and firm performance. Dynamic capabilities remain one of the most popular, but also one of the most controversial topics in current knowledge and innovation research. The empirical evidence such as the research of Lau, Man, and Chow were investigating "Organizational Capabilities and Performance of SMEs in Dynamic and Stable Environments", this study examines the correlation between the organizational capabilities and firm performance of SMEs in both dynamic and stable environments in Hong Kong [28]. Organizational capabilities are measured in terms of innovative ability, quality-enhancing capability, cost-reduction capability and 'organicity'. Organizational capabilities are hypothesized to correlate positively with firm performance and to be moderated by environmental dynamism. A sample of 71 SMEs was drawn from the chemical and computer industries, which represent stable and dynamic industrial environments respectively. The findings suggest that organizational capabilities can significantly explain the level of SME performance and the impacts of environmental dynamism on these relationships [28]. Consistent with Giniunienea and Jurksiene, they were study "Dynamic Capabilities, Innovation and Organizational Learning: Interrelations and Impact on Firm Performance", the research result found the positive relationship between studied variables [29]. Rehman and Saeed were research an "Impact of Dynamic Capabilities on Firm Performance: Moderating Role of Organizational Competencies" this study observes the phenomenon of organizational performance with the lens of dynamic capabilities [30]. This study investigates the impact of dynamic capabilities on organizational performance, taking organizational competencies as moderating variable, focusing on a paper industry at Lahore, Pakistan. The measurement of organizational dynamic capabilities is based on the multi-dimensional construct underlying the four main factors which include i.e. Sensing, Learning, strong coordination, and competitive response to the rivals. This will lead to explore relationship of organizational dynamic capabilities with firm performance. Empirical research posits that organizational dynamic capabilities have a direct impact on performance of the firm. It also proves that organizational competencies have positive moderating role in relationship of firm performance and organizational dynamic capabilities [30]. Kuo, Lin, Lu studied "The effects of dynamic capabilities, service capabilities, competitive advantage, and organizational performance in container shipping"; the research findings indicated that dynamic capabilities positively influenced both competitive advantage and service capabilities. Service capabilities and competitive advantage were positively related to firm performance [31].

Also recent researches had shown the relationship between organizational dynamic capabilities and firm performance, there are researches that reveal the relationship between innovation and firm performance. Tajuddin, Iberahim, and Ismail studied "Relationship between Innovation and Organizational Performance in Construction Industry in Malaysia" the results revealed that principally innovation is significantly positive in influencing organizational performance. Nevertheless, innovative design solution and advanced technology dimensions were insignificant in influencing project performance and business performance respectively [32]. Tuan's research were study "The effects of innovation on firm performance of supporting industries in Hanoi, Vietnam", the result demonstrated there are positive effects of process, marketing, and organizational innovations on firm performance in supporting firms. More specifically, the higher the level of innovation activities is, the greater the innovative performance is, which means the larger level of process, organization and marketing innovation activities are, the higher level of innovative performance are likely to be. Secondly, the higher level of Process, organization and marketing innovative performance, the better level of firm performances is likely to be. To sum up, in order to improve the innovative and firm performance, those firms in supporting industry should highly concentrate on process, marketing, and organizational innovation activities, rather than product innovation activities [33]. The research on "The Relationship of Innovation with Organization Performance" investigated the relationship of innovation with

organizational performance of the telecommunication sector. In this research, the independent variables are process innovation and the product innovation, organizational innovation as an organizational culture that is a moderating variable. The research is survey research in which questionnaire is administered to 200 employees that are concerned with innovation in telecom industry present in Islamabad and Rawalpindi to ensure reasonable response. The collected data was analyzed through the social science software and results showed that product innovation, process innovation and organizational innovation had a positive impact on organization performance [34].

Recent research has shown empirical evidence of the relationship between organizational dynamic capabilities, innovation, and firm performance. However, most researches are conducted in large business organizations, not in the SMEs, there are not many research SMEs in the Northeast of Thailand. In addition, the results are different in many contexts of the study. It is essential that further research is required. In this research has been developed the research conceptual framework from the literature mentioned above.

The research conceptual framework is composed of independent variables (organizational factors, organizational dynamic capabilities), mediator variable (innovation), and dependent variable (firm performance); the details are as figure 1.

Organizational Factors
1. Duration of firm
2. Types of firm

Organizational Dynamic
Capabilities

1. Sensing capability

1. Product innovation

2. Seizing capability

3. Transforming capability

3. Organizational innovation

Time Performance

3. Organizational innovation

Figure 2
Research conceptual framework

The research hypotheses are as follows.

H₁: The organizational dynamic capabilities, innovation, and firm performance of SMEs are different when classified by organizational factors.

H₂: The organizational dynamic capabilities, and when classified as sub-elements; sensing capability, seizing, and transforming capability have different positive influence level on innovation.

H₃: The innovation, and when classified as sub-elements; product innovation, process innovation, and organizational innovation have different positive influence level on firm performance.

H₄: The organizational dynamic capabilities, and when classified as sub-elements; sensing capability, seizing, and transforming capability have different positive influence level on firm performance.

RESEARCH METHODS

Population and Sample

The population in this study is the entrepreneur of Small and Medium Enterprises (SMEs) from manufacturing, retail and wholesale, and service businesses in the upper Northeastern area 2 of Thailand. The amount of SMEs in each province is as follows; Sakon Nakhon province 1,806 SMEs, Nakhon Phanom

province 1,205 SMEs, and Mukdahan province 1,490 SMEs, 368 samples was calculated by Taro Yamane (1973) formula [35], the entrepreneur of SMEs as respondents, sampling was used proportional sampling and simple random sampling.

Research tools

Questionnaires are the major tool for data collecting. The process to create a questionnaire for the validity and reliability of the research was construct measurement as follows. 1) The researchers were construct model and variables by studying the theories, concepts, principles, and research in Thailand and abroad related to the phenomenon. From the literature review, there are significant variables as follows; independent variables composed of organization factors, and organizational dynamic capabilities adapted from the concept of Teece [15] and Kump [16]. Mediator variable is innovation adapted from concept of OECD [20] and Baer [22]. Dependent variable is firm performance adapted from concept of Civelek [26]. 2) The questionnaire was divided into 5 parts: Part 1: General information about the respondents. Part 2: Business information questions. Part 3: The questions of the organizational dynamic capabilities 11 items, Part 4: Innovation 12 items, and Part 5: Firm performance 10 items. All the items were measured on five point Likert Scale having range from Strongly Agree to Strongly Disagree. In the next step, ask five experts to examine the content validity by examining the list of questions that are consistent with the variables and definitions. The data obtained from each of the variables was compared to the index of congruence / IOC, and the questionnaire items should have IOC more than 0.50 [36]. 3) The 30 revised try-out questionnaires were used to select SMEs from Udonthani province. To find the confidence, Cronbach's alpha coefficient [37] was used to determine the reliability of the questionnaire. The alpha value is the level of confidence and reliability of the questionnaire. The value between $0 < \alpha < 1$, if the value is close to 1 indicates that there is a lot of confidence. Hair [38] described that the acceptable confidence value must be at least 0.70. A reliability value was present in table 2. 4) Tools used to collect data. 5) Quantitative data analysis, the data in Part 1 and Part 2 are analyzed by descriptive statistics; frequency, and percentage. The data in Part 3-4-5 were analyzed by using mean and standard deviation. The hypothesis 1 testing is based on the F-test (one-way ANOVA), for hypothesis 2 and hypothesis 3 and 4 are used path analysis. The research results can be significantly analyzed with 95% confidence interval.

Table 2
Cronbach's alpha coefficient of research variables

Variables	Cronbach's alpha coefficient (α)	Sub-elements variables	Cronbach's alpha coefficient (α)
Organizational dynamic	.891	Sensing capability	.724
capabilities		Seizing capability	.828
		Transforming capability	.791
Innovation	.892	Product innovation	.705
		Process innovation	.779
		Organizational	.883
		innovation	
Firm performance	.824	-	-

RESULTS

The results were presented by the objectives, part 1 was the respondents demographic, part 2 was the level of SMEs organizational dynamic capabilities, and part 3 was the results of hypothesis testing data, the details of analyses were as follows.

1. The research respondents' demographic data showed that male was 40.10%, female 59.90%, the respondent aged 41-50 years group was the highest at 44.40%, education below bachelor degree was highest

- at 61.10%, and the duration of firm less than 6 years group was the highest at 39.50%. When classified by types of firm; manufacturing was at 13.10%, retail and wholesale was at 68.10%, and service business was at 18.80%.
- 2. The level of organizational dynamic capabilities; the mean of organizational dynamic capabilities of SMEs in the upper northeast area 2 of Thailand was at high level ($\overline{X} = 3.66$), when classified by subelements found that sensing capability, seizing capability, transforming capability was high also, by mean at $\overline{X} = 3.86$, $\overline{X} = 3.56$, $\overline{X} = 3.55$ respectively. The level of innovation; the mean of innovation of SMEs was at moderate level ($\overline{X} = 3.48$), when classified by sub-elements found that the mean of product innovation, process innovation, organizational innovation was high level at $\overline{X} = 3.49$, $\overline{X} = 3.47$, $\overline{X} = 3.47$ respectively. The firm performance level was moderate level, by mean at $\overline{X} = 3.34$.
 - 3. The hypothesis testing results were as follows.

H₁: The organizational dynamic capabilities, innovation, and firm performance of SMEs are different when classified by organizational factors. The researchers were used F-test (one-way ANOVA) to prove the hypothesis.

Table 3

The organizational dynamic capabilities, innovation, and firm performance of SMEs when classified by duration of firm

	Orga	nizational Dynamic	Capabilities	
Duration of Firm	$\overline{\mathbf{X}}$	S.D.	F	Sig.
Less than 6 years	3.80	.51		
6-10 years	3.63	.38	1.25	.28
More than 10 years	3.64	.45		
		Innovation		
Duration of Firm	\overline{X}	S.D.	F	Sig.
Less than 6 years	3.82	.43		
6-10 years	3.39	.41	6.93	.00**
More than 10 years	3.46	.46		
	Firm Performance			
Duration of Firm	\overline{X}	S.D.	F	Sig.
Less than 6 years	3.52	.45		
6-10 years	3.30	.41	1.98	.41
More than 10 years	3.33	.43		

There was statistical significant at 0.05 levels different in innovation only, while organizational dynamic capabilities and firm performance was not different. The less than 6 years SMEs group was higher innovation than 6-10 years, and more than 10 years, by mean at $\overline{X} = 3.82$, $\overline{X} = 3.39$, $\overline{X} = 3.46$ respectively.

Table 4

The organizational dynamic capabilities, innovation, and firm performance of SMEs when classified by types of firm

	Orga	anizational Dynamic	Capabilities	
Types of Firm	$\overline{\mathbf{X}}$	S.D.	F	Sig.
Manufacturing	4.02	.39		
Retail and wholesale	3.61	.44	7.55	.00**
Service business	3.62	.35		
		Innovation		
Types of Firm	$\overline{\mathbf{X}}$	S.D.	F	Sig.
Manufacturing	3.84	.41		
Retail and wholesale	3.40	.47	8.42	.00**
Service business	3.54	.29		
	Firm Performance			
Types of Firm	$\overline{\mathbf{X}}$	S.D.	F	Sig.
Manufacturing	3.62	.47		
Retail and wholesale	3.28	.41	5.63	.00**
Service business	3.41	.41		

From the research results found statistic significant at 0.05 levels in all aspects. In the first aspect; manufacturing SMEs was higher organizational dynamic capabilities than retail and wholesale, service business, by mean was $\overline{X}=4.02$, $\overline{X}=3.61$, $\overline{X}=3.62$ respectively. In the second aspect; in a similar to first aspect, manufacturing SMEs was higher innovation than retail and wholesale, service business, by mean was $\overline{X}=3.84$, $\overline{X}=3.40$, $\overline{X}=3.54$ respectively. Third aspect; manufacturing SMEs remain higher firm performance than retail and wholesale, service business, by mean was $\overline{X}=3.62$, $\overline{X}=3.28$, $\overline{X}=3.41$ respectively.

In case of hypothesis 2, 3, and 4, the hypotheses were used path analysis; hence the testing must behave the regression analysis rules as follows. The symbols used to analyze in this research were as follows. ODC: Organizational dynamic capabilities, ODC1: Sensing capability, ODC2: Seizing capability, ODC3: Transforming capability, INO: Innovation, INO1: Product innovation, INO2: Process innovation, INO3: Organizational innovation, FPM: Firm performance.

The correlation analysis results found that; in the first variables group sub-element of organizational dynamic (ODC1, ODC2, ODC3), and the second variables group sub-element of innovation (INO1, INO2, INO3). The independent variables correlation were not exceed 0.80, Hair et al. (2010) described the relationship between the independent variables must be less than 0.80, which is more than 0.80 may cause of Multicollinearity. This research found the relationship between the independent the highest value was 0.71, it was not exceed 0.80. Multicollinearity problem was not found; therefore it could be tested by using path analysis to the next [38].

Table 5
Correlation analysis between variables

	ODC	ODC1	ODC2	ODC3	INO	INO1	INO2	INO3	FPM
ODC	1								
ODC1	.87**	1							
ODC2	.89**	.70**	1						
ODC3	.82**	.57**	.59**	1					
INO	.76**	.68**	.66**	.63**	1				
INO1	.59**	.54**	.47**	.53**	.81**	1			
INO2	.66**	.59**	.61**	.51**	.92**	.63**	1		
INO3	.71**	.63**	.61**	.60**	.86**	.51**	.71**	1	
FPM	.71**	.58**	.58**	.69**	.74**	.56**	.65**	.69**	1

H₂: The organizational dynamic capabilities, and when classified as sub-elements; sensing capability, seizing, and transforming capability have different positive influence level on innovation.

Table 6

The influence of organizational dynamic capabilities on innovation

Independent	Standardize Coefficients (β)	t	Sig.	
Variable				
ODC .76		2.87	.00**	
$\Delta R^2 = .58$, SEE. = .29, F = 220.43, Sig of F = .00				

Table 7

The influence of organizational dynamic capabilities when classified as sub-elements on innovation

Independent Variable	Standardize Coefficients (β)	t	Sig.	VIF
ODC1	.33	2.61	.00**	2.18
ODC2	.24	4.45	.00**	2.22
ODC3	.29	3.21	.00**	1.66
$\Delta R^2 = .58$, SEE. = .29, F = 73.19, Sig of F = .00				

The second hypothesis was accepted; the testing results found that; the organizational dynamic capabilities had statistic significant at 0.05 level high positive influence on innovation, the independent variables (ODC1, ODC2, and ODC3) could explained the variance (ΔR^2) of innovation (INO) 58.00%, and when classified organizational dynamic capabilities as sub-elements reveal that all variables was statistic significant at 0.05 levels positive influence, however the results showed the different of influence level between sub-elements, the sensing capability had higher influence on innovation than seizing capability and transforming capability, by standardize coefficients (β) were .33, .24, and .29 respectively.

H₃: The innovation, and when classified as sub-elements; product innovation, process innovation, and organizational innovation have different positive influence level on firm performance.

Table 8

The influence of innovation on firm performance

Independent	Standardize Coefficients (β)	t	Sig.	
Variable				
INO	.74	13.916	.00**	
$\Delta R^2 = .54$, SEE. = .29, F = 193.64, Sig of F = .00				

Table 9

The influence of innovation when classified as sub-elements on firm performance

Independent Variable	Standardize Coefficients (β)	t	Sig.	VIF
INO1	.20	2.91	.00**	1.70
INO2	.20	2.47	.01**	2.57
INO3 .45 5.93 .00** 2.05				
$\Delta R^2 = .56$, SEE. = .28, F = 67.77, Sig of F = .00				

The third hypothesis was accepted; the results of this testing found that innovation had statistical significant at 0.05 levels high positive influence on firm performance, by standardize coefficients (β) was .74, and when classified by sub-element; organizational innovation was higher influence on firm performance than product innovation and process innovation. The standardize coefficients (β) was .45, .20, and .20 respectively. The independent variables (INO1, INO2, and INO3) could explain the variance (ΔR^2) of dependent variable (FPM) 56.00%.

H₄: The organizational dynamic capabilities, and when classified as sub-elements; sensing capability, seizing, and transforming capability have different positive level influence on firm performance.

The fourth hypothesis was accepted; the testing results found that organizational dynamic capabilities was statistic significant at 0.05 levels high positive influence on firm performance, by standardize coefficients (β) was .71. When classifying variables into sub-elements, it was found different of influence between sub-element by transforming capability had higher influence than sensing capability and seizing capability, by standardize coefficients (β) was .48, .17, and .17 respectively. The independent variables (ODC1, ODC2, and ODC3) could explain the variance (ΔR^2) of dependent variable (FPM) 54.00%.

Table 10

The influence of organizational dynamic capabilities on firm performance

Independent	Standardize Coefficients (β)	t	Sig.	
Variable				
ODC	.00**			
$\Delta R^2 = .50$, SEE. = .30, F = 164.79, Sig of F = .00				

Table 11

The influence of organizational dynamic capabilities when classified as sub-elements on firm performance

Independent Variable	Standardize Coefficients (β)	t	Sig.	VIF
ODC1	.17	2.19	.03*	2.18
ODC2	.17	2.20	.02*	2.22
ODC3 .484 6.94 .00** 1.66				
$\Delta R^2 = .54$, SEE. = .29, F = 61.66, Sig of F = .00				

In conclusion, according to the hypotheses testing; the organizational factors in the aspect of duration of firm had only different in the level of innovation, in the aspect of type of firm had different in the level of organizational dynamic capabilities, innovation, and firm performance. In addition, organizational dynamic capabilities of SMEs in the upper northeast area 2 of Thailand had high positive influence on innovation and firm performance; and innovation had high positive influence on performance also.

CONCLUSION AND FUTURE WORK

The research finding found that; the level of the SMEs organization dynamic capabilities, and innovation were high level, while firm performance was moderate level, when analyzed by organizational factors, the SMEs in the group of duration of firm 6-10 years had lower innovation than the other groups. SMEs in the types of retail and wholesale, and service business had organization dynamic capabilities, innovation, and firm performance lower than manufacturing SMEs. In addition, to test the influence of organizational capabilities and innovation on firm performance; the results reveal that the organizational dynamic capabilities had high positive influence on innovation and firm performance, and innovation had high positive influence on firm performance also, the findings are consistent with the research finding of Lau, Man, and Chow [28]; Giniunienea and Jurksiene [29]; Rehman and Saeed [30]. Considering the organizational dynamic capabilities classified as sub-elements, it was found that sensing capability had higher influence on innovation than seizing and transforming capabilities, but found that transforming capability had more influence on firm performance than sensing and seizing capability. In sub-elements of innovation; it was found that organizational innovation had higher positive influence on firm performance than product innovation and process innovation.

Practical implications, based on the empirical findings of this research, policy recommendations can be made to public and private agencies involved in SMEs development in the upper northeast area 2 of Thailand are as follows; it should be focus on the SMEs in the group of firm duration between 6-10 years, and the firm types of retail and wholesale, service business by enhance their capability in 1) Organizational dynamic capabilities; especially sensing capability and transforming capability, by the SMEs entrepreneurs should emphasize on the firm external environment analysis to track changes that will affect business operations, such as changing customer needs, competitor Technologies or strategies, also seeking new opportunities to run a business. Entrepreneur should Integrated of the external knowledge into the knowledge of the organization, by fine tuning process reconfiguration, the ability of resources management within the organization to support the process of renewal. 2) Innovation development, Burkus [39] was proposed innovations development in the organization as follows; 1) Use technology to collaborate and share knowledge. Collaboration drives creativity and innovation, and social media and conferencing technologies can help bring people together (or virtually together) more often for that collaboration. 2) Promote innovation as an organizational value. The most innovative firm didn't just luck into hiring creative people; they placed creative and even average people into creative cultures. 3) Include innovation as a leadership development competency. Part of building an innovative culture is having leaders who value creativity, and are creative themselves. 4) Tie compensation and reward to innovation. The jury is still deliberating the influence of incentives on creativity, but their use in organizations sends a signal that innovation is valued. That signal is an important part of culture building. 5) Develop an "Idea-finding" program. As we've discussed elsewhere, it's not enough to have great ideas. Innovative companies build a system that taps into the collective knowledge of everyone and lets everyone promote good ideas [39].

Limitations and directions for future research; A first limitation of our study, because of this research was used a cross-sectional study so the weakness is that it cannot see the long-term change in firm performance. Longitudinal studies will confirm the reliability of the independent variables that affect the dependent variables. A second limitation, relates to the generalisability of our findings was limited in SMEs in the upper northeast area 2 of Thailand. We recommended that the future research could study more in other areas, or change the population from SMEs to other types of business organization. A third limitation, although the organizational dynamic capabilities and innovation could explained the variance of firm performance more than 50.00%, it was mean that there are still other variables that can influence on the firm performance, this is what researchers need to study more in the future. Examples of these variables are: top management team (TMT), organization culture, dynamic of organization culture.

RRFERENCES

- [1] OSMEP. (2016), "Annual Report 2016", URL: http://www.sme.go.th/upload/mod_download.
- [2] Ministry of Labour. (2017), "Summary on Labour Economic Conditions", *URL*: http://www.mol.go.th/en/academician/news-1.
- [3] Peteraf, M.A., & Maritan, C.A. (2007), "Invited Editorial: Building a Bridge between Resource Acquisition and Resource Accumulation Invited Editorial: Building a Bridge between Resource Acquisition and Resource Accumulation", Journal of Management, Vol. 37, No. 5, Pp. 1374-1389.
- [4] Lau, T., Man, T.W.Y. & Chow, I., (2004), "Organizational Capabilities and Performance of SMEs in Dynamic and Stable Environments", SAGE Journals, Vol. 5, No. 4, Pp. 221-229.
- [5] *Park, K. & Kim, B.K. (2013),* "Dynamic capabilities and new product development performance: Korean SMEs", Asian Journal of Technology Innovation, Vol. 21, No. 2, Pp. 202-219.
- [6] Nedzinskas, S. (2013), "The impact of dynamic capabilities on SME performance in a volatile environment as moderated by organizational inertia", *Baltic Journal of Management*, Vol. 8, No. 4, Pp. 376-396.
- [7] Inan, G. G. & Bititci, U. S. (2015), "Understanding Organizational Capabilities and Dynamic Capabilities in the Context of Micro Enterprises", *Procedia Social and Behavioral Sciences*, Vol. 210, Pp. 310-319.
- [8] Ndesaulwa, A.P. & Kikula, J. (2016), "The Impact of Innovation on Performance of Small and Medium Enterprises (SMEs) in Tanzania: A Review of Empirical Evidence", *Journal of Business and Management Sciences*. Vol. 4, No. 1, Pp. 1-6.
- [9] Thailand Management Association (2016), "Public-Private Collaborative Committee Meeting", URL: http://thailandcompetitiveness.org.
- [10] DEPA. (2017), "Digital Economy Promotion Agency creates OSSC booth at Smart Thailand 4.0", URL: http://www.depa.or.th/en/news.
- [11] Prahalad, C.K. & Hamel, G. (1990), "The Core Competences of the Corporation", *Harvard Business Review*
- [12] Teece, D.J., Pisano, G. & Shuen, A. (1997), "Dynamic Capabilities and Strategic Management", *Strategic Management Journal*, Vol. 18, No. 7, Pp. 509-533.
- [13] Ludwig, J. & Pemberton, J. (2011), "A managerial perspective of dynamic capabilities in emerging markets: The case of the Russian steel industry", *Journal for East European Management Studies*, Vol. 16, No. 3, Pp. 215-236.
- [14] Teece, D.J. (2017), "Business models and dynamic capabilities", Elsevier, Vol. 51, No.1, Pp. 40-49.
- [15] Teece, D.J. (2010), "Business Models, Business Strategy and Innovation", *Elsevier*, Vol.43, No.2, Pp.172-194.
- [16] Kump, B., Engelmann, A., Kessler, A. & Schweiger, C. (2016), "Towards a Dynamic Capabilities Scale: Measuring Sensing, Seizing, and Transforming Capacities", Academe of Management Annual Meeting Proceedings.
- [17] Maranville, S. (1992), "Entrepreneurship in the Business Curriculum", *Journal of Education for Business*, Vol. 68, No. 1, Pp. 27-31.
- [18] Ward, J. (2017), "Innovation and Collaboration Are the New Dynamic Duo", URL: https://www.forbes.com/sites/sap/2017/01/04/innovation.
- [19] Global Innovation Index (2016), "The Global Innovation Index 2016: Winning with Global", URL: www.wipo.int/edocs/pubdocs/en/wipo pub gii 2016.pdf.
- [20] OECD. (2005), "Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data", Paris: *OECD Publishing*, 3rd Edition.
- [21] Zapfl, D. (2016), "What types of innovation are there?", URL: http://www.lead innovation.com/english-blog/author/daniel-zapfl.
- [22] Baer, D. (2017), "The 3 Types of Innovation: Product, Process, & Business Model", URL: https://differential.com/insights/the3typesofinnovation/
- [23] OECD. (2015), "OECD Innovation Strategy 2015 An Agenda for Policy Action", URL: https://www.oecd.org/sti/OECD-Innovation-Strategy-2015-CMIN2015-7.pdf

- [24] OECD. (2012), "OECD Science, Technology and Industry Outlook 2012 Highlights", URL: https://www.oecd.org/sti/sti-outlook-2012-highlights.pdf
- [25] Richard, P. J., Devinney, T. M., Yip, G. S. & Johnson, G. (2009), "Measuring organizational performance:
- towards methodological best practice", Journal of Management, Vol. 35, No. 3, Pp. 718-804.
- [26] Civelek, M.E., Cemberci, M., Artar, O.K. & Uca, N. (2015), "Key Factors of Sustainable Firm Performance: A Strategic Approach Key Factors of Sustainable Firm Performance: A Strategic Approach", *Nebraska*: Zea Books.
- [27]Kaplan, R.S. & Norton, D.P. (1992), "The balanced scorecard measures that drive performance", *Harvard Business Review*, Vol. 70, No. 1, Pp. 71-79.
- [28] Lau, T., Man, W.Y. & Chow, I. (2004), "Organizational Capabilities and Performance of SMEs in Dynamic and Stable Environments", *The International Journal of Entrepreneurship and Innovation*, Vol. 5, No. 4, Pp. 221-229.
- [29] Giniuniene, J. & Jurksiene, L. (2015), "Dynamic Capabilities, Innovation and Organizational Learning: Interrelations and Impact on Firm Performance", *Procedia Social and Behavioral Sciences*, Vol. 213, Pp. 985-991.
- [30] Rehman, K.U., & Saeed, Z. (2015), "Impact of Dynamic Capabilities on Firm Performance: Moderating Role of Organizational Competencies", *Sukkur IBA Journal of Management and Business*, Vol. 2, No. 2, Pp. 18-40.
- [31] Kuo,S.U., Lin, P.C. & Lu, C.S. (2017). "The effects of dynamic capabilities, service capabilities, competitive advantage, and organizational performance in container shipping", ELSEVIER, Vol. 95, Pp. 356-371.
- [32] Tajuddin, M.Z.M., Iberahim, H., & Ismail, N. (2015), "Relationship between Innovation and Organizational Performance in Construction Industry in Malaysia", *Universal Journal of Industrial and Business Management*, Vol. 3, No. 4, Pp. 87 99.
- [33] Tuan, N., Nguyen, N., Pham, G., & Nguyen, N. (2016), "The effects of innovation on firm performance of supporting industries in Hanoi, Vietnam", *Journal of Industrial Engineering and Management*, Vol. 9, No. 2, Pp. 413-431.
- [34] Suhag, A.K., Solangi, S.R. & Larik, S.A. (2017), "The Relationship of Innovation with Organization Performance", *International Journal of Research GRANTHAALAYAH*, Vol. 5, No. 2, Pp. 292-306.
- [35] Yamane, Taro, (1973), "Statistics: An Introductory Analysis", New York: *Harper and Row Publication*, 3rdedition. *New York: Harper & Row*.
- [36] Pornpen Pethsuksiri, (1997), "Data Analysis for Management", Bangkok: Sema Dharma Publication.
- [37] Cronbach, L.J., (1974), "Essentials of Psychological Testing", New York: *Harper and Row*, Third Edition.
- [38] Hair, J., Black, W., Anderson, R. & Babin, B.J., (2010), "Multivariate Data Analysis", New Jersey: *Prentice Hall*, 7thEdition., Upper Saddle River, New Jersey: *Prentice Hall*
- [39] Burkus, D., (2013), "10 Practices from the Most Innovative Organizations", URL: http://www.creativitypost.com/business/10_practices_from_the_most_innovative_organizations.

The Management of the Tha Rae Community, Sakon Nakhon Province as a Secondary Destination for Cultural Tourism

Pim-Amorn Niyomkar

Department of Service industry, Faculty of Liberal Arts and Management Science, Kasetsart University, Thailand E-mail: pimamorn.n@ku.th

ABSTRACT

This paper establishes and provides the heritage values and cultural significance of the Tha Rae Community in Sakon Nakhon for development as a secondary destination after appropriate development, for tourism development. My objective is to promote the Tha Rae Community as a secondary destination and alternative heritage attraction for both domestic and international tourists and also spread the excessive number of visitors in the primary site. The author used the qualitative research method in this study to gain in-depth information of the subject. Content analysis was used with historical information of the Tha Rae Community and its cultural significance to the community. It has been found that Tha Rae is valuable and has considerable inherent potential heritage value. Besides possessing buildings of great historical significance and architectural value, the activities in this area reflect the various ethnic groups' community life.

However, the results from the survey and in-depth interviews discussing cultural ideas found that the Tha Rae Community as a secondary destination has potential, but the promotion for development and management is weak. As a result, the development and management plan is needed for a better understanding and marketing to the tourists. It is productive to create and apply the development plan.

Keywords- Tha Rae Community, Secondary Destination, Cultural Tourism

INTRODUCTION

The Tha Rae community in Sakon Nakhon province is home to Thailand's largest Roman Catholic community, which has been celebrating the Christmas Star Procession annually since 1982 to commemorate the Christmas nativity. This community represents a unique culture that is a mixture of components which are mostly Buddhist and Catholic Buddhism and Catholicism. Most of the villagers are descendants of Thai, Lao, Thai and Vietnamese Christians who have lived here for over 130 years. Besides possessing buildings of great historical significance and architectural values, the activities in these areas reflect the various ethnic groups' community life. The heritage values includes: a mixture of types and styles of vernacular architecture which have high heritage values. The four mansions are evidence of the Vietnamese and French colonially influenced architecture (principally, a residential type with a brick and plaster structure and the elaborate wooden working skills of the Vietnamese craftsmen for instance: wooden jointing, turning and carving are exceptional and unique) that is quite rare. The unique festival: the Christmas celebration and Star Parade festival usually takes place on December 24th . The beginning of December is the start of the Christmas season. People prepare for the upcoming festival by decorating their houses with different lightings, stars and Christmas trees. The decoration starts at the road in the middle of the village before other areas. Christmas is also considered a family day, therefore it's the day that families get together. Next, the layout of the community is in a grid-pattern around the heart of the village. St. Michael Archangel Cathedral reflects the planning principles of the Occidental world. Lastly, a lake side scenic area which is a landscape zone with a park and a promenade at the South end. It offerings many spectacular panoramic views of Nong Harn Lake, Sakon Nakhon City and the Phu Phan Mountain Range. Therefore, this paper explains the important terms, including the Tha Rae community as a case study of a secondary tourism destination. The second part will present the study of primary destination, secondary destination, and associated heritage value and method. The last part will toffer the discussion and recommendation for this area.

Objective

- 1. To promote the Tha Rae Community as a secondary destination in Sakon Nakhon.
- 2. Guidelines on how secondary attractions can be included in the heritage tourism planning and implementation process will be created.

THE STUDY AND RESEARCH METHODOLOGY

This particular research of the selected authors for a primary and secondary destinations theory is an important stage for seeking and discovering visitor's perception, visitor's experience, and visitor's response toward their surroundings based on elements that relate to visitor relationships with tourism destinations. However, several practical questions arise when dealing with tourism destinations. At this level, tourism destination discussions are important for starting research since the tourism destination provides rich meanings for study.

In a cultural context study, Tuan [1] recommends culture learning to know the neighborhood that requires the landmark significantly identified. It is important to identify the sense of place strongly influenced by the existence of significant objects, locations, and ideas. The image of the city has rather unique for each city of different characters is ties and culture. In parallel to the author reviews, the work of Lynch [2] found a good relationship between people and place. It is the key to predict that tourism destinations are defined as the physical (location of place), people experience and the locality setting. By contrast, the perceptual theory holds that perception is an indirect experiential landscape, but several approaches might be useful models. Cullen [3] argued that to achieve a unique sense of place, part of a townscape should be part of the design and details seen to have a life in their own setting. They satisfy their needs through emotional response to landscape and urban settings through an iconic experiential approach. Refer to du Cros (2014) [4], in a tourism attraction hierarchy, some heritage assets could be considered to be primary or "icon" that will draw tourists to a destination in their own right. Secondary attractions will appeal to tourists once they are already at a destination and are examining the options for best use of their time and so become a more discretionary choice for tourist. The most discretionary choice of all will be made to visit terry attraction. Secondary destinations are usually common site types or occur in more remote places and are not well known (Lague, 2009) [5]. Furthermore, Leiper (1990) [6] explains that only a small number of tourists really want to seek a deep learning experience when they travel. The rest are travelling for pleasure or escapism reasons and wish to participate in activities that will provide a sense of enjoyment. In relation to the Asian cultures and beliefs of the heritage sites, many historic sites represent by value systems such as beliefs, traditions, and rituals. They also receive little in the way of on-site presentation of interesting information to tourists to enhance their experience of the site and to protect it by engaging their cooperation in its conservation. Likewise, Taylor (2004, p. 419) [7] posted a very provocative question in relation to values: "Whose values are we addressing and whose heritage is it?", and also gave a very meaningful statement which emphasizes the importance of subjectivity in regard to value: "The tangible fabric of heritage places and objects is capable of objective quantification, but it is the values we attach to places and objects that are the fuel of the fire of heritage". The two aforementioned questions are worth considering as assigning a value to a place is very subjective, and involves hierarchical power. Values assigned by central government are, of course, greater than values assigned by local people because it reflects a different scale of significance (Scott, 2001) [8].

However, primary and secondary destinations play distinct roles in determining travel choices, and the location of secondary destinations is also important. It was concluded that the concept of primary destination is the most important destinations which influences visitation while, secondary destinations are locally significant tourist attractions. As stated above, emphasis will be given to secondary destinations, the associated heritage value and attractions of the secondary destination will also be analyzed. The Burra Charter also identified four main values: aesthetic value, historic value, scientific value and social value (Australian ICOMOS 1999, pp. 12-13) [9]. These four main values are used to assess the significance of tangible and intangible heritage. According to this analysis, it is possible to infer that whatever provides tourist experiences could be stated as attractions. In other words, whenever tourists consider gaining greater experience at a specific destination, it would then be regarded as a primary destination. It is necessary to establish an understanding regarding the terms 'primary' and 'secondary' tourism destinations and provide the knowledge

of associated heritage values (McKercher & du Cros, 2002) [10]. This will enable tour operators to develop itineraries that provide benefits not only for the travel agencies, but also for tourists, who can enjoy new experiences, and for people in the community.

Assessment of the values attributed to heritage is a very important activity in a conservation effort, since values strongly shape the decisions that are made whether they are concerned with giving a place "heritage" status, deciding which place to invest in, planning for the future of a historic site, or applying a treatment to a heritage place. Although every local community's heritage has characteristics of authenticity and uniqueness, it may not be equally significant for other communities or for tourism, which might help to classify primary and secondary cultural attractions/destinations (adapted and summarized from Yunis, 2004, Du Cros, 2002, Logan, 2001, and Sullivan, 1993) [11] [12] [13] [14]. Thus, the degree of attractiveness of primary or secondary destinations is depended on the authenticity and uniqueness of the heritage place. If we want to use the associated values that are embodied in heritage places as the visitor's attraction, we are strongly obligated to the responsibility for heritage safeguarding.

From the literature, most of the previous studies on tourism impacts have used the top-down approach to investigate resident's perceptions of tourism impacts. This study differentiates itself from most research because it uses a bottom-up approach to examine community values. A bottom-up approach emphasizes resident's values in relation to management tourism in their community and thereby minimizes the weakness of top-down approaches. The on-site survey instrument used in this study composed of a qualitative method was adopted, using in-depth interviews and on site-surveys. Scope of data collection and target groups were the Tha Rae community and related government agencies: Interviews were conducted with all stakeholders including community leaders, local community members, government agencies responsible for the tourism industry, and business owners in Tha Rae Community to find out their opinions toward promoting the community as a tourism destination. The participation technique prepared for the interview with community representatives and government officials were based on the research questions. The interviews were conducted during April 2016 to December 2016. Two rounds of survey were conducted during early 2016 and middle 2017. The first round was exploratory in physical environment. Data on history, physical environment, economy and socio-culture of the area was collected from both primary and secondary data sources as well as from direct observations. The authors sought to gather a better understanding of the built environment and heritage values issues as assets managed by respondents. Data collected from local people and the government agencies was conducted using face-to-face interviews. The interview questions were divided as follow; general data about the interviewee, to what are the key values of Tha Rae community relevant to the sustainability in terms of cultural tourism as a secondary destination. Then, the author analyses data collected with the principles of heritage value to demonstrate the potentials of promoting Tha Rae as a secondary destination.

RESEARCH FINDING

Document of heritage values and significance of the Tha Rae Community

A survey and documentation of the area's cultural heritage will be the first systematic method to identify, document and evaluate their potential as a secondary tourism destination and capture its unique ethnic heritage as a critical ingredient of the Tha Rae Community. Warangrat (1999) [15] explains that life and activities on the streets and around the Nong Harn Lake are strong indicators of traditional, Vietnamese culture still thriving that has intermeshed with contemporary narratives of changes, but retains its identity. Getting to the old settlement or the community living in Sakon Nakhon is a secondary destination where visitors will learn more about how ordinary people in Sakon Nakhon live from the past to present. That might help visitors to extend their understanding and intensify their appreciation of Sakon Nakhon cultural tourism during and after the trip. Life and activities on Rachchareon Road are strong indicators of traditional Vietnamese culture such as storytelling, performing arts, social practice, rituals, and festival events, practices and knowledge, traditional crafts knowledge and skill.

As the most culturally significant street within this historic community it holds the highest potential through tapping its architectural, cultural and economic potential. The community also has traditional celebrations that relate to the religious occasions of each year. St. Michael Church is the most active site for el-

der local members. Furthermore, it is the oldest area where Vietnamese immigrants mixed religions between Catholicism and Buddhists. Annual Catholic activities can be expressed through the four ceremonies from the past. These four ceremonies are concerned closely with the land and religion such as Eucharist; Holy Communion in January and May, the Parade of Paschal Candle, Holy Saturday, the Rosary ceremony in October and Christmas Eve in December (The Star Parades Festival).

Figure 1

The map of tourism attractions in the Tha Rae Community (Adapted from Niyomkar, July 2016)



According to the campaign of "Local Experience" by TAT (Tourism Authority of Thailand) [16], the tourists can experience "authentic" or "local" culture of ordinary people in their everyday places which are normally found in secondary sites rather than in primary destinations. It was found that there are a lot of tourists coming to the Tha Rae Community. The obvious benefit which tourists receive while travelling is not only knowledge, but also entertainment that should be provided. Likewise, the locals also agree and accept that their places will be developed as a tourism destination. The priest of the Immaculate Conception Church agrees that it will be good if the Tha Rae area becomes a tourism destination. He gave the reason that when the tourists come to the community, the villagers will have the opportunity to earn income from selling things such as food or other products. Moreover, the people associated with the secondary site will have benefits of economic, social and cultural aspects, such as, the opportunity to share their pride of heritage values and share them with others, providing jobs that relate to tourism for community members, allowing local or micro business to be established, or stimulating investments from outside and will also gain the chance to pass on local wisdoms and knowledge to the next generation, or improve the quality of life by upgrading the infrastructure of the community. In term of benefits to tourists, since most of the secondary destinations are located in remote areas, they can expect to witness different picturesque landscapes, including provocative related scenery. Tourists will learn about the significance of the destination in terms of associated people, places and events, in addition to the national view of the primary destination.

DISCUSSION

At this stage, I will present discussion and suggestions on issue of The Tha Rae community as secondary destination. The author presents interesting topics referring to the data analysis, the Tha Rae Community up and coming is one of the tourism destination features in TAT's Amazing Thailand. Aside from its unique festival, old buildings which had influence from western architecture, and a quaint riverside community, with a local way of life. The article also mentions a strategic plan to develop Thai Tourism to benefit communities' by DASTA in Thailand from 2016-2020 [17]. The plan identifies strategies and stakeholders who will implement ideas both in terms of operations and the benefits from management the Tha Rae Community as a secondary destination are as follows; Firstly, for preserving cultural diversity of the famous place of a

religious festival (Christmas Star Parade in Tha Rae) toward one of the important cultural spiritual places in northeast, and those specific asserts and the livelihoods of the local area. Secondly, keeping the proximity of relationships in the community, relationships with the place and relationships with trading - based historic community. Thirdly, for the aesthetic value, that is the collection of historic buildings, which comprise the shop houses, the church, and the old buildings which has been influenced by architectural styles from the West and lastly, for economic gain by creating new tourist destinations, where associated heritage value to the icon of the tourism destination. It can be said that the process of promoting the community is to be aware of the values of the community and leads to a sense of the need for preservation ranging from this generation to future generations. However, there were some obstacles that are mentioned as follows: the lack of budget to improve the landscape of Tha Rae areas in order to the enhance visitor is impression. Moreover, there is also a shortage of local guides who are knowledgeable enough to explain or tell stories about architecture, or to reveal the history of the temple which holds much cultural significance at the National level. In addition to taking part in group discussion, surveys, interviews and public hearings, at present, the community is involved in the management, but it would be better if the community were involved more. The community needs to be aware that the management of the area as a tourist attraction will benefit them. Experiencing a new culture is like stepping into a whole new world; tourists exposed to different languages, smells, colors, sights, sounds, and people. Taking the time to travel to a different part of the world and a new culture will completely change their life.

RECOMMENDATION

Recommendation for Tourism Plan and Management in the Community

Promote the community as a cultural tourism route for the secondary tourism destination. The community has potential to develop as a tourism destination because they have various attractions. Tourism in the community is proper for cultural tourists who are interested in culture, way of living, and architectures. To achieve the objectives, to promote Tha Rae community as a secondary destination and guidelines on how secondary attraction can be included in the heritage tourism planning and implementation process will be created it can be divided into three programs as follows;

- 1. Tourism Management Plan; several sightseeing routes within the community should be created i.e. a bicycle route, car route and walking route. In addition the activities relating to the religious and cultural beliefs i.e. the making of star-shape like objects to celebrate Christmas Eve, the making of Local Food and Dessert festival. These kinds of events help preserve the culture and also support the financial benefit to local people.
- **2. Interpretation Technique**; set up Tha Rae interpretation center (TIC) and Tourist center, maps can show tourist highlights, heritage trail routes and include out-of-town destinations as well while brochures that can guide a visitor's trip by telling them where to go in the Tha Rae community and what to see and why those places and activities are significant to the community, signage should be part of the comprehensive plan to conserve.
- **3. Conservation Management**; Create Tha Rae zoning plan to ensure good and suitable practice in the community conservation and to preserve and maintain authenticity of all significance elements in the community. Therefore, zoning is an effective tool for protecting the significant value of the cultural heritage place, if it has been established circumspectly. The reasons that good land use guidance is important can include preserving property values.

CONCLUSION

To create a traveling site that is attractive, enjoyable and educational is the goal of the developmental plan for tourism. The plan should aim for sustainable tourism, particularly cultural tourism. The new alternative for tourism is ethnic tourism. Tourism needs to develop into ethnic entrepreneurship in order to understand the tourist dynamics of commoditized ethnic spaces in the city. In fact, Sakon Nakhon is a multi-racial society which should be developed into an attractive culmination of cultures, which can attract both domestic and foreign tourists. Although the Tha Rae Community has potential to be developed into a secondary desti-

nation and an ethnic community, firstly, the community should fulfill the tourists' needs and demands. Secondly, the tourism activities should be acceptable, manageable and profitable to sustain themselves. The local authorities, travel agents mass media, corporate bodies, academics and the local community should involve in themselves developing and maintaining the area, as well.

In many cases, the intrinsic ties between conservation and tourism in urban areas should not be overemphasized. When linking inheritance value concepts, the value of a secondary destination may be evaluated, this may emphasize the importance of the area. This approach is a way for travel companies to create new tourist destinations, where associated heritage value is presented as part of experiences gained by tourists in the future. It also reduces the density of tourism in a particular destination and promotes tourism as a secondary destination by focusing on the associated heritage value, as suggested for the Tha Rae community. Many tourists visit heritage cities to encounter with and experience the atypical ambience of architecture, historical sites and local cultures. Conservation helps ensure the preservation of such historical characters. Moreover, the conservation of heritage cities can bring the economic injection into many sectors, including tourism authorities, travel agents, tour operators and owners of historic premises. If we believe in the "small is beautiful" concept of the British economist E. F. Schumacher [18], we have the opportunity to promote heritage / destination attractions with sustainable cultural tourism management. Anywhere in the world can be the primary destination for travel, which is well known for its tourism services or attractions, but most of the places are considered secondary destinations. Living heritage places, which are simply remote areas and not well known, are often classified in this category. These places are the "home" of normal life, and in everyday life there is an evolution of the epoch, reflecting the reality of the place. Therefore, Tha Rae historic community is excellent examples of this kind of development.

SUGGESTION FOR FUTORE RESEARCH

In relation to this dissertation, there should be future research to be taken as the following;

- 1. The author suggests that it should be conducted in order to evaluate the potentials of being developed into religious of place or/and handing down of culture in Sakon Nakhon. One such topic, directly linked to the Saint Michael Cathedral and Tha Rae issue, is the history and heritage of the Catholic communities in Sakon Nakhon. All of them have, in some sense, descended from the Mission Tha Rae church and its community; they have also handed down a significant, colonial-style architecture.
- 2. Follow up with effective models of interpretation plans and techniques proposed for the Tha Rae community and how to gain more attention from a wider audience.
- 3. Future research should be undertaken in collaboration with all stakeholders including the local government of Tha Rae, the local people, TAT, Department of Fine Arts, and other related units in regards to cultural tourism and the conservation of the community.

REFERENCES

- [1] Tuan, Yi-Fu. (1974). Topophilia: A study of environmental perception, attitudes, and values: Columbia University Press.
- [2] Lynch, Kevin. (1981). A theory good city form. Cambridge, Ma: MIT press.
- [3] Cullen, G. (2012). Concise Townscape: Routledge.
- [4] du Cros, H. (2014). New model of travel behavior for independent Asian youth urban cultural tourists, Asia Research Institute Working Paper Series 217, Singapore: Asia Research Institute, National University of Singapore. Available at: http://www.ari.mus.edu.sg/publications asp?pubtyperied-WP (accessed 23 March 2014).
- [5] Lague, P. (editor). (2009). Tourism development: Fresh perspective. Cape Town: Pearson Education South Africa.
- [6] Leiper, N. (1990). The framework of tourism: towards a definition of tourism and the tourist industry. *Annals of Tourism Research* 6(4): pp.390-407.
- [7] Taylor, K. (2004), 'Cultural Heritage Management: A Possible Role for Charters and Principles in Asia', International journal of Heritage Studies, 10 (5), 417-433.

- [8] Scott, J. (2001). Traditional Places, Modern Products: A Case Study of Tourist Images From the Mediterranean. In *Culture, Man and Tourism: Report on the AsiaEurope Seminar*, Hanoi. www.ulg.ac.be
- [9] Australia ICOMOS (1999), The Burra Charter. The Australian ICOMOS Charter for Places of Cultural Significance, Australia ICOMOS.
- [10] McKercher, B., & du Cros, H. (2002). Cultural tourism: The partnership between tourism and cultural heritage management. Binghamton, NY: Haworth Press.
- [11] Yunis, E. (2004), 'Introductory Presentation' in Ministerial Conference on Cultural Tourism and Poverty Alleviation. Hue, Vietnam, 11-12 June 2004.
- [12] du Cros, H. (2002) "Conflicting Perspectives on Marketing Hong Kong's Cultural Heritage Tourism Attractions", Proceeding of ICOMOS 13th General Assembly, March 1-5, 2002, p.319-321.
- [13] Logan, W.S. (2001), 'Globalizing Heritage: World Heritage as a Manifestation of Modernism and Challenges from the Periphery', in Australia ICOMOS National Conference, 28 November 1 December 2010 Adelaide, Australia.
- [14] Sullivan, S. (1993), 'The Management of Ancient Chinese Cave Temples, A Site-Management Training Course at the Yungang Grottoes', in Conservation of Ancient Sites on the Silk Road, International Conference on the Conservation of Grotto Sites, October 1993, The J Paul Trust, 1997, pp 28-40.
- [15] Warangrat, S. (1999). Thai-Vietnamese residential buildings of Ban Tha-Rae, Sakon Nakhon (in Thai). The Art and Culture Office of Rajabhat Sakon Nakhon Institute. Sakon Nakorn: Sakon Nakorn Printing.
- [16] Tourism Authority of Thailand:Thailand as a preferred destination. Retrieved 10 November 2016 from http://www.etatjournal.com/web/menu-read-tat/menu-2016/menu-42016/745-42016-th2560
- [17] DASTA in Thailand. Retrieved 10 November 2016 from http://www.ritsumei.ac.jp/acd/re/k-rsc/hss/book/pdf/vol04_02.pdf
- [18] Schumacher, E. F.; Small Is Beautiful: Economics As If People Mattered: 25 Years Later...With Commentaries (1999). Hartley & Marks Publishers ISBN 0-88179-169-5

Synthesis and Characterization of 1-(5-benzoyl-1H-1,2,3-benzotriazole-1-yl) 2-oxoethylamino) propionic acid and their metal complexes

P. S. Desai and D. V. Parekh

Department of Chemistry, Arts Science and Commerce College Kholwad, Kamrej Char Rrasta, SURAT- 394185. (Gujarat) INDIA. Email: psdesai69@gmail.com

ABSTRACT

1-(5-benzoyl-1H-1,2,3-benzotriazole-1-yl) 2-chloroethanone was condensed with 2-amino propionic acid (Alanine) and resulting 1-(5-benzoyl-1H-1,2,3-benzotriazole-1-yl)2-oxoethylamino) propionic acid. The newly synthesized ligand and their complexes that been prepared, were analyzed and characterized by using different techniques, such as elemental analysis, infrared and electronic spectra. The IR spectra, NMR spectra and atomic absorption analysis show that the benzotriazole ligand forming chelates with 2:1(Ligand: Metal) stoichiometry. Metal complexes were evaluator in-vitro antibacterial activity against Negative and Positive bacteria. The complexes showed significant antibacterial activity.

Keywords: Alanine, Benzoyl benzotriazole, Metal complexes, Synthesis, antibacterial activity.

EVALUATING THE DEGREE OF EFFECTIVENESS OF MULTIMEDIA IN MEDICAL SCIENCE AND ENGINEERING

Saeed Ahmed Kasi

Global development Institute (GDI), The University of Manchester Chief Operating Officer, Balochistan Education Endowment Fund Fulbright Scholar/ Alumni, Maxwell School, SU, New York. British Chevening Scholar 2015/16. ahmedsaeedkasi@yahoo.com

ABSTRACT

The past decade witnessed a significant growth in the use of multimedia in various educational institutions, corporate sectors, trainings and seminars. Today, it has become an important part of higher education in medical science, engineering, management sciences and other field of studies. With the advent of computer based innovation, this mode of learning has highly flourished across the globe. This paper explores the degree of effectiveness of multimedia in medical science and engineering. The results of this study shows that the multimedia application in the aforesaid disciplines seems much more effective if it is blended with the traditional mode of instructions. The cognitive loads of learning, specifically the Intrinsic Load and the Extraneous Load which multimedia exerts on the students of these disciplines suggest that this media should be blended with the traditional mode of instructions for optimum outcomes in terms of learning. The study also suggests certain technical measures to make the multimedia application more effective for the medical science and engineering studies. This research provides theoretical and practical guidelines to academics of the medical science and engineering disciplines.

KEY WORDS: Multimedia; Extraneous Load; Intrinsic Load; Interactive multimedia technology; Cognitive Theory of Learning;

INTRODUCTION

This paper comprehensively examines the degree of effectiveness of multimedia in two major disciplines of education vis-à-vis the medical science and the engineering. Ever since the advent of computer technology, the tools of multimedia are used for e-learning in educational institutions, corporate sectors, industries, trainings and seminars. The effectiveness of this technology in the spectrum of e-learning cannot be denied. However, the degree of its effectiveness is not uniform for all the disciplines of education. The paper analysis this fact on the basis of world renowned literature and a case study wherein data has been collected from the students of 03 educational institutions in Pakistan, namely the Bolan Medical College Quetta, The Hamdard Medical University Karachi and The Khuzdar Engineering University Balochistan. Unlike most of the existing literature on multimedia role in e- learning, this studies focuses on two specific components of education and evaluate its degree of effectiveness on the basis of primary and secondary data, including the major theories pertaining to this technology.

LITERATURE REVIEW

Definitions:

E-Learning is defined as instruction that is delivered via a digital device that is intended to promote learning (Clark & Mayer, 2016). The digital device can be any electronic device that is controlled by a computer chip, including a desktop computer, laptop computer, tablet, smart phone, game console or wearable devices such as head mounted virtual reality displays, Mayer, R. E. (2017). Multimedia instructional messages are presentations of material using words and pictures that are intended to foster learning. The pictures can be static graphics such as photos, drawings, maps, charts, figures, and tables or dynamic graphics such as video or animation, Richard E. Mayer (2002). E-learning is also called Web-based learning, online learning,

distributed learning, computer-assisted instruction, or Internet-based learning, J. G. Ruiz et al (2006). The rationale for computer-based multimedia instruction is that people learn better from words and pictures than from words alone, Mayer, R. E. (2017). According to R. Brunken, et al (2010) the computer-based instrument provides a direct and objective measure that overcomes many of the shortcomings of other indirect and subjective methods that will enable researchers to validate empirically theoretical predictions of CLT(Cognitive Load Theory).

The Cognitive Load:

The Cognitive Load Theory by Sweller (1994) cited by Brame C.J (2015) has 03 components: The Intrinsic Load which is inherent to the subject under study and is determined by the degree of connectivity with in the subject. The Germane Load which is level of cognitive activity necessary to reach the desired learning outcome. The Extraneous Load which is cognitive effort that does not help the learner towards the desired learning outcome. It is often termed as the load that rises from a poorly designed lessons.

The Cognitive Theory of Multimedia Learning:

The Cognitive Theory of Multimedia Learning (CTML) was presented by Richard E. Mayer (2012). According to Richard E. Mayer, this theory is based on three cognitive science principles of learning: the human information processing system includes dual channels for visual/pictorial and auditory/verbal processing (i.e. dual-channels assumption); each channel has limited capacity for processing (i.e. limited capacity assumption); and active learning entails carrying out a coordinated set of cognitive processes during learning (i.e. active processing assumption).

Literature background of Multimedia usage in Medical and Engineering Sciences:

Multimedia presents a number of challenges and opportunities which must be addressed if it is to be used effectively in an educational context, J. Carter (2002). Although adding pictures to words did not result in better remembering of the words, it did result in much better understanding, Mayer, R. E. (2017). Multimedia learning is widely used in life science education where the use of pictures and text can bring complex structures and processes to life. However the impact on academic performance and deeper understanding is not well documented, V. E. Rolfe and D. Gray (2011). Similar views are presented by Jorge G. et al (2006) who argued as: 'E-learning can be used by medical educators to improve the efficiency and effectiveness of educational interventions...; however, its use is highly variable among medical schools and appears to be more common in basic science courses than in clinical clerkships'. Due to these reasons Dewhurst et al. (1994) and Gibbons (2004) recommend a blend of the two means of instructions. According to these scholars 'multimedia instruction is a well established means of instructional delivery in the life sciences and is often used to complement or blend with traditional didactic elements (Pereira et al. 2007) or replace other 'traditional' teaching methods altogether (cited by V. E. Rolfe and D. Gray, 2011).

Electronic courses in science and engineering are not as widespread as courses in other disciplines in higher education. The reasons for this are that, science and engineering education has, traditionally, been content centered, design-oriented, and is permeated by the development of problem-solving skills (Bourne, 2005), cited in S. Junaidu (2008). Often one of the difficulties in presenting science or engineering content is that the concepts being portrayed are microscopic in detail. From biological cell structures to the structures of atoms, learner understanding of the content is often limited by the media that is being used to present it. Frequently science and engineering texts provide abstract, two dimensional drawings, which require interpretation by the reader. More often than not, spatial ability wanes and thus student understanding of such drawings, and the microscopic details they represent, is hindered, J. L. Mohler and W. Lafayette (2001). Laboratories are a mainstay of engineering education, as are mathematical foundations and design tools. Laboratories (Grose, 2003; Peterson, 2002) are notably difficult to provide online because of the traditional desire for the direct operation of instruments, S. Junaidu (2008). Well-designed laboratory experiments provide the best means to learn Medical Education. However, there are many barriers on the use of real laboratory experiments. As a result of these difficulties, computer simulations have created several physiological phenomena that can be used to supplement traditional laboratories and lectures, providing students with many more opportunities to learn by experimentation, S. Arulsamy (2012).

Multimedia as well as any environment in which there is little or no interaction, can fall quite short for learning, J. L. Mohler and W. Lafayette (2001). Although engineering content lends itself well to interactive multimedia techniques for delivery, most materials are still traditionally based, J. L. Mohler and W. Lafayette (2001). The content through multimedia is grasped well if it is designed properly. Indeed, proper design of multimedia instructions decrease the magnitude of Extraneous Load associated with the Cognitive Theory of Learning. According to N. Issa, et al (2013) 'Effective designs help learners attend to relevant information, organise it into a coherent mental representation, and integrate it with prior knowledge. Poorly designed multimedia materials may overwhelm and confuse learners'. Jorge G et al (2006) recommends a bled of the two ways of instructions by saying as: 'There is evidence for the effectiveness and acceptance of e-learning within the medical education community, especially when combined with traditional teacher led activities in a blended-learning educational experience'.

METHODOLOGY

This paper is based on qualitative methods of research. Qualitative research is not directed to a single objective reality; rather, the focus is on how people invest their experiences with meaning and the assumption is that such subjective interpretations will vary across individuals, Miller (2013:137). 'To design a study, particularly a qualitative study, you can't just develop (or borrow) a logical strategy in advance and then implement it faithfully. Design in qualitative research is an ongoing process', J. A. Maxwell (2005:3). Whenever necessary, the comparative methods of research will also be used to overcome the issues of accuracy in data.

The data for this research is obtained both from primary and secondary sources. The primary data include the data from the questionnaires delivered to 450 students ,while the secondary data include the literature of the renowned scholars, and peer reviewed articles.

CASE STUDY

This study is conducted in three Universities of medical and engineering sciences, namely the Hamdard Medical University Karachi, and the Bolan Medical College (BMC), Quetta and the Khuzdar Engineering University Balochistan. In Hamdard Medical University Karachi, the class lectures are mostly delivered via multimedia where as in the remaining two institutions the class instructions are mostly via the traditional way of teaching. A total of 450 students, 150 from each institutions was given the questionnaire. The students selected from the Hamdard University were of 3rd year professional and that of Bolan Medical College Quetta and the Khuzdar Engineering University were from the 2nd year professional. From each of these institutions, a sample population of N=150 was selected and a questionnaire was handed over to them with following questions;

Which means of instructions in the class do you prefer and why?

(a) Multimedia; (b) The traditional way; (c) Blend of the two Medias of instructions; (d) Reasons/justification

The replies to the aforesaid questionnaire are tabulated below . Out of 450, 386 students replied to the questionnaire. Their replies and reasons/justifications are tabulated below in Table 1 and Table 2.

Table 1

Name of Institutions	Total No. of students replied	No. of students who supported multimedia applications	No. of students who opposed multimedia applications	No. of students who favoured a blend of the two medias
Humdard University	141	58	02	81
Karachi				
%age	94%	41%	1.5%	57%
Bolan Medical College Quetta	127	53	16	58
%age	84%	42%	12.5 %	46%
Khuzdar Engineering University Balochistan	118	32	18	68
%age	79%	27%	15%	58%

Table 2

Case No.	Majority views
1. Students who supported Multimedia	Better and easy understanding of lectures.
	Easy access to knowledge.
2. Students who supported traditional way of	Multimedia create confusion; Laboratory instruction
instructions.	can't be easily understandable through multimedia
	learning.
3. Students who favoured blend of the two means	Practical instruction should be through traditional
of instructions.	means of laboratories and theoretical aspect should
	be through multimedia.

FINDINGS

The aforesaid case study explores the following major points towards the subject research:

- > The medical science and engineering instructions require both the traditional and multimedia sources of learning.
- > All the instructions to medical and engineering students can't be possible solely by means of multimedia sources.

- > If we apply the Cognitive Theory of Multimedia Learning (CTML) to students of case 2 in Table B, then we may suggest that it is the extraneous load due to which some students preferred the traditional way of instructions.
- > The case 3 in Table B, that is the blend of the two means of instructions seems highly effective in the context of medical and engineering studies.

DISCUSSION

Both the literature review and the case study suggest that unlike other disciplines, the studies of medical science and engineering cannot be instructed via multimedia only. Due to the complications of the medical and engineering studies, including practical and laboratory aspects of these science, the traditional means of instructions cannot be abolished from these disciplines at all.

The extraneous load and the intrinsic load in the courses of medical science and engineering are also optimum as compared to other disciplines of studies. To overcome the issue it is imperative that both the traditional and multimedia sources be utilized to get maximum learning from the instructors in medical and engineering institutions.

CONCLUSION

This paper reviewed the degree of effectiveness of multimedia usage both in medical science and engineering on the basis of renowned literature and peer reviewed articles. The case study conducted in medical and engineering institutions was also analyzed. Both the literature review and the case study concluded that a blend of the multimedia instructions and the traditional way of teaching in medical and engineering institutions is imperative for optimum learning. Due to the complexity of these sciences and the laboratory aspect of the practical involved in such kind of education, the traditional way of instructions cannot be abolished from its instructions. Thus, a blend of the two medias of instructions is the answer towards the effective learning of these disciplines.

REFERENCES

Brame C.J. (2015). 'Effective Educational Videos', Center for Teaching, Vanderbilt University, available online https://cft.vanderbilt.edu/guides-sub-pages/effective-educational-videos/

James L. Mohler, W. Lafayette. (2001). 'Using Interactive Multimedia Mechnologies to improve student understanding of spatially-dependent Engineering Concepts', Department of Computer Graphics Purdue University.

Jim Carter (2002). 'A framework for the development of multimedia systems for use in engineering education, Computers and Education', Vol. 39, Issue 2, pp. 111-128.

Jorge G. Ruiz, MD, Michael J. Mintzer, MD, and Rosanne M. Leipzig (2006). 'The Impact of E-Learning in Medical Education', Academic Medicine, Vol. 81, No. 3.

Mayer, R. E. (2017). 'Using multimedia for e-learning', Journal of Computer Assisted Learning, Vol. 33: Issue 5, pp. 403–423.

Nabil Issa, Richard E. Mayer, Mary Schuller, Edward Wang, Michael B. Shapiro & Debra A. DaRosa (2013). 'Teaching for understanding in medical classrooms using multimedia design principles', Medical Education Journal, Vol. 47, pp. 388–396.

Richard E. Mayer (2002). 'Multimedia Learning', Psychology of Learning and Motivation, Vol. 41, pp.85-

Richard E. Mayer (2012). 'Introduction to Multimedia Learning' in the Cambridge Handbook of Multimedia learning, the Cambridge University Press, pp 1-16.

Ronald Brunken, Jan L. Plass, Detlev Leutner (2010). 'Direct Measurement of Cognitive Load in Multimedia Learning', Journal Educational Psychologist, Vol. 38, Issue 1, available online https://doi.org/10.1207/S15326985EP3801_7

Sahalu junaidu (2008). 'Effectiveness of Multimedia in Learning and Teaching Data Structures Online', Turkish Online Journal of Distance Education, Vol. 9 No. 4

S. Arulsamy (2012). Multimedia in Medical Education', Journal of Medical Sciences Vol. 1(1), pp. 7-11.

Vivien E Rolfe and Douglas Gray (2011). 'Are Multimedia Resources Effective in Life Science Education? A Meta-Analysis', Bioscience Education, Vol.18, pp. 1-14.

The Influence of Job Design and Human Resource Development on Employee Performance of Bangkok Bank Public Company Limited, Thailand

Watcharapong Intarawong*, Pattama Suriyakulnaayudhya** & Oracha Chaiyapong***

*Lecturer, Department of Business Management, Faculty of Liberal Arts and Management Science,

Kasetsart University, Thailand

E-mail: watcharapong.intr@ku.th

**Assistance Professor, Department of Business Management, Faculty of Liberal Arts and

Management Science, Kasetsart University, Thailand

E-mail: pattama.s@ku.th

***Graduate student of Kasetsart University, Thailand

E-mail: gunamebo@hotmail.com

ABSTRACT

The objectives of this research were 1) to study job design system of Bangkok Bank Public Company Limited 2) to study human resource development of Bangkok Bank Public Company Limited 3) to study staff performance of Bangkok Bank Public Company Limited 4) to compare the different of job design, human resource development, and performance when classified by personal factor 5) to study the influence of job design and human resource development on employee performance. This research was a survey research and used quantitative approach. The population consisted of 3,040 staffs; sample size was calculated by Taro Yamane formula [1], 390 samples was included Bangkok Bank Public Company Limited's staffs in the northeastern of Thailand, and used proportional sampling and simple random sampling. Questionnaires were used to collect data. Reliability testing was used Cronbach's alpha coefficient as follow job design was .924, human resource development was .918, and staff performance was .962. Respondents' general data on respondents, job design, human resource development and staff performance were analyzed by descriptive statistics composed of frequency, percentage, mean, and standard deviation. Hypothesis testing was used t-test, F-test, Pearson product-moment correlation coefficient, and multiple regression analysis.

The research findings found that the mean score of job design, human resource development, and staff performance were 3.82, 3.75, and 3.68 respectively. The first hypothesis, there was no difference in staff opinion toward job design, human resource development, and staff performance when classified by personal factors. The second hypothesis, there was found only human resource development had positive statistical influence at 0.05 on staff performance. The human resource development could be explained the variance of staff performance (Adjusted R Square .818) by 81.8%, with a standardized coefficient (Beta) of .904. Based on the research results, it could be concluded that there was no difference in the opinions of the staffs on the job design, human resource development, and performance when classified by personal factors. The human resource development had a positive influence on performance of Bangkok Bank Public Company Limited.

Keywords- Job Design, Human Resource Development, Staff Performance

INTRODUCTION

The overall banking sector has changed dramatically. There is also more intense competition. The bank wants to expand its market share, with the acquisition of more revenue in the current situation. Bangkok Bank Public Company Limited the motto is "to be a partner in the home" as a key to working in earnest. Because of this principle, the bank has always been successful. In addition to providing customer service, the firm also provides quality, efficient and beneficial service to our customers. The three main functions are: acting as a bank officer in a professional manner, building relationships with customers, understanding the customers thoroughly. And think creatively in product offerings. And the service that best suits the needs of our customers. When considering the banking business in terms of providing value to customers, the basic activity is to provide services that support the value chain. Human Resource Management Service providers are the agents of the business to deliver goods

to customers under the service. Development of services and activities to support innovation. Peter [12] draws attention to six factors that are vital to productivity of intellectual workers, but as the demands of the intellectual worker's organization and performance environment vary, these factors may have a different influence and prospects of achievement. Sarnovics [18] The most important factors that influence labor productivity of an organization intellectual workers are the employee's understanding of the core of the task and the goals to be achieved; a chance to take part in and contribute their ability to the management processes of both their work and the whole organization; a chance to continually learn and develop; the selection of qualitative work assessment methods; work conditions and the organization's inner culture that is both motivating and promotes a creative work atmosphere. Human resources are an important resource in organizations. It is important to manage the organization to the success of the organization. It is good because human knowledge, ability, intelligence and ability to develop without limit. And no tools or technologies can truly replace human beings. The past, corporate management focused on other management factors such as finance, accounting, production, sales, tools and technology in production, and focused on the success of the organization through profit. One of the reasons the organization gives more attention to people is because people as a resource are already the only thing that has more value in the organization. Unlike many tools and technologies, it should be developed for people to have a variety of skills appropriate to the task that the development of the cooperation of all units to the evaluation of the work. This is a great way to achieve success. The important of human resource tools to strengthen the capacity of human resources in the organization; the design of the job includes a variety of factors like tasks involved, knowledge, social and contextual characteristics as well. According to Belias and Sklikas [21] a job should be designed keeping employee's expectations in mind. Job rotation help employees to explore various departments and flexibility to move from one task to another in a given period of time and increasing their productivity, job enrichment helps build the recognition, responsibility and stimulated the work and job enlargement to incorporate different tasks and help employee increase their learning. All these three factors contribute to the job design which in turn contributes to employee's performance and loyalty towards the organization. Job design has always played a vital role and one of the most effective tools in maximizing the performance of the employees. A well-designed job design will help increasing employee involvement and satisfaction and motivates them to perform well by giving their best to their work. It helps employees to become highly productive and increases their loyalty towards the organization as well. Designing an effective job design helps bringing the involvement of an employee in his work-related activities which helps in forecasting the employee output, departmental productivity and company's success (Bates, 2004; Harter, 2002; Baumruk, 2004). In addition to job design, human resource development is also an important tool to enhance employee capability as well. Human resource development (HRD) is a part of human resource management. It deals with the all round development of an employee within an organization, career development, training, counseling, updating with the latest technology, helping employee explore their potential and develop skills, which would prove beneficial to both the employee and the organization in achieving the organization goals. It also means allocation of resources for the development of the employee. From the reason above are the causes of this research. The objectives are as follows; 1) to study job design system of Bangkok Bank Public Company Limited 2) to study human resource development of Bangkok Bank Public Company Limited 3) to study employee performance of Bangkok Bank Public Company Limited 4) to compare the different between job design, human resource development, and performance 5) to study the influence of job design and human resource development on employee performance.

LITERATURE REVIEW

Job Design

The definition of job design from literature review is outlined in numerous studies. Mondy et al. [6] defined the job design as a design process as the process of determining the specific characteristics of the work to be performed. Determine the relationship with other organizations. Parker [7] job design is a core function of human resource management and it is related to the specification of contents, methods and relationship of jobs in order to satisfy technological and organizational requirements as well as the social and personal requirements of the job holder or the employee. Its principles are geared towards how the nature of a person's job affects their attitudes and behavior at work, particularly relating to characteristics such as skill variety and autonomy. The aim of a job design is to improve job satisfaction, to improve through-put, to improve quality and to reduce employee problems

(e.g., grievances, absenteeism). Hackman and Oldham [3] presented a theory of job characteristics that would explain one of the best motivational theories, suggesting that if employees were motivated at work, employees would be able to express themselves and good performance. Job Characteristics Model composed of 1) job description 2) psychological condition 3) personal and job outcomes. In addition, Hackman and Oldham [2] were presented model describes jobs in terms of five characteristics: 1) Skill variety: the extent to which a job requires a variety of skills to carry out the tasks involved 2) Task identity: the degree to which a job requires completing a "whole" piece of work from beginning to end (e.g., building an entire component or resolving a customer's complaint 3) Task significance: the extent to which the job has an important impact on the lives of other people. 4) Autonomy: the degree to which the job allows an individual to make decisions about the way the work will be carried out 5) Feedback: the extent to which a person receives clears information about performance effectiveness from the work itself. Bremner and Carriere [19] had defined job design in 5 dimensions like Hackman and Oldham [3]. Thus, it can be conclude that the job design principle focuses on the motivational aspects of jobs to make them more interesting and challenging to employees. In this research was adapted the conceptual framework from Hackman and Oldham [3]; Bremner and Carriere [19], job design composed of 5 elements as follows; 1) Skill variety 2) Task identity 3) Task significance 4) Autonomy 5) Feedback.

Human Resource Development

The reviews of the relevant literatures conceptualized the meanings of Human Resource Development Heathfield [17] provides the definition of human resource development as Human Resource Development (HRD) as a framework for helping people. The organization provides knowledge, skills and abilities, as well as opportunities for people to develop, through professional development training, self-management, well-being, and follow-up. Accurate with Woolner [4] states that human resource development refers to the development of a learning organization. Gilley and Jerry [9]. There are three fundamental component areas of human resource development (HRD): 1) individual development (personal), 2) career development (professional), and 3) organizational development. The importance of each component will vary from organization to organization according to the complexity of the operation, the criticality of human resources to organizational efficiency, and the organization's commitment to improved human resources. But all three have one focus individual performance improvement. Since individual performance improvement is the heart of an HRD program, HRD can be described as the "area of congruence" among the three components. Individual development refers to the development of new knowledge, skills, and/or improved behaviors that result in performance enhancement and improvement related to one's current job (training). Learning may involve formal programs, but is most often accomplished through informal, on-the-job training activities. Pope [15] career development is the lifelong process of managing learning, work, leisure, and transitions in order to move toward a personally determined and evolving preferred future. In educational development, career development provides a person, often a student, and focus for selecting a career or subject to undertake in the future. Often educational institutions provide career counselors to assist students with their educational development. Gilley and Jerry [9] career development focuses on providing the analysis necessary to identify the individual interests, values, competencies, activities, and assignments needed to develop skills for future jobs (development). Career development includes both individual and organizational activities. Individual activities include career planning, career awareness, and utilizing career resource centers. Organizational activities include job posting systems, mentoring systems, career resource center development and maintenance, using managers as career counselors, providing career development workshops and seminars, human resource planning, performance appraisal, and career path programs. In the part of Organization development (OD) Schultz, Schultz, and Ellen [11] OD is the study of successful organizational change and performance. OD emerged from human relations studies in the 1930s, during which psychologists realized that organizational structures and processes influence worker behavior and motivation. More recently, work on OD has expanded to focus on aligning organizations with their rapidly changing and complex environments through organizational learning, knowledge management and transformation of organizational norms and values. Key concepts of OD theory include: organizational climate (the mood or unique "personality" of an organization, which includes attitudes and beliefs that influence members' collective behavior), organizational culture (the deeply-seated norms, values and behaviors that members share) and organizational strategies (how an organization identifies problems, plans action, negotiates change and evaluates progress). Gilley and Jerry [9] Organizational development is directed at developing new and creative organization solutions to performance problems by

enhancing congruence among the organization's structure, culture, processes, and strategies within the human resources domain. In other words, the organization should become a more functional unit as a result of a closer working relationship among these elements. The ultimate goal of organizational development is to develop the organization's self-renewing capacity. This refers to the organization's ability to look introspectively and discover its problems and weaknesses and to direct the resources necessary for improvement. As a result, the organization will be able to regenerate itself over and over again as it confronts new and ever-challenging circumstances. This occurs through collaboration of organizational members with a change agent (an HRD practitioner), using behavioral science theory, research, and technology. In addition to the above, Heathfield [10] Human Resource Development (HRD) is the frameworks for helping employees develop their personal and organizational skills, knowledge, and abilities. HRD is one of the most significant opportunities that employees seek when they consider you as an employer. The ability, and encouragement, to continue to develop their skills help you to retain and motivate employees. Human Resource Development includes such opportunities as employee training, employee career development, performance management and development, coaching, mentoring, succession planning, key employee identification, tuition assistance, and organization development. In this research was adapted Human Resource Development concept from Gilley and Jerry [9] and Heathfield [25], the components of HRD were as follows; 1) individual development composed of training, coaching, mentoring 2) career development 3) organization development focus on performance management, development of knowledge, skills, and behavior in work to be ready to perform the tasks of the organization, sufficient resources are allocated to enable efficient operation, the linked between organization-level targeting work and personal levels.

Employee Performance

Performance is a multidimensional construct. It may be defined as the record of an individual accomplishment. Schermerhorn et al. [5] gave the definition of performance is the behavior that the individual fulfills for the task assigned to it. Patterson (1998) there is no general, overarching theory about employee performance. The effectiveness with which organizations manage, develop and stimulate their employees is an important cornerstone for how organizations perform. Because of this, people management has a significant impact on performance. Viswesvaran and Ones [8] Performance can be traced back to the behavior of people on the shop floor. Employees work in a certain way or behave in a way that contributes to (the goals of) the organization. Dugguh and Dennis [22] the factors that are used in performance ratings are varied but Campbell et al suggest that studies should look at the dimensions separately because the general factor cannot possibly represent the best fit when rating employee performance. Several measures have been developed to measure employee performance. Though the measures vary in terms of how carefully and distinctively they are conceptualized with respect to affective or cognitive job satisfaction and so on. Other measures that may combine those mentioned above include quality of work (input), quantity of work (output), time management, punctuality, goal setting, cost reduction on materials, money, people, information and energy, interpersonal skills and compliance, absenteeism, morale and anxiety. Hakala [14] Performance measurement uses the following indicators of performance, as well as assessments of those indicators composed of; 1) Quantity: The number of units produced, processed or sold is a good objective indicator of performance. Be careful of placing too much emphasis on quantity, lest quality suffer. 2) Quality: The quality of work performed can be measured by several means. The percentage of work output that must be redone or is rejected is one such indicator. In a sales environment, the percentage of inquiries converted to sales is an indicator of salesmanship quality. In this research adapted employee performance measurement from the concept of Hakala [14], and Dugguh and Dennis [22].

The link between Job Design, Human Resource Development (HRD), and Employee Performance

There are many empirical evidences that reveal the relation between job design, Human Resource Development, and employee performance. Mohamed Ali [23] had study "Impact of job design on employees' performance (with special reference to school teachers in the Kalmunai Zone)", the hypothesis that was concerned with relationship between perceived level of job design and perceived degree of employees' performance the Pearson Product-Movement Correlation technique was applied. The results of the study showed a significant and positive relationship between perceived level of job design and perceived degree of employees' performance in the schools, Ali and Zia-ur-Rehman [23] had study "Impact of Job Design on Employee Performance, Mediating

Role of Job Satisfaction: A Study of FMCG's Sector in Pakistan", The present study intends to measure the effect of job design on employee performance while the mediation effect is job satisfaction, although the job design has several methods but we use JCM model (Oldman and Hackman) [2], which has five dimensions of Job Characteristics Model (skill variety, task identity, task significance, job autonomy and feedback) on employee performance. Findings of the present research indicate a positive relationship between job design and employee performance. While the mediating effect of Job satisfaction is also found having a positive effect on employee's performance. Organizations always have quest of finding the unique ways in order to enhance the performance of the employees, and employee performance as follows. Tahir et al. [24] was study "The Impact of Training and Development on Employees Performance and Productivity a case study of United Bank Limited Peshawar City, Pakistan", this paper main objective was to investigate whether training and development has impact on employees' performance and productivity. This paper is quantitative in nature. The result showed that there was significant relationship between the variables. Okechukwu [20] the research was explored on the influence of training and development, employee performance on job satisfaction among the staff of School of Technology Management and Logistics (STML).

CONCEPTUAL MODEL AND HYPOTHESES

From the literature review above, the researcher was developed the research conceptual framework as figure 1.

Personal Factors Job Design 1. Skill Varity 2. Task Identity 3. Task Significance 4. Job Autonomy 5. Feed Back **Employee Human Resource Development (HRD)** Performance 1. Training 2. Coaching 3. Mentoring 4. Self Learning 5. Career Development 6. Performance Management

Figure 1
Research conceptual framework

The research hypothesis was defined as follows.

 H_1 : Job design, human resources development, and employee performance are different when classified by personal factors.

H₂: Job design and human resource development have a positive influence on the employee performance.

RESEARCH METHODOLOGY

This research was a survey research and used quantitative approach. The population consisted of 3,040 staffs; sample size was calculated by Taro Yamane formula [1] 354 samples was included Bangkok Bank Public Company Limited's staffs in the northeastern of Thailand, and used proportional sampling and simple random sampling. Questionnaires were used to collect data. Job design was adapted from the concepts of Hackman and Oldham [3] Bremner and Carriere [19], job design composed of 5 elements as follows; 1) Skill variety 2) Task identity 3) Task significance 4) Autonomy 5) Feedback, human resource development was adapted from the concepts of Gilley and Jerry [9]; and Heathfield [25], the components of HRD were as follows; 1) individual development composed of training, coaching, mentoring 2) career development 3) organization development, and

staff performance was adapted from the concepts of Hakala [14], and Dugguh and Dennis [22]. Reliability testing was used Cronbach's alpha coefficient as follow job design was .924, human resource development was .918, and employee performance was .962. Respondents' general data on respondents, job design, human resource development and staff performance were analyzed by descriptive statistics composed of frequency, percentage, mean, and standard deviation. Hypothesis testing was used t-test, F-test, Pearson product-moment correlation coefficient, and multiple regression analysis. The research results can be significantly analyzed with 95% confidence interval.

ANALYSIS OF THE DATA

The analysis of data was arranged according to the research objectives, the results were as follows. 1) The descriptive statistic of respondents was as. The descriptive statistic of respondents was show that, the proportion of male and female respondents was similar. Most respondent age was between 30-50 years, education was bachelor and under bachelor degree. Monthly income the group of 30,000 - 45,000 Baht had more than other groups, and most employees was belong to risk department. 2) The job design system of Bangkok Bank Public Company Limited, the data analysis was as follows. The highest mean was task significant ($\overline{X} = 4.14$), the second was task identity ($\overline{X} = 4.13$), the third was feed back ($\overline{X} = 4.04$), the fourth was skill Varity ($\overline{X} = 3.89$), and the last was job autonomy ($\overline{X} = 3.75$) respectively. 3) Human resource development (HRD) of Bangkok Bank Public Company Limited, the data analysis was as follows. The highest mean was training ($\overline{X} = 4.00$), the second was mentoring ($\overline{X} = 3.99$), the third was coaching and self learning ($\overline{X} = 3.88$), the fourth was performance management ($\overline{X} = 3.87$), and the last was career development ($\overline{X} = 3.76$) respectively. 4. Employee performance was defined in 3 aspects; the highest mean was in the aspect of customer satisfaction ($\overline{X} = 4.40$), the second was the aspect of quantitative performance ($\overline{X} = 4.35$), the third was qualitative performance ($\overline{X} = 3.96$). 5)The hypothesis testing results was as follows.

H₁: Job design, human resources development, and employee performance are different when classified by personal factors, t-test, and F-test (One Way ANOVA) was used for testing. The first hypothesis testing results show that, 1) there was not statistically significant at 0.05 levels different between male and female 2) In terms of age, there were statistically significant differences in all variables. In terms of age, there were statistically significant differences in all variables, by the age under 30 years had the opinion that job design, and human resource development was not appropriate than other groups. 3) Education; there was statistically significant at 0.05 levels different in job design and human resource development. The group of above bachelor degree had opinion in job design and human resource development was not appropriate than other groups. 4) Monthly income; there was statistically significant at 0.05 levels different in job design and human resource development. The less than 30,000 Baht had opinion in job design and human resource development was not appropriate than other groups. 5) Department; there were statistically significant differences in all variables. The accounting and finance department had mean of opinion on the job design, human resource development, and performance less than other departments. It can be concluded that some parts of first hypothesis were accepted.

H₂: Job design and human resource development have a positive influence on the employee performance. The research hypotheses can be described in the forms of structural equations in order to show the relationship among variables and predict the dependent variable for hypotheses testing. The symbols used to represent the variables stated as follows:

JBD = Job Design

HRP = Human Resource Development

EPF = Employee Performance

Table 1
Correlation analysis between the independent variables

	JBD	HRP	EPF
Mean	3.99	3.92	4.25
S.D.	0.300	0.486	0.431
JBD	1		
HRP	0.501**	1	
EPF	0.039	.158*	1

The structural equation can be described as follows:

$$EPF = \beta 1 JBD + \beta_2 HRD \tag{1}$$

The result of the structural equation analysis was as follows.

EPF = .186HRD (1)
(3.039)
Adjusted
$$R^2 = 0.27$$
, SEE. = .426, F = 4.892, Sig of F = .008

The structural equation was reveal that, the independent variables (job design and human resource development) can explained variance (R^2) of dependent variable (employee performance) at 27.0%, only human resource development had statistic significant at 0.05 levels influence on employee performance by the standardize coefficient (β) was .186, while job design had not statistic significant at 0.05 levels influence on employee performance. It can be concluded that some parts of second hypothesis were accepted.

CONCLUSION

This research study aimed to investigate influence of job design and human resource development (HRD) on employee performance of Bangkok Bank Public Company Limited in the Northeastern region of Thailand. The results of this research was show that 1) the employee opinion toward job design, human resource development, and employee performance were different when classified by personal factors 2) only human resource development had an influence on the employee performance of Bangkok Bank employees. Therefore, the administrator of Bangkok Bank Public Company Limited should be focus on the group of age under 30 years, education above bachelor degree, monthly income less than 30,000 Baht, department of risk management, these groups had mean of opinions on design, development, human resources, and performance less than others. Additional qualitative studies should be used to gain insights into such issues. The limitation of this research, establishing a tool for measuring employee performance in this research was used self-efficacy assessment, which may result in bias and reliability. Future research should develop tools that can measure performance more reliably, by using the company's evaluation or using supervisory assessments. However, the results of this research provide empirical evidence that explains the impact of human resource development on employee performance. Thus, future studies should include a more detailed study of human resource development that covers all three aspects; individual development, career development, and organization development, how do these factors influence on employee performance.

REFERENCES

- [1] Yamane, Taro (1973), "Statistics: An Introductory Analysis", Third editio. Harper and Row Publication.: Newyork.
- [2] Hackman, J. R. & G. R.Oldham. (1976), "Motivation through the design of work: Test of a Theory", *Organisational Behavior and Human Performance*.
- [3] Hackman J. R. & G. R. Oldham. (1980) Work Redesign. Philippines: Addison-Wesley.
- [4] Woolner, P. (1992), "The Purposes and Stages of the Learning Organization", Thresholds in Education", Vol. XVII. No.2-3.
- [5] Schermerhorn, J. R., J. G. Hunt, & R. N. Osborn. (1996), "Managing Organizational Behavior. 5 th ed", John Wiley & sons:USA.

- [6] Mondy, R. W., R. M. Noe, & S. R. Premeaux. (1999), "Human resource management 7 th ed", *Prentice Hall*: New Jersey.
- [7] Parker, S. K., T. D. Wall, J. & L. Cordery. (2001), "Future work design research and practice: towards an elaborated model of work design", J. Occup. Organ.\Psychol.
- [8] Viswesvaran, C., & Ones, D. S. (2000), "Perspectives on Models of Job Performance", *International Journal of Selection and Assessment*, Vol.8, No.4,Pp. 216-226.
- [9] Gilley, J. W., Eggland, S. A., & Gilley, A. M. (2002), "Principles of human resource development (2nd ed.)", *Cambridge, MA*: Perseus.
- [10] Heathfield, S. M. (2006), "How to Make Values Live in Your Organization", http://humanresources.about.com/od.htm.
- [11] Schultz, Ellen E. & Theo Francis (2006), "How safe is you pension?", Wall Street Journal, January 12,2006.
- [12] Peter, F. (2007), "The Essential Drucker: Selections from the Management Works of Peter F. Drucker", Butterworth-Heinemann, 2007, Pp. 275.
- [13] Kahya, E. (2007), "The effects of job characteristics and working conditions on job Performance", *International Journal of Industrial Ergonomics*, No.37, Pp.515–523.
- [14] Hakala, D. (2008), "How to Measure Employee Performance, 16 Ways. HR World Newsletter", http://www.hrworld.com/features/16-ways-measure-perfromance-021908/.
- [15] Pope, M. (2009). "Jesse Buttrick Davis (1871-1955): Pioneer of Vocational Guidance in the Schools", The Career Development Quarterly: Special Section: The 100th Anniversary of Vocational Guidance, Val.57, No.3, Pp.248-258.
- [16] Hair, J. F., Jr., Black, W. C., Babin, B. J., & R. E. Anderson. (2010), "Multivariate data Analysis", *Prentice Hall*: Upper Saddle River, NJ.
- [17] Heathfield, S. M. (2010), "More Tips to Reduce Employee Turnover: You Can Reduce Employee Turnover", http://humanresources.about.com/od/retention/a/turnover tips.htm.
- [18] Sarnovics (2010), "Financial literacy of young generation in changing European Environment: Evidence From Germany and Latvia", *Journal of Technology Innovation and Industrial Management*, Pp.161.
- [19] Bremner, N. & Carriere, J. (2011), "The Effects of skill variety, task significance, task identity and autonomy on occupational burnout in a hospital setting and the mediating effect of work meaningfulness", *Telfer school of Management*, WP. 11.02.
- [20] Okechukwu, C.A., El Ayadi, A.M., Tamers, S.L., Sabbath, E.L., & Berkman, L. (2012). "Household food insufficiency, financial strain, work–family spillover, and depressive symptoms in the working class: The Work, Family, and Health Network study", *American Journal of Public Health*, No.102, Pp.126-133.
- [21] Belias D., & Sklikas D.. 2013. "Aspects of Job Design", *International Journal of Human Resource Management and Research*, Val.3, No. 4, Pp.85–94.
- [22] Dugguh, S. & Dennis, A. (2014). "Job satisfaction theories", Traceability to employee performance in organizations. *Journal of Business and Management*, Vol.16, No.5, Pp.11-18.
- [23] Ali, N., & M.Zia-ur-Rehman. (2014), "Impact of job design on employee performance, mediating role of jop satisfaction: A study of FMCG's sector in Pakistan", International Journal of Business and Management, Vol. 9, No. 2, Pp. 70-79.
- [24] Tahir, L., Abdullah, T., Ali, F., & Daud, K. (2014). "Academics transformational leadership: an investigation of heads of department leadership behaviours in Malaysian public universities", *Educational Studies*, Vol.40, No.5, Pp. 473-495.
- [25] Heathfield, S. M. (2016), "What is human resource management", https://www.thebalance.com/what-is-human-resource-management-1918143.