

JOB BURNOUT FOR EMPLOYEES IN JORDANIAN HOTELS

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ABSTRACT

The purpose of this study is to determine the impact of burnout level of employees on turnover intention in five-star hotels in *Jordan*. and whether hotel employees' mean scores of burnout sub-dimensions vary according to their demographic characteristics. For this study, a survey that consists of Maslach Burnout Inventory (MBI) to measure the independent variable; emotional exhaustion, personal accomplishment, depersonalization and the dependent variable; turnover intention. Data that are obtained from surveys are analyzed by using statistical software (SPSS 16.0). The findings of the study indicated that hotel employees' level of emotional exhaustion is medium, level of depersonalization is medium, and, level of personal accomplishment is medium. The result of this studying dedicated that employees had high levels of burnout. The results also showed that sub-dimensions of burnout, emotional exhaustion, depersonalization and personal accomplishment significantly associated with turnover intention. Consequently, this study pointed out that the burnout level of employees had an effect on turnover intention.

Keywords: Job burnout, hotel employees, turnover intention, Jordan.

INTRODUCTION

In hospitality industry are always required to behave politely when serving customers. work environments in hotel industry have stressful for employees because of the amount of time spent employees with customers. (Chuang & Lei, 2011; Kim, 2008; [Chieh Lu](#), [Gursoy](#),2013).

To provide high-quality service there is another challenge in tourism and hospitality industry called "Burnout Syndrome" [Chieh Lu](#), [Gursoy](#),2013

According Pines and Maslach (1978) defined burnout as "*a syndrome of physical and emotional exhaustion, involving the development of negative self-concept, negative job attitudes, and loss of concern and feelings for clients*".

Intention to leave of employment can be explained as employees' tendency to quit. (Yildirim and other,2015). intention to turnover is the best immediate predictor of voluntary turnover. holds that one's intention to perform a specific behavior is the immediate determinant of that behaviour. turnover intentions have been recommended as a proxy for measuring actual turnover. (Price,2001; Price & Mueller,1981; Hemdi and Nasurdin,2014).

The purpose of this study is to determine the impact of burnout level of employees on turnover intention in five-star hotels in Jordan.

METHODOLOGY

This section provides the methodology applied in the current study. It consists of the research model, operational definitions of the study's independent and dependent variables, research questions, besides data collection tool and research population and sample.

Research Model:

The elements of this research are established based on preceding literature, either theoretically or empirically. Indeed, this study used variables that are common in hotel and beverage management literature. Figure (1) represents a model for the study that shows the independent variables, the dependent variable, and the proposed relationship between them.

Research Hypothesis

In order to test the research model, the study is hypothesized as follows:

H1: There is a statistically significant impact of emotional exhaustion on intention to quit.

H2: There is a statistically significant impact of personal accomplishment on intention to quit.

H3: There is a statistically significant impact of depersonalization on intention to quit.

H4A: There is a significant difference in the impact intention to quit due to classification hotel.

H4B: There is a significant difference in the impact of intention to quit due to level in the organization.

H4C: There is a significant difference in the impact of job performance due to years of service in current hotel

H4D: There is a significant difference in the impact of intention to quit due to age

H4E: There is a significant difference in the impact intention to quit due to division currently working/department .

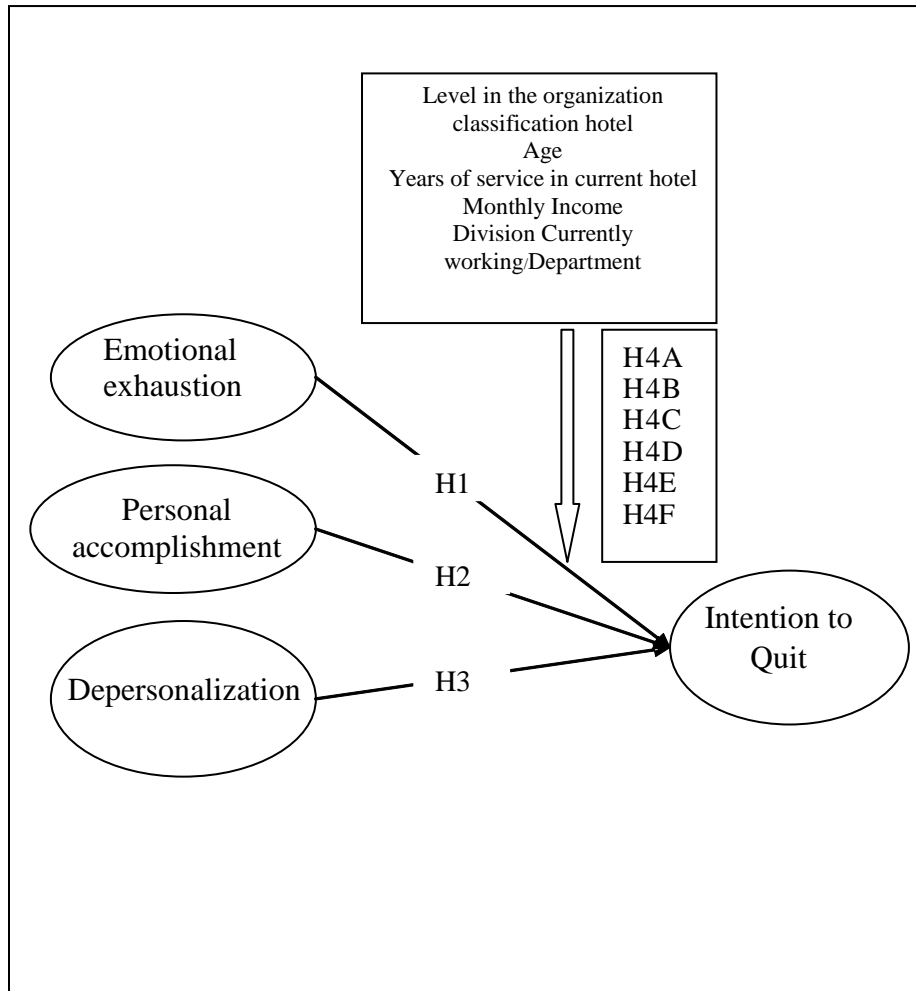


Figure 1 Research Model

2- Burnout:

Introduced Burnout concept was used by Freudenberg in (1974) and Maslach (1976) for the first time. Most researchers agree as a social problem worthy of attention to study it and try to better understand why it happens.

burnout appears when there is a mismatch between the characteristics of a person's job and the characteristics of the person doing the job, so burnout is a social/environmental problem related to a person's occupation. (Maslach and Leiter, 2005).

Pines and Maslach (1978) defined burnout as "a syndrome of physical and emotional exhaustion, involving the development of negative self-concept, negative job attitudes, and loss of concern and feelings for clients".

Burnout is a reaction to the chronic emotional strain of Communicate with other people. (Maslach, 1982a). Schaufeli and Enzmann (1998) argue that burnout grows due to job stress related to personal needs and expectations for the employee (Pines and Keinan, 2005).

Many experts have proposed different concepts of burnout, But the Agreed upon and most widely spread definition is Maslach's definition and Through it appeared Maslach Burnout Inventory (MBI).

She defined burnout syndrome as “a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with other people in some capacity” (Maslach, 1993).

Maslach Burnout Inventory (MBI) was divided into three main dimensions:

(emotional exhaustion, depersonalization, and personal accomplishment).

According to MOHAMAD, the emotional exhaustion is interpreted as the emotional depletion due to excessive psychological and physical demands. also, exhaustion dimension refers to as wearing out, loss of energy, depletion, debilitation, and fatigue. as well as emotionally exhausted employees cannot give any more to their jobs. 2-3-

Depersonalization dimension describes the loss of idealism, dehumanization and refers to a negative, excessively detached response to various aspects of the work, and describes to the treatment of others as objects rather than people due to negative feelings. -3-7

Finally, reduced personal accomplishment dimension refers to a feeling of incompetence and a lack of achievement and productivity in work, decline in feelings of competence as well as a tendency to evaluate oneself negatively, capability, low morale, and an inability to cope. (Maslach & Jackson, 1981; Maslach, Jackson, & Leiter, 1996).

3- turnover intentions:

Intention to quit refers to an individual's perceived of staying or leaving an employing organization (Tett and Meyer (1993)) This relationship is supported by the attitude-behaviour theory (Asela,2017).

Ökten, (2008) defines the intention to quit as “*a destructive and active action showed by employees in case of being unsatisfied with the job conditions*” .

4- Methods and sources of data collection:

the information and data required by the study were obtained through two main sources: secondary sources, which included books and periodicals related to the search topic and the online information available on the subject and the primary sources which were represented in the questionnaire related to the topic of the study, which was developed by the researchers.

To measure the level of the sample's approval of the dimensions , the researchers adopted the Likert scale consisting on five degrees of approval (1-5), respectively, where 5 means agree with a very high degree, 4 agree with a high degree, 3 agree with a meduim degree, 2 agree with a low degree and 1 agree with a very low degree. The following gradation was adopted by the researchers to classify the arithmetic mean of the answers of the members of the study sample to the questionnaire items:

A - the arithmetic mean of 1- 2.33 reflects a low approval.

(B) the arithmetic mean of 2.34 - 3.66 reflects a medium approval.

(C) the arithmetic mean of 3.67-5 reflects a high degree of approval.

To examine the validity of the study tool, the researcher presented it to the virtual validity test through a group of 9 arbitrators with experience in the subject of the study; as for the reliability of the measurement tool, (Cronbach's alpha) of the internal consistency was extracted to collect the study scales as shown in table (1); (Cronbach's alpha) reliability coefficient for the field of the study which is represented in the Intention to Quit was (0.89), in the field of Burnout Dimensions (0.92), which are high and acceptable values for the purposes of the study; most of the studies indicated that the rate of the approval of the reliability coefficient was (0.70). (Al-Najjar and Al-Najjar and Al Zoubi, 2013).

Table 1 reliability coefficient (Cronbach's alpha) for study tool

field	dimension	Reliability coefficient (Cronbach's alpha)
Burnout Dimensions	Emotional exhaustion	0.92
	Personal accomplishment	0.82
	Depersonalization	0.91
	Total / Burnout Dimensions	0.92
Intention to Quit		0.89
Total		0.92

Statistical methods used: to analyze the data, and answering the study questions, and test the study hypotheses, a set of statistical methods that include the Statistical Package for Social Sciences (SPSS) was used. Such methods were represented in frequencies and percentages to describe the sample characteristics, arithmetic means, and standard deviations to identify the degree of approval of the people studied on the study variables and dimensions. the correlation coefficient, the simple and multiple regression coefficient were also used to test the validity of the hypotheses contained in the study; Cronbach's alpha coefficient was also used to confirm the reliability of the measuring tool.

- The First Question: What are the levels of feeling of the three dimensions of occupational combustion among Jordanian hotel workers?

The arithmetic means and standard deviations for the sample's approval of Burnout Dimensions. Table 2 illustrates this.

Table (2) means and standard deviations for the sample's approval of Burnout Dimensions					
Rank	number	Dimension	Mean*	standard deviation	Assessment degree
1	2	Personal accomplishment	3.91	0.89	Medium
2	3	Depersonalization	3.80	0.97	Medium
3	1	Emotional exhaustion	3.59	1.04	Medium
4	Total / Burnout Dimensions		3.75	0.76	Medium

*The mean of (6). 0-2.00 degrees low, 2.00 -4.00 Medium. 4.01 -6.00 degree high

Table (2) shows that the arithmetic means for the sample's approval of practicing the job design process in the surveyed hotel ranged (3.59-3.91) by a medium degree for all dimensions where the dimension of " Personal accomplishment " was in the first rank with a mean of (3.91) followed by " Depersonalization " with a mean (3.80) in the second rank, " Emotional exhaustion " with a mean of (3.59) in the last place; the general arithmetic mean for the field as a whole was (3.75) represent a degree of a assessment medium.

Second, the analysis and discussion of the study questions and hypotheses: this part will present the results of the study, which aimed to identify the Job Burnout in Relation to Intention to Quit as a variable rate of the relationship linking the job design and answering the study questions and testing its hypotheses, as follows:

a. Study Questions: To answer the questions of the study, the arithmetic means and standard deviations for the approval of the study fields and dimensions by the sample members. The results were in the next section.

- The First Question: What are the levels of feeling of the three dimensions of occupational combustion among Jordanian hotel workers?

The arithmetic means and standard deviations for the sample's approval of Burnout Dimensions. Table 2 illustrates this.

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The Second question: What is the nature of the correlation between the phenomenon of occupational combustion and the level of intention to leave the work of employees in Jordanian hotels?

To answer this question was extracted Pearson correlation coefficient in a manner (Pearson Correlation) between occupational combustion and the level of intention to leave the work of employees in Jordanian hotels, Table (3) shows that.

Table (3)

		Intention to Quit
Job Burnout:	Pearson Correlation	0.489- **
	Sig. (2-tailed)	0.000
	N	250

Table (3) shows that there is an inverse relationship and a statistical function at the level of between(Job Burnout, Intention to Quit), where the Pearson Correlation value of Negative and statistical function.

The Third question: Are there significant differences in the level of functional combustion and the intention to leave the work according to the variables of the study (monthly income - hotel classification - age - career level - experience in this hotel - experience in the hospitality industry - work department)?

In order to answer this question, the arithmetic averages and the standard deviations of the responses of the sample were extracted from to the personal variables, the results are listed in Table 4.

Table 4 Mean and standard deviations comparison of the demographic characteristics of respondents with Job Burnout and Intention to Quit (n = 250)

variable	Level	Job Burnout		Intention to Quit	
		Mena	S.D	Mena	S.D
classification hotel	Four stars	3.84	0.82	3.74	0.81
	Five stars	3.72	0.73	3.84	0.75
	Sig.(P)	-		-	
Level in the organization	Manager	3.99	1.01	4.07	0.68
	Supervisor	3.85	0.75	3.72	0.84
	General staff	3.66	0.70	3.79	0.75

variable	Level	Job Burnout		Intention to Quit	
		Mena	S.D	Mena	S.D
	Sig.(P)	*		-	
Years of service in current hotel (Less than 1 Years out of survey)	Less than 3 Years	3.78	0.59	3.78	0.79
	3 – 6	3.69	0.92	3.88	0.70
	More than 6 Years	3.82	0.75	3.72	0.85
	Sig.(P)	-		-	
Age	18-25	3.77	0.59	3.79	0.78
	26-35	3.68	0.93	3.85	0.75
	36 and above	3.86	0.80	3.75	0.82
	Sig.(P)	-		-	
Division Currently Working/Department	Housekeeping	3.81	0.66	3.66	0.83
	Front office	3.79	0.65	3.98	0.70
	Food and beverage	3.69	0.89	3.85	0.74
	Sig.(P)	-		*	
Monthly Income	350 JD and less	3.65	0.95	3.93	0.66
	350- 750	3.80	0.67	3.96	0.71
	750 JD and over	3.80	0.66	3.68	0.83
	Sig.(P)	-		*	

The table shows (4) that there are differences in the level of the (Job Burnout) depending on the variable (Level in the organization), when applying the method of Hevah comparisons dimensionality shows that the sources of differences in favor of (Manager)Level in the organization an mean (3.99).

As the table shows, there are differences in the level of desire to leave the work according to variable (Division Currently Working/Department) when applying the method of Hevah comparisons dimensionality shows that the sources of differences in favor of (Front office)Level in the organization an mean (3.98).

As the table shows, there are differences in the level of desire to leave the work according to variable (Monthly Income) when applying the method of Hevah comparisons dimensionality shows that the sources of differences in favor of (350 JD and less)Level in the organization an mean (3.93).

CONCLUSIONS

As with any research, the results of this study should be interpreted. The results of this study have useful implications for managers for business practice in the hotel industry.

A survey that consists of Maslach Burnout Inventory (MBI) to measure the independent variable; emotional exhaustion, personal accomplishment, depersonalization and the dependent variable; turnover intention.

Data that are obtained from surveys are analyzed by using statistical software (SPSS 16.0).

The findings of the study indicated that hotel employees' level of emotional exhaustion is medium, level of depersonalization is medium, and, level of personal accomplishment is medium.

The result of this studying dedicated that employees had high levels of burnout.

The results also showed that sub-dimensions of burnout, emotional exhaustion, depersonalization and personal accomplishment significantly associated with turnover intention.

Consequently, this study pointed out that the burnout level of employees had an effect on turnover intention.

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Questionnaire
(Job burnout for Employees in Jordanian Hotels)
Faculty of Tourism and Hotel Management
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Dear Participants,

The researchers are conducting this study in order to measure the (Job burnout for Employees in Jordanian Hotels) in the five-star hotels in the city of Amman, note that the questionnaire intended for research purposes only, and all responses to this questionnaire will be used for academic purposes and will be dealt with confidentially.

Please, take your time to complete all the questions as completely as possible; your participation will be greatly appreciated.

Researchers

Part One: Employees' profile:

classification hotel	Age
Four stars	18-25
Five stars	26-35
	36 and above
Level in the organization	Division Currently Working/Department
Manager	Housekeeping
Supervisor	Front office
General staff	Food and beverage
Years of service in current hotel (Less than 1 Years out of survey)	Monthly Income
Less than 3 Years	350 JD and less
3 – 6	350- 750
More than 6 Years	750 JD and over

Part Two:

Please indicate to what extent you agree or disagree with the following statements by marking (√) at the appropriate answer. The scale can be interpreted as:

Job Burnout

6	5	4	3	2	1	0
Everyday	A few times a week	Once a week	A few times a month	Once a month or less	A few times a year or less	Never

Burnout Dimensions		ITEMS	0	1	2	3	4	5	6
Emotional exhaustion	1	I feel that I have lost my enthusiasm about my profession.							
	2	I feel exhausted spiritually when I arrive home after work.							
	3	I feel I can't stand this job even one more day.							
	4	It is really tiring for me to deal with people all day long.							
	5	I feel I get tired of my current job.							
	6	I am of the opinion that my job puts limitations on me.							
	7	My shifts at work make me exhausted.							
	8	It makes me stressful to be in a direct communication with people.							
	9	I feel I get exhausted at work both emotionally and cognitively.							
Personal accomplishment	10	I can get how the customers feel easily.							
	11	I deal with the customers' problems directly.							
	12	I believe that I become useful through my job.							
	13	I feel energetic.							
	14	As a responsibility, I create an environment in which the customers feel comfortable at work.							
	15	I feel active and vigorous while I am working.							
	16	I am successful at my profession.							
	17	I overcome my emotional problems caused because of my job with ease.							
Depersonalization	18	I feel I behave insensitive to the customers.							
	19	I feel I have got senseless towards people since I started this job.							
	20	I am worried that my job makes me hard-hearted.							
	21	I do not care about the problems the customers face up with.							
	22	I feel the customers think that I am responsible for some of the problems they face up with.							

Intention to Quit:

	ITEMS	Strongly disagree	Disagree	neutral	Agree	Strongly agree
		1	2	3	4	5
1	I want to leave this organization very much.*					
2	As soon as I get another acceptable job, I will quit.*					
3	I am setting up to go away my work inside the subsequently six or five months.**					

FACTORS INFLUENCING IN SMART FARM BEHAVIOR'S PERCEPTION THE CASE STUDY OF THE BAN PONG AGRICULTURAL GROUP IN RAJCHABURI PROVINCE

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ABSTRACT

This research aimed to (1) study the perception of farmer's role in 4.0 era (2) compare the perception of farmer's role in 4.0 era which classify by personal factors and (3) approach to create the perception of farmers role in 4.0 era.

The survey research methodology was used. The research population was the Ban Pong agricultural group in Rajchaburi province and the Taro Yamane table was used to determine the sample size. The sample, then, was 400 farmers derived by stratified sampling. The research instrument was a questionnaire and the statistics used for data analysis were frequency, percentage, mean, standard deviation, one-way ANOVA, Scheffe's LSD test and content analysis.

The research results showed that, the Ban Pong's farmers perceived the farmer's role in 4.0 i.e. factor of priding on being a farmer (\bar{x} = 4.46), factor of having data for decision making (\bar{x} = 4.41), and factor of realizing in product quality and consumer safety (\bar{x} = 4.41) at the highest level. In other words, farmers perceived the farmer's role in 4.0 i.e. having the happiness and satisfaction as farmer, using data for solving problem, and developing own career and training about the product quality standards such as GAP, GMP, organic farming. The factors with a high level of importance were the aspects of product and marketing management, corporate social responsibility (CSR), and having knowledge about farming. As for comparison of the perception of farmer's role in 4.0 era which classify by personal factors identified that gender, age, and educational level with a statistical significant level of 0.05.

Approaches to create the perception of farmer's role in 4.0 era i.e. government sector would promote and support the using of technology and innovation of agriculture, develop and connect the information technology system, create and link the agricultural group and institute for producing agricultural product comply with product quality standard and market demand, and establish the development center of agricultural product system.

Keywords: Smart Farm, Behavior, Perception

INTRODUCTION

The main concept of smart farm is the application of electronic technology and computer, including information and communication technology to develop the entire supply chain of agricultural production process to the consumers in order to enhance production quality, reduce cost, as well as improve product standards. Smart farm is also an effort to raise the four important levels of agricultural development: (1) cost reduction in production process, (2) enhancement of the quality of production standards and product standards, (3) risk reduction in agricultural sector which caused by outbreaks of pests and natural disasters, and (4) knowledge management and transmission by applying information technology from research to practical development, including focus on the use of information technology of the farmers [1].

Smart farm in Thailand may have limitations because of the inefficiency of some technology systems. For example, GPS and GIS systems still require high investment and farmers also lack the expertise to use the tools. However, when the world enters into physical and social change, including knowledge, information and news are exchanged rapidly across all regions, it is necessary for Thai farmers to adjust ourselves

according to our lifestyles. We need to expose and learn the new information in order to lead us to become a smart farmer in accordance with the policy and practices of the Ministry of Agriculture and Cooperatives, "Develop a farmer as a Smart Farmer with Smart Officer as a companion" [2].

The process of producing Smart Farmer is to develop Smart Officer or government officer who has academic knowledge on the policy and be able to use technology to support farmers by guiding the farmers towards environmentally friendly development. On the other hand, entering into Smart Officer is to adjust working process by starting making a deep understanding of types and quantities of agricultural products in each area. In addition, it is necessary to understand the problems of each product and be able to bring the information gained from the research center of the agency network of the Ministry of Agriculture and Cooperatives and the Office of Agricultural Economics to plan an effective production for the farmers [3].

Smart farm is a modern technology related to philosophy of the sufficiency economy in term of their similar principles of using resources in the most effective and efficient ways. According to the agricultural areas of Ban Pong district in Rajchaburi province, most of the population is farmers. In 2016, the area was considered as the area of economic crops. It consisted of 55,130 rai of paddy field with 46,869 tons of rice yield. In addition, there were 6.823 rai of vegetable area consisting of 5.046 rai of baby corn, 137 rai of eggplant, and 125 rai of sweet corn, respectively [4]. As a result, in order to make the farming more effective, Smart Farm is another interesting innovation. Thus, the researchers are interested in conducting a research on factors influencing in Smart Farm behavior's perception: a case study of Ban Pong agricultural group in Rajchaburi province. This will lead to Thailand's sustainable development of the agricultural system in the future.

METHODOLOGY

The samples of the study were 12,330 male and female farmers in Ban Pong district in Rajchaburi province. They consisted of the farmers who grow rice, vegetables, fruits, and trees (the Office of Agriculture of Ban Pong District, 2017). The samples were selected by using sampling method based on the Taro Yamane probability;

$$n = \frac{\square}{1 + \square(\square)^2}$$

Review of Related Literature

Bangkok Bank (2017) conducted a research on Smart Farmer: Thai Farmer 4.0, it was found that Smart Farmer is a new generation of knowledgeable people who graduated Bachelor's degree and then back home to take care of their own agricultural land, or people who turn themselves into a farmer. Although the strengthening process for farmers has been done for a long time in order to cope with the changes in society, it has not been successful because of the discontinuity and lack of people to continue and make the process effective. In addition, most of people see that Smart Farmer is like a knowledgeable entrepreneur. There must be a plan and gain a lot of income. On the other hand, in the Bank's point of view, Smart Farmer should be rich and has the ability to manage money in order to have no debt. However, in fact, Smart Farmer needs to understand the nature. It means to invest less and let nature helps a lot. It is not harmful to the nature and the ways of using resources as needed. When being Smart Farmer, it should be more comfortable, not more tired. For example, it is the way to have a small area which well designed to be an integrated farming [5].

First of all, in order to do this, the farmers have to be ready to cope with changes. Next, they need to be able to link the world together, that is they can live in the world where technology changes rapidly. They need to realize what they should know in order to accommodate changes. For instance, they must understand the nature, be knowledgeable, study research, or be able to do an experiment and carry out research. If they have these qualities, they can adjust themselves to the changes.

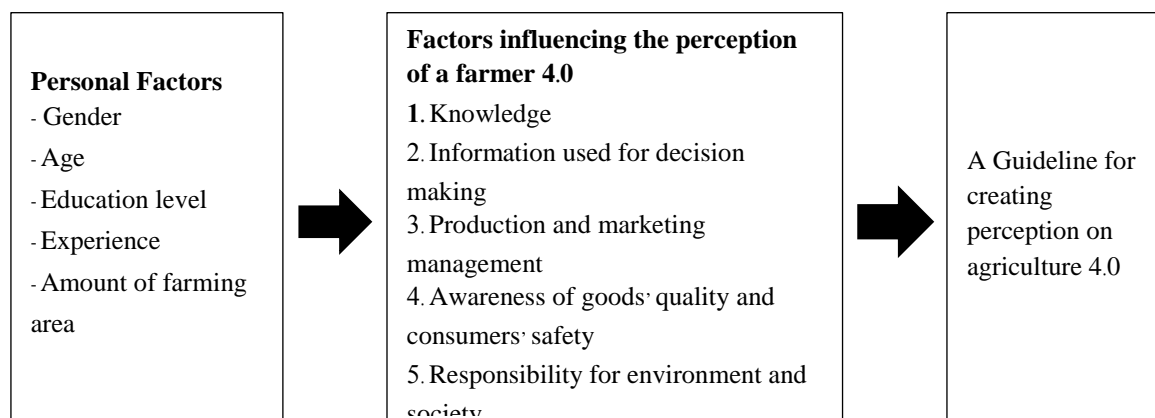
All in all, to access the farmer 4.0, it is necessary to understand the research process and have enough knowledge to try to understand. In other words, the farmers must understand the forest, soil, water, genetics, microbes, as well as technology. If they know all of these, they will be able to live well in this era.

Jirapon Putmeepol (2014) carried out a study entitled, "Roles of Existing Smart Farmer Based on Perception of Existing Smart Farmers, Agricultural officials, and Community Leaders in Pak Phli District, Nakhon Nayok Province." The findings showed that, in the first round, the perceived roles of Existing Smart

Farmers about the knowledge to do farm practices, eligibility for an informed decision, productivity management and marketing, the properties for recognizing the goods' quality and safety of consumers, the commitment to the environment and society, and the pride of being the farmers of Existing Smart Farmers and agricultural officials were at the high level. However, community leaders perceived the very high level. In the second round, it was found that the perception of Existing Smart Farmers and community leaders were at the very high level, whereas agricultural officials perceived at the high level. However, the perceived of both rounds were consistency. Moreover, problems of Existing Smart Farmers were lack of interest in becoming the Existing Smart Farmers and aging of the farmers make perception decrease [6].

Jeeraporn Kampannoy (2011) investigated factors that affect the decision to produce and discontinue organic rice production. The findings revealed that factors affecting the possibility of organic rice production decisions sorted by the incremental effect of the influence of the change in the value of each factor were: (1) ability to observe the results of innovation, (2) comparison of health benefits, and (3) compatibility or consistency with existing ones. On the other hand, the factors that decrease of possibility of organic rice production decisions was complication. In addition, the factors that decrease the possibility to discontinuing decision on organic rice production were (1) expectation on the results of innovation and (2) knowledge and skills in doing activities of organic farming innovation. Unlike, the factors that increase the possibility to discontinuing decision on organic rice production were (1) family conflict and (2) number of farming area for worker (rai/person) [7].

Figure 1
Research framework



The factors that influence the role perception of agriculture 4.0 could be divided into 6 aspects: knowledge, information used for decision making, production and marketing management, awareness of goods' quality and consumers' safety, responsibility for environment and society, and pride of being a farmer. This research attempted to study the factors that influence the role perception of being a farmer 4.0 based on a survey of farmers in the agricultural area.

Research Instrument Testing

In this research, the content validity of the instruments was done by 3 experts in order to find the Index of Item -Objective Congruence developed by Rovinelli and Hambleton. [8].

Data Collection

The data were collected by distributing questionnaires to the respondents and then 400 questionnaires were returned.

Data Analysis

The data were analyzed by using the following statistics programs for research:

1. Analyze basic information of the farmer group in Ban Pong district, Rajchaburi in the terms of gender, education level, experience, and amount of farming area by using descriptive statistics such as frequency distribution and percentage.

2. Analyze the role perception of a farmer 4.0 sorted by personal factors by using descriptive statistics such as mean and standard deviation, the level of measurement that affects five levels of perception.

3. Compare the factors that influence the role perception of a farmer 4.0 sorted by personal factors. Then, the analysis was done by using standard deviation and t-test in order to be used for describing the variance of data and testing the hypothesis about the difference between personal factors and the factors influencing the role perception of a farmer 4.0.

RESULTS

1. The analysis of basic information of the farmers in Ban Pong district, Rajchaburi

According to the analysis of basic information of the farmers in Ban Pong district, Rajchaburi, it was found that 56.50 percent of the farmers were male and 43.50 percent were female. Age was divided into two categories: 46 percent of the farmers were 17-27 years old and 42 percent were 28-38 years old. 49.50 percent of the farmers graduated high school and 29.80 percent graduated secondary school. The farmers' income level showed that 50.20 percent receiving over 20,001 baht. In addition, most of them had 11-15 rai for their own agricultural area.

2. The analysis of the role perception of a farmer 4.0 sorted by personal factors

In the aspect of knowledge, the perception of being a master farmer or learning point for others was at a very high level (\bar{x} = 4.07). Next, it was the perception of being a speaker or give advice to others (\bar{x} = 3.21).

In the aspect of information used for decision making, the perception of using information to solve problems and develop career was at a very high level (\bar{x} = 4.55). Next, there should be information recorded and use the information to analyze the planning before operating and managing the product to meet the market demand (\bar{x} = 4.40).

In the aspect of production and marketing management, the perception of the ability to manage production factors, labor, and cost was at a very high level (\bar{x} = 4.38). Next, it was the perception of the ability to link production and marketing for selling products (\bar{x} = 4.12).

In the aspect of awareness of goods' quality and consumers' safety, the perception of knowledge and training about GAP, GMP, organic agriculture or other standards was at a very high level (\bar{x} = 4.46). Next, it was the perception of the production process which conformed to the GAP, GMP, organic agriculture, or other standards (\bar{x} = 4.36).

In the aspect of responsibility for environment and society, the perception of non-polluting process or Green Economy was at a very high level (\bar{x} = 4.37). Next, it was the perception of continued community and social support (\bar{x} = 3.79).

In the aspect of pride of being a farmer, the perception of happiness and satisfaction in agricultural career, including love and preservation of land and career for the next generation was at a very high level (\bar{x} = 4.37). From Table 1.

Table 1
Average of importance levels, standard deviation, result interpretation, and ranking of the role perception of a farmer 4.0

No.	Role perception of a farmer 4.0	\bar{x}	S.D.	Level of importance
1.	Use information to solve problems and develop your own career	4.55	0.52	Very high
2.	Be happy and satisfy in agricultural career	4.47	0.49	Very high
3.	Have knowledge or training about GAP, GMP, organic agriculture or other standards	4.46	0.56	Very high
4.	Have the ability to manage production factors, labor, and cost	4.38	0.55	Very high
5.	Have non-polluting process or Green Economy	4.37	0.48	Very high
6.	Can be a master farmer or learning point for others	4.07	0.71	High
Overall image of the role perception of a farmer 4.0		4.38	3.31	High

Hypothesis 1

\square_0 : There were significant differences in genders affecting the role perception of a farmer 4.0.

\square_1 : There were no significant differences in genders affecting the role perception of a farmer 4.0.

Table 2 shows a comparison of factors affecting the role of perception of a farmer 4.0 in the aspects of knowledge, information used for decision making, production and marketing management, awareness of goods' quality and consumers' safety, responsibility for environment and society, and pride of being a farmer. The data were categorized by genders and analyzed by T-test. It was found that there was no statistically significant difference at the 0.05 level in the aspect of information used for decision making. On the other hand, in the aspects of knowledge, production and marketing management, awareness of goods' quality and consumers' safety, responsibility for environment and society, and pride of being a farmer, the difference was statistically significant at the 0.05 level. From Table 2.

Table 2
A comparison of the factors influencing the role perception of a farmer 4.0 sorted by gender

No.	Role Perception	Male		Female		df	t	sig
		\bar{x}	SD	\bar{x}	SD			
1.	Knowledge	3.57	0.63	3.72	0.83	398	-2.087	0.037*
2.	Information used for decision making	4.38	0.34	4.45	0.49	398	-1.594	0.112
3.	Production and marketing management	4.11	0.35	3.98	0.38	398	3.478	0.001*
4.	Awareness of goods' quality and consumers' safety	4.57	0.44	4.20	0.42	398	8.397	0.000*
5.	Responsibility for environment and society	4.01	0.32	4.17	0.36	398	-4.555	0.000*
6.	Pride of being a farmer	4.42	0.25	4.51	0.31	398	-3.071	0.002*

* a statistical significant level of 0.05

Hypothesis 2

\square_0 : There were significant differences in ages influencing the role of perception of a farmer 4.0.

\square_1 : There were no significant differences in ages influencing the role of perception of a farmer 4.0.

Table 3 shows a comparison of the factors influencing the role perception of a farmer 4.0 sorted by age. It was found that the significance level of the overall image of each factor was statistically significant at the 0.05 level. In addition, the difference was statistically significant at the 0.05 level in the aspects of knowledge, information used for decision making, production and marketing management, awareness of goods' quality and consumers' safety, responsibility for environment and society, and pride of being a farmer. From Table 3.

Table 3
A comparison of the factors influencing the role of perception of a farmer 4.0 sorted by age

No.	Role perception of a farmer 4.0	P-Value
1.	Knowledge	0.001*
2.	Information used for decision making	0.000*
3.	Production and marketing management	0.015*
4.	Awareness of goods' quality and consumers' safety	0.000*
5.	Responsibility for environment and society	0.019*
6.	Pride of being a farmer	0.000*
Overall image		0.000*

* a statistical significant level of 0.05

Hypothesis 3

\square_0 : There were significant differences in education levels influencing the role perception of a farmer 4.0

\square_1 : There were no significant differences in education levels influencing the role perception of a farmer 4.0.

Table 4 shows a comparison of the factors influencing the role perception of a farmer 4.0 sorted by education level. It was found that the significance level of the overall image of each factor was statistically significant at the level of 0.05. In addition, there were four aspects which have statistically significant level of

0.05. They were the aspects of knowledge, information used for decision making, production and marketing management, and responsibility for environment and society. From Table 4.

Table 4
A comparison of the factors influencing the role perception of a farmer 4.0 sorted by education level

No.	Role perception of a farmer 4.0	P-Value
1.	Knowledge	0.015*
2.	Information used for decision making	0.000*
3.	Production and marketing management	0.000*
4.	Awareness of goods' quality and consumers' safety	0.337
5.	Responsibility for environment and society	0.000*
6.	Pride of being a farmer	0.056
Overall image		0.000*

* a statistical significant level of 0.05

CONCLUSION AND FUTURE WORK

This study aimed to investigate the factors influencing perception behavior in the aspect of modern agriculture, a case study of the farmer group of Ban Pong district in Rajchaburi province. The results showed that male and female farmers have different perceptions on knowledge, production and marketing management, awareness of goods' quality and consumers' safety, responsibility for environment and society, and pride of being a farmer. The male farmers better perceived a farmer 4.0 needs to know what they are doing and there must be information used for making decision. In addition, the farmer needs to be responsible for environment and society and be proud of being a farmer. This is consistent with the research by Nonthawan and others (2016) [9]. They conducted a research titled, "Guidelines for Yong Smart Farmer Development in Rayong Province." It was also found that most of new generation of the farmers in Rayong province was male, who receive the information from smart phone, government officers, the Internet, and Facebook, respectively.

However, according to age factor, it was found that the perception of a farmer was significantly different in all six aspects of knowledge, information used for decision making, production and marketing management, awareness of goods' quality and consumers' safety, responsible for environment and society, and pride of being a farmer. On the other hand, according to education level, it was found that there were four significant different aspects of factors affecting the role of perception of a farmer. They were the aspects of knowledge, information used for decision making, production and marketing management, and responsible for environment and society. It is consistent with the study done on new farmers for the future of Thailand by the Office of the National Economic and Social Development [10]. It was found that those of 17-27 years old who have high level of education will have the opportunity to develop their potential. They are ready to learn technology and accumulate agricultural knowledge well. Moreover, most of them are knowledgeable on marketing information and be able to access the consumers easily.

Therefore, the way to build the perception of Smart Farm is the government should support and encourage the integration and create a production plan for the security of occupation. There should be a support for accessing to information and technology, as well as a link to marketing for the benefit of adjusting production to meet the needs of the market. Furthermore, basic needed factors of production should be supported, especially the lands, plants, animals and funding sources.

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CHALLENGES IN THE USE OF LEARNING MANAGEMENT SYSTEMS IN SAUDI ARABIAN UNIVERSITIES

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ABSTRACT

The use of learning management systems (LMS) has increased widely in recent years, and numerous institutions have employed it in their teaching and learning processes due to its diversity of benefits. Nevertheless, there are many barriers that prevent learners from using LMS effectively. This study aimed to examine the challenges that learners encounter when they use LMS in Hail University, Saudi Arabia. The method used in this study by the researcher involved semi-structured interviews with six students who use LMS in their learning. These participants were selected purposively in order to give more depth of information regarding the obstacles they faced. The main results from this study were that lack of motivation from teachers in using LMS and lack of interaction with educators were the main challenges encountered by students. The study results also revealed that technical issues and lack of support were further barriers to the effective use of LMS in Hail University. Finally, the study suggested solutions in order to address these challenges, such as providing strong internet connection, the provision of immediate technical support, and encouraging instructors to interact with their students; without these interventions, such challenges will not be overcome.

Keywords: Obstructions, Learning Management System, LMS, Saudi Arabia.

HOME BASED ENTERPRISES IN HOUSING CORRIDOR OF DEVELOPING COUNTRIES, THE CASE OF LAGOS METROPOLIS, NIGERIA.

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ABSTRACT

There has been a general spread of home based enterprises across the housing corridors of the developing countries, especially Lagos Nigeria housing zones in recent times. In lieu of this circumstantial, this study examines the consequence of the sector in housing corridor in Lagos metropolis. Data were obtained through personal observation and administration of structured questionnaires. Sampling was done using multi-stage and disproportionate sampling techniques. A total of 1345 copies of the questionnaires were administered to home-based entrepreneurs in fifty-two predominantly residential zones across the sixteen local government areas that made up the Lagos metropolis. Nine hundred and seventy five copies representing 73.9% of the administered questionnaires were retrieved, found adequate and acceptable for analysis. Data were analysed using descriptive and inferential statistical tools for the interpretation and discussion of results. The study revealed that 44.3% of the operators were retailers, 21.9% were petty commodity production and 31, 5% were services. It revealed further that the home based enterprises modeled high negative effects on housing land use in, obstruction of drainage, traffic crowding, visual obstacle, and indiscriminate disposal of waste, aesthetical disorder, menace of provisional structure, encroachment of circulation land use, unkempt environment and alteration of land use. The study recommends the need for provision of market for the practitioners, discouraging the overconcentration of home-based enterprises in built-up areas; educating the practitioners and general public on the evil of environmental degradation, and compulsory establishment of data base for home-based enterprises.

Keywords: Housing land use, home-based enterprises, visual obstruction, Lagos metropolis

BEHAVIOURAL FACTORS INFLUENCING INDIVIDUAL INVESTORS' DECISION-MAKING: EVIDENCE FROM MAURITIUS

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ABSTRACT

Behavioural finance considers various psychological factors present when an investor is undertaking an investment. As such, the objective of this paper is to explore the behavioural factors influencing individual investors' decisions on firms listed on the Stock Exchange of Mauritius (SEM). A sample of 95 individual investors has been obtained from three main stocking firms. The results show that the emotion factor and the cognitive dissonance are the main elements impacting on the behavioural decisions of investors. This implies that investors in the local Mauritian equity markets tend on average to consider the views of others prior to making their investment decisions. This view is confirmed by the factor that the anchoring factor has scored the least mean score. In particular, most investors, on average do not seem to stick to their own decisions but seems to alter their minds as market conditions changes. Finally, the results also show that risk aversion seem to be related to the age of the investors.

INTRODUCTION

Behavioural Finance being one of the essential subfield of finance as per Harvey (2004) is about applying the psychological factors when considering a financial transaction. It hence shows how the decision making of an investor is affected by certain conditions.

The financial market being subject to fast growing globalization, need investors to implement certain strategies so as to be able to face the fierce international competition. This contradicts the classical financial theories which according to Masomi and Ghayekhloo (2011), assumes that investors are rational and are particularly concerned with the maximization of profits, maintaining liquidity and the potential risks. The new concept of behavioral finance was hence developed and introduced in the 1880's which evolved through journal and publications in the 1990's, stating that emotion and other psychological factors influence the process of decision making specially when concerning investment purpose. Accounting for the fact that behavioural finance considers several aspects associated with emotions and psychological impact, there are some important concepts which have been developed to explain the irrationalism of investors while making investment decision.

Given the newness of the SEM and given its small market size, there has not been any major formal study on the issue of behavioural finance. As such, the objective of this paper is to explore the behavioural factors influencing individual investors' decisions at the Stock Exchange of Mauritius (SEM).

Prior Research.

Various studies have been conducted to prove that there exist several psychological factors that need to be considered in the finance domain when making decision. This indeed shows that the assumption of investors being rational are void and as such contradict the classical theories as define by Fama (1970, 1991),Sengal/ Singh (2012) amongst others. According to Thaler (1993), behavioral finance is simply open minded finance implying that investors are to be normal rather than rational and as per Sewell (2005), it is the psychological influence on the financial players and the ultimate effect on the market. Nevertheless, as depicted by Riepe (2003), investors are concerned with both rational and irrational factors, and cannot be entirely engaged on only one side.

Behavioural Factors

First of all, as discovered by De Bondt and Thaler (1995), overconfidence is a factor influencing decision making as the investors rate their abilities in beyond their capacities which is above the average level. As per Shiller (1997), they tend to estimate the level of failure or error below the average level and as stated by Odean (1998), this overconfidence also include the fact that the investors have a tendency to consider only the first information obtained which might be misleading. Ultimately as described by Stracca (2004), Benadou and Tirole (2004), if the investment is successful, the investors take all the credit while if it is not, they will blame others.

Another factor is availability bias, determined by Tversky and Kahneman (1973) stating that investors base their opinion and decisions on the most recent fact or information obtained rather than considering the actual circumstances. This simply explains that emotional effect is generated by those particular situations which are memorable. In addition, there is another factor being anchoring has been developed by Kahneman and Tversky (1974) and this occurs when an investor concentrates only on initial information which represents the anchor and would make their decisions based on that perception only. They would proceed with their investment only if it is relevant in respect to the anchor. This method might be irrelevant in respect to the situation as there is no logical information derived and analyzed to go further with an investment. Investors therefore restrict themselves only to the information primarily obtained which might be irrelevant as a reference in concern with other situation.

Furthermore, representiveness as another factor defined by Kahneman&Tversky (1994) and by De Bondt (1995) which is the extent an event is represented by a population as a whole. This might to some extent be correct but the opposite is also applicable as according to Ritter (2003) such that investors would consider only the recent performance of the population and hence neglect the long term effect which might be negative. An example to illustrate this concept is the fact that most investors would be more motivated to invest in companies having good reputation and financial records than others.

The next factor is mental accounting which as per Barberis and Huang (2001) explains the situations in which individuals often opt to separate their investment for different purpose, generally for a safer return and a risky one yielding more return. This would finally evade the negative impact and hence achieve a positive

outcome which compensate for the loss made in the risky asset if any. The illogical statement in such cases is that if all investment is combined rather than separating them which imply to bear certain cost, the result would be more or less the same.

To proceed with the key concept of behavioral finance, the factor herd behavior developed by Banerjee (1992) and simply mean that investors are tempted to follow the crowd and imitate their actions. This reaction may be caused by either the social pressure of consistency implying doing the same thing as others so as to integrate the group or because there is less risk that the larger groups are opting for a wrong decision. Last but not the least factor is the cognitive dissonance developed by Leon Festinger, Riecken and Schachter (1956) which refers to a situation whereby investors have conflicting attitudes concerning particular issues. The conflict arises due to the confusion arising between the belief and the attitudes in respect to certain decisions.

Empirical evidence

The seven main concepts defined above, support investors being irrational, ultimately having an impact on their decisions. To give support to those factors, several researches have been undertaken in different countries.

For instance, in Lithuania, Kartasova (2013) conducted a project with 500 respondents to analyze the behavioral finance in the country. The result showed the main factors were anchoring, herd behavior, overconfidence and regret aversion where investors prepare themselves for any potential regrets of wrong choice. Along with the factors, it was analyzed that the investor's mood had a great impact on their decisions especially in female cases and that the younger generation mostly the males and the single ones are the investors who are tempted to invest more in riskier assets. Ajmijy (2008) affirmed through another survey that female tends to be more risk averse than the male and that the investors in the range of 30-45 years are the one ready to opt for risky investments. Moreover, it was found that the female investors are those having more confidence but that the confidence also depends on the experience of the investors. The more their experience, the more they tend to be overconfident.

Another study conducted in Tunisia by Rekik and Boujelbene (2013) concluded that the investors of the country contradicted the traditional classical theory during their investment decisions, which imply they consider the emotions and other psychological factors. They also proved that there are important factors influencing the investment decisions such as herd attitude, anchoring, representiveness, mental accounting and loss aversion. However, the Tunisian were not subject to the overconfidence element as they more uncertain about the performance of their decisions. Several studies (Chowdhury and S. Barua (2009) in Bangladesh, K.C. Phan and J. Zhou (2014) in Vietnam and Hoang Thang Hue Ton & Trungkien Dao (2014) in Vietnam) were undertaken in different countries, which more or less concluded the same factors as important concepts to be considered while making an investment decision.

METHODOLOGY

The aim of this study is to assess the different key components of behavioural finance present when making an investment decision on SEM. In particular, factors influencing the investment decisions such as herd attitude, anchoring, representiveness, emotions, cognitive dissonance, overconfidence and loss aversion are examined for investors willing to invest on the Mauritian equity market.

Questionnaire structure

This study focuses on the primary source of data whereby information is collected through a questionnaire. The questionnaire comprised mainly of 4 sections with 30 questions. Section A considered the general aspect of investment decisions, section B looked at the personal characteristics of the different respondents, section C considered the social and psychological factors in behavioural finance while section D assessed the market factors of behavioural finance.

Sample

For the purpose of this study, questionnaires, both soft and hard copies were sent to three stock broking companies, which are not identified in order to maintain anonymity of the individuals, investment brokers and the institutions. Primarily, 12 stock brokers were aimed, but only 3 of them responded positively, who ultimately acted as the intermediaries to circulate the questionnaires to the individual investors.

Analysis of data

This section looks at the profile of the respondents, the different composition of behavioural finance and the extent to which the investors consider different factors when making an investment decision.

Demographic Factors

For the purpose of this study, 95 respondents were available to answer a survey whose responses are represented as follows.

Table 1: Demographic factors of respondents

Demographic Profile		Frequency	Percentage
Gender	Male	53	55.8
	Female	42	44.2
Age group	Under 25 years	12	12.6
	25-45 years	62	65.3
	45-55 years	12	12.6
	55-64 years	8	8.4
	65 and above	1	1.1
Education	Secondary	5	5.3
	Under-graduate	53	55.8
	Post-graduate	36	37.9
	Other	1	1.1
Employment	Employed	88	92.6
	Self-employed	6	6.3
	Unemployed	1	1.1
Income range	Below 10,000	6	6.3
	Rs 10,000 - 30,000	51	53.7
	Rs 30,000 - 75,000	26	27.4
	Rs 75,000 - 100,000	9	9.5
	Above 100,000 Rs	3	3.2
Marital status	Married	50	52.6
	Single	45	47.4

As illustrated, 42 males and 53 females successfully responded to the survey and the majority of the investors both males and females are young investors from the age group of 25-45 years who are said to be rather risk lovers as compared to the older groups who tends to be risk adverse. Moreover, the investors chosen for the purpose of this study mainly acquired an undergraduate degree representing 55.8% and 37.9% having a post graduate degree. There are also 5.263% having only a secondary certificate and a smaller percentage of 1.053 having other qualifications which were not defined. It is also noted that among the 95 investors, there are 92.63% employed persons, 6.316% self-employed and the remaining investors being unemployed. The income of those investors were asked and as per the result around 53.7% earn between RS 10 000 to RS 30 000, 27.4% earn between RS 30 000 to RS 75 000, while 9 investors earn between Rs 75 000 to Rs 100 000. There were also 6 investors earning below Rs 10 000 and 2 candidates above Rs 100 000. The marital status of the sample was more or less the same with 45 single investors and 50 married ones.

4.2. Behavioural factors influencing individual's investment decisions

This section looks at the mean of the different variables which may influence an investor when taking the decision of an investment.

Table 2: Behavioural factors Mean Scores

Factors	Mean
Herding	2.5613
Overconfidence	2.821
Representiveness	2.3474
Cognitive Dissonance	3.4737
Emotions	3.6211
Loss aversion	2.5543
Anchoring	1.3212

The main behavioural factors as mentioned are herding behavior, overconfidence, representiveness, cognitive dissonance, emotions, loss aversion and anchoring. The factor with the highest means of 3.6211 is the emotion of the persons investing. This implies that the investors may be disturbed by their current mood when deciding to invest. With a mean of 3.4737, the investors are influenced by cognitive dissonance which according to Leon Festinger (1950) is a situation where an investor is confused between two particular choices. They may be opting for a response but the point of view of others may disturb their decisions. The following factor with a mean of 2.8210 is overconfidence. In this case, the investors consider that they have the capacity and the potential above the real condition in concern of an investment decision. As defined by Lovigne and Legros (2005), investors tend to exaggerate their capabilities and knowledge, making them deal in larger volumes which eventually due to the existence of the bias belief, the outcome may be negative.

Herding behaviour with a mean of 2.5613, state that the candidates based their opinions on the decisions of other investors or through the use of information obtained from magazines or elsewhere. Therefore they insist on the feedback obtained primarily and would rather ignore the current situation. Loss aversion is then followed with a mean of 2.5543 which according to Barberis and Huang (2001) refer to the situation where individuals anticipate for potential losses. A loss is also said to be less painful than normal circumstances if it is followed by an event of gain but consequent losses is much more painful. Risk aversion is however understandable since anyone would be profit motive and try to evade any source of loss. The next factor as classified is then the representiveness with a mean of 2.3474. Such cases arise when investors concentrate on a recent event or refer to a main situation only or the advice of an expert in the field. As such, other prevailing factors are ignored that can be crucial during an investment decision. The result of such judgment might be negative. The least significant factor considered by the investors with the lowest mean of 1.3212 is anchoring where investors stick to an initial situation and would proceed with an investment only if the

market conditions reflect that particular circumstance known as the anchor. Investors therefore restrict themselves to other available information and potential opportunities.

4.3. Hypothesis Testing

It is important to determine the relationship between different behavioral factors and the demographic factors for the same population sample. The chi-square test as defined by Karl Pearson (1940) is conducted to know whether two factors are related to each other.

4.3.1. Relationship between respondent's profile and herd behaviour

Table 3: Chi square test of demographic factors and herd behavior

Demographic factors	Chi-square	Sig.
Gender	0.744	.863 ^a
Age group	7.615	.268 ^{a,b}
Education level	15.723	.015 ^{*b,c}
Employment status	3.834	.280 ^{a,b}
Income range	7.615	.268 ^{a,b}
Marital status	3.523	.318 ^a

The above values are all greater than 5% which imply these demographic factors are not related with the herd behaviour with the exception of education. It seems that investors who have low level of education tend to be more influenced by other group of investors.

4.3.2. Relationship between respondent's profile and overconfidence.

As shown below, the significant value is all greater than 0.05 except for the factor gender which is 0.023. The results state that there is a connection between the fact being male or female and the behavioural factor overconfidence. This is so because the variable overconfidence arises further because maybe the females tend to exaggerate their capacity when taking investment decisions.

Table 4: Chi square test of demographic factors and overconfidence

Demographic factors	Chi-square	Sig.
Gender	9.573	.023 ^{*b,c}
Age group	6.593	.086 ^{a,b}
Education level	6.053	.109 ^{a,b}
Employment status	6.593	.086 ^{a,b}
Income range	6.478	.691 ^{a,b}
Marital status	3.441	.329 ^{a,b}

4.3.3. Relationship between respondent's profile and representiveness

Table 5 shows the chi square test of demographics factors and the behavioral factor representiveness. The results suggest that there is no link between demographic factors with the exception of gender.

Table 5: Chi square test of demographic factors and representiveness

Pearson Chi-Square Tests

Demographic factors	Chi-square	Sig.
Gender	7.222	.097 ^{*,b}
Age group	2.955	.228 ^{a,b}
Education level	10.307	.112 ^{a,b}
Employment status	1.779.	.813 ^{a,b}
Income range	1.589	.811 ^{a,b}
Marital status	.885	.643 ^a

4.3.4. Relationship between respondent's profile and cognitive dissonance.

Significant value for the relationship between the profile of investors and the factor cognitive dissonance, as shown by table 6 is greater than 5% significant level for all factors except for age group of the candidates. It seems that investors from different age group may be subject to different opinions when making a decision to proceed with an investment.

Table 6: Chi square test of demographic factors and cognitive dissonance

Pearson Chi-Square Tests

Demographic factors	Chi-square	Sig.
Gender	2.870	.412 ^a
Age group	16.970	.009 ^{*,b,c}
Education level	2.153	.905 ^{a,b}
Employment status	.769	.857 ^{a,b}
Income range	3.681	.931 ^{a,b}
Marital status	4.375	.224 ^{a,b}

4.3.5. Relationship between respondent's profile and emotions.

In the case of table 7, the significant level is greater than 0.05 accepting H0 and rejecting H1. There is hence no relationship between the respondent profile and emotions.

Table 7: Chi square test of demographic factors and emotions

Pearson Chi-Square Tests		
Demographic factors	Chi-square	Sig.
Gender	3.750	.153 ^{a,b}
Age group	5.833	.212 ^{a,b}
Education level	4.444	.349 ^{a,b}
Employment status	.	.
Income range	5.833	.212 ^{a,b}
Marital status	10.000	.107 ^{*b,c}

4.36 Relationship between respondent's profile and loss aversion

Association between Loss aversion and the demographic factors is described by table 8. The significant level is above 5% for the gender, education level, employment status, and the income range factors. As such, the loss aversion is not related to these factors. However, investors from different age groups and their marital status influence the decisions through the loss aversion factor. They anticipate for any losses and would rather invest for an ultimate gain instead of loss. This is so because older investors have a tendency to be more risk adverse as compared to the younger ones who are more willing to take risks. Also, the married couples are more reluctant to invest in risky assets and prefer to invest in safer ones. This is maybe due to family considerations before taking any investment decision.

Table 8: Chi square test of demographic factors and loss aversion

Pearson Chi-Square Tests		
Demographic factors	Chi-square	Sig.
Gender	.830	.842 ^a
Age group	21.333	.011 ^{*b,c}
Education level	1.209	.751 ^a
Employment status	2.347	.504 ^{a,b}
Income range	15.590	.211 ^{a,b}
Marital status	7.873	.049 ^{*b}

4.3.7. Relationship between respondent's profile and anchoring

Table 9: Chi square test of demographic factors and anchoring

Pearson Chi-Square Tests		
Demographic factors	Chi-square	Sig.
Gender	1.049	.902
Age group	17.372	.362 ^{a,b}
Education level	9.758	.637 ^{a,b}
Employment status	1.293	.996 ^{a,b}
Income range	8.581	.930 ^{a,b}
Marital status	6.938	.139

CONCLUSION

The aim of this paper is to assess the components of behavioural finance impacting on investors willing to invest on the Mauritian equity market. A sample of 95 respondents has been obtained. The results show that the emotion factor and the cognitive dissonance are the main elements impacting on the behavioural decisions of investors. The least significant factor in investment decision is anchoring where investors stick to a particular decision. The link between personal profile of the investors and the components of the behavioural factor was tested. It seems that gender is a key factor impacting on over confidence of investors while age of the investors is linked to cognitive dissonance. The results also showed that age impact on the risk aversion of investors with old aged investors being more risk averse than younger ones.

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THE SUPPLY CHAIN MANAGEMENT OF THE CULTIVATED BANANA IN BUDHAMONTHON DISTRICT, NAKHONPATHOM PROVINCE

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ABSTRACT

The problem demand for the cultivated bananas in the market increased but, the number of the cultivated banana growers decreased. Due to farmers still have problems with supply chain management systematically. The researcher is interested to study the supply chain management of the cultivated banana plants from upstream to downstream. As well as information perception. To find good management practices, increase productivity and profit for farmers. Encourage farmers to develop standards. This research aims to: 1.) Find the supply chain management features of the cultivated banana. 2.) to study the problems and obstacles in the supply chain of the cultivated banana and 3.) To provide a good supply chain management system to farmers and the peoples interested. Researchers use quantitative and qualitative research methods by collecting data from questionnaires. Close observation and depth interviews.

The research found that: Most farmers are male aged 41-50 years. Experienced in growing the cultivated bananas. The successor of the ancestors. And plant are secondary plant. Average income per year is over 15,000.00 Baht. In the study, find the supply chain management features of the cultivated banana in Budhamonthon district. Nakhon Pathom. It was found that most of the cultivated banana is a native. Planting characteristics. It is planted on a farm or planted in the orchard or rice field reproducing from sprouting. Use water from natural sources. Planting period. To arrive harvest time is about 1 year. The yield is about 12 combs per, the cultivated banana bunch. Distribution channels. Available in local markets. Have a middleman cut from the garden and sent to the factory. Price depends on the size and number of the cultivated bananas per comb. The remaining fruit from the sale will be processed into baked the cultivated banana.

The results of the research were found. Was found that the supply chain management model of the cultivated banana there is no proper planning, use a convenient form of cultivation, let's grow naturally, no product development to add value from promoting creation of supply chain management model for the cultivated banana by brainstorming from community, to solve problems and obstacles. Can make the supply chain management model of good the cultivated banana, is the selection of the appropriate species breed. The cultivation method have take care of treat put organic fertilizer can do increased productivity, join grouping the villagers. To gather product bring, innovation make to increase the value of the product and extend the life of the product, build trade mark, and bring in information technology to increase sales channels. Set as a learning center for sustainable development.

Keywords: supply chain management, cultivated the cultivated banana

INTRODUCTION

The cultivated banana crops as farmers in Thailand are well known. Can grow easily and produce throughout the year. Has a high nutritional value, There are many benefits of the cultivated bananas, either Usable trunk can. The cultivated bananas are also economically important fruit species in Thailand, and the cultivated banana also exists in the Strategy development research the cultivated bananas year 2559-2563. (Department of Agricultural Extension, Ministry of Agriculture and Cooperatives, 2016). [1] The cultivated banana is a plant that Thai farmers know very well. In addition, the cultivated banana fruit is eaten from cooked fruit. The result is a variety of other products in addition to the cultivated banana effect is consumed. The

cultivated bananas are useful to use as many the cultivated bananas, the cultivated banana leaves. The cultivated bananas can be said that. "The cultivated banana" benefit can be easily planted and yield throughout the year. Highly nutritious, the benefits of the cultivated bananas are abundant. Currently, the cultivated bananas grown in Thailand are the much bananas. The much banana are popular for export. Presently farmers grow less the cultivated banana. The cultivated bananas are in short supply in some stages. Although the cultivated bananas are grown throughout the country, there is no systematic study of supply chain management.

For that reason. Researchers are interested to study supply chain management. In order to increase the efficiency of production to get quality output. Since the development of the cultivated banana varieties. Development of cultivation methods Cost management Find the channel. The development of the value of the cultivated bananas. If farmers can integrate supply chain management of the cultivated banana from the upstream to downstream as well as development of innovative processing. And technology to help increase distribution channels. Farmers have good income. Wealthy Stability and economic sustainability.

Purposes of the Study

1. Find the supply chain management features of the cultivated banana.
2. To study the problems and obstacles in the supply chain of the cultivated banana and
3. To supply the supply chain management of good the cultivated banana.

Scope of the Study

Research on Supply Chain Management in the cultivated the cultivated banana, study of agro-marketers in Ban Nam Sua area. 50 houses in Bhutthamonthon, Nakhon Pathom

Review of Related Literature

The study was conducted. Research on the theory and related research papers to create a framework for research ideas as follows.

Supply Chain Management

Tanit Sorat (2009) has collected definitions and meanings related to "Supply Chain Management" is as follows. Strategic Management Taking into account the relevance. Or integrated relationship. The department or department in the organization, and related partners whether it is a customer or a supplier in the supply chain, the purpose is to deliver goods. Or services as per the needs of the consumer. Whether it is about time, price or quality, it effectively manages information related to the operations of organizations and partners, and effectiveness eliminate delays in transactions. It also eliminates the problem of sending or receiving goods, and services that result from inefficient financial management systems. [2].

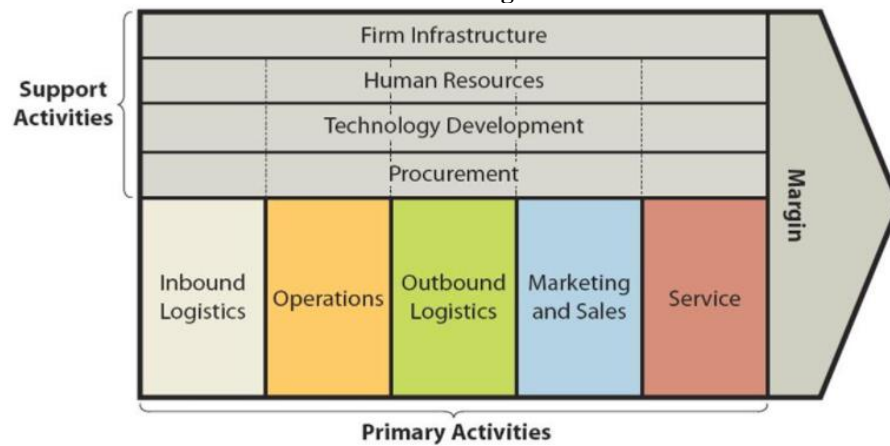
CSCMP's Definition of Supply Chain Management

Council of Supply Chain Management Professionals (2018), CSCMP Supply Chain Management Definitions and Glossary Supply chain management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies. [3]

Value Chain Management

Akamol Aramsri (2012), VCA Talked about. Value chain is a strategic tool used to analyze activities within a company, with clear goals for value development. And maximize performance. Michael Porter presented the concept of "how to make a profit". Value chain model "in 1985. Value chain system is a management style in all activities within the company. The Value Chain products and services are based on core activities that add value to the final product. With the support of Support Activities This adds value indirectly to the Value Chain Model example below, [4] Figure 1

Figure 1
Value Chain Management



Supply Chain Agriculture

Supply Chain Management Focus on the flow of goods. The flow of information and capital to risk. The flow of goods is based on the marketing structure, competition, distribution channels. Manufacturing Processes Product characteristics, this is called logistics. The flow of information includes processes and technology. And the flow of capital will include risk management and risk-sharing. (Thailand Research Institute, 2010), [5]

The supply chains of different agricultural commodities in India, however, are fraught

With challenges stemming from the inherent problems of the agriculture sector. The agrisupply chain system of the country is determined by different sartorial issues like dominance of small/ marginal farmers, fragmented supply chains, absence of scale economies, low level of processing/value addition, inadequacy of marketing infrastructure etc. (National institute of agricultural extension management and organization of Ministry of Agriculture, Government of India), [6]

Sudarat Pimonranakan. (2017, 1595-1610), take about, the community operators exporting Orchid supply chain management issues as agricultural orchids. It found that the pattern of supply chain management of agricultural products, orchids, as appropriate, of the size of the farmers, which is promoting a pattern of supply chain management agricultural orchids. By participation of the community in which it contributes to join think. To solve the problem and to mobilize the resources, which are an important way in the business community, success can be self-reliant in a sustainable manner. It also is a way to improve the situation of the external environment of business competition. By the pattern of supply chain management of agricultural products that have used information technology to the process which results in the development of supply chain management agricultural orchids [7].

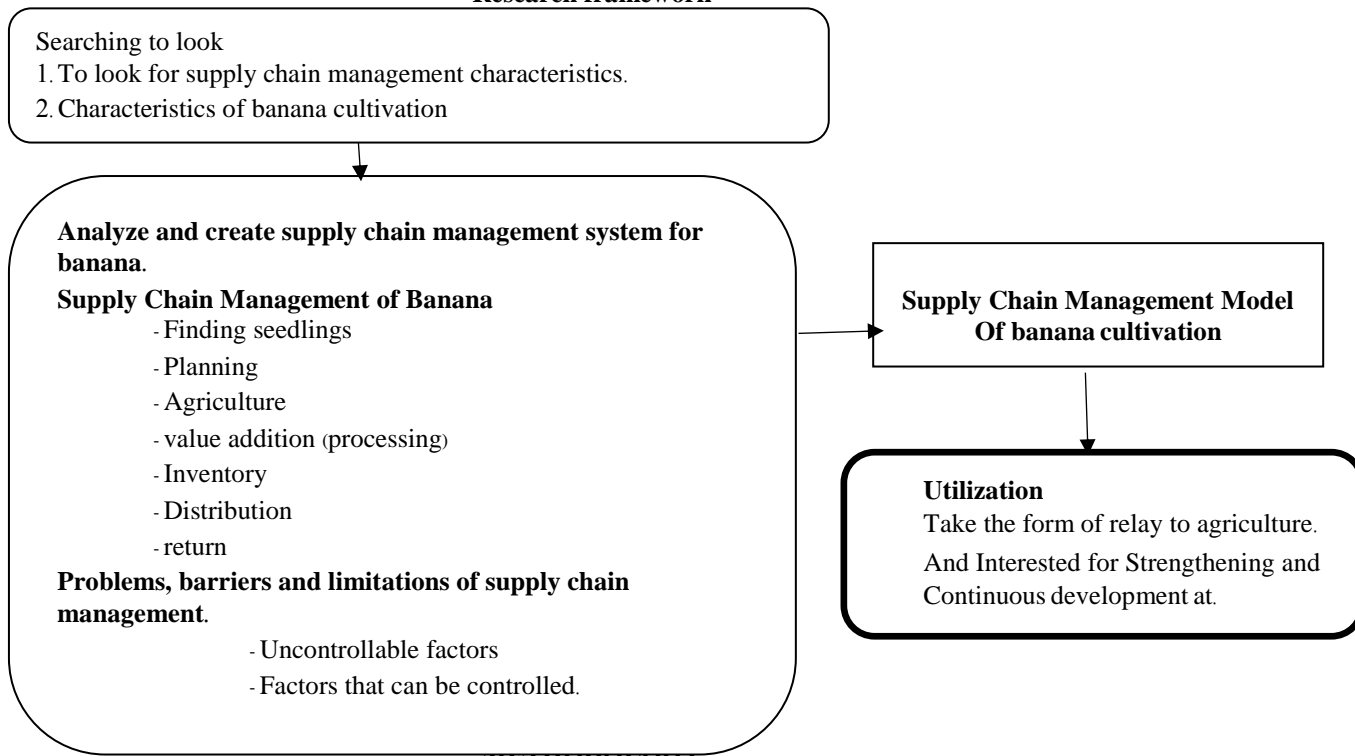
The benefits of the cultivated banana.

Juthamat Prerapatchara (October 2016), [4]. The Institute of Research and Development, Rajamangala University of Technology Phra Nakhon has written an article published on the full the cultivated banana, which is the research results for the Royal Initiative Plant Genetics. Rajamangala University of Technology Phranakhon (KMUTT) under the conservation and utilization of plant genetics. This shows that the cultivated banana is useful and can be processed to add more value, which is shown in the project kit, as well as works that integrate the cooperation between the university with the local government and the community as a user. The research framework is based on the use of the cultivated bananas in the form of the cultivated banana and the cultivated banana trees. Separation of food into research, and not food up to 8 research papers. [8].

Conceptual Framework of the Study

Based on the literature review, the researcher can create a conceptual framework for supply chain management. Figure 2

Figure 2
Research framework



The supply chain management of the cultivated the cultivated banana In Budhamonthon district, NakhonPathom province, the research methodology is as follows.

Population and sample

Research on Supply Chain Management in the cultivated banana cultivation to study the data from the cultivated banana growers in the area Phutthamonthon District, Nakhon Pathom Province. In this study, the size of the sample 50 people by setting the sample size for this research, use the table of Krejcie & Morgan (Robert V. Krejcie and Earyle W. Morgan. Educational and Psychological Measurement, 1970: 608-609. Referenced in the sample for research, 2559: online system) the researcher selected the sample Purposive Sampling.

Tools used to gather information.

The researcher studied the research data from the literature. And research related to supply chain management. For information. Used to create research tools. And develop to discuss the results. In this research, the questionnaire was used. Questionnaires are a tool for collecting data. The characteristics of the questionnaire are divided into 4 parts. Part 1 Query about general information of respondents. Part 2: Query about supply chain management. Part 3: The questionnaire on the analysis of supply chain management model, and Part 4 Questionnaire on open-ended questions, the questionnaire Likert (Rating Scale), each section is divided into 5 levels is very high , high, moderate, little and least.

Research Instrument Testing

1. Content validity by bringing the questionnaire to the experts. Consider Consistency Coverage of questionnaire with objectives of research, terminology and language suitability of the questionnaire. By definition, the Index of Item-Objective Congruence (IOC) is 0.50. (Prasopchai Pandan, 2012:224) Then, consider the question of the question of the individual, qualification of develop a model of tools to suit the next use. From the test, the IOC value is 0.85 or higher.

2. Analyze the reliability of the tool. (Reliability) by taking the questionnaire before the test. Data were collected from 5 samples and data were tested by Cronbach's alpha coefficient (Cronbach's alpha). The results showed that the reliability coefficient alpha, the value of the questionnaire was 0.85. If the test is more than

0.7, the test population is given a consistent score with a value close to 1 indicating that the test is highly reliable.

3. Data Analysis Data analysis in this research. Descriptive statistics consisted of frequency, percentage, mean, standard deviation (SD). The score was 4.21-5.00. Score of 3.41-4.20 indicates that the score is very high, score of 2.61-3.40 indicates moderate level, score of 1.81-2.60 indicates low level and score of 1.00-1.80 is the lowest level.

Data Collection

This research is a qualitative research by phenomenology. The Phenomenology Study is a study of phenomena and human experiences. The need to study the supply chain management of agricultural the cultivated banana in Bhutthamonthon. Nakhon Pathom The study was conducted by the main informants namely 50 specific the cultivated banana growers

The instrument used to collect this data was the interview form. The researcher chose the most important tools. To help keep the information fully meet objectives. It consists of questions, interviews, notebooks, cell phone pens. Researchers and interviewees Data collection Learn from articles, papers, and research. Related to using the concept of supply chain management. To understand the meaning and principles of this concept. In-depth interview. The interviewer interviewed the key informants with the question of supply chain management. The researcher has prepared a questionnaire for interviews with key informants to provide an opportunity for key informants to share their experiences and work independently. The researcher can add to the need to expand or verify the confidence. Data is collected by other means, such as non-participant observation. And taking notes and the reflection reflects the idea.

Verification of data reliability

To verify the reliability of the data. Researchers use data triangulation to prevent lack of credibility. And if the information is not enough. Researchers can collect additional information. By checking the data and time difference. Different locations, and different people. Each person will provide the same information or not, if they do not match. Researchers should interview at different times and places. To confirm and find information for clarity.

Data Analysis

Data analysis, the researcher uses data analysis to generate conclusions based on interview data. Then construct the concept using theoretical principles. Comparison with supply chain management theory. If so, then analyze. Synthesize the data to find the next step.

RESULTS

The study of supply chain management of the cultivated banana. In Bhutthamonthon District Nakhon Pathom Quantitative research was conducted by conducting a survey of the sample. The researcher can summarize the results as follows.

1. The samples were farmers. The male is 41-50 years old, has experience in growing the cultivated bananas since the generation of parents. The planting of the cultivated banana is a secondary plant. For example, planted by the ranch, or planted to wait for the main crops to yield. The average income per year is about 15,000 baht / family.

2. Study on the supply chain management of the cultivated banana in Bhutthamonthon District, Nakhon Pathom Province, it was found that the field of cultivation. The cultivated banana varieties are the most popular varieties, 70.00 percent because of easy cultivation. Do not care Diseases and insects do not interfere. Propagation method using splitting method. Most of the agricultural crops are 80.00%, followed by the growing of the main crops, the yield, the planting time, the harvesting time, the yield is 1 year, from planting to tangling, the length is 250-260 days. The harvesting period is 110-120 days, using water from natural sources. It will produce 10 to 15 combs per bunch. On average, it is 12 combs per bunch, most of which is 70.00 percent. To see the softness of the cultivated bananas. It may look like the cultivated banana. The cultivated bananas or use the age-old method of stabbing. Or cut May cut the cultivated banana when about 80% (the cultivated banana fruit smooth round effect), the cutting time must be long enough. Postharvest practices, take a bunch of the

cultivated bananas hung on the rail. Allow the rubber to flow. Clean the ball. Or the end of the petals are dry out. The cultivated banana bunch is a comb. Carefully, do not make cuts. Packaged / packed with the cultivated banana leaf or paper to protect. Distribution channels and transportation Available in the community market. 80% or may be purchased from the garden for sale to the sales of comb is 75%, or to be processed into the cultivated banana, the cultivated banana, the cultivated banana, the cultivated banana etc. Price depends on the size of the fruit. The cultivated bananas and the number of the cultivated bananas per comb, if it is processed, the price will be higher. And can extend the life of the cultivated banana.

3. Creating a Supply Chain Management Model for The cultivated banana in Bhutthamonthon District It was found that the opinions of the farmers were divided into five aspects: Planning, cultivation, productivity, distribution and the value added (processing). From Table 1.

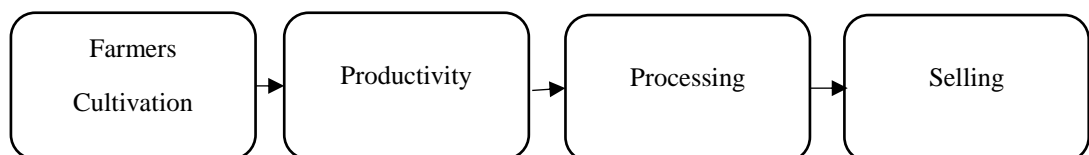
Table 1
The importance of creating a supply chain management model is 5 aspects.

No.	Aspects of	Average
1	Planning	3.98
2	Cultivation	3.86
3	Productivity	3.80
4	Value added (processing)	3.74
5	Distribution	3.72
Average		3.82

In qualitative research, interviews with key informants, and from research, the findings are as follows.

1. Research and research. It was found that the supply chain management model of the cultivated banana. This is to promote the supply chain model of the cultivated banana. Participation of the community, which will contribute to the idea. Solve problems and mobilize resources. That is how important. To make farmers in Bhutthamonthon district. Sustainability can be self-reliant. Figure 3

Figure 3
Supply Chain Management of Farmers



2. The study of the context of growing the cultivated banana plants. The form of supply chain management of the cultivated banana is a system that will contribute to the sustainability of agriculture. Can be managed manually. Or combine groups of farmers. Divided into various areas, such as cultivation, production planning. Value Added Distribution In each of these areas, there is a systematic relationship based on the importance of each task. Once the supply chain model of the cultivated banana-based supply chain is developed, it can be developed in the context of the competitive environment. By introducing the management model of supply chain of the cultivated banana, use of information technology in the process. The theory is based on the development of the supply chain management model of the cultivated banana.

3. Research and research. The barriers to supply chain management of the cultivated banana

The study found that the cultivated banana growers. Do not pay attention to care. To grow naturally, the cultivated banana output is not up to standard. When the main crop yields, it will cut off, resulting in discontinuity.

4. Distribution of management model of supply chain management of the cultivated banana in Bhutthamonthon district. Nakhon Pathom To the farmers by the knowledge. This will allow the farmers to use

as a guideline for operations. Farmers are interested in changing their approach by introducing a supply chain management model that will allow farmers in Bhutthamonthon to be self-sustaining.

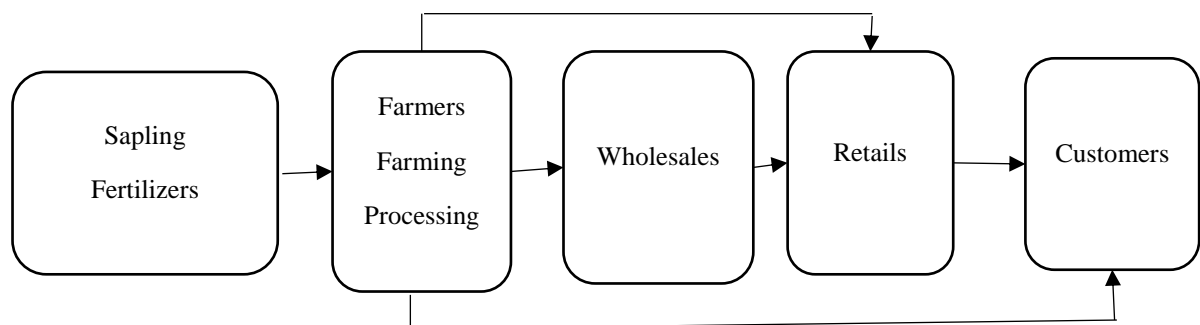
CONCLUSION AND FUTURE WORK

The results of research on supply chain management of the cultivated banana. In Bhutthamonthon District Nakhon Pathom Can discuss the results.

Study on supply chain management characteristics of the cultivated banana. Bhutthamonthon District Nakhon Pathom Characteristics of supply chain management. The results of the research found that the cultivation. Type of the cultivated banana planted in native species. The cultivation is planted on the ranch. Or planted to wait for the main crops to yield. Propagated by sprouting Water from natural water sources yields an average of 12 combs per distribution channel. Will be sold in the community market, or to be processed into the cultivated banana, the cultivated banana, the cultivated banana, dried the cultivated banana to extend the life and increase the value and parts of the cultivated banana is also available. The cost of growing the cultivated bananas is not high, because the cultivated bananas can grow naturally. No need to look and care for water sources, fertilizers used in nature. But it must be planned. To create products for distribution. This is consistent with the research. Sunchai Langthaekun, (2015) said, the research found that the supply chain consists of farmers, processing enterprises (mills), wholesalers, retailers and consumers. The supply chain management and logistics. The volume of goods at each level is not enough. Damaged during storage. And there are inferior products returned from customers. Suggestion is Farmers should be encouraged to develop good agricultural practices (GAP), increase productivity per rai, and mitigation techniques. The processing enterprise (mill) should be the main unit in the supply chain to jointly plan and forecast production volumes to meet the demand. Strict quality control should be maintained in the process of receiving raw materials, packing and storage [9]. And Thomas Blaha said, in the food market two types of segments exist: one with quality-oriented products - in the form of branded articles - and one with anonymously produced products. The majority of the farmers still produce an exchangeable product under the focus of quantity maximization and cost minimization. Caused by the predominantly horizontal organization of agriculture (cooperatives, producer alliance etc.) the vertical dialogue with the following production stages is predominantly limited to the delivery of the products to be processed. The ability to trace the food origin is generally not possible. [10]

Researchers have discovered the model of supply chain management services. In line with farmers' needs, farmers can be satisfied. As follows, Figure 4

Figure 4
Supply chain model of the cultivated banana



Suggestion

1. The farmers should be grouped together to form a community enterprise to enhance their competitiveness. It is a combination of capital, resources, productivity, knowledge, wisdom, cultural capital. Social capital to generate income for self-reliance of the family. The community and the community are sustainable.

2. Farmers should attend training courses or technical seminars for small and medium-sized enterprises in the field of management by applying information technology to their operations. In order to develop the knowledge to increase the value of products.

3. Farmers should seek technology support from government agencies for innovative products processing. To add value to the product to a higher price and longer storage.

Future Work

Development of community enterprise management model.

Research should be conducted to develop the model of community enterprise management. For sustainable growth this will help promote sales and competition with competitors in the future. It can increase the economic value of the community and local farmers.

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FAREWELL TO THE THEORY OF REALISTIC ARTISTIC AUTHENTICITY IN CONTEMPORARY CHINESE LITERATURE

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ABSTRACT

The discussion about artistic authenticity has been a hot topic in contemporary Chinese literature. It was thought whether a work is excellent or not is totally depended on whether it shows a kind of ‘authenticity’ or not, and the comprehension of realistic artistic authenticity was mainly based on Marx and Engels’ viewpoint of arts. Different from traditional realistic authenticity’s emphasis on counterdraw about nature, the works put more emphasis on discovery of life’s essence, social rules, shape of representative environments and characters as well. After going through wars and complex situation, the Chinese literature was closely connected with politics and made to disseminate Party’s policy. This situation has been changed from the launch of the reform and open policy and market economy. The discussion of artistic authenticity began concentrating in philosophy level and returned to aesthetics level. Under the enlightenment of Western realistic literature, authors of the Chinese literature have made brave attempts to violate realistic principles which overthrew the viewpoint of realistic literature authenticity fundamentally. In this paper, I will analyze why the new realism literature trend is regarded as a return to realism in China. Especially, I will discuss how the network novels, which have been attracted great amount of people’s warm discussion on the internet, promote the development of new explanation of literary theory.

EUROPEAN ENTREPRENEURIAL ACTIVITY IN A CHANGING MACROECONOMIC ENVIRONMENT

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The major role of entrepreneurship in enhancing economic growth, job creation and innovation, but also in increasing the productivity and competitiveness of national economies has prompted the intensification of researchers and decision makers' concern about investigating the factors that affect its dynamics in different countries and regions. Against this background, our paper aims to assess the impact of some variables from the macroeconomic environment on the development of entrepreneurial activity in eighteen developed and emerging European Union countries, over the period 2003-2015. Our research is grounded on data from the Global Entrepreneurship Monitor (GEM) and the World Bank, and uses the fixed-effects panel data estimation technique. Three alternative indicators have been considered as proxy for the level of entrepreneurial activity, namely the early-stage entrepreneurial activity rate, the nascent entrepreneurship rate, and the new business start-ups rate. As independent variables, we have taken into account several macroeconomic indicators with potential impact on entrepreneurial activity, namely GDP per capita, unemployment, inflation, total tax rate, foreign direct investment, domestic credit to private sector by banks, stock market capitalization to GDP, and public debt. The results of our research largely confirm those of previous empirical studies on the determinants of entrepreneurship and indicate that many of the selected explanatory variables significantly affect the dynamics of entrepreneurial activity in our sample countries. Thus, the most relevant macroeconomic factors are found to be GDP per capita, unemployment, inflation, total tax, foreign direct investment and domestic credit, although their impact differs, in some respects, depending on the stages of the entrepreneurial process. Overall, our research underlines the major importance of ensuring a stable, solid and healthy macroeconomic environment for the development of entrepreneurial activities in a country, both from the perspective of starting-up new businesses and expanding the existing ones.

JEL Codes: L26; M13; C33

INTERNATIONAL CRUISE FLEET REALLOCATION DURING OFF-SEASON PERIOD IN THE NORTHERN HEMISPHERE: THE ATTRACTIVENESS OF SOUTHERN DESTINATIONS

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ABSTRACT

Cruise ship tourism is a growing industry and the major destinations are the Caribbean, Europe and North America. The present study analyses the reallocation of ships from the Northern Hemisphere to the Southern Hemisphere during the off-season period and the variables that influence the itinerary choice. The two main destinations in the Southern Hemisphere are South America (Brazil, Argentina and Uruguay) and Oceania (Australia and New Zealand). Based on descriptive analysis and a Logit model for the destination choice in the Southern Hemisphere, we found out that tourist attractiveness of the itineraries and port infrastructure are significant factors for cruise liners to decide about their destinations and itineraries. Besides, capacity variables (such as number of passengers, crew and length of the ship) also influence the cruise ship destination. The results show that South America itineraries are positively affected by their touristic attractions, while Oceania destinations benefited by port infrastructure.

Keywords: cruise ships; cruise tourism; itineraries.

1. Introduction

Cruise industry has been massified, especially since the 1980s, experiencing an annual growth rate (in the number of cruise passengers) of 8.4%. (BRIDA, 2008) According to CLIA (2012), 25.8 million passengers are expected to go cruising in 2017. The economic impact of the cruise industry can be analyzed by its local or worldwide impact; direct, indirect and induced impacts. Locally, it can induce growth of touristic and service infrastructure. World widely, it generates almost a million jobs, totalizing an output of 177 billion US dollars. (CLIA, 2016; DWYER, DOUGLAS & LIVAIC, 2004; EUROPEAN CRUISE COUNCIL, 2012)

The main destination of cruise ships is the Caribbean, although North America and Europe also stand out. It is important to notice that the cruise lines to the Caribbean and to the Mediterranean region are maintained during the whole year, while some of the cruise lines to North America and North Europe tend to be reallocated during the off-season period. (MANZANO, FAGEDA & LAXE, 2014). The Southern Hemisphere, as a competitive destination to the Caribbean and the Mediterranean region during wintertime in the North, emerges as an alternative strategy to cruise liners. According to Dowling (2006), climate is a major determinant of the relocation of cruise ship itineraries from one destination to another. Indeed, most of

the cruise ships in Southern Hemisphere operate only during the off-season in the North, not the entire year. (CHARLIER & MCCALLA, 2006b)

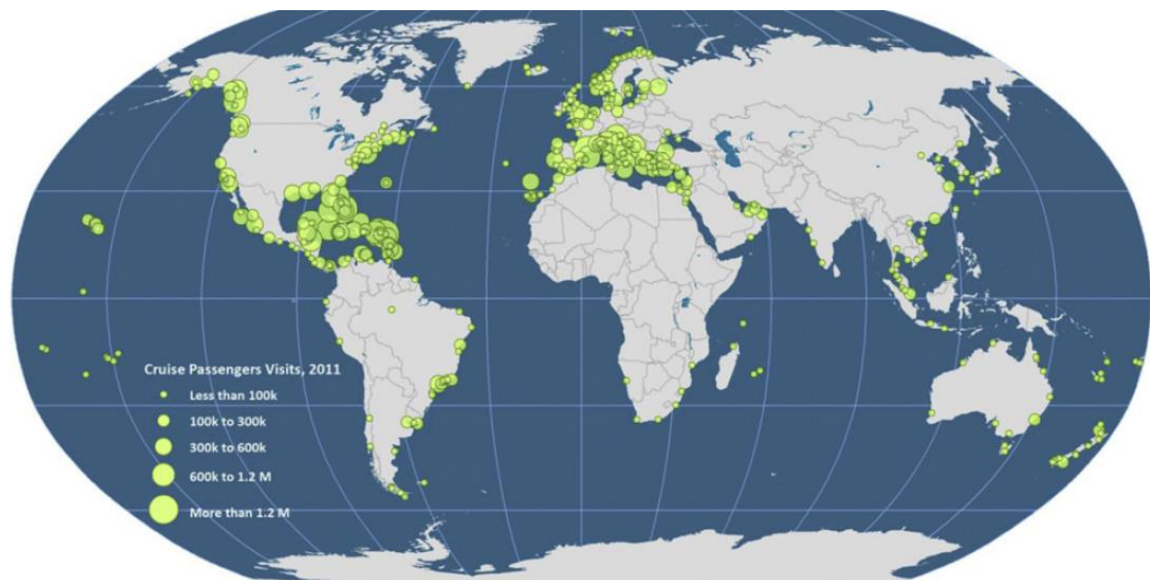
Oceania (mostly by Australia and New Zealand) and South America (especially Brazil, Argentina and Uruguay) represent the most competitive destinations in the Southern Hemisphere. Therefore, in this paper we intend to analyze itineraries and destinations of cruise ships that depart from the North to the Southern Hemisphere and the variables that influence the itinerary choice, such as tourist attractiveness, infrastructure and ship capacity. (RODRIGUE & NOTTEBOOM, 2013)

2. Stylized Facts & Hypotheses

North America and Europe both have strong cruise liner markets. Such that, despite the lower demand during colder months, the majority of lines that comprehend the southern states of the US - such as Florida, Hawaii and even the Caribbean - and lines in the Mediterranean are maintained throughout the year.

Figure 1 shows the ports with the greatest passenger flow in 2011. Most of these are in the Northern Hemisphere: Europe, North America and the Caribbean.

Figure 1
The Global Cruise Port System (2011)



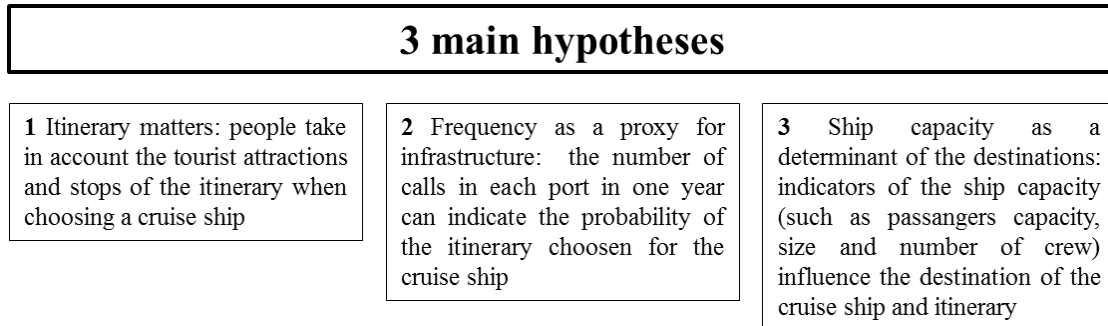
Source: Rodrigue and Notteboom (2013)

Although the Caribbean and the Mediterranean remain as the top destinations of cruise liners all year round, a notable reallocation of ships which have their itineraries focused in North America and Europe during the summer can be observed on the off-season period, the Northern Hemisphere's winter. Through this seasonal reallocation, cruise ships maximize their occupancy by always sailing in climatically attractive areas. (CHARLIER & MCCALLA, 2006a)

Cruise ships can do either the typical itineraries, such as Caribbean and the Mediterranean, or make a longer route, with the Southern Hemisphere as their destination. The two most common destinations in the Southern Hemisphere are South America - chiefly Brazil, Argentina and Uruguay - and Oceania, represented by Australia and New Zealand. It is important to recall that the hurricane season in the Caribbean is from June to November, a period that represents the less attractive time of the year to go cruising in the region. Therefore, the region represents a great competition to the Southern destinations, which are benefited during their summer time, from December to March. (FADDEGON, n.d.)

This present article intends to verify which of the two southern destinations are more likely for ships coming from the Northern Hemisphere according to the observation of different variables. For this purpose, three main hypotheses have been presented, as shown in Figure 2.

Figure 2
Article Hypotheses



Source: Authors' elaboration (2018)

The first hypothesis is that itinerary matters. This hypothesis relies on the belief that cruise takers choose their cruise based not only on the origin and/or final destination of the trip, but also take in account the stops along the way and tourist attractions present in each one of them. According to Rodrigue and Notteboom (2012), the cruise industry becomes more competitive by selling itineraries, which are affected by market circumstances such as seasonality. Lee and Ramdeen (2013) also affirm that itineraries have a significant effect on the cruise ship occupancy rate, especially in cruises that take place in South America and the Pacific (including Australia and New Zealand). Therefore, a ship coming from the Northern Hemisphere during the off-season would most likely have its itinerary focused in areas with higher touristic attractiveness.

The second hypothesis uses frequency as a proxy for the stop infrastructure by using the number of calls each port/stop has registered in the period of a year. That way, it is possible to measure the port infrastructure by analyzing how attractive it is when it is busier, and other factors as touristic infrastructure to welcome a larger number of tourists. Furthermore, cruise ship schedules are not very flexible in regards to delays, so the stops must be well-planned. (RODRIGUE AND NOTTEBOOM, 2012)

The third hypothesis is related to the ability of port terminals to handle the current increase in cruise ship vessels. The evidence regarding new cruise ships on orders shows a rapid increase in the size of ships. According to CLIA (2016), the size of new vessels on order increased from 1,154 passengers per ship (in average) in 2017 to 2,356 in 2018. Despite the building ship industry in the cruise sector being less concentrated than in the container business - which allows some room for a greater focus on differentiated products rather than large gains of scale (OECD/ITF, 2015) - we argue that extension and quality of the cruise terminal infrastructure directly affects the probability of cruise ships to call at that terminal. Therefore, our hypothesis is that larger cruise terminals tend to attract larger cruise vessels, which in our model is measured by passenger capacity, number of crewmembers and vessel length. In addition, we consider an average productivity variable, measured by passenger by crew.

3. Results

3.1. Model

Since our variable of interest is of qualitative nature and it takes the value of either 1, if a cruise ship goes from the Northern Hemisphere to South America, or 0, if it goes to Oceania, our model is a limited dependent variable approach. Within this class of models, empirical studies have mainly applied Logit and

Probit models. In this study we use the Logit model, which yields superior results than the Probit methodology in applications to panel data sets (EGGER & LARCH, 2008).

There is an increasing number of empirical models using Logit and Probit models in the context of cruise ships throughput. Examples of models that deal with microeconomic survey data are Mahadeva (2017) – who deals with the probability of passengers to cruise again – and Brida *et al* (2012) who investigate residents' investment preferences towards the cruise industry under the hypothetical assumption that they are stakeholders of the cruise liners. On the other hand, Manzano, Fageda & Laxe (2014) approaches cruise ship traffic, as the dependent variable, as a function of macroeconomic and industry level variable, such as population, overall port throughput, number of hotels, airport traffic and berth and channel draft.

In the present case, we deal with the likelihood of a given ship that is leaving the Northern Hemisphere to go to South America or Oceania. Similarly to Manzano, Fageda & Laxe (2014), our explanatory variables are at macroeconomic or industry level. The model is stated as follows

$$\beta_{itj} = (\beta_{1,itj}, \beta_{2,itj}, \beta_{3,itj})$$

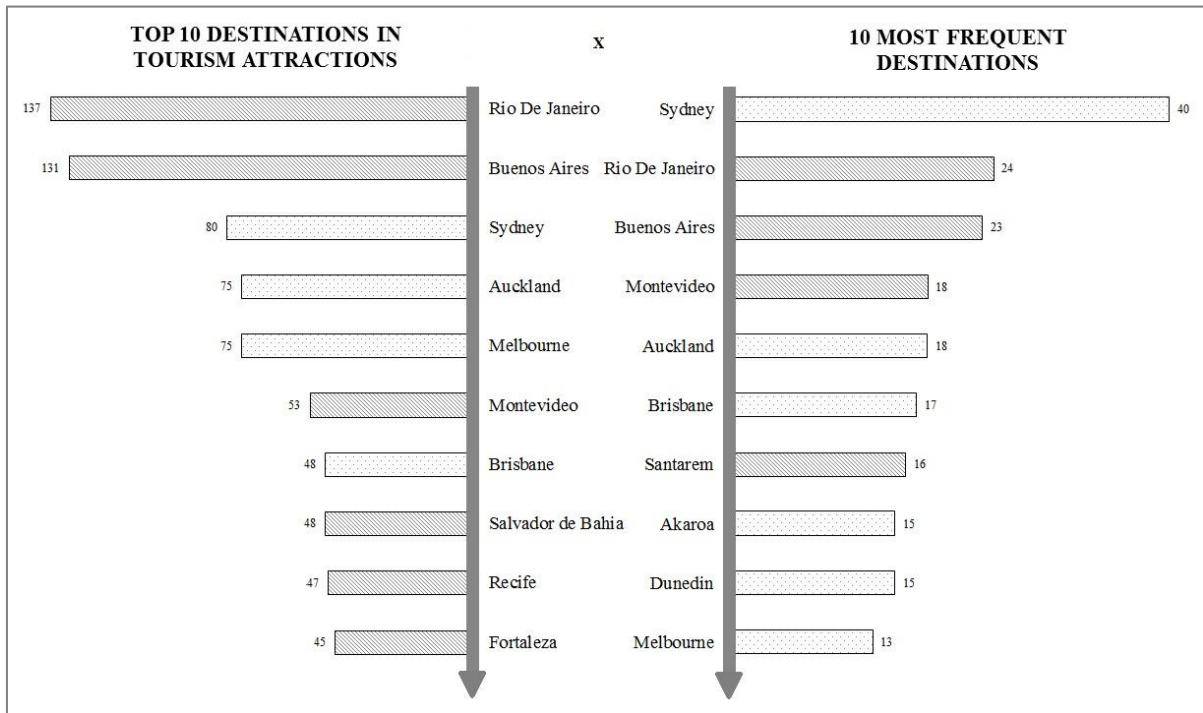
where i is either 1 (South America) or 0 (Oceania); t is 2017 or 2018; and $j = 1 \dots 4$ and it depicts different measures of ship capacity. Y is the binary variable that equals 1 when the cruise ship leaves the Northern Hemisphere to South America, and equals 0 when it goes to Oceania. X_1 stands for the number of tourist attractions of the 5 most frequent ports in the typical itinerary of the ship that are rated 4 or more stars and with one hundred or more references on the trip advisor website. X_2 is the number of total calls of cruise ships for the typical itinerary. X_{3j} measures port capacity and ship size: X_{31} is the ship capacity measured by the number of passengers; X_{32} is the length of the cruise ship (in meters); X_{33} is the total number of crew. Alternatively, we also include a productivity variable given by the ratio of number of passengers to crew (X_{34}).

3.2. Descriptive Results

The descriptive results intend to show preliminary results among the analyses, and confirm the relation between the variables of the study, such as port frequency and tourist attractiveness. Besides, we have some descriptive data around cruise ships characteristics and the number of ships operating in each year of the study.

Figure 3

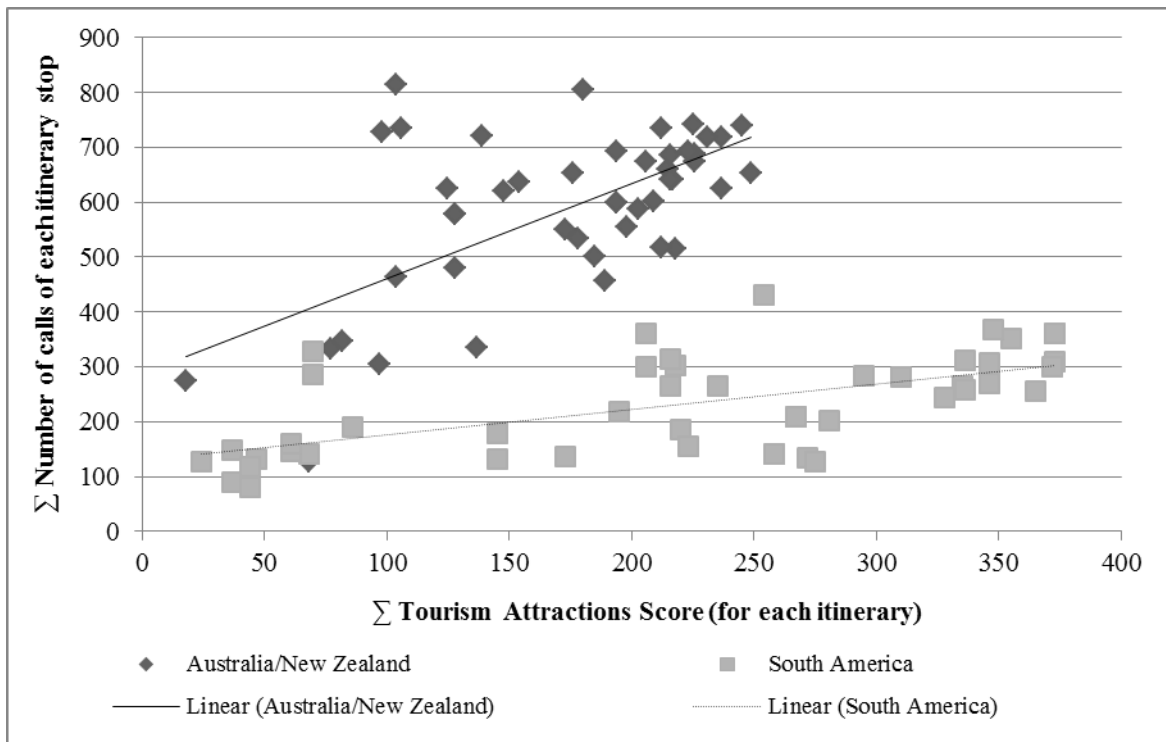
The top 10 destinations in number of tourism attractions x most frequent destinations



Source: Authors elaboration (2018) Data: Crew Center (2017)

Figure 3 lists the ten most frequent destinations in the itineraries analyzed between 2017-18 and the ten destinations with the highest tourism attraction score – defined by the number of attractions rated 4 stars or higher and with over 100 evaluations on TripAdvisor. As can be observed, 4 of the 10 most frequent destinations are in South America, represented by Rio de Janeiro, Buenos Aires, Montevideo and Santarem. When it comes to the attractiveness score, South America represents 6 of the top 10 results. Still, it is important to notice that 7 of the most frequent destinations are also highlighted when it comes to tourist attractiveness. Thus, both results can be associated, implying that a high number of sights can represent a better chance of being included in the cruise ship itinerary, reinforcing the first hypothesis – itinerary matters.

Figure 4
Graphic Tourism Attraction Score x Number of calls of each stop (per itinerary)



Source: Authors elaboration (2018) Data: Crew Center (2017); Trip Advisor (2018)

Figure 4 shows a relation between the sum of every tourist attractions score in the itinerary and the sum of the total port calls in a year per itinerary stop, distinguishing itineraries made in South America and in Australia/New Zealand. As observed, the higher the tourist attractiveness, the busier the port. The variables relation is more pronounced in Australia/New Zealand, which indicates better port infrastructure and destinations in the area, while in South America, busier ports represent a push factor for the cruise ships.

Table 1
Cruise Ship Characteristics: South America and Oceania

Ship destination	Capacity (n° of people)			Lenght (meters)			Year built		
	Higher	Lower	Average	Higher	Lower	Average	Newer	Older	Average
South America	4345	132	1900,9	332	15	244,8	2017	1988	2003
Oceania	4029	128	1734,9	345	15	237,0	2016	1972	2001

Source: Authors elaboration (2018) Data: Crew Center (2017)

Regarding the ships' characteristics, as indicated in Table 1, the cruise ships destined to the Southern Hemisphere (considering South America and Oceania) have similar specifications, such as capacity, length and year built. The average capacity of the ships is around 1820 passengers, as the average length and year of construction are 240 meters and 2002, respectively.

Table 2
Operating cruise ships 2017 and 2018

Number of Ships operating	Northern Hemisphere (season period)	Southern Hemisphere (off season)	Southern Hemisphere (hole year)	Total of ship cruises
2017	199	53	12	211
2018	242	54	12	254

Source: Authors elaboration (2018) Data: Crew Center (2017)

In 2017, there were 199 active cruise ships in the Northern Hemisphere in the summer season. During the off-season, 53 of these ships changed their routes to the Southern Hemisphere. Oceania has 12 ships operating during the two years continually, totalizing 211 in operation during 2017. In 2018, the number of operating cruise ships in the Northern Hemisphere raised to 242, along to 54 in the Southern Hemisphere, totalizing 254 cruise ships.

3.3. Model Results

We estimated equation 1 by the Logit methodology. The data set is organized as a panel data, where there are 47 cruise ships (cross-section units) and 2 years (2017 and 2018) in our sample. We deal with all cruise ships that travel from the Northern Hemisphere to South American and Oceania destinations. Ships that stay in the North or that are already in the South are excluded from the sample. The intuition of the model is therefore to compare the attractiveness of South American with respect to Oceania itineraries.

Table 3
Model Results - Dependent Variable is Likelihood to go to South America (versus to go to Oceania)

Variable	Model 1		Model 2		Model 3		Model 4	
	Coeff	Std.Err	Coeff.	Std.Err	Coeff.	Std.Err	Coeff.	Std.Err.
Constant	23.35**	6.83	5.33	7.11	20.4**	6.33	29.6**	7.65
log(TripAdvisor)	3.47**	1.22	3.17**	1.14	3.18**	1.14	4.19**	1.44
log(Calls)	-9.41**	2.41	-9.30**	2.44	-9.08**	2.31	-9.40**	2.42
log(CapacPass)	2.04**	0.89	-	-	-	-	-	-
log(Lenght)	-	-	6.11**	1.80	-	-	-	-
log(Crew)	-	-	-	-	2.66**	1.22	-	-
CapacPass/crew	-	-	-	-	-	-	5.79**	2.51
McFadden R ²	0.792		0.783		0.784		0.787	
Obs	94		94		94		94	

*** stand for statistically significant at 1% and 5%, respectively.

The results are in Table 3. There are 4 models which include a different capacity variable for each equation – as expected, there is a significantly high correlation among those ship capacity measures. All coefficients are statistically significant and with the expected sign.

The TripAdvisor variable demonstrates the importance of itinerary. The higher the number of positive ratings (four stars or more) for tourist attractions in the five cities most frequent destinations in the itinerary, the greater the likelihood of a cruise ship to go to that destination. The estimated coefficient indicates a positive relationship between tourist attractiveness of the South American itinerary and the probability of the cruise ship to go to that South American destination.

The variable “calls” stands for port infrastructure and it is a proxy measure of how busy the port is in terms of cruise ship traffic. The coefficient is statistically significant and negative indicating that cruise liners would rather go to ports with lower number of calls. The intuition behind this result is that, particularly in South American ports, a busier port is correlated with lower level of port services and a higher chance of facing a waiting period to dock. Therefore, the negative sign of the coefficient also captures the relatively higher level of port infrastructure in Australia/New Zealand region.

The capacity variables (number of passengers, length, crew and capacity/crew) were all significant and with a positive sign. This result means that an increase in capacity (in Brazilian and other Latin American ports) is associated with the ability of the port to dock larger vessels and, then, with an increase of the probability for cruise ships to go to South America. The model with capacity of the ship, in number of passengers, yields a slight superior result and it is the preferred specification. Finally, our productivity variable, measured by passenger by crew, was also estimated to be significant and positively related to the likelihood to attract cruise ships.

4. Conclusion

The objective of this article was to investigate the determinant variables to the reallocation of cruise ships departing from the Northern to the Southern Hemisphere during the off-season period in the North. In a brief literature review, we set some of the most relevant variables that influence the itinerary decision of cruise liners. The main variables that we tackle are: touristic attractiveness of the itineraries, port destination infrastructure and ship capacity. We also defined that the two main destinations to cruise ships in the Southern Hemisphere are South America and Oceania (Australia/New Zealand).

Preliminary results indicate that our explanatory variables seem to be complementary in terms of their relationship with the probability for cruise ships to go either to South America or to Oceania. More formally, a Logit model was set up to estimate the probability of cruise ships to go from Northern to Southern Hemisphere. The results indicate that South America's touristic attractiveness and ship capacity are crucial to increase the cruise ship traffic to that region; while Oceania destinations tend to be a preferred itinerary based on their superior port infrastructure.

At last, it can be acknowledged that the reallocation of cruise ships from the Northern to the Southern Hemisphere is not only a seasonal behavior, with low commitment to nontraditional destinations, but mainly a composite strategy that enhances profitability and stability of the cruise ship industry.

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MACROECONOMIC CONDITIONS AND BANKING SECTOR STABILITY: EVIDENCE FROM EU COUNTRIES

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ABSTRACT

The major importance of a stable banking sector for macroeconomic stability and a sound financing of the real economy led to the intensification of researchers and policymakers' concerns for the analysis of banking stability and the investigation of its determinants. Against this background, our paper seeks to analyze and empirically evaluate how the changes in macroeconomic conditions affected the stability of the banking sector in the countries in the European Union over the period 2000-2015. The study is conducted on data from the World Bank and Eurostat databases, using panel-data estimation techniques. In our analysis, the stability of the banking sector is alternately assessed by two proxy variables, namely the Z-score and the ratio of non-performing loans. To investigate the effects of the changes in macroeconomic conditions on banking stability, we included several macroeconomic factors as explanatory variables in our models. Because our study covers both the period before and the period after the recent international financial crisis, we also considered a dummy variable that captures the effects of this crisis on the stability of the banking sector in the EU countries. Seen on the whole, our empirical results are generally in line with economic theory and other relevant empirical studies. Thus, the results of our panel-data regression analysis show that among all the macroeconomic variables examined, the GDP growth rate, the unemployment rate, the public debt, and the bank lending to the private sector are the most important determinants of banking stability in the EU countries. Our study also highlights the significant negative impact of the recent international crisis on banking stability in the countries under investigation. The added value of our analysis results from the inclusion as independent variable of public finance quality indicators, which proved to be of major importance for banking sector stability in the EU countries in the context of the recent international crisis. Overall, our research emphasizes that the changes in macroeconomic conditions have a strong and decisive impact on banking stability in the EU countries. In addition, the results of our research show that national and European policymakers should give high priority to adopting structural measures that support sustainable economic growth, and also to improving the quality of public finances, which are positively and strongly correlated with banking stability.

Keywords: banking sector; Z-score; nonperforming loans; financial stability; macroeconomic variables
JEL Codes: G21, G28, E44, C23

FACTORS AFFECTING TO LOGISTICS SYSTEM OF SECOND HAND: CASE STUDY IN COMMUNITY DUMP PHUTTHAMONTHON 3 ROAD BANGKOK

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ABSTRACT

There are a lot of waste in Thailand and the volume is constantly increasing and the waste is very diverse. Although there are more than 7,000 local waste management organizations in the country, it is not enough to eliminate waste. And there is a tendency for management is quite difficult. Researchers have recognized the importance of conducting research. The objective of this study to Factors affecting to Logistics System of Second hand: Case study in Community Dump Phutthamonthon 3 Road Bangkok. Use qualitative research process of education and analyze data from documents or documentary research and In-Depth Interview from the sample consisted of 100 person

This community was originally located in a vacant land. In Bangkok, the waste was placed in the waste community of Nongkhaem to dispose of waste before disposing of it. Most of the villagers migrated from various sectors. The house is around the garbage because it is easy to find things to sell for a living and after the villagers have garbage collection sales, so many people live is it a community of waste junk Nongkhaem. The Nongkhaem Waste Community is a community that recycles waste and materials by amassing, sorting, and washing. Quantity more than 1,000 tons each month has been sold throughout the Central, East, and North. This business can feed the whole community.

The factors that affect the logistics of second-hand goods are: Distribution and Sale because second-hand products are uncontrollable products that will be in any form. And delivering to the final consumer, it is anticipating the needs of consumers in each period and groups of consumers are specific. There are not many it distribution can be difficult. The quality of goods collected from the household sector. Most are not quality control products at all. It depends on the ability to repair the product or adapted to handmade products. Garbage collectors must have specific skills for certain types of products. Transportation, Second-hand transporters must have knowledge and understanding of freight and there are a number of different types of distribution and distribution of goods in transit to sell to consumers. Storage, the store must have knowledge and understanding about storage and sorting of second hand goods for Looking forward to distributing second-hand goods before shipping. And the product selection, in the selection of garbage in the repair, improved or cleaned for distribution to next-hand products.

Keywords: Logistics management, Second hand, Community dump

INTRODUCTION

The problem of solid waste and sewage is another important issue in countries with economic growth if so, how much growth the problem of waste management will be more and more. The disposal of solid waste that does not separate the waste prior to disposal results in a problem of the value of the waste. Cause of waste in many areas. It is a burden on the government to manage the waste more difficult. The government's policy to promote waste to keep the landfill to a minimum and does not affect the environment. In addition, waste management should be integrated. This means solid waste management that selects technologies that can be properly disposed of as waste and the amount of solid waste is acceptable to the public. And still, the principle of preserving natural resources and the environment is an important consideration. And it does not focus on economic benefits or one of the technical aspects. Management begins with the disposal of solid waste. To

keep the hair down to destruction or dispose of waste so as not to affect the environment. Considering the use of recycled materials as an important management approach.

The procedure for allocating resources, goods and services in a participatory economy. The participatory and planning procedure does not deal explicitly with the exchange of already produced goods, so called second-hand goods. Second hand goods in this context can be defined as goods that already have been asked for, produced and delivered in accordance with earlier years' plans, which have a value that exceeds a certain sum, and a remaining economic lifespan that exceeds a certain number of years. There are many different reasons why an efficient use of already produced goods, including a flexible and efficient routine for trading used goods, is desirable in any economy. One of the more obvious reasons has to do with the effects on the environment of the production of goods. A participatory economy is an economy where citizens have the opportunity to express their preferences for a clean environment in the planning procedure and one where they can insist on compensation from producers which in the production process release substances that affect the environment negatively. It is reasonable to assume that such an economy also will strive for an efficient utilization of all goods that already have been produced during their whole economic lifespan.

Thailand currently has a lot of waste. The population is constantly increasing and the waste is very diverse. Although local governments have more than 7,000 waste management organizations across the country not enough for garbage disposal. The way to deal with management is quite difficult. Currently, landfill is currently being disposed of or Burning outdoors. One of the people who has a waste separation career separation of waste to be used in various ways such as selection of some recycled materials as new raw materials, separation to select materials that can still be used to repair, modify, or upgrade again. In the case of waste management by selection method for sale as second hand, it is an alternative for community living. Community Dump Phutthamonthon 3 Road Bangkok. A community with recycling processes and materials by cutting, cutting, washing 1,000 tons in each month has been sold throughout the country. This sort of waste can feed the entire community. The community generates income for the villagers and imperative that the community has a thorough understanding of the logistics process to distribute second hand merchandise from community waste to get a lot to Fast and efficient. In addition, community empowerment in solid waste management can be achieved by recycling waste management. People can see the benefits of separating them to sell to make money for the family. Recycled waste can be reduced significantly [1]

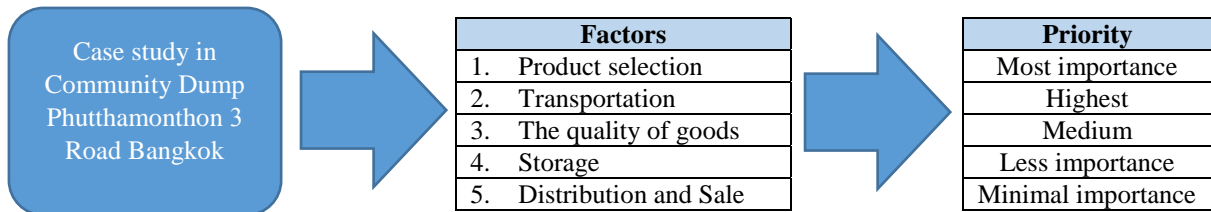
Logistics management is that part of supply chain management that plans, implements, and controls the efficient, effective forward and reverses flow and storage of goods, services and related information between the point of origin and the point of consumption in order to meet customers' requirements. Logistics management activities typically include inbound and outbound transportation management, fleet management, warehousing, materials handling, order fulfillment, logistics network design, inventory management, supply/demand planning, and management of third party logistics services providers. To varying degrees, the logistics function also includes sourcing and procurement, production planning and scheduling, packaging and assembly, and customer service. It is involved in all levels of planning and execution--strategic, operational and tactical. Logistics management is an integrating function, which coordinates and optimizes all logistics activities, as well as integrates logistics activities with other functions including marketing, sales manufacturing, finance, and information technology. [2] Therefore, the logistics include the general management of how resources are acquired, stored and transported to their final destination. Logistics management involves identifying prospective distributors and suppliers, and determining their effectiveness and accessibility. Ultimately, management establishes a relationship with the appropriate companies or handles its own logistics if it is more cost effective.

Logistics System, is important to manage the movement of goods from upstream and the downstream this is the foundation and important factor associated with the integration of information, transportation, warehouse management, material management, and packing logistics is a channel of supply chain that maximizes the value of time and place. The goal is to reduce costs, shorten the moving time and cost control is minimal and if the logistics system is managed effectively, it will result in more profit.

METHODOLOGY

This research is Factors affecting to Logistics System of Second hand: Case study in Community Dump Phutthamonthon 3 Road Bangkok. This research methodology by use qualitative research process include of the study and data analysis from document or documentary research and in-depth interview process from samples reside in the community 95 people.

Figure 1
Research framework



Documentary research is a methodical qualitative research by process of the study and analysis from document or documentary research. This process to theory conceptual review and literature related to the process of managing second hand logistics systems in Thailand and foreign including academic information obtained from electronic media search or other website This includes academic information start by studying the theoretical concepts. Logistics process management in product selection, quality products, storage side, transportation and distribution. Then, prioritize these activities: most importance, highest, medium, less importance and minimal importance. From figure 1.

In-depth interview is a qualitative research with in-depth interviews. This research use interview looks like a deep interview. The structural of interview design of questionnaire can be used in semi-structured interviews or guided interview. This is unstructured interviews or open-ended interview. This method of stretching research or use keywords to ask and guide questions to draft question with key words and be flexible and ready to modify the wording of the question to be consistent with participants in research or each interviewee in each situation. There are events or environments that change to the population and to the samples including key individuals involved in the logistics process answer questions from deep interviews will make the data is real and facts in practice

Researcher have taken the data obtained from in-depth interviews were used in the analysis process and data Processing by conducted with the process of gathering data from the study of the document. Process and methods of qualitative analysis such as data analysis considerations major themes or major pattern findings from all interviews after that major themes consideration is divided into sub-issues and categories. This is an analytical process to start form overview analysis into sub-issues of according to the qualitative research approach in addition to during the in-depth interview process the researcher will conduct the process analysis data from in-depth interview by describing the phenomena together to find out from this is an important method also determines the essence of the factors affecting the second hand logistics system. That can lead to research results and suggestions.

RESULTS

Community Dump Phutthamonthon3 Road Bangkok or Nongkhaem junk community was originally located in an empty land. Bangkok has brought waste to the community in Nongkhaem before and after that to dispose of waste before disposing of it the villagers from different parts of the country to set up houses around the garbage. There are about 172 houses currently. Nongkhaem waste management community is a community with a waste recycling process and materials by cutting, cutting, washing. There are more than 1,000 tons of each month such as PVC, linoleum, glass bottles, plastic hoses by cutting, cutting, washing and delivery throughout the Central, Eastern and Northern Thailand. This business can feed the whole community generate income for the average villager 500 per day per person. Various types of products can be sold as second hand products such as clothing can be washed, repaired, clean and then sold out to consumers with low income or use a second hand.

The factors that affect the logistics of second hand goods are distribution and sale because second hand products are uncontrollable products that will be in any form. The fashion industry is an industry based on uncertainty and everything is changing along the fashion trend that is trending. [3] Delivering to the final consumer, it is anticipating the needs of consumers in each period that affected by fashion and technology, resulting in various impulses. Make it happen and disappear quickly. Consumers may want something a little over a period of time and maybe not at the moment. The group of second hand consumer products is a niche group and Most of them focus on product marketing mix and price level. [4] And good attitude and affect the level of intention to buy second-hand goods quite a lot [5] Distribution can be difficult to control.

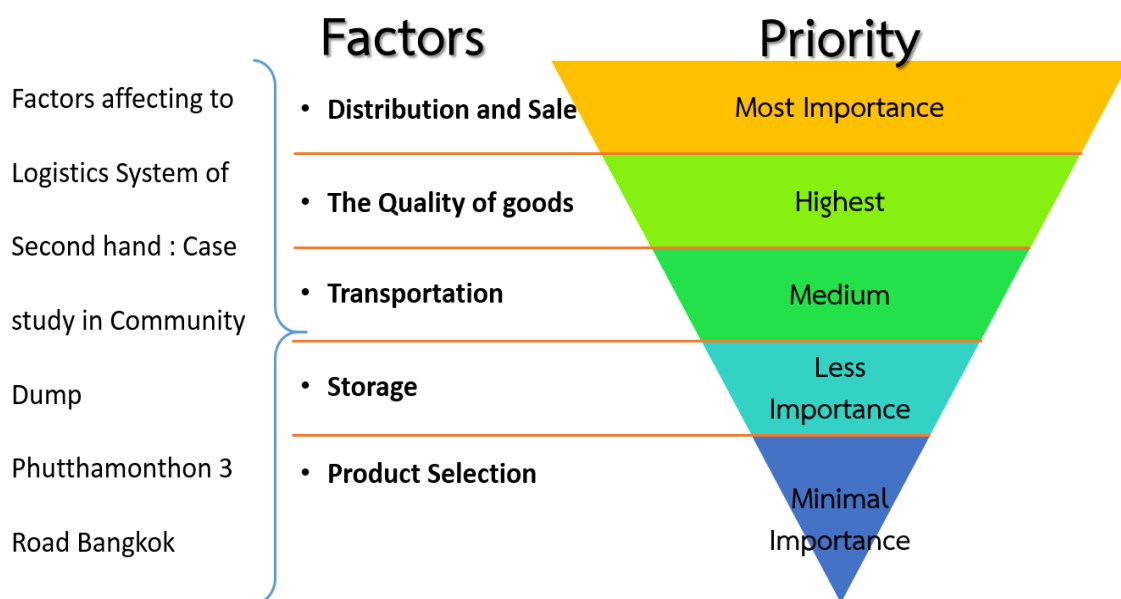
The quality of goods is a customer satisfaction. If the product is more quality cause the more satisfied the customer. Most of store and warehouses second hand on sale of products by type without focusing on neat and second hand goods are usually priced by weight and the condition of the product. That are still in new condition until the product is dirty and cannot be used again [6] Second hand product selection is a cost effective activity. This includes the handling of laundry, clean and repair. For second hand goods, suppliers must have expertise in product selection to meet customer needs but it does not have to be the best for the terms of use. Due to the low price of the products Most of the products are not brand name products. Commodities from the household sector that most are not quality control products at all. It depends on the ability to repair the product or adapted for handmade products. Garbage collectors must have specific skills for each type of product.

Transportation of second hand seller must have knowledge, transportation understanding and distribution are many types and difference in keeping goods in transit [7] to sell to consumers, road transportations are the most abundant form of transportation in the second hand and the main transportation that nurtures society and the community. Road transport usually uses 4-wheel trucks. 6-wheel vehicles are used to transport goods [8] that all types of used goods can be transported by road transport.

Storage is an area that has been planned for efficiency and moving goods and raw materials. The warehouse is responsible for storing goods during the moving process to support the production and distribution. It must be a storage area where the store owner must have knowledge and understanding about the storage classification of goods before storage.

Product selection depending on the factors determine the selection of garbage to be repaired, maintenance, or clean before distribution. Products are from personal items such as shoes, bags, clothing, jewelry, watches, furnishings, home furnishings and so on. The selection of this product requires a skilled person to evaluate the utility and repair methods so that they can continue to work.

Figure 2
Factors affecting to Logistics System of Second hand : Case study in Community Dump
Phutthamonthon 3 Road Bangkok



According to studies Factors affecting to Logistics System of Second hand : Case study in Community Dump Phutthamonthon 3 Road Bangkok found factors affecting the sale of second hand goods of the community of garbage are: distribution and sale, quality of goods, transportation, storage and product selection respectively from figure 2. Most consumers who purchase second hand goods have demand for cheap products [9] and regardless of whether the piece will ever have a user before. Things to consider later for the product was used are decrease price mean quality or something features missing. The life of those products will be reduced or the cost of care is more than usual and finally, it becomes garbage in the end. The use of second hand economics concepts must be done in conjunction with promoting sustainable domestic consumption.

CONCLUSION AND FUTURE WORK

There are many reasons to opt for a second hand rather than a new one because the price, only thing that cannot be found in the present and garner but for whatever reason. Every time there is a second hand exchange. Equally reduces production, which can create problems for the environment on the other hand, with this one-time production can cause many economic revolutions and also distributes income to many other groups. Second hand goods are "sold as seen", so there may be some fault, imperfection or wear and tear. You need to examine the item carefully and ask the seller to point out any damage or imperfections. Make sure the item does what it is expected to do [10].

Second hand product management is a must for qualified product selection. Especially products that come from garbage. They must be clean and repair before released. The factors distribution and sale, the quality of goods, transportation, storage and product selection impact on the sale of second hand goods as well. People involved in the public sector. And private companies should turn to cooperate to promote the existing waste management to increase the value of the second hand make a choice for a wide range of buyers and needed in terms of usage features.

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