

**APPLYING BUSINESS MODEL AND COOPERATING WITH  
STAKEHOLDERS IN COMMUNITY-BASED TOURISM**

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## Abstract

The purpose of this paper is to investigate the application of business model and the cooperation with stakeholders towards the development of community-based tourism. The author used the case study of Mahasawat canal community, which is known as one of the well-established and successful agro-tourism communities in Thailand. Semi-structured interviews were used to collect the data from the local people participating in the tourism activities. Purposive sampling was used to collect data from 22 local villagers who had different roles in the community-based tourism. From the findings, in order to develop and promote tourism destination, the community applied business model to build and sustain the community-based tourism activities. The results showed that the community has to understand the roles of different stakeholders, providing various types of supports, including facility development, marketing strategy, capacity building and tourism skills. In addition, the community has to deal effectively with numerous issues (e.g. developing new tourism products and promoting the tourism destination) and to integrate the tourism activities and their ways of life to create the balance for the participants. Discussions, conclusions and implications of the research were also provided.

**Keywords:** Business model, Community-based tourism, and Stakeholders

## 1. Introduction

In the context of tourism in Thailand, community-based tourism has been known as one of the most important areas of tourism development over decades. Currently, tourism developers support the growth of community-based tourism because there are several advantages for local communities, including economic regeneration, social cohesion and cultural preservation. In order to successfully develop tourism product and services, local communities can also apply and develop the business model in order to help the create the products and services, to sell the products to the right target group of customers or tourists and to improve the quality of the products and services to achieve their expected outcomes.

The trend of community-based tourism has been increased rapidly in terms of tourism development and scholarly works in this area (Russell, 2000; Blackstock, 2005). The main research questions for the current papers are “How can business model be applied in the context of community-based tourism?” and “What are the key roles of stakeholders towards the development of community-based tourism?”. It is interesting to find out the how local people apply the business model to ensure the success of their tourism business development.

Additionally, it is important to understand the relationship between stakeholders and the community as well as their collaboration to promote and to support tourism activities. In addition, the conceptual model can be further created to provide a guideline for tourism development model based on the stakeholder analysis.

## **2. Research Objectives**

The objectives of this current research are two folds. The first objective aims to conduct a qualitative investigation of the business model implications from the viewpoints of the local people participating in community-based tourism about the roles and involvements in the local community in different stages of tourism development. Another objective is to develop the conceptual framework in order to demonstrate the process of tourism development with the roles of stakeholders, especially government and nongovernment organizations.

## **3. Literature Review**

### **3.1 Business Model**

Morris et.al, (2005) noted that there is no generally accepted definition of the term business model. There are many different types and forms of business model, but common characteristics of business model can be concluded as the statement of how an organization selects its customers, defines products and services to provide to its customers, determines its tasks and roles to perform, promotes its offerings to the market, creates value for its customers, and sustains profits (Chesbrough, (2010); Chesbrough & Rosenbloom, 2002); Johnson et.al, (2008) and Slywotsky (1996).

At the operational level, the business model indicates the design of internal and external process for the organization. The emphasis of the implementation of the model is on infrastructure, flow of products and services, resource allocation, knowledge management and logistics management (Stewart and Zhao, 2000).

In order to successfully implement the business model, a firm or an organization requires engaging in interdependent activities involving the firm itself, its suppliers, partners and/or customers (Zott and Amit, 2010).

### **3.2 Community-based tourism**

There are several definitions and variations of the definitions for community tourism and community-based tourism. In addition, Goodwin and Santilli (2009) discovered that there was no agreement about the meaning of community-based tourism. Some important criteria for community-based tourism can be generally defined (Russell, 2000; Blackstock, 2005). Firstly, local people must participate and support the tourism activities. Secondly, the results of community-based tourism have to provide economic benefits for the local people. Thirdly, tourism activities help protecting and supporting the culture, tradition, ways of life and natural resources in the community.

### **3.3 Characteristics of community-based tourism in Thailand**

The emergence of community-based tourism in local Thai communities generally stems from internal factors, including the decline of income sources, the deterioration of natural resources as well as the need to cope with cultural impacts from the influx of tourists (Satarat, 2010). Community-based tourism in Thailand was heavily promoted by the Tourism Authority of Thailand (TAT)'s Amazing Thailand Campaign during 1998-1999 with objective to preserve tourism areas to attract quality tourists to visit the country and to stay longer. Khanal and Babar (2007) asserted that community-based tourism offers both opportunities and threats to communities. If the management and capacity building of local communities are not done in parallel, opportunities will be lost and damage will be caused. According to Satarat (2010) in Thailand, community-based tourism has suffered from four major problems, which are low-income generation, uneven income distribution, seasonal fluctuations in tourism-derived income and the ignorance of the failures of community-based tourism. Furthermore, past experiences demonstrate that most local people receive very few benefits from tourism activities managed by outsiders. The local people have been involved in tourism only in selling a small quantity of low cost handicrafts and services; whereas, most of the profits went to the middlemen, especially the outside private tour operators. The income generated from tourism is also subject to seasonal fluctuations. The ignorance of the failure of community-based tourism has also been dangerous for communities that have adopted community-based tourism without any concern and preparation.

### **3.4 Stakeholder concept and success factors in community-Based Tourism**

The concept of stakeholder in tourism development is highly discussed in the community-based tourism literature (Sautter and Leisen, 1999). In addition, stakeholders can be defined as persons or groups with rightful interests in activities of another organization (Donaldson and Preston, 1995). Aas et al., (2005) mentioned that stakeholder in the tourism industry can be any person or group, creating a positive or negative impact toward tourism environment and the path of the tourism progress of any tourism organizations. In addition, the collaboration among stakeholders and tourism developers in planning, decision-making and implementing process can result in the success or failure of tourism development.

Several attempts have been made to identify and determine the critical success factors for community-based tourism development by using various approaches. However, according to Tasici et al., (2013) many community-based tourism programs failed due to lack of some critical factors such as tangible benefits and employment creation, benefits from the land, management, marketing and entrepreneurial skills, community involvement and participation, sense of ownership of the project amongst the community members, and the lack of local financial resources or heavy reliance on foreign donors. Additionally, since each community has unique destination characteristics and stakeholders involved, there are no rigid community-based tourism models that can be applied indiscriminately to all communities. Thus, there are some principles for best probability of success and sustainability that community-based tourism should rely on as follow (Tasici et al., 2013):

1. Active planning rather than reactive planning.
2. System of production and consumption (the economic system) adapted to local conditions.
3. High degrees of local participation and control (inclusive of marginal groups) in all stages starting from the planning stage.
4. Responsiveness to the priorities of the communities.

5. Power structure in the population, which is positive and conducive to productivity.
6. Educational system for locals, reconstructing the power structure and increasing knowledge and formal competence.
7. Equity in distribution of income and wealth, avoiding losers and winners (winners usually outsiders, exploiters).
8. Involvement of public authorities to structure government intervention (policy framework reforms) to stimulate more desirable outcomes.
9. Tourism as a supporting industry rather than the only industry.

Community-based tourism success criteria can be identified in many aspects, including community participation, benefit sharing among stakeholders, tourism resource conservation, partnership and support from within and outside community, local ownership, quality of life and tourist satisfaction (Vajirakachorn, 2011).

In addition, community-based tourism development can only be achieved when the community realizes its own potential as a community, fully appreciates its natural and cultural resources, and is empowered to be responsible for driving its own economic wheel in a sustainable manner. However, support from government and nongovernment organizations (NGOs) is still important. Mostly, local communities receive assistance from public agencies, private sectors, NGOs and academic institutions in terms of financial and technical supports.

### **3.5 Community-based tourism case study - agro tourism in Mahasawat canal community**

Mahasawat canal community is known as one of the important agro-tourism sites in Thailand, winning tourism award in 2007 from Tourism Authority of Thailand (The trip packer, 2011). Along Mahasawat canal, there are several attractions that tourists can explore by simply riding a boat for a cruise along the canal to the attractions. There are many attractions along the journey, including the orchid farms, a lotus farm, snack shop by the local housewife center, specializing in making crispy rice cakes, which are also a part of the OTOP (One Tambon One Product). It is also allowed the tourists to participate in by trying to make rice cakes as well (The trip packer, 2011). One of the major highlights for the tourists is to observe the ways of life along this canal that are still peaceful and do not change with the passing times, it is because the people here love a life of simplicity and adhere to the sufficiency economy principles (TK Park, 2011). According to the empirical research by Alungkorn (2002), in the beginning local people involving in agro-tourism development project in Mahasawat canal community were farmers owning the farms with potentials to be developed as agro-tourism sites and the farmers with boats, who were willing to participate in the agro-tourism project. However, the finding by Baitumtip (2007) revealed that the local respondents suggested that the community should develop and get more attentions and supports from government and other organizations. In terms of local community participation, the local respondents mentioned that there should be more opportunities allowing the involvement of local community in planning, managing and operation process. In addition, the related organizations should provide more knowledge about sustainable tourism concept for a comprehensive understanding.

### **4. Methodology**

Qualitative research approach was adopted to collect the data. Purposive sampling was applied to select the villagers who were directly involved with the tourism development and activities. These samples had different roles (e.g. boat driver and farm owner), providing

various dimensions in the tourism development. The author used semi-structured interviews to inquire 22 local villagers who directly participated in the development process of community-based tourism in Mahasawat Canal. The informants provided the information about the roles of stakeholders (e.g. government agencies and other related stakeholders) involving in the creation and continuous development of tourism activities. Regarding validity and reliability of the study, the author applied theory triangulation in developing the research designs, based on multiple studies and theories. All interviews were recorded and strictly transcribed for further analysis.

## 5. Results

The author conducted the interviews with the local residents participating in community-based tourism activities. Some informants joined the community-based tourism from the beginning and some participated in the later years. The age range of the samples was from 35 to 61 years old. The informants were farmers, farm owners, community leaders, boat drivers and vendors. The contents of all interviews were summarized in this section.

### 5.1 The Beginning of Community-Based Tourism and Using Ways of Life as the Tourism Resources

The location of Mahasawat canal community is located along the canal where local residents maintain their culture and natural resources. Although roads become the main mode of transportation, many local people own boats and used them to commute. In addition, a majority of local people participated in farming for their ways of lives, supporting the development of agro-tourism in the area. Currently there are about 50 families that participated and registered as members of agro-tourism project.

One of the boat drivers mentioned.

*“In the past, the way of life of villagers living near Mahasawat Canal is familiar with water transportation by using their own boats to transport people and agricultural products from their farms. Currently, the water transportation is still the main transportation of many people who live near the canal since the roads are still not reached their places yet. As the government established the fund to develop the tourism in community, I started joining this project when it was started in September 2000 by using my boat as the vehicle to bring the tourists to travel to various tourism spots along Mahasawat Canal. I can generate the additional revenues from joining this tourism project by bringing tourists to travel along Mahasawat Canal”.*

Several tourism sites have been developed and promoted as tourism destination, such as lotus ponds and orchid farms. Tourism initiatives were firstly encouraged and supported by the government officers, such as Provincial Agricultural officers and Tourism Authority of Thailand.

One boat driver talked about his reasons to join the tourism project.

*“Providing boat service to visitors is a good way to earn extra income when there is a free time, I will serve visitors when I am free, and I am not serving if I am busy. And the attractions sites are not far away from my place, so I decided to be a member of the project immediately when my friend invited me to join in the project”.*

One of the attractions in Mahasawat canal is the organic fruit farm. The owner recalled her story.

*“Agricultural fruit farming is what my family does for living and the Provincial Agricultural Officer was interested in my farm and believed that this farm has potential to develop as a site for agro tourism in the future. My farm was well organized so I did not need to change much, only putting some name tags”.*

*“In the beginning there were only visitors in the weekend then a number of visitors increased a lot and the community had visitors visited from only weekend to everyday within a year. In the 3<sup>rd</sup> year, agro tourism in Mahasawat canal was heavily promoted on press such as TV program and traveling magazine, and attracted a great number of tourists and that was the peak period of agro tourism”.*

At the beginning of tourism product development, local people collaborated with their stakeholders to form the ideas about types of tourism products (e.g. sightseeing, boat cruising and organic fruits products) to offer to the tourists. As a community, the local people set up a group of community committees to manage the operations such as the logistics flow for the tourists, parking areas, boat queuing, tour guiding, new tourism product and service development, and acquisition of customer feedback for future improvement.

## 5.2 The Cooperation with the Stakeholders

Stakeholder participation and involvement are key components for community-based tourism at Mahasawat canal. Establishing a harmonious working relationship among the stakeholders and community enhances the sustainable tourism development for the long run. The community has been supported by Department of Agricultural Extension, Community Development Department, and Mahasawat Subdistrict Administrative Organization in several aspects. Moreover, Ministry of Public Health always arranges the program for people in the community to visit and to learn about the management of other tourism communities. Universities located close to the Mahasawat canal support the community in many aspects, such as nutrition calculation of local products and testing the cleanliness of drinking water.

Many governmental organizations supported the development of the tourism activities in Mahasawat community and helped to support funding to each tourism site in order to develop the tourist facilities, including toilet and pavilion. They also provided the training programs for boat drivers such as how to welcome, treat or deal with the tourists and how to provide the boat safety. Moreover, they helped to promote the tourism in this community as well.

One of the farm owners recalled.

*“The Department of Agricultural Extension and Tourism Authority of Thailand asked me to join the tourism project and those government agencies offered the help to establish the tourism facilities in the farm area to serve the tourists”.*

The stakeholders had many roles in Mahasawat canal community. One farm owner explained.

*“There were several hospitality service training programs and education providing for local people who are directly involve with the agro tourism. The knowledge that I gained from participating to those programs help me develop the farm and I have a better understanding about tourism management”.*

### 5.3 Benefits of Community-Based Tourism

Social and economic benefits and cultural preservation are known as the crucial reasons to adopt the community-based tourism. One informant shared her thought about the benefits from community-based tourism.

*“The tourism project brought more cooperation among villagers in the area to develop and improve tourism in their community; for example, the villagers help to eliminate the water hyacinth in Mahasawat Canal to facilitate the transportation of tourist boats in their local community. The owner of water lily farm receives additional revenues from the tourism project about 20,000 Baht a year but this is still not the main proportion of the total revenues of this water lily farm”.*

In the community, not all villagers joined the community-based tourism project. At the beginning, there were some conflicts for the member of agro-tourism project and those who were not involved, because of ineffective communication to convey the details and benefits of tourism initiatives. Later, with more communication among local people, social cohesion becomes stronger and relationship among the people is better. Another farm owner explained the social benefits of tourism.

*“I found that tourism could help tightening relationship of local people in the community; they are closer and have more frequent conversations on tourism related topics. Local shops, like restaurants, that are not members of the agro tourism project also help providing information for visitors and in return the restaurant could sell more food when more visitors come. Moreover, tourism also helps distributing income to communities, some local people could earn some income from selling goods at attraction sites and I believe that tourism is good for community for now and in the future. Tourism provides opportunities for interacting and meeting new people around the world and that is important for knowledge sharing and could apply that knowledge and comment to develop community to better”.*

Additionally, it is not just about economic or social benefits, which are important for the local people, but it is also about their personal joy and pride of their community, when there are tourists visiting their homes. The farm owner shared his opinion.

*“The main revenue was from farming business and involving with the agro tourism project was just for personal enjoyment in terms of meeting people from different places, knowledge sharing, and promoting the community.”*

### 5.4 New product development in community-based tourism

When tourism activities were developed and tourism products attracted the local and foreign tourists to the tourism sites, however, every product has its life cycle. Learning from the feedback of the tourists, integrating with the local resources, and delivering the new products or services can support the sustainability of the tourism activities. Therefore, long-term tourism development is also highly important in order to draw the attentions of new tourists and repeat visitors to come to the destination. For the local people and the future of their own tourism development, it is highly important to focus on learning and understanding how to attract the tourists to revisit by maintaining their traditions and cultures and at the same time by creating new tourism products which helps reflecting the new cultural dimension of the community.

One informant discussed about the new development in the community.

*“Currently, the community has come up with the new concept for floating market as the new attraction in the Mahasawat Canal. In addition, the local government unit has just received the budget to establish’ the floating market’ in front of this local housewife group center to attract more tourists to this area. With the floating market, we can have another channel to sell more of our agricultural products”.*

New product development in the community is expected to generate more revenue for the local people. With the financial support from the local government and other supports from their stakeholders, the local people can effectively build and improve their capacity to meet with the expectation and demand of the tourists.

**Table 1** Summary of Types of Stakeholders, Contributions of Stakeholders and Benefits to the Community

| Types of Stakeholders   | Contributions of Stakeholders   | Benefits   |
|---|---|--|
| <ul style="list-style-type: none"><li>- State-owned Enterprises (e.g. Tourism Authority of Thailand)</li><li>- Government organizations (e.g. Department of Agricultural Extension, Local government, Ministry of Public Health)</li><li>- Tourists</li><li>- Other stakeholders (e.g. Universities and Media organizations (such as televisions and magazines)</li></ul> | <ul style="list-style-type: none"><li>- Financial supports</li><li>- Facilities investments</li><li>- Career development (e.g. tour guide skills development)</li><li>- Idea generations (e.g. utilizing the new local culture as tourism product)</li><li>- Problem solving tools</li><li>- Networking</li></ul> | <ul style="list-style-type: none"><li>- Increasing incomes</li><li>- Joy</li><li>- Learning</li><li>- Social cohesion</li><li>- Maintenance of local ways of lives</li><li>- Continuous Development (e.g. floating market)</li><li>- Conserving and sharing local wisdom</li></ul> |

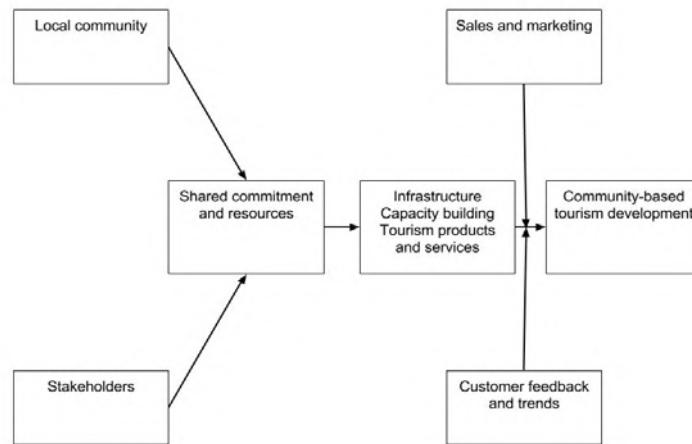
Table 1 summarized the types of the stakeholders from data collection and key contributions to generate the sustainability of tourism activities in the community. In addition, benefits of the tourism development included social, economic, cultural aspects as well as personal enjoyment of the villagers.

## 6. Discussion

From the results, the community has developed their business model from creating the tourism product, managing the flow of logistics, acquiring new knowledge to continue to deliver new products, and working closely with their stakeholders (Chesbrough & Rosenbloom, 2002; Johnson et.al, 2008).

Stakeholders contributed their resources and commitment to support the community, leading to the success of community-based tourism development. It can be discussed that the relationship between the local community and stakeholders must be harmonious and therefore the community can learn how to become a good host for tourists. Since the beginning of the tourism development, government agencies worked with the local community to create the tourism activities and supported the local people to develop the new tourism product (e.g. the floating market) and the results were supported by Alungkorn (2002), Aas et al., (2005), and Tasci et al., (2013).

**Figure 1** Applied business model with the cooperation with stakeholders in Community-Based Tourism Development



From Figure 1, the author summarized business model process and the important roles of stakeholders in supporting the community-based tourism development. With continuous involvement of stakeholders, the relationship with the community leads to shared commitment and resources of all parties. Due to the close collaboration, the community can later achieve capacity building, tourism product development, and learning new tourism skills and knowledge to achieve sustainability in the tourism development.

## 7. Conclusion

The business model from business organizations can clearly be applied in the context of community-based tourism. Moreover, tourists are also customers for the tourism destination and therefore the community can continue to learn and to improve its marketing and management strategies to improve the tourism products and services to increase the financial returns. Additionally, the roles of stakeholders in community-based tourism are highly essential and, it can be concluded that without the encouragement and support of the stakeholders, there is no tourism activities in the community today. However, it is obvious that the participation of stakeholders is merely a part of the tourism development. The long-term success of tourism initiatives lies on the shared vision of the local people together with the strong integration of the leaders, local people participating, and those who do not want to participate with the tourism activities. Furthermore, keeping balance between their ways of life and roles of tourism providers provides the continuity and sustainability of tourism development in Mahasawat canal community.

About recommendations and managerial implications, the results provided that to successfully develop the community-based tourism activities, the villagers, including community leaders and others, have to be directly involved and try to help one another developing the tourism activities to attract new tourists and to draw the tourists to revisit the destination. In addition, the community should focus on maintaining their originality in terms of culture and way of life and on developing new tourism products to increase the likelihood for the tourists to revisit the destination in the future. Another important dimension is that the

community needs to develop the strong and collaborative with their stakeholders (including public and private sectors), because the stakeholders can provide new knowledge and other important resources for the community.

Some limitation of the study should be mentioned. Firstly, the study was based on the case study of one community in the central part of Thailand. The study of many communities may enhance the generalization of the results. Secondly, there are many different types of community-based tourism, such as agrotourism, adventure tourism and ecotourism, and the factors and environment of each type of tourism can be varied. For further research, since the current study was based on a case study approach, the researchers may study the application of business model in various tourism destinations in order to enhance the dimensions of the business model for community-based tourism organizations. In addition, it is also interesting to explore the long-term relationship between community and stakeholders, especially about the exchange mechanism among all parties involved, including from the point of view of stakeholders and their own goals for supporting the communities. In addition, quantitative approach can be conducted to identify the level of importance of the factors involving tourism development.

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## **ESTIMATING PRICE ELASTICITY OF DEMAND FOR MEDICAL CARE SERVICES IN THAILAND**

by

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## Abstract

This paper estimates price elasticities of demand for medical care services of inpatient and outpatient in Thailand. The variation in prices comes from six different medical insurance plans. A price of the medical care services faced by an individual holding an insurance plan is measured by the average out-of-pocket medical care costs of patients who hold the same medical insurance plan. I estimate the price elasticities by using a probit regression model. The price elasticities of demand for all inpatient care services range from -0.06 to -0.10 while the price elasticities of demand for all outpatient care services range from -0.15 to -0.22. These findings are in line with the available literature. They are also consistent with the hypothesis that inpatient care services are less price-responsive to the demands for medical care services than outpatient care services.

**Keywords:** demand for medical care services, price elasticity, Thailand

## 1. Introduction

In this study, I estimate the price elasticities of demand for medical care services for both inpatient and outpatient care services. Price of the medical care services faced by an individual holding an insurance plan is measured by the average out-of-pocket medical care costs of patients who hold the same medical insurance plan. I use patient information from the National Statistical Office in the series of the Health and Welfare Survey (HWS) and use a probit regression model to find the results. The survey sample includes the demographic and social economic characteristics of nearly 68,000 people for each year, which represents a form of medical care utilization for all nations.

Moreover, on the basis of this study, the price elasticity is crucial to evaluating the welfare gains from government intervention through social (health) insurance. Following Chetty and Saez (2009), the model derives from a welfare formula that depends on functions of reduced form parameters, e.g. price elasticity of medical care services and consumption insurance. This elasticity reflects a moral hazard distortion created by insurance policies. Thus, in order to evaluate the welfare benefits of medical care services, the results of the price elasticity of demands for medical care services in the welfare calculations for Thailand are needed for empirical study here.

Several studies estimated the elasticity for medical care services using different measurements for the price of medical care services: e.g. for developed countries, Manning et

al. (1987), Bhattacharya et al. (1996), Eichner (1998), Van Vliet (2001), Cockx and Brasseur (2003), and for developing countries, Duarte (2012), Sauerborn et al. (1994), Lindelow (2005), and Sahn et al., (2003). Many of these have focused on the elasticity of how individuals respond to changes in prices. This is important in proceeding with health policies, especially those subsidized through social health insurance.

Earlier studies estimated the demand for medical care by focusing on price elasticity of medical care services with different measurements for developed countries. In a seminal paper, Manning et al. (1987) studied the impact of co-insurance on the demand for medical care services. The estimations were based on a randomized controlled experiment by using different measures of medical care prices in six sites of the United States by the RAND Health Insurance Experiment. The RAND Experiment randomly assigned household into five different insurance plans with different co-insurance rates ranging from 0 to 95 percent. The estimation results imply that price elasticity was -0.10 for all medical care services and -0.13 for outpatient care services when considered co-insurance rates from 0 to 25 percent while price elasticity was -0.14 for all medical care services and -0.21 for outpatient care services when considered co-insurance rates from 25 to 95 percent. These results are widely used by researcher and policy maker to evaluate or design health policies in the United States until now.

Unfortunately, there was no experimental data in other countries. Therefore, most of studies need to rely on non-experimental data and econometric techniques. For example<sup>1</sup>, Bhattacharya et al., (1996), Eichner (1998), Van Vliet (2001), Cockx and Brasseur (2003) measured prices of medical care services by co-payment rates. Their estimation results imply that price elasticity was a relatively inelasticity and a negative relationship between utilization and price of medical care services.

Duarte (2012) estimated the price elasticity of expenditures for medical care services across different groups in Chile. He used a single price for medical care services by calculating the expected effective co-insurance rate by plan from a combination of insurer payment cap and co-insurance rates. He found the price elasticities to be from -0.028 to -0.07 for acute care services. In developing countries, For instance<sup>2</sup>, Sauerborn et al. (1994) and Lindelow (2005) examined pecuniary cost of medical care services (out-of-pocket expenditures) and the time cost of medical care services to represent the prices to obtain health care. Sahn et al. (2003) used the quality of health care resources in a nation for estimating price elasticity. Consequently, the prices of medical care services may reflect the various methods of measurement for estimating price elasticity, depending on the characteristics of the health care system in each country.

For this paper, I measure the prices of medical care services by classifying into 6 major health welfare plans as a proxy for the cost of an individual's decision in seeking medical care. In this study, prices are computed by the average out-of-pocket expenditure per night when an individual purchased the medical care utilizing a health welfare plan. Even though this measurement presents the variations of only six prices, it can show suitable consistency with the behavior of Thai patients seeking medical care according to the data set.

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<sup>1</sup> Order to literature: Japan (1996), USA (1998), Netherlands (2001) and Belgium (2003).

<sup>2</sup> Order to literature: Burkina Faso (1994), Mozambique (2005) and Tanzania (2003).

The paper is organized as follows: Section 2 describes the theoretical model; Section 3 presents the empirical analysis and econometric approach; Section 4 provides the data and samples; Section 5 shows the results; and Section 6 presents the conclusions.

## 2. Model framework

This section outlines a simple model as a guideline for the empirical specification employed in this paper. Following Grossman (1972), I have modeled medical care services as a commodity and enter directly into the utility function. The utility function of an individual is given by

$$U(C_i, H_i) \quad (1)$$

where  $C_i$  is consumption of non-medical care goods and  $H_i$  is the health status of individual  $i$  in current period.

The health status of an individual  $i$  depends on his or her initial health status  $H_{0i}$  and the amount of medical care services  $M_i$ . I assume the production function is linear as following:

$$H_i = H_{0i} + M_i \quad (2)$$

where  $H_{0i}$  is the initial health status, which potentially depends on individual characteristics and actions before obtaining medical care services, e.g, the  $H_{0i}$  is low when he or she acquires an illness. Individual characteristics and actions such as age, sex, work and education translate into different levels of initial health status. This production function captures an idea that an individual can improve in his or her health status in current period by using medical care services.

The individual's budget constraint and non-negatively conditions are given by

$$Y_i = C_i + P_i M_i \quad (3)$$

$$C_i, M_i \geq 0 \quad (4)$$

where  $Y_i$  is the income of individual  $i$ . The price of non-medical consumption goods is normalized to one and  $P_i$  is the (expected) price of the medical care services faced by the individual  $i$ . Equation (4) is the non-negativity conditions on consumption  $C_i$  and on medical care services  $M_i$ , which state that the individual cannot sell his or her health.

### 2.1 Individual decision

Consider the individual's problem of choosing the consumption of non-medical care goods as  $C$ , and medical care services as  $M$ , to maximize utility

$$\underset{C_i, M_i}{\text{Max}} \quad U(C_i, H_i) \quad (5)$$

subject to medical care production (2), budget constraint (3), and non-negativity conditions (4).

For expositional purposes, I assume that the utility function is a utility function as follow: constant elasticity of substitution (CES) for the representative individual to derive the demand function given by

$$U(C_i, H_i) = [\alpha C_i^\rho + (1-\alpha)H_i^\rho]^{1/\rho} \quad (6)$$

where  $\rho = 1 - 1/\sigma$  is the elasticity of substitution and  $\sigma > 0$ .  $\alpha \in (0, 1)$  is the preference weight between non-medical care consumption goods and health status.

The demand for medical care services in this case is as follow:

$$M_i^* = \frac{Y_i - H_{0i} \left[ \frac{\alpha}{1-\alpha} P_i \right]^\sigma}{P_i + \left[ \frac{\alpha}{1-\alpha} P_i \right]^\sigma} \quad (7)$$

Equation (7) states that the demand for medical care services is a function of the (expected) price of medical care services  $P_i$ , individual income  $Y_i$  and the initial health status  $H_{0i}$ . For example, when the initial health status of individual falls, the demand for medical care services will increase with treatments needed to improve his or her health status. The initial health status depends on different individual characteristics and actions such as gender, age, working and education. These variables cause different degrees of illness in the initial health status of the individual. Therefore, I add these individual characteristics and actions to regressions to studying the demand for medical care services in order to control for heterogeneity in the initial health status.

### 3. Empirical Analysis

This paper primarily uses a binary choice model, namely a probit model. The main estimating equation is a linear function from (7) as follows:

$$M_i^* = \beta_1 \log P_i + \beta_2 Y_i + \beta_N X_i + e_i \quad (8)$$

where  $M_i^*$  is amount of medical care services required by an individual  $i$  and is an unobserved latent variable. The observed choice is a dummy variable defined by

$$D_i = \begin{cases} 1 & \text{if } M_i^* > 0, \\ 0 & \text{otherwise.} \end{cases} \quad (9)$$

This observed is discrete choice variable and is taken as 1 when individual utilized medical care services, and 0 otherwise as in (9). The study uses the self-reported medical care services in the Health and Welfare Survey (HWS), which are differently classified as inpatient and outpatient care to represent amount of medical care service variable.

A special interest,  $\log P_i$  represents the expected price of medical care services for an individual who holds an insurance plan  $i$ . Based on the estimated coefficient of this variable, I then can estimate the price elasticity of demand for medical care services,  $\varepsilon_{M,P} < 0$ , which is calculated at the mean price of the expected price of the medical care services. For empirical study,  $Y_i$  is represented by household income per capita because I assume that the medical

care services are joint decisions within the household. The explanatory variable  $X_i$  includes the control variables for individual characteristics, consisting of gender, age, education, and work.

In individual level data, the parameters  $\beta$  of the equation (8) are estimated jointly by the maximum likelihood method (ML)<sup>3</sup>. To fit a probit regression, I conduct hypothesis tests; the null hypothesis is that the coefficients are all zero. This hypothesis, checked by a Wald test, examines the slope of coefficients affecting the model so that the results are consistent parameter estimates and correct predictions.

#### 4. Data source

In 2001, Thailand began to introduce social health insurance that provided the universal health insurance coverage (known as 30-Baht Scheme) to access the basically medical care services for nation. Thus, in this paper, I use data during initial periods of introducing the universal health insurance coverage to estimate price elasticity of demand for medical care services in Thailand which data are available limitedly and completely for 3 years. This study uses the Health and Welfare Survey (HWS) conducted annually by the National Statistical Office (NSO) from 2003 to 2005. The survey collected data of 68,000 individuals from every province in the kingdom, both inside and outside the municipal areas. This HWS survey was conducted during the month of April of each survey year. The survey collected information on the demographic characteristics of individuals and households, individual income, employment status, the types of medical care service provider to visit, the methods of treatment at the last time of illness, the out-of-pocket expenditure of each individual for each type of medical care services, the date when last cured at a medical provider, the primary welfare of individuals, etc. The survey therefore is a representative sample of all patients for public health in Thailand.

This study categorizes health welfare plans into 6 main plans. I report the utilization rates for both inpatient and outpatient care services. The portion of patients utilizing these plans is provided in Table 1. Note that individuals are generally assigned to a health welfare plan based on their place of employment. (i), Plan NO (nothing plan) is a group of patients who did not utilize any health welfare plans when getting health care services. (ii), Plan G is for government officials, state enterprise employees and pensioners covered by the government welfare plans. It covers about 15-19% of the population. (iii), Plan SS is for the private sector employees covered by their firms and accompanied with the government fund. It covers less than 8% of the population. Next, the universal coverage for health care is for anyone who did not otherwise qualify for health welfare plans. It covers more than 70% of the Thai population. Classified by (iv), Plan UC is for individuals utilizing health welfare from the UC card plan but who did not pay any fee. (v), Plan UC30 is for individuals utilizing the health welfare from the UC card plan but paid a fee of 30 baht. Finally (vi), Plan OT is for individuals utilizing with private health insurance, employer welfare, and all others. In all of these, an individual may freely decide to utilize them for treatment or not use.

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<sup>3</sup> The likelihood function can be written as:  $L = \prod_{M_i=0} F(-x_i'\beta) \prod_{M_i=1} [1 - F(-x_i'\beta)]$  where  $F$  is the cumulative distribution function for  $e$  that is the normal distribution.  $x$  is a vector of factors explaining the decision for medical care.  $\beta$  is the set of parameters reflecting the impact of changes in  $x$  on the probability.

**Table 1** ion of patient utilizing health insurance plans.

| Insurance Plans | Inpatient: percent |       |       | Outpatient: percent |       |       |
|-----------------|--------------------|-------|-------|---------------------|-------|-------|
|                 | 2003               | 2004  | 2005  | 2003                | 2004  | 2005  |
| NO              | 2.78               | 3.56  | 2.41  | 3.18                | 3.71  | 2.86  |
| G               | 16.82              | 18.95 | 18.82 | 14.57               | 15.33 | 15.87 |
| SS              | 6.80               | 7.64  | 7.65  | 5.43                | 5.44  | 5.55  |
| UC              | 36.25              | 33.45 | 31.99 | 45.06               | 43.58 | 43.05 |
| UC30            | 35.46              | 36.31 | 36.82 | 30.48               | 31.87 | 31.18 |
| OT              | 1.88               | 0.10  | 2.31  | 1.28                | 0.07  | 1.50  |

From: HWS 2003 to 2005.

#### 4.1 Measuring the medical price variable with the health insurance plans

One of the most challenging parts of this study is to measure prices of medical care services faced by individuals in each plan. There are many studies using different measurements for the price of medical care services and each study was able to obtain the price in limited setting. For example, Manning et al. (1987) used percent co-insurance rates, Bhattacharya et al. (1996) used the average cost and co-payment rates of a patient visit with insurance plan, Sauerborn et al. (1994) used time and the pecuniary costs of medical care services and Duarte (2012) used the out-of-pocket expenditure as a combination of cap and co-insurance rates as the price of medical care services. For this study, the suitable price variable is the average value of the out-of-pocket expenditure per nights of the individual who was treated by service providers. Therefore, price variable can be summarized into a single price in each plan by calculating the expected price of medical care services to estimate the price elasticity.

In particular, I calculated the expected price of medical care services for each plan by using the average value of the out-of-pocket expenditure per nights (number of days stay at the service provider) of all patients in the group. That is, I assume the number of nights at the service provider reflects the quantity of the medical care services. More formally, the expected price of medical care services for plan  $j$  is as follows:

$$P_j = \frac{\sum_{i \in N_j} opc_i / d_i}{N_j}$$

where  $P_j$  is the expected price of medical care services of insurance plan  $j$ .  $opc_i$  is the out-of-pocket expense of patient  $i$  who is in plan  $j$ .  $d_i$  is the number of days of services acquired by patient  $i$  when staying at service provider.  $N_j$  is the number of patients who hold the same plan  $j$ . Meanwhile, the expected price of medical care services of outpatient uses the number of 1 day to calculation.

Note that I did not use the disease variable when I calculated the expected price of medical care services because I could not observe about the diseases of some individuals who were sick, however, they might not go or not admit to the service providers. Thus, I did not calculate the expected price of medical care service from diseases variable to estimation. Moreover, I assume that there are homogeneous diseases of patient, however, I separated as inpatient and outpatient to describe the level of acute illness of patient.

This study needed to assign all individuals to these expected prices. Although an individual may not utilize them, I assume that he or she know the prices before making his/her choice to treatments. Within the same insurance plan, the individuals face the same expected price. The expected prices of medical care services from the calculation are shown in Table 2. All of these expected prices are represented as a price proxy for analyzing the demand for medical care services to estimate price elasticity.

**Table 2** The expected prices of medical care services by health insurance plans: (Baht).

| Insurance<br>Plans | Prices of inpatient |          |          | Prices of outpatient |        |        |
|--------------------|---------------------|----------|----------|----------------------|--------|--------|
|                    | 2003                | 2004     | 2005     | 2003                 | 2004   | 2005   |
| NO                 | 2,388.61            | 2,747.18 | 3,324.44 | 222.48               | 224.38 | 250.02 |
| G                  | 285.07              | 224.62   | 258.14   | 58.21                | 84.71  | 93.94  |
| SS                 | 241.96              | 216.00   | 214.31   | 27.26                | 48.78  | 17.55  |
| UC                 | 14.38               | 23.82    | 33.81    | 7.03                 | 9.92   | 3.99   |
| UC30               | 53.48               | 100.66   | 85.04    | 40.39                | 45.44  | 41.29  |
| OT                 | 742.12              | 923.17   | 807.76   | 313.83               | 407.71 | 236.31 |

Calculated from HWS 2003 to 2005

In addition, the analysis includes control economic independent variables from a series of variables: *Household income per capita* - it is expected that demand for medical care services increases with higher income. For the initial health status, individual characteristics consist of the following. *Age* affects the rate of depreciation, since health status can decline with age. *Gender* is also included and represented by 1 dummy for male. It is expected that the rate of depreciation will be higher for men since they usually have somewhat shorter lives. *Work* is reflected by a dummy measure that equals to 1 for white-collar work who performs as administrative work or non-labor work. It is expected to increase in demand for medical care services. Finally, *Education* is represented by an individual's education level divided into two groups, if 1 is dummy for less than a bachelor's degree otherwise a bachelor's degree or higher. I expect that demand for medical care services increases with a higher education. The list of all variables is used for estimates in a probit regression.

**Table 3** Sample descriptive statistics during 2003 to 2005 and Pooled data.

|                             | Variables | 2003                   | 2004                   | 2005                   | Pooled                 |
|-----------------------------|-----------|------------------------|------------------------|------------------------|------------------------|
| <b>Dependent</b>            |           |                        |                        |                        |                        |
| Inpatient                   |           | 0.06<br>[0.24]         | 0.06<br>[0.24]         | 0.06<br>[0.24]         | 0.06<br>[0.24]         |
| Outpatient                  |           | 0.12<br>[0.33]         | 0.12<br>[0.33]         | 0.12<br>[0.32]         | 0.12<br>[0.32]         |
| <b>Independent</b>          |           |                        |                        |                        |                        |
| Price of inpatient          |           | 210.18<br>[463.26]     | 268.19<br>[599.01]     | 255.30<br>[608.52]     | 244.54<br>[561.48]     |
| Price of outpatient         |           | 48.04<br>[56.29]       | 55.77<br>[46.35]       | 51.32<br>[54.65]       | 51.70<br>[52.72]       |
| Household income per capita |           | 5,892.44<br>[31,726.3] | 6,643.62<br>[38,543.0] | 7,049.49<br>[35,246.7] | 6,037.67<br>[33,332.2] |
| Age                         |           | 40.48<br>[13.13]       | 40.40<br>[13.13]       | 40.92<br>[13.25]       | 40.60<br>[13.17]       |

| Variables                                      | 2003               | 2004               | 2005               | Pooled             |
|--|--------------------|--------------------|--------------------|--------------------|
| Male   | 0.51<br>[0.50]     | 0.51<br>[0.50]     | 0.50<br>[0.50]     | 0.51<br>[0.50]     |
| Work   | 0.39<br>[0.49]     | 0.40<br>[0.49]     | 0.42<br>[0.49]     | 0.40<br>[0.49]     |
| Education                                      | 0.90<br>[0.30]     | 0.89<br>[0.31]     | 0.88<br>[0.32]     | 0.89<br>[0.31]     |
| <b>Separate service providers of inpatient</b> |                    |                    |                    |                    |
| Inpatients visit at public                     | 0.05<br>[0.22]     | 0.05<br>[0.23]     | 0.05<br>[0.23]     | 0.05<br>[0.22]     |
| Price of public                                | 173.68<br>[372.90] | 191.51<br>[300.20] | 230.16<br>[547.79] | 198.55<br>[421.29] |
| Inpatients visit at private                    | 0.01<br>[0.10]     | 0.01<br>[0.10]     | 0.01<br>[0.09]     | 0.01<br>[0.10]     |
| Price of private                               | 472.15<br>[891.21] | 534.10<br>[959.59] | 604.28<br>[884.45] | 537.04<br>[913.80] |
|  | N = 37,534         | N = 37,313         | N = 37,850         | N = 112,697        |

Note: The table presents mean and standard deviation is in brackets that used in the regression.

#### 4.2 Sample Statistics

Table 3 provides the descriptive statistics of explanatory variables for using in the regression during the years from 2003 to 2005 and pooled data. Overall, 6 percent of the sample utilized inpatient care in the 12 months prior to the interview. The average expected prices of inpatient care varied from 210 to 268 baht per person. On the other hand, the number of outpatients made up 12 percent of the sample in the 1 month prior to the interview and the average expected prices of outpatient care ranged from 48 to 56 baht. Other characteristics of the sample are similar in terms of demographics and consist of the following. The mean household income per capita is approximately 5,892 baht for 2003, and 6,038 baht for the pooled set. The sample is middle-age with an average age of 41 years. The ratio of gender is nearly 51 percent for men all three years. The average of white-collar workers is around 40 percent. The level of education, measured by the highest achieved, shows approximately 89 percent had less than a bachelor degree. Moreover, considering the dependent variables for the separate service providers of inpatient care, 5 percent of the inpatients were treated by public providers, and just 1 percent by private providers. The mean price of medical care at public providers is three times lower than from private providers.

#### 5. Empirical results

This section presents empirical results regarding the demand for medical care services based on the equation (8). The variation in prices comes from six different medical insurance plans. I estimate the price elasticity by using a binary choice model with a probit regression model. The price elasticity is calculated at the mean price of the expected price of medical care services. The results of the model are presented in two parts. The first estimates the own price elasticity of inpatient care services. Moreover, I estimate the own price elasticity categorized the sample by gender, area, age, household income and types of provider, which also include to estimating the cross price elasticity between public and private inpatient care services. The second shows the own price elasticity of outpatient care services.

## 5.1

### 5.1.1 Own price elasticity of inpatient care services

As discussed, the dependent variable in this model is a dummy variable if an individual  $i$  used an inpatient service during the twelve months preceding the interview. I compare this in three periods and a pooled cross section to examine the effects of change over time of the price elasticity of inpatient care services (see on Table 4).

The estimated effects of the expected price on the demand for medical care services are statistically significant and the coefficients of expected price are negative in all years. They showed that the increasing expected price would reduce the probability of demand for medical care services. Table 4 also shows that the price elasticities (calculated at the mean price of the expected price of medical care services) in these three periods for inpatient care services are low, significant, and tend to rise. These results imply that individuals are inelastically responsive to changes in the price. For example, the results imply that a 1 percent increase in inpatient charges would reduce the probability of demand for medical care services by only 6.20, 8.27, and 10.22 percent in each year, and 6.88 percent for the pooled data, respectively.

**Table 4** The estimated coefficients of the model and own price elasticity of inpatient care services with probit regressions.

| Variables          | 2003       | 2004       | 2005        | Pooled     |
|--------------------|------------|------------|-------------|------------|
|                    | Inpatient  | Inpatient  | Inpatient   | Inpatient  |
| Logprice           | -0.0130*   | -0.0263**  | -0.0509***  | -0.0346*** |
|                    | (0.00696)  | (0.0108)   | (0.0179)    | (0.00903)  |
| Household income   | 1.54e-07   | -6.27e-07* | 1.18e-06*** | -4.61e-06  |
|                    | (2.16e-07) | (3.58e-07) | (2.10e-07)  | (2.97e-06) |
| Age                | 0.00776*** | 0.0139***  | 0.00198     | 0.00404*** |
|                    | (0.00281)  | (0.00115)  | (0.00127)   | (0.000732) |
| Male               | -0.0762**  | -0.123***  | -0.219***   | -0.224***  |
|                    | (0.0311)   | (0.0345)   | (0.0323)    | (0.0188)   |
| Work               | 0.106      | 0.0129     | 0.0159      | 0.0203     |
|                    | (0.0760)   | (0.0214)   | (0.0372)    | (0.0220)   |
| Education          | 0.497**    | 0.0328     | 0.129**     | 0.119***   |
|                    | (0.244)    | (0.0426)   | (0.0565)    | (0.0376)   |
| Constant           | -1.404***  | -1.388***  | -1.389***   | -1.557***  |
|                    | (0.153)    | (0.0994)   | (0.129)     | (0.0719)   |
| Wald $\chi^2$      | 455.79     | 589.32     | 114.65      | 245.94     |
| Prob > $\chi^2$    | < 0.000    | < 0.000    | < 0.000     | < 0.000    |
| Observations       | 37,447     | 37,184     | 37,704      | 112,290    |
| Price elasticities | -0.0620**  | -0.0827*** | -0.1022***  | -0.0688*** |

Standard errors in parentheses, \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

Note: - A generalized Wald test is run to determine whether these properties are violated. The testing rejects a null hypothesis that coefficients are all zero.

- The price elasticities are measured by the percentage point change in the probability at the mean price of the expected price of medical care services. For binary regressors using the marginal effect at mean are calculated as elasticities.

These results are in line with the past results in the literature. Manning et al (1987) found that price elasticities varied from -0.14 to -0.17 for hospital care in the USA. Nyman (1989) found that the price elasticity of private patients was -1.7. For Eichner (1998), price elasticities of medical expenditures of employees ranged between -0.62 and -0.75. Van Vliet (2001) examined the effects of price and deductibles on medical care demand and estimated it at -0.079 in Netherlands. In the developing country of Burkina Faso, Sauerborn et al (1994) examining adults more than 14 years had inelastic around -0.27. Sahn et al (2003) found the own price elasticity in rural Tanzania to be -1.69 for private clinics, with private hospitals at -1.64 and public hospitals -1.86. In China, Naci Mocan et al (2004) estimated the price elasticity at around -1.04 in a two-part model and -0.81 using the discrete factor method. To sum up, the price elasticity of demand for medical care services is in line with these earlier studies.

For other control variables, the estimated effects of household income per capita on the demand for medical care are statistically significant in 2004 and 2005. The relative direction is both negative and positive in during these years but household income is expected for positive. However, the relationship between income and medical care services can fluctuate to negative or positive, depending on the context and covariates from study. This is similar to Fuchs (2004) in that if individual works hard, he/she will be higher income but it would not be surprising if health care were lower. The estimated effects of age are statistically significant in all years except 2005. The coefficients of age are positive in all periods, which means with increasing age one is more likely probability to be treated at service provider, since growing older is a fundamental fact of human life. Gender is statistically significant and as expected is negative in all periods, since the probability of rate of reduction is higher for men. It is consistent with the United Nations study (2011) that showed the life-expectancy of women has increased in every country. The coefficients of work are positive and indicate that probability of individuals with a low risk from their work increases in demand for medical care services. In addition, the estimated effects for education have a positive correlation between education and health. However, they indicate that probability of individuals with a less education can take better care of their health as well.

### **5.1.2 Own price elasticity of inpatient care services classified by gender, area, age and household income**

In this section, I show an alternative analysis the own price elasticity of inpatient care services by estimating the main regression (8) classified the sample of gender, area, age and household income. The results highlight the importance of individual demographic variables in explaining variations with price responsiveness (presenting only the own price elasticities see results on table 5).

#### **- Gender**

I classify the sample into two groups based on gender. The explanation of gender for demand for medical care services indicates the impact of lifestyle on utilization decisions. The results show that the coefficients of own price elasticities have expected sign. Men are more responsive to changes in the price than women. It implies that women prefer to seek medical care for protecting and treating their health more often than men. Similarly, in developed countries Hunt-Mccool et al. (1995) in the USA and Cockx and Brasseur (2003) in Belgium, found that women utilize more medical services than men when examining gender differences for variations in price.

## - Area

A second specification considers the area of residence. I classify the sample into two groups, divided into urban and rural. The area of residence reflects the impact of decisions in terms of healthcare utilization, access, and costs of individuals for urban and rural health care.

The estimations show that individuals living in urban areas have a higher response to changes in the price than those in rural areas. This result suggests that urban areas are more likely to have differences in socioeconomic backgrounds. This is not surprising, since rural areas have fewer alternatives to access public or private health service providers due to the fact that most health service providers are generally located in the cities. In other words under Thai context, individuals in rural areas rarely go to service providers for treatments as inpatient, alternate with treatments as outpatient instead. Hence, the demand for medical care services of urban area is more elastic to changes in the price than in rural areas.

**Table 5** Own price elasticity of inpatient care services with probit regressions classified by gender, area, age and household income.

| Variables               | 2003<br>Inpatient | 2004<br>Inpatient | 2005<br>Inpatient | Pooled<br>Inpatient |
|-------------------------|-------------------|-------------------|-------------------|---------------------|
| <b>Gender</b>           |                   |                   |                   |                     |
| Male                    | -0.0730*          | -0.0988**         | -0.2057***        | -0.0785***          |
| Female                  | -0.0521           | -0.0588           | -0.0572           | -0.0485**           |
| <b>Area</b>             |                   |                   |                   |                     |
| Urban                   | -0.0585           | -0.1084**         | -0.1486***        | -0.0845***          |
| Rural                   | -0.0240           | -0.0832           | -0.0655           | -0.0467*            |
| <b>Age</b>              |                   |                   |                   |                     |
| I ≤ 30                  | -0.1220           | -0.0542           | -0.2419***        | -0.0996***          |
| 31 ≤ II ≤ 45            | -0.0471           | -0.1398**         | -0.0368           | -0.0750**           |
| 46 ≤ III ≤ 60           | -0.0514           | -0.0509           | -0.0861           | -0.0592*            |
| IV ≤ 61                 | -0.0201           | -0.1457**         | 0.0440            | -0.0191             |
| <b>Household income</b> |                   |                   |                   |                     |
| Quartile I              | -0.1045           | -0.0297           | -0.0048           | -0.0638*            |
| Quartile II             | -0.0638           | -0.0383           | -0.099            | -0.0493             |
| Quartile III            | -0.0146           | -0.0998           | -0.0588           | -0.0329             |
| Quartile IV             | 0.0716            | -0.1180**         | -0.1295           | -0.0301             |

\*\*\*p<0.01, \*\*p<0.05, \*p<0.1

Note: I classify the sample of gender, area, age and household income to estimate the own price elasticities with the main regression (8), separately. The price elasticities are measured similarly on table 4.

## - Age

A third specification brings age into analysis. I classify the sample into four groups based on age. For the first group, individual age is from infants to adults under 30 years. The second group is set from 31 to 45 years, and third group is for 46 to 60 years. Finally, the

oldest group is for those more than 61 years. In all years, the price elasticities of age specification did not move in a set direction among age groups. However, for the pooled cross section, the first age group's price elasticity is the highest at -0.10 for inpatient care services. The oldest group is the least sensitive to changes in the price, from -0.02 and less than five times of the youngest group.

These results suggest that older individuals may be less responsive to changes in the price because they are aware that medical care will probably allow them to live longer. They are also concerned about the quality of life in old age and do not want to lose their ability and health. This could be caused by the fact that older individuals have a strict incentive to spend for prevention in medical care. Thus, they are less elastic to change in the price.

#### **- Household Income**

A fourth specification considers household income per capita as a factor. I classify the sample into four groups based on quartiles, which are by different ranges of household income per capita in each year.

The results show that the price elasticities of the highest household income quartile have more responsive to changes in the price than the lower household income groups in 2004 and 2005. For example, the highest household income quartile of inpatient care services has elasticity of more than four times (-0.12 and -0.03 in 2004) and manifold (-0.13 and -0.005 in 2005) that of lowest household income quartile, respectively. This could be explained by the fact that a higher household income family can easily move to expensive services and expect to manage the out-of-pocket expense of better health service providers for medical care much more than one on a lower household income. Alternatively, lower household income groups spend less on medical care simply because they do not have as many resources as higher income households.

#### **5.1.3 Own price elasticity and cross price elasticity of inpatient care services between public and private service providers**

##### **- Own price elasticity of types of provider**

For this section, I alternatively show the own price elasticity of inpatient care services by estimating the main regression (8) classified the sample of types of provider. This specification considers the types of medical provider (presenting only the own price elasticities see on Table 6). I classify the sample into two groups, based on an inpatient's utilization of public and private service providers and re-calculate the expected price rate by separating types of provider to find out each of the own price elasticity. Note that the expected prices between public and private service providers might not cover the services at the same rate because of service quality.

The price elasticities of inpatients utilizing a public provider associate with the expected price rate range from -0.17 to -0.19 and are statistically significant. In contrast, the price elasticities for inpatient care services utilizing at private provider is not expected sign and not statistically significant in 2003 and 2005. The estimations show that inpatient utilizes at public service providers has a higher responsive to changes in the price than at private service providers.

**Table 6** Own price elasticity of inpatient care services with probit regressions classified by types of provider.

| Variables                | 2003       | 2004       | 2005       | Pooled     |
|--------------------------|------------|------------|------------|------------|
| <b>Types of provider</b> |            |            |            |            |
| Public                   | -0.1911*** | -0.1923*** | -0.1932*** | -0.1693*** |
| Private                  | 0.1637***  | -0.2056    | 0.0564     | -0.0119    |

\*\*\*p<0.01, \*\*p<0.05, \*p<0.1

Note: I classify and re-calculate the expected price rate by the sample of types of provider to estimate the own price elasticities with the main regression (8), separately. The price elasticities are measured similarly on table 4.

This could be caused by some facts evident in the sample. First, Thais prefer to seek medical care at a public rather than a private provider in accordance with the restrictions in each insurance plan. Second, the fraction of the total sample for inpatient visits at private providers is only an average of 1 percent. Finally, the cost of private providers is almost three times higher than public providers (see on Table 3). Therefore, this evidence shows that those seeking inpatient care services forgo medical care at private providers more often than at public providers.

As the result, the price elasticities in this estimate are not explicitly obviously. Thus, I also use cross price elasticity to explain the elasticity. The cross price elasticity reveals that the utilization of inpatient care services between public and private providers is a substitute for treatment options. This method is illustrated in the next section.

#### - Cross price elasticity of types of provider

This section, I re-estimate the previous section to find out the cross price elasticity of types of provider, (measured at the mean price). I classify the estimations into two cases between public and private of inpatient care providers (see on Table 7).

**Table 7** Cross price elasticity in the case of inpatient of public provider and private provider with probit regressions.

| Variables                    | Inpatient public provider |                         |                           |                           | Inpatient private provider |                         |                        |                            |
|------------------------------|---------------------------|-------------------------|---------------------------|---------------------------|----------------------------|-------------------------|------------------------|----------------------------|
|                              | 2003                      | 2004                    | 2005                      | Pooled                    | 2003                       | 2004                    | 2005                   | Pooled                     |
| LogPrice of public provider  | -0.165***<br>(0.0246)     | -0.0642***<br>(0.0158)  | -0.162***<br>(0.0349)     | -0.110***<br>(0.0122)     | 0.347***<br>(0.0708)       | 0.316***<br>(0.112)     | 0.103***<br>(0.0259)   | 0.206***<br>(0.0256)       |
| LogPrice of private provider | 0.0772***<br>(0.0202)     | 0.0337**<br>(0.0152)    | 0.112***<br>(0.0348)      | 0.0732***<br>(0.0108)     | -0.136***<br>(0.0473)      | -0.228***<br>(0.0790)   | -0.0836***<br>(0.0281) | -0.128***<br>(0.0238)      |
| Household income             | 1.01e-06<br>(6.67e-07)    | -6.33e-07<br>(4.49e-07) | 1.39e-06***<br>(1.21e-07) | 1.38e-05***<br>(5.54e-07) | -2.00e-06*<br>(1.13e-06)   | -2.80e-06<br>(2.19e-06) | 1.73e-07<br>(2.96e-07) | -7.49e-06***<br>(2.60e-06) |
| Age                          | 0.00243*<br>(0.00138)     | 0.0137***<br>(0.00142)  | 0.00136<br>(0.00137)      | 0.00301***<br>(0.000734)  | -0.0136<br>(0.0172)        | -0.0257<br>(0.0243)     | 0.0180***<br>(0.00162) | 0.00390**<br>(0.00167)     |
| Male                         | -0.237***<br>(0.0338)     | -0.120***<br>(0.0357)   | -0.229***<br>(0.0338)     | -0.203***<br>(0.0182)     | -0.0766<br>(0.0875)        | -0.249**<br>(0.111)     | -0.0580<br>(0.0396)    | -0.124***<br>(0.0382)      |
| Work                         | -0.0178<br>(0.0410)       | -0.0346<br>(0.0247)     | -0.0768**<br>(0.0389)     | -0.00782<br>(0.0215)      | 0.197**<br>(0.0943)        | -0.612<br>(0.733)       | 0.198***<br>(0.0553)   | 0.219***<br>(0.0427)       |
| Education                    | 0.354***<br>(0.0706)      | 0.121**<br>(0.0505)     | 0.222***<br>(0.0654)      | 0.104***<br>(0.0375)      | -0.175<br>(0.149)          | -0.320<br>(0.210)       | -0.0333<br>(0.0609)    | -0.00341<br>(0.0782)       |

| Variables                | Inpatient public provider |                      |                      |                       | Inpatient private provider |                      |                      |                      |
|--------------------------|---------------------------|----------------------|----------------------|-----------------------|----------------------------|----------------------|----------------------|----------------------|
|                          | 2003                      | 2004                 | 2005                 | Pooled                | 2003                       | 2004                 | 2005                 | Pooled               |
| Constant                 | -1.678***<br>(0.125)      | -1.575***<br>(0.117) | -1.648***<br>(0.163) | -1.589***<br>(0.0700) | -3.617***<br>(0.271)       | -2.228***<br>(0.644) | -2.159***<br>(0.197) | -2.880***<br>(0.159) |
| Wald $\chi^2$            | 167.46                    | 625.21               | 259.62               | 1200.81               | 76.44                      | 25.4                 | 345.08               | 135.17               |
| Prob > $\chi^2$          | < 0.000                   | < 0.000              | < 0.000              | < 0.000               | < 0.000                    | < 0.000              | < 0.000              | < 0.000              |
| Observations             | 37,447                    | 37,184               | 37,704               | 112,335               | 37,447                     | 37,184               | 37,704               | 112,335              |
| Cross price elasticities |                           |                      |                      |                       |                            |                      |                      |                      |
| Public provider          | -0.3534***                | -0.2024***           | -0.3400***           | -0.2517***            | 0.6797***                  | 0.5845***            | 0.4790***            | 0.5456***            |
| Private provider         | 0.1651***                 | 0.1062**             | 0.2353***            | 0.1668***             | -0.2658***                 | -0.4232***           | -0.3881***           | -0.3392***           |

\*\*\*p<0.01, \*\*p<0.05, \*p<0.1

Note: The dependent variables show as inpatient visiting at public provider on the first panel and as inpatient visiting at private provider on the second panel. The price elasticities are measured similarly on table 4.

The range of cross price elasticity suggests that public providers and private providers are substitutes. In case of a dependent with public inpatient care providers, the cross price elasticities during study years and pooled regression are both significant at a 95% and 99% confidence level. The price elasticities of public inpatient care services with respect to the price of a public provider range from -0.20 to -0.35 and a private provider ranges from 0.11 to 0.24. For instance in 2003, the results indicate that a 1 percent increase in price change for a public provider results in a 16.51 percent increase in the probability of visiting a private provider instead.

Similarly, in case of a dependent with private inpatient care providers, an increase in price change by a private provider in 2003 results in a 67.97 percent increase in the probability of visiting a public provider. Comparing both providers indicates that inpatient care services of public providers are more sensitive to changes in their price than private providers in this study.

#### 5.1.4 Robustness checks for the own price elasticity of inpatient care services

For robustness checks (e.g. full estimations in 2003 see on appendix table 10), I estimate additional probit regression model by using different variables to check the own price elasticity (see on tables 8) of inpatient care services to compare with the previous section 5.1.1.

##### - Price of private plan

In this section, there are seven plans to estimate the price elasticity. I re-calculate the expected price rate by adding the price for private plan, separated from plan (OT), faced by individuals entering the main regression (8), to check how private plan impact on the elasticity of inpatient care services. The result in 2003, -0.07, is similar to using the main six plans. The private plan data in 2004 is not available. However, in 2005 the price elasticity, -0.07, seems to be less responsive to changes in the price compared with the main results in section 5.1.1.

##### - Price per visit

I calculate price per visit by using only the average value of the out-of-pocket expense of inpatient care services (not divided by the number of days) divided the number of

inpatients who hold the same plan. Price per visit replaced the expected price variable in the main regression (8). Currently, there are the other six plans to run the regression to estimate the price elasticity. The results for the price elasticities are close to those found in section 5.1.1, except that those of 2005 differ by approximately 3 percent.

#### **- Individual income**

I assume that the decision to seeking medical care services depends on an individual's income, not a household's income. I ran a probit regression by using only individual income. The price elasticities are quite different to the main results in section 5.1.1 of this paper. The results for the price elasticities by individual income are less responsive to changes in the price than household income, except in the year 2003. The price elasticities range from -0.07 to -0.09 during the year study.

**Table 8** Robustness checks show own price elasticity of inpatient care services with probit regressions.

| Robustness Variables  | 2003       | 2004       | 2005      | Pooled     |
|-----------------------|------------|------------|-----------|------------|
| Price of private plan | -0.0675**  | -          | -0.0708** | -          |
| Price per visit       | -0.0526**  | -0.0657**  | -0.0709** | -0.0459*** |
| Individual income     | -0.0881*** | -0.0752**  | -0.0757*  | -0.0688*** |
| Exercise              | -0.0629**  | -          | -         | -          |
| Drinking water        | -0.0434    | -0.1173*** | -0.0779   | -0.0555*** |
| Lavatory              | -0.0635**  | -0.1176*** | -0.0726   | -0.0637    |
| Chronic               | -0.0453    | -0.0591*   | -0.0806** | -0.0658*** |
| Drop working          | -0.0416**  | -0.0449**  | -0.0579** | -0.0459*** |

\*\*\*p<0.01, \*\*p<0.05, \*p<0.1

Note: - Price of private plan data is not available in 2004.  
- Exercise data is not available in 2004 and 2005.

#### **- Prevention by exercise, drinking water and using the lavatory**

Prevention is hypothesized to decrease the rate of depreciation in health status. Exercise refers to whether an individual in the sample engaged in any sporting activities during the month prior to the interview. Drinking water refers to the types of water to consumed, such as bottled water, piped water, and underground water. Lavatory refers to types of using toilet, such as flushed toilets, molded bucket latrine toilets, and pits toilets. Thus, I use three dummy variables and add them separately into the main regression (8) for estimating the price elasticity of inpatient care services.

The result for sporting activities in 2003 is similar to the result of section 5.1.1. The exercise data for 2004 and 2005 is not available. The price elasticities range from -0.04 to -0.12 for drinking water, and from -0.06 to -0.12 for using lavatory. In these two dummy variables, the results for the price elasticities are similar and close to that of 2003 and the pooled data, but are quite different in 2004 and 2005 when compared to the main results in section 5.1.1.

#### **- Chronic**

The chronic variable refers to health status of an individual who had a chronic disease. I use it as a dummy variable measuring price elasticity for inpatient with chronic disease. The

results show that the price elasticities range from -0.05 to -0.08 and are less responsive to changes in the price than in section 5.1.1. This suggests that inpatient with chronic disease is more preventable, treatable and careful for long-lived than only inpatient case.

### - Drop work

I add the working variable into the main regression (8), but the sample size is reduced around 50 percent. Now, I drop the working variable and run the regression by using the remaining variables. The results indicate that the price elasticities decrease double and less responsive to changes in the price compared with the main result in section 5.1.1. The price elasticities range from -0.04 to -0.06 in during year study.

## 5.2 Own price elasticity of outpatient care services

As discussed, the dependent variable in this model is a dummy variable if an individual  $i$  used as outpatient care services during the 1 month prior to the interview. Individual medicates illness by utilizing health service providers. The price elasticity is calculated at the mean price of the expected price of medical care services. I estimate during three periods and pooled cross section to examining the effects of changes over time of the price elasticity of outpatient care services (see on Table 9).

**Table 9** The estimated coefficients of the model and own price elasticity of outpatient care services with probit regressions.

| Variables          | 2003                   | 2004                    | 2005                    | Pooled                     |
|--------------------|------------------------|-------------------------|-------------------------|----------------------------|
|                    | Outpatient             | Outpatient              | Outpatient              | Outpatient                 |
| Logprice           | -0.247***<br>(0.0835)  | -0.100***<br>(0.0164)   | -0.0398**<br>(0.0160)   | -0.0968***<br>(0.00865)    |
| Household income   | 4.03e-07<br>(5.81e-07) | -3.54e-07<br>(2.45e-07) | 3.07e-07*<br>(1.83e-07) | -3.89e-05***<br>(9.17e-06) |
| Age                | 0.0229***<br>(0.00275) | 0.0187***<br>(0.000801) | 0.00867**<br>(0.00362)  | 0.0196***<br>(0.000656)    |
| Male               | -0.401***<br>(0.0582)  | -0.213***<br>(0.0281)   | -0.114**<br>(0.0469)    | -0.292***<br>(0.0170)      |
| Work               | -0.101**<br>(0.0418)   | -0.0820***<br>(0.0250)  | -0.0590**<br>(0.0268)   | -0.0883***<br>(0.0197)     |
| Education          | 0.284***<br>(0.0879)   | 0.0877*<br>(0.0448)     | 0.783***<br>(0.239)     | 0.0975**<br>(0.0392)       |
| Constant           | -1.673***<br>(0.129)   | -1.259***<br>(0.0850)   | -1.438***<br>(0.0670)   | -1.506***<br>(0.0594)      |
| Wald $\chi^2$      | 146.62                 | 590.68                  | 832.66                  | 1,378.09                   |
| Prob > $\chi^2$    | < 0.000                | < 0.000                 | < 0.000                 | < 0.000                    |
| Observations       | 37,447                 | 37,184                  | 37,704                  | 112,335                    |
| Price elasticities | -0.1641***             | -0.2170***              | -0.1521***              | -0.1570***                 |

Standard errors in parentheses, \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

Note: A generalized Wald test is run to determine if these properties are violated. The testing rejects the null hypothesis that coefficients are all zero. The price elasticities are measured similarly on table 4.

The estimations from the empirical analysis are based on a probit regression. The results indicate that determinants to seek outpatient care services include the expected price of outpatient medical care services, household income per capita, and individual characteristics. The coefficients of these variables have a positive and negative effect on the decision to seek medical care. The price elasticities of demand for medical care services with respect to outpatient charges are inelastic for all and range from -0.15 to -0.22 and are significant at the 99% level. The results predict that a 1 percent increase in the expected price is associated with a drop in the probability of seeking care for outpatients by 16.41, 21.70, and 15.21 percent in each year, and 15.70 percent for pooled data, respectively.

The findings are in line with the available literature. For example, Manning et al. (1987) estimated the range as -0.13 to -0.21 for outpatients. Bhattacharya et al. (1996) found elasticities in the range of -0.12 to -0.54, while Yoshida and Takagi (2002) found a range of -0.08 to -0.11 after the reform of the social medical insurance system in Japan. In this study, the results suggest that the own price elasticities of demands for medical care for outpatient care services are almost double demand for inpatient care services in response to changes in the price. Therefore, the results are consistent with the hypothesis that inpatient care services are inelastically responsive to changes in the price in the demand for medical care service than outpatient care services.

## 6. Conclusion

This paper estimates price elasticities of demand for medical care services with both inpatient and outpatient care services. I study individual level data from the Health and Welfare Survey (HWS) by a probit regression model. The findings indicate that inpatient care services are less price-responsive to the demands for medical care services than outpatient care services. The price elasticities for inpatient care services are inelastic and range from -0.06 to -0.10 while prices elasticities for outpatient care services are more elastic than inpatient care services, and rang from -0.15 to -0.22. These results are consistent with the range of elasticity of other studies e.g., Manning et al (1987), Eichner (1998) for USA, Van Vliet (2001) for Netherlands, Bhattacharya et al. (1996) for Japan and Duarte (2012) for Chile.

One limitation in this study should be highlighted is that Thailand's health care system does not have an appropriate co-insurance or co-payment rate for medical care services. The method used in this paper to estimate price elasticities is the expected price of medical care services measured by the average out-of-pocket medical care costs of patients who hold the same medical insurance plan. This is different from the literature, which usually used co-insurance or co-payment rates as the prices. Nevertheless, the outcomes of this study are in line with the literature. This similarity of the results from this study and the literature suggests that the measurement of the prices of medical care services using the average out-of-pocket medical care costs is quite sensible.

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## Appendix

**Table 10** Robustness checks estimated coefficients and own price elasticity of inpatient care services in 2003.

| Variables                | 1                      | 2                       | 3                       | 4                      | 5                       | 6                      | 7                      | 8                       |
|--------------------------|------------------------|-------------------------|-------------------------|------------------------|-------------------------|------------------------|------------------------|-------------------------|
| Logprice                 | -                      | -                       | -0.689***<br>(0.246)    | -0.0208*<br>(0.0111)   | -0.00933<br>(0.00665)   | -0.0221**<br>(0.0107)  | -0.0455<br>(0.0304)    | -0.00973<br>(0.00670)   |
| LogPrice of private plan | -0.0235**<br>(0.0110)  | -                       | -                       | -                      | -                       | -                      | -                      | -                       |
| LogPrice per visit       | -                      | -0.0110*<br>(0.00632)   | -                       | -                      | -                       | -                      | -                      | -                       |
| Household income         | 1.70e-07<br>(3.53e-07) | 1.49e-07<br>(2.15e-07)  | -                       | 5.07e-07<br>(3.91e-07) | 1.76e-07<br>(2.17e-07)  | 1.69e-07<br>(3.52e-07) | 7.37e-07<br>(1.01e-06) | 5.38e-07*<br>(3.14e-07) |
| Individual income        | -                      | -                       | -7.79e-06<br>(5.50e-06) | -                      | -                       | -                      | -                      | -                       |
| Age                      | 0.0122***<br>(0.00289) | 0.00778***<br>(0.00283) | 0.00925***<br>(0.00279) | 0.0123***<br>(0.00218) | 0.00775***<br>(0.00280) | 0.0123***<br>(0.00271) | -0.0529**<br>(0.0214)  | 0.00615<br>(0.00413)    |
| Male                     | -0.132***<br>(0.0490)  | -0.0756**<br>(0.0307)   | -0.298***<br>(0.0787)   | -0.116**<br>(0.0452)   | -0.0782**<br>(0.0328)   | -0.131***<br>(0.0474)  | -0.432***<br>(0.129)   | -0.0668<br>(0.0425)     |
| Working                  | 0.162<br>(0.124)       | 0.104<br>(0.0752)       | 0.170*<br>(0.0908)      | 0.111<br>(0.133)       | 0.122<br>(0.0788)       | 0.157<br>(0.122)       | 0.00896<br>(0.0806)    | -                       |
| Education                | 0.108**<br>(0.0463)    | 0.500**<br>(0.244)      | 0.319*<br>(0.172)       | 0.0912*<br>(0.0488)    | 0.491**<br>(0.245)      | 0.109**<br>(0.0461)    | -0.261<br>(0.522)      | 0.672<br>(0.438)        |
|                          |                        |                         |                         | (0.0284)               |                         |                        |                        |                         |
| Drinking water           | -                      | -                       | -                       | -                      | -0.0456**<br>(0.0211)   | -                      | -                      | -                       |
| Lavatory                 | -                      | -                       | -                       | -                      | -                       | -0.0474<br>(0.0972)    | -                      | -                       |
| Chronic                  | -                      | -                       | -                       | -                      | -                       | -                      | 1.121***<br>(0.227)    | -                       |
| Constant                 | -1.604***<br>(0.127)   | -1.395***<br>(0.153)    | -0.976*<br>(0.506)      | -1.489***<br>(0.132)   | -1.415***<br>(0.160)    | -1.564***<br>(0.153)   | -0.987**<br>(0.493)    | -1.515***<br>(0.122)    |
| Wald $\chi^2$            | 279.94                 | 455.01                  | 29.91                   | 269.12                 | 462.48                  | 283.33                 | 106.75                 | 707.76                  |
| Prob > $\chi^2$          | < 0.000                | < 0.000                 | < 0.000                 | < 0.000                | < 0.000                 | < 0.000                | < 0.000                | < 0.000                 |
| Observations             | 37,447                 | 37,447                  | 29,177                  | 26,901                 | 37,447                  | 37,447                 | 37,447                 | 62,806                  |
| Price elasticities       | -0.0675**              | -0.0526**               | -0.0881***              | -0.0629**              | -0.0434                 | -0.0635**              | -0.0453                | -0.0416**               |

Standard errors in parentheses, \*\*\*p<0.01, \*\*p<0.05, \*p<0.1

Note: The price elasticities are measured similarly on table 4.



## **FACTORS AFFECTING BEHAVIORAL INTENTION TO PURCHASE LOW-COST AIRLINE E-TICKET IN YHAILAND**

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# **FACTORS AFFECTING BEHAVIORAL INTENTION TO PURCHASE LOW-COST AIRLINE E-TICKET IN THAILAND**

by

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## **Abstract**

**Purpose** - The purpose of this research aims to investigate the factors that affect behavioral intention to purchase low-cost airline e-ticket and this research.

**Design/methodology** - This research employed an empirical study with the use of the questionnaire survey method, in total, 430 responses were collected through randomly mailing and sent out to consumers who had an experience of purchasing low cost airline e-ticket.

**Findings** - The result showed that marketing efforts, perceive ease of use and perceived usefulness positively affects attitude toward using low cost airline e-ticket and attitude toward using and subjective norm also positive affect behavioral intention to purchase low-cost airline e-ticket. The research showed that perceived usefulness was the most important factor that affect to the behavioral intention to purchase low-cost airline e-ticket.

**Practical implications** - The research showed perceived usefulness was the most important factor that affect to the behavioral intention to purchase low-cost airline e-ticket. . The most influence question in this factor is “using internet for flight reservation increase reservation performance”. Customers think that when they reserve the flight by online booking, they will get the best deal because the website provide all information and they can compare the price easily to another website because product and service information seem to be very important. Hence, Airline companies should ensure that they provide enough details and useful information about the product as well as clearly state the price and terms and condition. Therefore it can help influencing customer’s intention to purchase.

## 1. Introduction

According to the current situation, the world becomes more globalization and most companies become communication to each other via the network. Then, the internet plays as the main channel to serve in all kind of businesses such as business to business (B2C), business to customer (B2C) and customer to customers (C2C). Also, in the recent year, there are many researchers conducted in the topic of the behavior intention to use the online channel and it will lead to new marketing concept for expanding and developing the market strategy of most organization. Most of managements strongly demand increasing in the attention in behavior to use the online channels and also consider many factors effect to the attitude to use and intention to use the online channels of customers.

To consider the behavior attention to use online channels of consumers, there are many factors related to the behavior intention to use online channel as follow. The determinants of online channel used in a multi-channel environment (Srisuwan 2008). The Technology Acceptance Model (TAM) has been used to interpret people's adoptions of several kinds of technology. However, while people accept online application service technology with security threats, the perceived risk is generally ignored by past TAM studies (Lu 2005). Conceptual model based on technology acceptance with extended antecedent variables (entertainment and irritation) to examine the impact of use and gratification on e-consumers' acceptance of B2C Websites (Huang 2008). Individual attitudes toward e-shopping were a direct predictor of e-shopping behavior and mediated the relationship between personal values and behavior (Jayawardhena 2004). The factors influencing the intention to use internet stock trading among investors in Malaysia (Gopi and Ramayah, 2007). The determinants of the acceptance of online customization in apparel shopping by testing a research model with methods of internet surveys and a nationwide random sampling (Cho and Fiorito, 2008). The study of factors that help or hinder the attitude towards using online services (Seneler, Basoglu and Daim, 2009). Presenting a conceptual model based on technology acceptance with extended antecedent variables (entertainment and irritation) to examine the impact of use and gratification on e-consumers' acceptance of B2C Websites (Singh 2004). This research is created to study the consumer behavior and develop online channel to satisfy the consumers by considering the factors effected. This research focuses on Low-Cost Airline in Thailand which are Air Asia, Nok Air, Orient Thai, Bangkok Airways and Thai Smile Air, a new budget airline created by Thai Airways International.

In addition, Thailand is considered the internet as the important gate way to do business activities. Internet plays as the main channel to serve in all kind of businesses. Almost every Airline uses the web to provide information about products and services. According to Law and Leung (2000) many airline companies still do not have sufficient knowledge to build a "useful" web site. The airline also use the web to be one of the channel to do promotion. Customers can purchase air ticket online, pick the seat, select the meal and etc.

In order to help the companies increase the volume of purchasing low-cost airline ticket thru online or e-ticket and changing consumer behavior to purchase ticket thru online more to get more benefits and cost saving as the customers need, the researcher considered that there are many variables that affected to online users who have intend to purchase E-ticket. Therefore this research was studied perceived usefulness, perceived ease of use, subjective norm, marketing efforts are independent variables. Perceived usefulness, perceived ease of use, marketing efforts factors related to attitude toward using which is an intervening that linked to behavior intention to use while subjective norm is a directly affected to online users behavioral intention to use.

## **2. Research questions and objective**

### **2.1 Research questions**

This study is expected to answer the following questions:

1. How does marketing effort affect attitude toward using low cost airline e-ticket?
2. How does perceived ease of use affect attitude toward using low cost airline e-ticket?
3. How does perceived usefulness affect attitude toward using low cost airline e-ticket?
4. How does attitude toward using low cost airline e-ticket affect behavioral intention to purchase?
5. How does subjective norm affect behavioral intention to purchase?

### **2.2 Research Objective**

This research aims to explore of factors that affecting customers' intention to purchase low cost airline e-ticket as follows:

1. To analyze the relationship between marketing effort and attitude toward using low cost airline e-ticket
2. To study the relationship between perceived ease of use and attitude toward using low cost airline e-ticket
3. To explore the relationship between perceived usefulness use and attitude toward using low cost airline e-ticket
4. To explore the relationship between attitude toward using low cost airline e-ticket and behavioral intention to purchase
5. To explore the relationship between subjective norm and behavioral intention to purchase

## **3. Expected Benefits**

Currently, there is a 24-hours service online. So, it helps customers to economize time and costs with high ability of using at anytime and anywhere to access system. According to above factor, both business owners and customers can gain benefits.

Enhancing usefulness and ease of use, business owners can have more benefits such as an increase of ordering product via internet customers can order products or service online 24 hours.

Business sectors will gain benefits from the rising amount of customers who use internet with the reasons of perceived ease of use, perceived usefulness, subjective norm or social factors. These can enhance purchasing effectiveness, and also are easy to use, clear and understandable. Hence, many companies have to improve their website more interesting and easy to use in order to urge and enhance customers to use online service channel. In Thailand, and many business owners are now changing their traditional selling products or services and behavior to become more electronics and purchasing online. One of those businesses is airline e-ticket.

This research is expected to help marketers to have a better understanding on customers' intention concerning internet purchasing.

## **4. Literature Review**

### **4.1 Marketing efforts**

Channel alternatives are a significant key manipulate in channel alternative. If companies pay an attention on marketing efforts throughout the amount of channel alternatives to consumers, they can be confident to exploit a particular channel. For instance, the majority online products offer an electronic mail service and advertising information on their Web site, after that customers can choose the channel they favor to make up their mine on their purchasing. Purchaser channel movement and discovered that advertising, which is catalogues and electronic mails, can dominant customer behavior in both channel alternative and buy quantity (Sari, 2005).

Furthermore, the customer makes a decision which quantity they want to buy from the trader and what channel to apply. Also, buy quantity and channel alternative might be related in the same period of time. Thus, electronic mail and catalogues as advertising which company try to communicate with its customer, can influence buy quantity and channel alternative. Incentive can be an ordinary instrument for increasing the competence of channels. Furthermore, marketers occasionally apply it to give confidence to customers to choose their channel alternative. It appears that by applying a mixture of promotions and incentives to demonstrate its consumers to the accurate channels at the accurate times, companies can shift their customers into applying a particular channel. Myers et al (2004) revealed that careful exploit of incentives can aid companies control the reaction of their multi-channel consumers.

## 4.2 Subjective norm

According to Venkatesh et al. (2003), social influences result from subject norms, which relate to individual consumers' perceptions of the beliefs of other consumers. Shim et al.(2001) consider subjective norms only marginally significant for e-shopping intentions, whereas Foucault et al. (2005) confirm a significant link between talking about e-shopping with friends and intention to e-shop. Social influence also is relevant to enjoyment, because involving web sites facilitate e-friendship among social communities and enforce enjoyment as e-shopping.

Subjective norm is defined as a “person’s perception that most people who are important to him think he should or should not perform the behavior in question” (Venkatesh and Davis, 2000). That is closely related to social pressure is named the “subjective norm.” Subjective norm is often measured directly by asking respondents to indicate whether important others (that is, self-selected referents) would approve or disapprove of their performing a particular behaviors (Ajzen 1991).

Raghunathan and Corfman (2004) discovered that the attitude of congruity among personal attitude and others guide to positive way of thinking. Keen et al (2004) practiced the social norm as of the theory of logical accomplishment to learn which problem determine customer favorites among offline and online buying. Subjective norm is defined as the individual’s perception of the likelihood that the potential referent group or individuals approve or disapprove of performing the given behavior (Fieshbein and Ajzen, 1975;Ajzen, 1991). Subjective norm also shown as a direct determinant of behavioral intention in TRA (Fishbein and Ajzen, 1975).Another defining is social influence and social pressure, an individual would perform the behavior even though that people is not in favor of performing the behavior (Venkatesh and Davis, 2000).

## 4.3 Perceived ease of use

Perceived ease of use is a major factor that effects on consumers' acceptance of information system (Davis et al, 1989). Perceive ease of use (PEOU) is defined as “the degree to which a person believes that using a particular system would be free of effort” (Davis, 1989). Therefore an application is more likely to be accepted by users if it is perceived to be easier to use than another.

Technology acceptance model (TAM) is considered the most validated model to explain the acceptance of information technology and information systems (Lu et al., 2003).

Applying this research to online flight reservation “ease of use” is the consumer’s perception that booking on the Internet will involve a minimum of effort. Whereas “usefulness” referred to consumers’ perceptions regarding the outcome of the online shopping experience, “ease of use” refers to their perceptions regarding the process leading to the final online shopping outcome. In a simplified manner, it can be stated that “usefulness”

is how effective booking flight via the Internet is in helping consumers to accomplish their task, and “ease of use” is how easy the Internet as a booking medium is to use. According to TAM, “ease of use” has a dual effect, direct as well as indirect, on consumers’ intention to shop online. The direct effect is explained by the fact that in behavioral decision making consumers attempt to minimize effort in their behaviors, as is also the case with consumers’ perceptions regarding the “ease of use”: the perception that Internet shopping will be free of effort (Venkatesh, 2000). The easier and more effortless a technology is, the more likely consumers intend to use this technology.

Understanding that “ease of use” affects consumers’ attitude and intention toward online shopping, it is important to identify the latent dimensions of this construct in the Internet setting. According to TAM, “ease of use” is particularly of influence in the early stages of user experience with a technology or system (Davis, 1989, 1993). Following this, Venkatesh (2000, p. 343) stated: “..With increasing direct experience with the target system, individuals adjust their system-specific ease of use to reflect their interaction with the system”. Implying that if consumers get more experienced with Internet, they will adjust their perceptions regarding the “ease of use” of the Internet as a shopping medium in a positive direction.

#### **4.4 Perceived usefulness**

Perceived Usefulness (PU) is defined as "the degree to which a person believed that using a particular system would enhance his or her job performance" Davis (1989). TAM mentioned that “usefulness” is influenced by “ease of use”, because the easier a technology is to use, the more useful it can be (Venkatesh, 2000; Dabholkar, 1996; Davis et al., 1989).

According to the research of (Monsuwe and Ruyter, 2004) they found that “usefulness” refers to consumers’ perceptions that using the Internet as a shopping medium enhances the result of their shopping experience and that perceptions influence consumers’ attitude toward online shopping and their intention to shop on the Internet.

According to Burke (1996), perceived usefulness is the primary prerequisite for mass-market technology acceptance, which depends on consumers’ expectations about how technology can improve and simplify their lives (Peterson et al., 1997). A website is useful if it delivers services to a customer but not if the customers’ delivery expectations are not met (Barnes and Vidgen, 2000). The usefulness and accuracy of the site also influence customer attitudes. Users may continue using an e-commerce service if they consider it useful, even if they may be dissatisfied with their prior use (Bhattacherjee, 2001a). Consumers likely evaluate and consider product-related information prior to purchase, and perceived usefulness thus may be more important than the hedonic aspect of the shopping experience (Babin et al., 1994).

In addition, perceived usefulness predicts IT use and intention to use (Adam et al. 1992), including the using of e-commerce (Gefen and Straub 2000).

#### **4.5 Behavioral intention**

Behavioral intention (BI) is defined as a consumer's intention to subscribe (or intention to purchase product) in the future (Brown and Venkatesh, 2005; Dwivedi, 2005; Venkatesh and Brown, 2001) and also one kind of purchase intention which can be used to predict consumer's purchase behavior (Chih, Lin and Yang 2010) Intention is defined as the perception of an individual towards performance of a particular behavior (Fishbein and Ajzen, 1975).

Shim et al, 2001 showed in an empirical study that attitude towards web-shopping would positively predict intention to use the web for product information search which would affect web-shopping intentions. O'Cass and Fenech,(2002)conclude that attitude towards the web for retailing can influence action behavior of using the web for retail purchases. It seems that direct relationship between attitude and web-purchasing intentions is supported. However, this relationship has been found to be mediated by a variable – web-searching behavior (Shim et al, 2001).

#### **4.6 Attitudes**

Attitude toward a behavior is referred as an individual's positive or negative evaluation of behavior and is composed of an individual's, salient beliefs regarding the perceived consequences of performing behavior. Helander and Khalid (2000) found that a positive attitude toward e-commerce has a significant influence on shopping from the internet.

The relationship between attitude and purchase intention toward the traditional retailer has been intensively investigated in the past (George, 2002). Similarly, in the internet context, a number of past studies (e.g. Goldsmith and Bridges, 2000; Shim et al, 2001) showed that attitude toward the internet shopping was positively related to internet shopping intention. The positive attitude toward the internet shopping important increased intention to use the internet for purchasing.

Moreover, Kim et al (2003) found that consumers who had more favorable attitudes toward online shopping had greater intention to purchase clothing via the internet. Watchravesringkan and Shim (2003) also confirmed a positive causal relationship between attitude toward online shopping and online purchase intention focusing on apparel.

### **5. Theory**

#### **5.1 The technology acceptance model (TAM)**

The technology acceptance model (TAM), it originally formulated by Davis (1986) is one of the most widely tested models of technology acceptance. The TAM adapted Ajzen and Fishbein's (1980) theory of reasoned action (TRA) to explain the relationship between users'

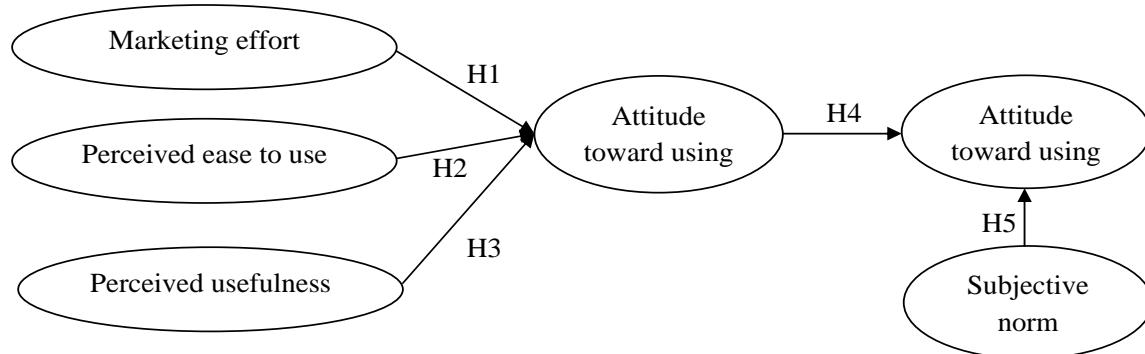
internal beliefs (usefulness and ease of use), attitude, intentions, and computer usage behaviour (Davis et al., 1989). The original TAM is a person's acceptance of a technology is hypothesized to be determined by his or her voluntary intentions towards using the technology. The intention is determined by the person's attitude towards the use of the technology and his or her perception of its usefulness. Attitudes are formed from the beliefs a person holds about the use of the technology. The first belief, PU, is the user's "subjective probability that using a specific application system will increase his or her job performance within an organizational context" (Davis et al., 1989, p. 985).

## 5.2 Theory of planned behavior

The TPB (Ajzen, 1991) is an extension of theory of reasoned action(TRA) and was established to answer the limitation in the TRA (Fishbein and Ajzen,1975; Ajzen and Fishbein, 1980). Also, an extension of TRA, TPB is composed of attitude towards the behaviour, social factor was called subjective norm and an added variable which is the degree of perceived behavioral control (PBC) (Ajzen, 1985, 1991, 2002). PBC is the additional construct that was added to solve the limitations in TRA (Ajzen, 1985, 1991, 2002). TPB is an individual's performance of a certain behavior and determined by his or her intent to perform that behavior. Intent is itself informed by attitudes towards the behavior, and perceptions about whether the individual will be able to successfully engage in target behavior.

## 6. Conceptual Framework

**Figure 1** Conceptual Framework



Source: Shumaila Y. Yousafzai, Gordon R. Foxall and John G. Pallister (2007), Technology acceptance: a meta-analysis of the TAM: Part 1, Vol 2, No. 3, pp. 251-280.

Paweeana Srisuwan and Stuart J. Barnes (2008). Predicting online channel use for an online and print magazine: a case study. *Internet Research*, 18 (3), pp. 266-285.

M. Gopi and T. Ramayah (2007). Applicability of theory of planned behavior in predicting intention to trade online, Vol.2, No. 4, pp.348-360.

### Hypothesis

- H1: Marketing efforts positively affects attitude toward using.
- H2: Perceived ease of use positively affects attitude toward using
- H3: Perceived usefulness positively affects attitude toward using.
- H4: Attitude toward using positively affects behavioral intention.
- H5: Subjective norm positively affects behavioral intention.

## 7. Methodology

The population of this research is customers who used to purchase ticket by online (E-Ticket) in Bangkok. Moreover, also scope the age of customers as 15 to above 45 which is considered as more willing purchase group and the questionnaires were send out 450 and returned back to the researcher 430.

### 7.1 Data collection

According to this research objective, the respondents were sampled from customers who used to purchase ticket by online (E-Ticket) in Bangkok. The questionnaires were collected with 2 rounds. The first one was from 10 August to 5 September 2013, the questionnaires were distributed by researchers to the individual from the following places:

1. Office building: Bangkok Bank Head Officer and SC park, with 150 questionnaires.
2. Donmueng Airport with 150 samples questionnaires.

The 300 questionnaires were returned back from both office building and Donmueng Airport, the return rate was 100%

The second round was from 10 to 30 September 2013, the questionnaires were sent randomly with 150 questionnaires by e-mail. The screening question was sent along with to check whether the respondent used to purchase e-ticket or had an experience about purchasing e-ticket before in e-mail. If the respondent had an experience, then could be continued for the questionnaire. Finally, the samples questionnaires were sent back by e-mail at 130, the return rate was 86.6%. Therefore, the return rate of 2 rounds of 450 was 93.3%, the total of the valid from 2 rounds were 430.

### 7.2 Data Analysis

Likert scale was applied to measure the level of agreement of variables. The scale is from 1-5 rating from “strongly disagree” to “strongly agree”. The scale was developed from (Xiao Tong 2010) Interpretation of questionnaire with 5 point scales, the interval for breaking the range in measuring each variable is calculated by:

$$(5 - 1) / 5 = 0.80$$

It means items with scores falling between the ranges of:

- 4.21 – 5.00 considered as strongly agreement
- 3.41 – 4.20 considered as agreement
- 2.61 – 3.40 considered as neutral
- 1.81 – 2.60 considered as disagreement
- 1.00 – 1.80 considered as strongly disagreement

After all data was collected it was be summarized and analyzed in a comprehensive format. The appropriate technique used in this research was a computer statistics program and the outputs of the program were presented in the next chapter. Descriptive statistical technique was used to describe demographic part such as gender, age, education level, occupation, income and marital status. The “Multiple Regression Analysis (MRA)” using SPSS 16.0 is used to test the relationship between more than one independent variables and one dependent variable.

One-Way ANOVA which is used to test the significance of the analysis of homogeneity test is greater than .05; and Regression model is used to test marketing effort, perceived ease of use, and perceived usefulness had effect on attitude toward using low-cost airline e-ticket.

### 7.3 Pretest of Research Instrument

Pretest of Research Instrument, Validity is concern in this research. Validity analysis is an evaluation using the index of item-objective congruence or IOC (Rovinelli and Hambleton, 1977).

**Table 1** Validity test using IOC

| Variables                        | IOC  |
|----------------------------------|------|
| Marketing effort                 | 0.77 |
| Perceived ease of use            | 0.77 |
| Perceived usefulness             | 0.88 |
| Subjective norm                  | 0.80 |
| Attitude toward using            | 0.90 |
| Behavioral intention to purchase | 0.93 |

**Table 2** Reliability test using Cronbach's Alpha

| Variables                        | Amount of Items | Cronbach's Alpha |         |
|----------------------------------|-----------------|------------------|---------|
|                                  |                 | (Pre-Test)       | (Final) |
| Marketing effort                 | 6               | 0.860            | 0.861   |
| Perceived ease of use            | 6               | 0.880            | 0.856   |
| Perceived usefulness             | 6               | 0.890            | 0.861   |
| Subjective norm                  | 5               | 0.855            | 0.870   |
| Attitude toward using            | 7               | 0.890            | 0.859   |
| Behavioral intention to purchase | 5               | 0.880            | 0.860   |

The values of the coefficients calculated by using Cronbach's Alpha score to decide and the final test was higher than 0.7.

The statistics which are use the "Multiple Regression Analysis (MRA)" using SPSS to test the relationship between more than one independent variables and one dependent variable. One-Way ANOVA is using to test the significant in the analysis of homogeneity test is greater than .05; and Regression model are employ to test marketing effort, perceived ease of use, and perceived usefulness had effect on attitude toward using low-cost airline e-ticket.

## 8. Hypothesis Testing

**8.1 Multiple regression analysis** used to test the research model. Multiple regression analysis used to test hypothesis 1-3. The analysis result of H1 indicates p-value < 0.05 (0.039), b = 0.101, H2 indicates p-value < 0.05 (0.000), b = 0.553, H3 indicates the p-value < 0.05 (0.000), b = 0.171. This can be concluded that marketing efforts, perceived ease of use, perceived usefulness positively affects attitude toward using low cost airline online channel.

**8.2 Pearson Product Moment analysis** used to test hypothesis 4 and hypothesis 5. The analysis result of H4 indicates the p-value < 0.05 (0.000) and H5 indicates the p-value < 0.05 (0.000). This confirms that attitude toward using low cost airline online channel and subjective norm positively affects behavioral intention.

**Table 3** Brief of Hypothesis Testing

| Hypothesis   | The Result |
|--|------------|
| H1: Marketing efforts positively affects attitude toward using low cost airline online channel             | Accept     |
| H1o: Marketing efforts is not positively affects attitude toward using low cost airline online channel.    | Reject     |
| H2: Perceived ease of use positively affects attitude toward using low cost airline online channel         | Accept     |
| H2o: Perceived ease of use not positively affects attitude toward using low cost airline online channel.   | Reject     |
| H3: Perceived usefulness positively affects attitude toward using low cost airline online channel          | Accept     |
| H3o: Perceived usefulness is not positively affects attitude toward using low cost airline online channel. | Reject     |
| H4: Attitude toward using low cost airline online channel positively affects behavioral intention          | Accept     |
| H4o: Attitude toward using low cost airline online channel is not positively affects behavioral intention. | Reject     |
| H5: Subjective norm positively affects behavioral intention.   | Accept     |
| H5o: Subjective norm is not positively affects behavioral intention  | Reject     |

## 9. Conclusion and Discussion

This research aims to understand consumer behavior in factors affecting behavioral intention to purchase low-cost airline e-ticket. In order to get the right factor of online channel

use can ensure that consumers will have positive attitudes and intentions to go online more. As a result of the regression model, perceived ease of use appeared to be the most accurate factor of consumer attitude toward using low-cost airline e-ticket. Perceived usefulness was the second accurate factor of consumer attitude toward using low-cost airline e-ticket. Marketing effort also associated with consumer attitude toward using low-cost airline e-ticket because E-mail and incentives are examples of marketing efforts that could encourage consumers to go online more.

## **10. Implication of the study**

According to the e-commerce has rapid growth in the business world and it force companies to enter the competition in online business world including the knowledge of the factors which have an impact on consumer in purchasing e-ticket online will give advantage to companies in utilizing and allocating their resources in more efficient way. In this research perceived usefulness (PU) is one of the most important factors that affect behavioral intention to purchase e-ticket. The most influence question in this factor is “using internet for flight reservation increase reservation performance”. Customers think that when they reserve the flight by online booking, they will get the best deal because the website provide all information and they can compare the price easily to another website because product and service information seem to be very important. Perceived ease of use (PEOU) tended to be the result from internet characteristic itself as the factors involved in convenience, understandable and flexibility. The Airline companies can improve their website by making it easier to use in order to increase the customers’ understanding to the website.

Marketing effort is another factor that has high positive affect with attitude toward using. The Airlines companies can send the message, promotions and advertising to customer via e-mail because when customer get an advertising and promotion from email, they will have a positive attitude and will have an intention to purchase ticket from the web site.

From this research, the attitude towards online using has high positive relationship with behavioral intention to purchase. This means that more positive attitude towards online using will translate to higher online purchasing intention. Therefore, companies should try to increase the positive attitude of the consumers such as the attitude of using the website in order to increase their purchase intention, which will further lead to increase of sales of e-ticket. Moreover, to ensure the factors that affect to customers’ intention to purchase, based on the findings of this research, attitudes can be positive when the airline company provide a convenient, time saving, cost-savings and a larger service selection. Especially, provide a useful such as information seeking and increase reservation performance. According to the finding the attitude towards online using has high positive affect with behavioral intention to purchase. After companies can increase the positive attitude, customers will plan and frequently to purchase ticket thru online also they will recommend to other to purchase. Finally, they will consider the online channel as their first choice to purchase ticket.

## 11. Recommendation for the Future Research

This research was conducted to indicate the factors influencing the behavioral intentions to use internet for purchasing low-cost e-ticket. However, there are some aspects need to be made in further research. The researcher would recommend for the further study as the follows:

Firstly, the research should expand for the group of respondents from distributing the questionnaire to other groups which more likely to have intention to purchase airline E-ticket such as university students and business owner group.

Secondly, this research was studied only the attitude toward low-cost airline e-ticket. Therefore, the future study can also extend to study premium airline.

Lastly, the study should explore outside Bangkok or up countries. For example, Chiang Mai, Nakhon Ratchasima, Phuket and Songkhla. In order to make better understanding of customer's intention to purchase on e-ticket or online ticketing, there are many factors which should explored and study for example, perceive enjoyment, perceive security, and trust which affect to customer's intention to purchase.

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## **ICT , SUSTAINABLE TOURISM AND RESIDENT QUALITY OF LIFE**

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## **Abstract**

sustainable urban tourism with emphasis on positive multi lineage relation between environment, human and Communities cause in increasing a proper long term sustainable effect on resident quality of life .some of this effects are: increasing incomes with preserving customs, increasing a recreation service facility, improving urban decoration with cultural symbols, increasing job opportunity that related to handicrafts and art. development in new technology like internet provide a new solution for enriching a sustainable tourism in marketing and offering handicraft and tourism service, understanding historical space while contacting with host, guest and tourism officials.

So in this paper we try to study and evaluate new capacity of ICT for tourism using and Introducing attraction and urban tourism service and impact of that on resident quality of life.so this is a analytical paper that form with studying a relative documents and extracting a proper concept.

**Keywords:** Sustainable urban tourism, Information and communications technology, Resident quality of life

## **1. Introduction**

Analyzing ICT functioning in different industries such as tourism seem to be of out most importance in a way that, this effect since 1980 has revolutionized tourism's industry (Ip et al, 2011: 234) and has effected all sections of this industry (Reino et al, 2011: 66) number of researchers believe that ICT is one of the criteria's for identifying sustainable development

(Fathi & Motlagh, 2010: 47) and needless to note that sustainable development in tourism industry is a case of conflict (Saarinen, 2006), and as a management guide in tourism industry is revealed for protection and adding up opportunities in future of industry (Tsaur & Wang, 2007:127).

In an overall definition sustainable development can be identify as strategic development that will manage all properties, natural and human resources such as economical and physical properties for long time (Tosun, 2001: 290) and will include economic and biologic processes towards improving life systems (Tsaur & Wang, 2007: 128), cities are able to attract tourists from different areas such as historical, cultural, business, sport, entertainment, shopping and etc. (Ashworth & Page, 2011: 10) that can provide, many inside stakeholders groups like jobs holder, employees and citizens. Urban tourism's sustainable development creates possibility of increase in economical, social and environmental benefits, plus reduction in negative effects of tourism's in an urban, in such a way that affects qualitatively in local people's life as one of the stakeholders.

Thus, as concepts of ICT has the able to publicize meaning of urban tourism sustainable development through creating job holder's more economic benefits, better cultural introduction, better evolution of society plus tourism and etc., therefore it is closely tied with quality criteria's of people and host society. So in this article, the search will be towards identifying ICT capacities in urban sustainable development with regard to its effects on host society life.

## **2. Literature Review:**

Using information and communication technology in tourism industry has a long history in a way that, Kromideh & Muca (2011) had recognized computerized ticket reservation in aviation industry, the first internationally usage of information technology (65) Sirirak et al, in their research had discovered a very strong positive relation between ICT usage in tourism industry, functional productivity and customer satisfaction. (Sirirak et al, 2011: 34). Berton & Altintas had come to this conclusion that managers in hotel sections, restaurants, and hospitality for improving excitable processes should increase their usages of information and communication technology (Berton & Altintas, 2011: 49). Oconner & Murphy also had indicated that using internet in tourism's attraction zones, pricing and customer interactions are effective (Oconner & Murphy, 2004: 473). Pena & Jamilna had identified that, ICT is appropriate for rural tourism strategy (Pena & Jamilna, 2010: 35). Of course Susskin & Stefaney, has come into conclusion that factors such as security, confidence and latency are factors that can widely limit the use of internet in tourism industry (Susskin & Stefaney, 2010: 7).

Also different research has been done in relation to sustainable development subject in tourism industry that many different subjects such as environmental (Hunter & Shaw, 2007), cultural (Hawkin, 2004), political (Yasarata et al, 2010), business (Tesone, 2004, Dinan & Sargean, 2000) and economical (Tao & Wall, 2009) can be mentioned.

Sustainable tourisms domains with domains regarding urban tourism are covering, cultural, political, physical, economical and concept domains (Edwards et al, 2008: 1036). These domains cause studding of urban sustainable tourism be as comprehensive as can be in all dimensions of sustainable development.

### 3. Sustainable development and urban quality of life

Sustainable development of tourism has three main criteria's that are as:

1. Physical-Ecological Sustainability.
2. Social-Cultural Sustainability.
3. Political-Economic Sustainability; so each one of these has different characteristically dimension that is shown in table 1.

**Table 1** Standards and dimensions of Tourism Sustainable development.

| Items | Name of Criteria                    | Dimension  |
|-------|-------------------------------------|--|
| 1     | Social- cultural sustainability     | a) Satisfaction Toward Tourism Development       |
|       |                                     | b) Travel Safety                                 |
|       |                                     | c) Conservation and protection of local          |
| 2     | Physical- Ecological Sustainability | a) Completeness of Ecosystem                     |
|       |                                     | b) Completeness of Recreation Related Facilities |
|       |                                     | c) Waist and Pollution Management                |
|       |                                     | d) Supply of Energy and Weather Resources        |
| 3     | Political-Economical Sustainability | a) Economic Effects                              |
|       |                                     | b) Increasing of Employment Opportunities        |
|       |                                     | c) Sustainable Policy and Administration         |

Reference: (Tsaur & Wang, 2007: 136)

The quality of urban life is closely related to standards and dimensions that are shown in table 1. Of course, these dimensions resulted from different studies done for different cities with little changes have been mentioned in table 2.

**Table 2** Urban quality of life dimension.

| Items | Urban quality of life dimension  | Reference                                      |
|-------|--|--|
| 1     | Economical, Political, Environmental, Social, Educational  | Liu(1976)                                      |
| 2     | Weather, Housing, Environmental and Health, Crime, Transportation, Education, Art, Entertainment, Economy                                      | Boyer and Savegeau (1981)                      |
| 3     | Climatically downfalls, Numbers of warm days, Numbers of cold days, Humidity, Wind speed, Sun shining Beach, Crime, Particles, Waist materials | Blomquist et al(1988)<br>Stover & Leven (1992) |
| 4     | Public Security, Food Expenditure, Living space, Standard housing Communication, Education, public health, Comfort, Traffic, Clean air         | Sufian(1993)                                   |
| 5     | Life expectancy, Illiterate rate, Medium purchase power  | Human Devstxdex (UNDP, 1994)                   |
| 6     | Monthly personal income, Income distribution, monthly food expenditure   | Pretassenke                                    |

Reference: (Ulengin, 2007: 243)

From all criteria above some are more important than the others, like economic criteria, that some believe amount of income more than 50 percent is more effective in creating satisfaction (Kim et al, 2012: 3). Connecting tourism sustainable development concepts and quality of life of host society can be generalized into two general and especial levels in order to analyze them.

A) Especial level: which includes all employed in urban tourism, like tourists guides, hotel employees, restaurants and job holders that economic improvements and amounts of incomes along with their health and job securities will effect on quality of their lives (Tesone, 2004: 233).

B) General level: which cover all host society that is in one way or other part of stakeholders and impressions on tourism industry. Feeling of increase in quality of life and its perception by local people could cause increase in satisfaction (Kim et al, 2012: 4) from tourism industry. Satisfaction that is adding up to customer satisfaction will result in situation improvement towards creation of sustainable tourism and will be effective in capital investment in the industry (Chancellor et al, 2011: 496).

Urban tourism's sustainable development will provide and assures both groups, especial and general, benefits and because of close relationship with quality of life, can increase people's quality of life in host society, and reduces conflicts between stakeholders (Byrd, 2007: 12).

#### **4. Using ICT in urban sustainable development in regards to quality of life**

Sustainable development requires creation of proper conditions prior to implementation, and required conditions need long time investment. This is in a way that, quick efficiency analysis in tourism industry development has been one of important indicators in sustainable development assessments (Reddy, 2008: 557). Therefore, a gap between nature of sustainable development and speed of expected efficiency is one of the problems within strategy and implementation of its sustainable development programs (Connell et al, 2009: 876).

In order to removing this gap, one can use new technologies for strategic planning and implementation of sustainable development programs, in such a way that can improve trends of programs executions in that processes and increase their efficiencies. Since the dimension of quality of life as a whole, is the same as quality of environment, social communication, health feeling, condition of hygiene and health, economic situation and public properties (Budruk& Phillips, 2011:164) and they are closely related with sustainable development dimensions and indicators, therefore, comparative analogy of ICT capacities in three levels first, social- cultural, second, environmental-ecological, and third political-economic sustainability in urban tourism can guide us towards speeding up planning and implementing sustainable development which will cause higher efficiency and effectiveness.

## 5. ICT capacities in urban social-cultural sustainability:

As mentioned before (Table No. 1) social cultural sustainability is divided into three Dimensions that each one has some indicators that are shown in table 3.

**Table 3** Indicators related to social cultural sustainability.

| Items | Dimension name                           | Indicators |                        |
|-------|--|------------|------------------------|
| 1     | Satisfaction toward Tourism development  | 1          | Tourist Satisfaction   |
|       |  | 2          | Residents Satisfaction |
| 2     | Travel safety                            | 1          | Frequency of accident  |
|       |  | 2          | Criminality frequency  |
| 3     | Local culture Conservation and promotion | 1          | Cultural Conservation  |
|       |  | 2          | Tourists Participation |

Resources (Tsaur& Wang, 2007)

Indicators in table 3 are in close relation with life's quality. Informational and communicational technology such as internet and urban comprehensive ports plus moving towards electronic urban provides possibilities of receiving and transferring information through electronic ports and results in rise of public awareness. In table 4 effects of ICT will be deal with in creating and adjustments of each one of indicators in social cultural sustainable development (Miller et al, 2010: 629)

**Table 4** Dimensions and indicators related to Social-Cultural sustainability and their sample in ICT for improvements and creating these indicators.

| Items | Dimension name                           | Indicators |                        | ICT samples in improving and creation of indicator  |
|-------|--|------------|------------------------|---|
| 1     | Satisfaction toward Tourism development  | 1          | Tourist Satisfaction   | Through electronic ticket purchasing for historical places, on-line connection, attraction information and business connection etc.   |
|       |  | 2          | Residents Satisfaction | Through providing better services to tourists in websites, given ease access to urban services, processing cases quickly and providing ease connections with those in charge in urban |
| 2     | Travel safety                            | 1          | Frequency of accident  | Through reduction in trafficking within the urban, using electronic purchasing , sales and connecting ports.  |
|       |  | 2          | Criminality frequency  | Through decreasing in cash trading and increase in ATM using by cards and electronic paying ports.  |
| 3     | Local culture Conservation and promotion | 1          | Cultural Conservation  | Through transferring cultural information between society and visitors and providing wide range of cultural information in multi-media format for visitors.                           |
|       |  | 2          | Tourists Participation | Through interchanging cultural information by electronic ports, using social nets and chat rooms.   |

## 6. ICT capacities in urban Physical Ecological Sustainability

As mentioned in table 1 physical ecological sustainability has 4 dimensions that in table 5 its indicators and capacities regarding to ICT in creation and sample of those indicators are pointed out.

**Table 5** Dimensions and indicators related to Physical Ecological sustainability and their sample in ICT for improvements and creating these indicators.

| Items | Dimension name                              | Indicators |                           | ICT samples in improving and creation of indicator  |
|-------|---|------------|---------------------------|---|
| 1     | Comprehensive Ecosystem                     | 1          | Vegetation covering       | Doing some promotional advertising in web-site for people awareness about urban and importance of green covering of urban spaces.   |
|       |   | 2          | Biodiversity              | Providing awareness for Society and tourists about how to preserve environmental habitant's thorough web sites.   |
|       |   | 3          | Quantity of Species       | Giving information and access to information through web sites and helping people gaining knowledge.  |
|       |   | 4          | Spoiled coast lines       | Keeping On-line control on coast lines, keeping close contact with those in charge through on-line ports.   |
| 2     | Comprehensive Recreation related Facilities | 1          | Recreational Facilities   | Promoting about recreational places, ticket sales, on-line purchasing on-line advertising and speeding up processes regularly.  |
|       |   | 2          | Accommodation Facilities  | On- line reservation for room in hotels, keeping watch over rooms situations and their ranking before entrance , possibility of comparing on-line.  |
|       |   | 3          | Accessibility             | Better access to shops, Departments, and services requests , providing on-line connections with different departments, organizations, providing access to bank's electronic systems, services from businesses and working relations with all the world and etc. |
| 3     | Waist and pollution management              | 1          | Air Pollution             | Through ease on-line connection with all over the world's businesses and avoiding unnecessary flights.  |
|       |   | 2          | Noise Pollution           | Through limiting unnecessary travel by using web sites for cases that can be done by them, such as purchases, sales, payments to banks and departments.   |
|       |   | 3          | Waste Treatment Capaurban | Through increasing in efficiencies of urban departments and increase in services quality which are provided to host society and tourists.   |
|       |   | 4          | Recycle and Reduction     | Through providing proper information in web sites, SMS, TV programs, cultural promotion (communication systems new and old).  |
| 4     | Supply of Energy and Water Resources        | 1          | Supply of Energy          | Through avoiding urban travel by providing possibility of doing some cases on-line(before has been mentioned).  |
|       |   | 2          | Supply of Water Resources | Through improving society cultural preferences by providing information in mass media and on-line connections.  |

| Items | Dimension name | Indicators                | ICT samples in improving and creation of indicator  |
|-------|----------------|---------------------------|---|
|       |                | 3 Saving of Water/ Energy | Through improving society cultural preferences by providing information in mass media and on-line and making them realize the importance of Energy. |

According to table 5, one of the most important of the ICT faces in supporting implementation and effectiveness of sustainability physical-ecological related programs is level of transferring information and messages plus effectiveness of this transferring has in people general behavior in urban dwellers (Miller et al, 2010).

## 7. ICT capacities in urban Political-Economic Sustainability

Political-economic sustainability contains 3 dimensions and 6 indicators that realization of them is very much related to amount of urban dwellers general and specific satisfaction, and therefore has noticeable effects on concepts and feelings of life's quality. Table 6 is describing ICT indicators and capacities in creating and improving these indicators.

**Table 6** Dimensions and indicators related to political-economic sustainability and their sample in ICT for improvements and creating these indicators.

| Items | Dimension name                           | Indicators              | ICT samples in improving and creation of indicator   |
|-------|--|-------------------------|--|
| 1     | Economic Effects                         | 1 Importance of Tourism | Informing and creating acceptance of tourism hospitality in order that prevention of cultural heritage of host society through web sites, SMS, Public relation medias.   |
|       |  | 2 Earning from Tourism  | Presenting services related to tourism on-line, problems of attracting tourists to urban, direct presentation of hand crafts, and other tourists services, on-line sales and symbol presentation, on-line satellite connections.   |
| 2     | Increase employment Opportunities        | 1 No. of Employment     | Increasing employment through attracting more tourists and increasing more income through on-line promotions and satellite connections.  |
|       |  | 2 % of Employment       | And services quality improvement given to tourists through ewom and long period's relationship with customer or tourists (CRM), increase in businesses income related to tourism.  |
| 3     | Policy and administration sustainability | 1 Policy and planning   | Taking feedbacks from plan 2 in a shortest time, on-line surveying, improving urban connections and receiving citizens suggestions, participation of citizens in tourism's programs, policies improvements for protecting urban benefits.  |
|       |  | 2 Media Administration  | Creating possibility for citizens to choose manager, or keeping the present manager through interactive information sharing in social comities and consolations, and media communications, higher connections between citizens and top managers and taking feedback about their satisfaction or dissatisfaction regarding their management |

According to table 6, improvement in promotion and marketing communications through internet and providing possibilities of maximum interaction between citizens and urban managers, and creating long run connections of tourists and managing communication with them (CRM) and etc. results in planning stabilization and sustainable and proper urban management style plus increase in amount of employment and more incomes for businesses (economic or general) plus general public, so will create more satisfaction for people in cities. This satisfaction, along with cultural promotions, easy access to information regarding environmental and societal living, will cause sustainable development and existing resources preservations, and future improvements for coming generations.

## **8. Conclusion**

ICT capacities in creating and supporting sustainable urban tourism models can be divided into three main groups that are as: 1) communication capacities, 2) information capacities, and 3) interactive capacities, that through these grouping improvements can be achieved in sustainable tourism indicators that are as: social-cultural sustainability, physical-ecological sustainability, and political-economic sustainability in the urban. Therefore, with preservation of social and environmental recourses, creation of economical befits are possible in the cities.

Closeness of concepts identifying sustainable development and quality of life causes sustainability of development to increase quality of life in host society and always in two levels, general (society as a whole) and specific (economic oriented businesses active in urban tourism) to be precise, that in today's world not using informational and communicational technology potentials such as satellite multi-media, audio-visual communicating devices, and the most impotent of all internet plus on-line world, such a development(development with emphasis on quality of life improvement for host society) is very difficult and even impossible. As ICT creates speed in information flows, it also causes integration within it, so with preventing parallel activities and avoiding conflicts will provide better urban management.

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THE FUSION OF POP CULTURE IN PLACE BRANDING  
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## Abstract

This paper examines the prevalence and adoption of popular culture in the establishing of place branding in Japan. While Japan has been famously known as the land of anime, the obsession and attraction towards characters are not merely confined to games, films and comics. The adoption of characters as mascots by various products and services serve as a reminder of the pertinence of such characters in the social landscape. In the efforts of encouraging and further developing domestic tourism, local cities and prefectures have adopted different mascots accordingly (gotoshikayara). After the Great East Japan earthquake in 2011, inbound tourism took a plunge however statistics reflect that domestic tourism only took a 2% drop in June and July. These mascots are viewed as magnets in drawing a higher rate of domestic tourists as well as generating huge revenues for the specific towns and prefectures.

This study begins with the background and explanation of the cute or kawaii culture and the pertinence of characters and mascots. 'The concepts of 'gotoshikyara' and yurukyara are also introduced followed by the drivers of travel and destination choices. This study adopts both quantitative and qualitative research approach where young adults (university students) are both interviewed and asked to complete a questionnaire in order to deduce if their travel decisions were made based on the influence of 'yurukyara'. The findings reveal that while yurukyara does play a role, it is less appealing to young adults where travel decisions are not strongly made based on yurukyara. However, there is still potential for yurukyara to grow stronger in the young adult segment if effective strategies are formulated and executed by the local governments.

**Keywords:** Domestic tourism, Japan, Popular culture, Gotochikyara, Yurukyara

## 1. Introduction

Japan, a nation of many wonders where east meets west in a very unique way. This lies in the very fact that Japan has a fascinating fusion of both, traditional and modern elements. It's a nation where tradition and modernization coexists and forms the fabric of a diversified society. Simply take a stroll down Shibuya and you would be enveloped and awed by the bright, neon lights, the vibrant atmosphere and the flood of people. Turn into Harajuku and you would be greeted with the youngsters dressed in Gothic – Lolita styles. Around the

corner, a stone's throw away lies Meiji Shrine – stepping into the grounds will instantly transport one away from the city of Tokyo and into ancient Japan. The various sights, sounds and colors of the nation from Hokkaido in the north to the Okinawa Islands in the south would prove enchanting and intriguing making Japan a captivating destination.

Domestic tourism is a very strong industry in Japan. Most Japanese take to traveling within the nation and there is an immensely wide array of domestic travel plans and packages that are tailored to the different needs of the travelers, for instance the ones offered by JR East under the JR East View brand name. Apart from relying on the appeal of local attractions, most towns and cities in Japan have also adopted a character to help boost tourism seeing that characters have always played an integral part in Japanese culture.

This paper examines the effectiveness in the adoption of 'yurukyara' by the local Japanese prefectural governments in the quest of revitalizing domestic tourism among the young adults. The factors that drive destination selection will be examined accordingly as well as the purchase of local character goods. The first part of the paper will provide a look at the background of characters and their place in Japanese culture. Followed by the factors of tourism choices highlighted by Clark and Middleton (2007) and Cooper (2008). The methodology and findings of this study is then discussed. Finally, the discussion of the key issues that arose from this study is presented.

## 2. Literature Review

### 2.1 Cute Culture and Yurukyara

In terms of products and exports, Japan is often associated with commendable quality and cutting-edge technology. However, Japanese export is not limited to quality, hi-tech products. While Japan may be dimming as a manufacturing powerhouse in terms of its mainline industries surrendering ground to South Korea and China, it has re-emerged as a trailblazer in, of all things, pop culture (Craft 2005). Japan's Pop culture has been chalking big dollars and has attracted a massive following globally. Japanese names, *anime* and *manga*, have entered the international lexicon with a new generation of young Americans, Europeans and Asians have grown up watching not Mickey Mouse and Bugs Bunny but Japanese cartoons, from *Astro Boy* to *Doraemon*, *Sailor Moon*, *Dragon Ball* and *Crayon Shinchan* (Craig 2000).

Cute culture is an integral part of Japanese popular culture. Cute or 'kawaii' culture has dictated the demand for goods and services; leading to the rise of 'maid cafes' and concepts such as grotesque cute (NBC News, 2006). There are unwritten rules of how to dress, carry oneself and behave; body gestures and the like that would qualify and determine if a person as cute. These 'rules' are religiously adhered to by, both women and men in their efforts to be seen as cute. Aside from clothing and displayed behavior, mascots and characters are key in embodying cute culture (Drake, 2001; Mead, 2002; Roach, 1999). Characters and mascots have become the face of various companies where they are believed to enhance the sales of products and services, even politicians are also using mascots (Kyodo News, 2012; Torres, 2012).

Cuteness is a common trait in Japan as it is ubiquitously found in decorations and illustrations (Schilling, 1997; Yano, 2000). From construction figures of rabbits to rice balls decorated to resemble pandas and other cute animals or characters, it is a very common sight to find cuteness in every nook and corner of the country. According to a survey done by CREA in 1992, ‘*kawaii*’ or cute is the most loved, widely and habitually used word in modern day Japan (CREA, November 1992, p. 58, quoted in Kinsella, 1995). Among the famous Japanese characters that embody the essence of cute ranges from Pikachu to Doraemon, the well-loved robot cat from the future. Popular cute culture icon, Hello Kitty is also another epitome of cuteness and has fans both locally as well as overseas (Belson & Bremmer, 2003). The appeal of cuteness has witnessed the success of characters in terms of sales of goods and brand equity. As of 2008, Hello Kitty alone has contributed to half of Sanrio’s \$1billion turnover (Walker, 2008).

Cute or *Kawaii* has been subjected to various definitions. McVeigh (2000) defines it according to different categories: baby, very young, young, maternal, teen, adult, sexy, pornography, child pornography, authority and corporate. On the other hand Yano (2004) defines it as interrelated dimensions of physical, relational/ emotional, and sexual. Masabuchi (1994) lists seven elements that define cute: smallness, naivete and innocence, youth (especially the very young), *amae*, roundness, pastel colors and animal-like qualities. The manifestation of these elements is typically found in the clothing and accessories as well as behavior and conduct for instance the trend in 2012 where young females would wear animal tails or fix the tails on to their bags as accessories or even get a complete animal costume (O’Neil, 2012; Weird News Asia, 2012; Wilson, 2012).

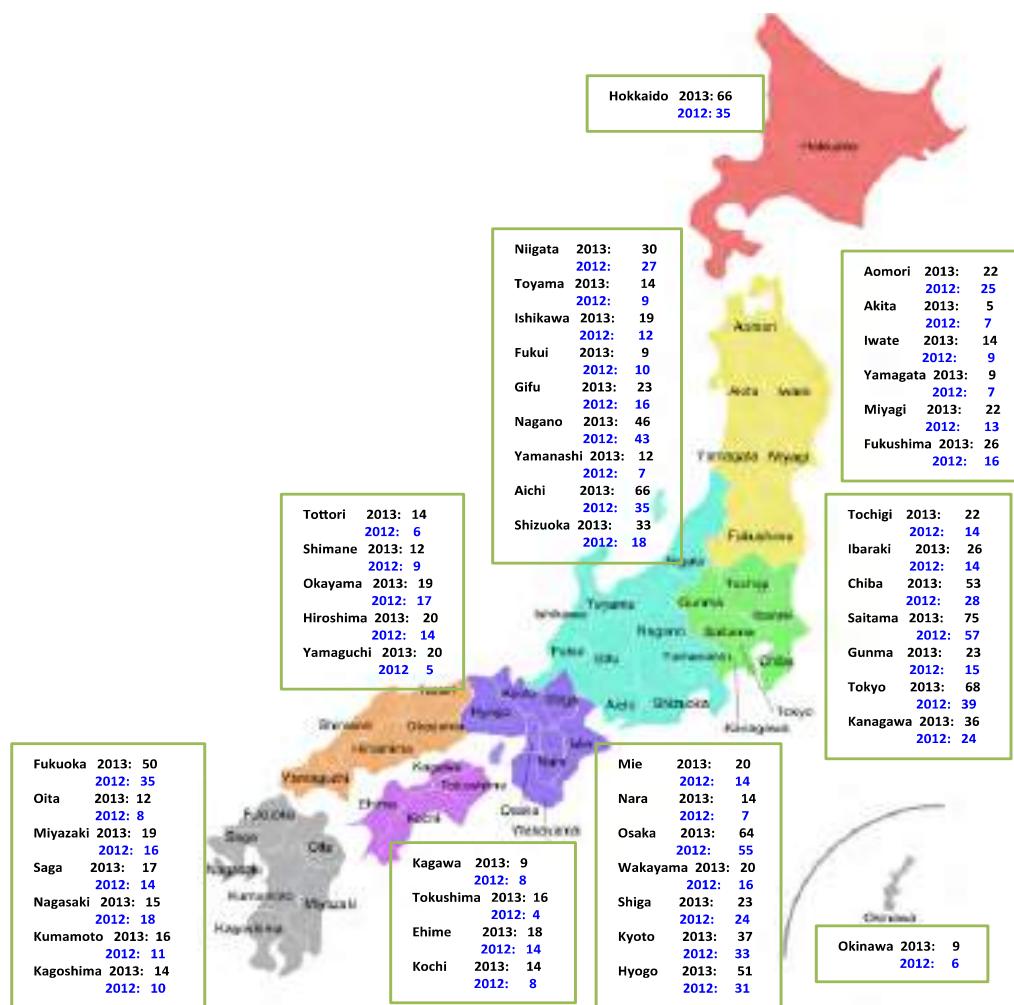
Overall, the core elements of cute are found in more ‘negative’ traits than positive such as grotesque, neediness, defenselessness, and the inability to stand alone as these evoke a sense of pity, that essentially leads to sympathy, even a maternal feeling and the need of wanting to protect (Harris, 2001; Lebra, 1984; Merish, 1996; West, 2008; Yano, 2004). Kinsella (1995) stresses that childlikeness where sweet, adorable, innocent, pure, simple, genuine, gentle, vulnerable, weak and inexperienced social behavior and physical appearances form the definition of *kawaii*.

Cute culture basically began in the 1970s when Japanese teenage girls started writing in rounded childish letters and characters (MacEwan, 1995). It further gained popularity in the 1970s and 1980s from a fusion of post-modern desire and infantile affection (Belson & Bremmer, 2003). However, the psychological need to be cute is not a new concept that has recently emerged in Japanese society. On the contrary it has long been around in the Japanese culture, in the form of *amae* (甘え) or interdependence indulgence; a concept used to describe often a childish behavior that stems from the desire to be loved and to be indulged and taken care of (Doi, 1979). There is the element of dependence and this persists even into adulthood. Doi (1979) has also pointed out that the desire to look cute is a typical expression of *amae*; be in the clothing and appearance or even the usage of childlike words that demonstrate the distinction between children and adults has become blurred. While ‘*amae*’ is a cultural aspect other factors have also led to the exponential growth of cute culture. Escapism from the stress of everyday living and space constraints in the city has also been cited as reasons that the Japanese are fixated on cute things and fantasy (West, 2008).

Leveraging on the appeal of characters, local governments have introduced characters called ‘yurukyara’ (ゆるキャラ) that represent their respective towns with the objectives of gaining popularity and increasing tourists. Yurukyara basically means ‘loose character’ and

are referred to as ‘loose’ in a sense that it is badly executed design that aims to appear cute (but somehow ends up not). This was a term coined but Jun Miura, a kitsch connoisseur who unveiled his first yurukyara in 2002. Later, a boom that started in 2007, known as the ‘gotoshikyara boom’ (“the local mascot boom”) led to continual growth in the number of local mascots being introduced as illustrated in Figure 1(Yurukyara Grand Prix, 2012 & 2013).

**Figure 1** Number of ‘Yurukyara’ in each prefecture/ metropolis/ city in 2012 & 2013.  
Adapted from Yurukyara Grand Prix, 2012 & 2013.



While characters are supposed to embody cuteness, yurukyara has been the total opposite. The artists who create yurukyara mascots are amateurs as local governments are unable to pay the charges of professional artists who are able to create adorable characters on par with Hello Kitty; for example in the case of Hikonyan, the yurukyara from Hikone castle as paid around a million yen for his work. Each yurukyara is created to showcase the famous product or attraction of the local city or town, in most cases the character takes the form of the famous produce or attraction of the town. For instance, Nara city office created Sentokun,

a caricature of the Great Buddha at Todaiji festooned with antlers resembling the deer that roam freely about the grounds of the temple while Marimokkori, the green yurukyara from Kushiro city in Hokkaido was created to resemble the famous green algae balls found in Akan lake. While yurukyara does not possess the cuteness of Doraemon or Hello Kitty, it does not prevent the hosting of the annual yurukyara contest where the 'best' yurukyara is selected each year (Torres, 2012).

Yurukyara also reaches out to the public and communicates to them through social media as well as public events such as sports and games organized by the local governments to help increase the awareness and establish the relationship between the public and the respective yurukyara (Suzuki, 2012). The public views that they are able to 'understand' the characters and have a good relationship with them, hence the 'cuteness' and appeal of the yurukyara increases substantially. These efforts by the local governments have bore fruit as the number of visitors increase exponentially whenever the yurukyara makes a public appearance at a public event, particularly children and the elderly (Hughes, 2010; Suzuki, 2012). Character goods have steadily been raking in massive revenues as good of these characters are sold not only in their respective 'hometowns' but for the more popular characters such as the mascot created by government of Kumamoto prefecture, Kumamon, the goods are available all over the nation for instance, in 2012 Kumamon generated a total of US\$ 285 million in revenue from the sales of its goods (Otagaki, 2013).

## **2.2 Why Do We Travel?**

Various factors influence consumers' decision-making when selecting, and deciding on their vacation destinations. Middleton and Clarke (2007), Cooper and Hall (2008) as well as Kotler (2006) have identified and categorized the various factors that determine the travel choices that consumers make which in turn affects the demand for tourism.

### **1) Economic factors and comparative prices**

These are the most important determinants for leisure vacation as well as business trips. The good performance of an economy almost guarantees high average disposable income, which is essential for tourism consumption. Additionally, tourism research confirms that the price of a destination, compared to its competitors, is still the most dominant factor in the short term.

### **2) Demographics**

Demographic variables such as age, social class, income, and education are the most commonly used characteristics to analyze the tourism market. In Japan, the huge growth in the aging population has become one of the most attractive segments for tour operators in recent years. This is noticeable with JR having constant campaigns and advertising to encourage older travelers, enticing them with the 'traditional beauty and landscapes of Japan'. Many elderly travelers voiced their feelings of safety and comfort traveling domestically versus abroad where they would stress over language and cultural differences.

### **3) Attractions and Climate**

Visiting a destination is often triggered by its scenic attractions and favorable climate. Examples are the numerous trips of Northern Europeans to the Mediterranean region for a seaside vacation or the flux of city dwellers to countryside locations. In Japan, national parks welcome a surge of travelers during the summer season where families and friends can enjoy hiking, camping and a host of outdoor activities while still being able to soak and relax in the hot springs.

### **4) Socio-Culture**

Socio-cultural attitudes towards tourism greatly vary between different nations. While in one country vacation is a luxury in another one it has become the norm to go on one or several holidays throughout the year. The length of vacation, the motivation factors for traveling and the expectations of a destination depend on each national cultural background and pose a challenge to tourism planners. In Japan, students in elementary schools, junior high schools and high schools often take school excursions and trip both domestic and international. On the other hand, office workers have limited vacation days and this definitely skews the destination choices to domestic spots.

### **5) Population Mobility**

The mobility of a population greatly influences tourism demand, especially for domestic tourism, as the ownership of a car makes visiting nearby locations possible and convenient. In Japan, car rentals are widely available hence the population is fairly mobile. The availability of bullet trains that run from Hokkaido to Kyushu contribute to providing transportation options apart from local trains, buses, cars and planes to travelers.

### **6) Governmental Regulations**

Governments around the world impose various rules and regulations to safeguard their population. Examples are laws for customer protection, fair competition, regulations on holidays, visa permits, and environmental protection. The various national parks in Japan such as Shiretoko in Hokkaido and the Aso-Kuju in Kyushu are governed by regulations to ensure preservation and protection.

### **7) Media and Promotions**

Promoting travel through media communications will bring awareness to the consumers and the possible subsequent purchase of the travel product. Advertising on billboards, train stations and leaflets as well as magazine and through tv programs are commonly done in Japan.

From a psychological perspective, Kotler and Makens (2006) outlined a list of determinants that influence travel, namely prestige, escape and relaxation, education, social interaction, family bonding and self-discovery.

#### **1) Prestige**

People being able to afford a vacation, especially a long distance trip or an exotic location, have always been credited with a certain level of prestige, increasing the self-esteem and social status of the individual.

## **2) Escape & Relaxation**

A basic human desire is the escape of the everyday routine, and tourism-marketing campaigns often incorporate the catchphrase 'escape'. The hot spring experience markets the timeless feel of old Japan, a place where one can go back in time and relax while those in Ito Peninsula emphasize the theme of relaxation.

## **3) Education**

Tourism has often the purpose of increasing someone's knowledge and widening the understanding of other cultures. A very prominent historical example is the tour of Otaru or Nikko to learn the town's history.

## **4) Social interaction**

Meeting other people aside from the immediate surrounding has been identified as a very strong motivator for traveling resulting in the designing of appealing resorts and cruises.

## **5) Family bonding**

Whether between marriage partners or between parents and children, travel has become an effective tool in improving family interaction.

## **6) Self-discovery**

The desire to 'find oneself' can result from different triggers: for example a dramatic event in ones life such as the death of a family member or a divorce. Another example is temporary employment opportunities at resorts or youth hotels are appealing to young people who wish to engage in self-discovery. People embark on solo travels for self-discovery want to enjoy some alone time or to seek for answers within themselves. The growth in this segment has led to various tour packages aimed at the single traveler. An example is seen is the 'hitori tabi' (travel alone) packages that are proliferating the market in Japan.

## **3. Methodology and Study Design**

As the focus of the study is to examine the effectiveness of yurukyara in encouraging domestic tourism among the young Japanese segment, this study adopts both quantitative and qualitative research methodology, with the qualitative focusing on conducting an exploratory research in order to provide more comprehensive findings. Exploratory research is used in seeking insights into the general nature of a problem, the possible decision alternatives and the relevant variables that need to be considered with hypotheses being either vague and ill defined, or do not exist at all (Aaker, Kumar & Day, 2004).

330 sets of questionnaires were distributed to young, university adults between the ages of 18 – 24 with 58% males and 42% females from different prefectures across Japan. Young adults were the focus of this study as the frequency of travel is higher within this age group versus working adults. On top of that, young adults tend to visit Disneyland and character theme parks more than the other age groups. This segment also has a high propensity to purchase character goods. The questionnaire contained a mix of various

techniques where both open and closed ended questions were adopted. The closed ended questions adopted a 5-point Likert scale rating system. There were also multiple-choice questions and questions that required the respondents to rank in order of importance. The open-ended questions utilized projective methods of picture representation and word association techniques. The factors that influence domestic travel destinations and activities were examined. The questions also explore the perception towards different characters in order to illustrate the strength of positive perception and preference toward yurukyara that will contribute towards destination selection.

Qualitative research prioritizes the study of perceptions, meanings, and emotions in defining how social experiences are formed and interpreted in the socially constructed nature of reality (Denzin & Lincoln, 2000; Silverman, 2005). It is concerned with empathizing with the consumer and establishing the meanings that he/she attaches to products, brands and other marketing objects (Hague & Jackson, 1996). Therefore, the methods adopted by a qualitative researcher are used to gauge and look for attitudes, feelings and perceptions (Seidler, 2003). In terms of qualitative research, focus group discussions were conducted with a total of 10 groups of 8 participants each (a total of 80 participants).

With the continual growth in registered numbers of yurukyara, and the increase in revenue from sales of character goods.

## 4. Results

Basically, the findings can be organized into the following key areas.

### 4.1 Recognition

Around 57% of the participants were aware of only one yurukyara as shown in Table 1; out of which 36% knew of only the yurukyara from their respective hometowns. While the balance of 21% were aware of at least one other yurukyara excluding the mascot from their respective hometowns.

**Table 1** Awareness of Yurukyara

| Aware |       |           |         |               |                    |
|-------|-------|-----------|---------|---------------|--------------------|
|       |       | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Yes   | 188       | 57.0    | 57.0          | 57.0               |
|       | No    | 142       | 43.0    | 43.0          | 100.0              |
|       | Total | 330       | 100.0   | 100.0         |                    |

### 4.2 Purchase of Yurukyara Goods

**Table 2** Purchase of Yurukyara Goods

| Purchased Yurukyara Goods from the Characters' Towns |       |           |         |               |                    |
|--|-------|-----------|---------|---------------|--------------------|
|  |       | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid  | Yes   | 129       | 39.1    | 39.1          | 39.1               |
|  | No    | 201       | 60.9    | 60.9          | 100.0              |
|  | Total | 330       | 100.0   | 100.0         |                    |

Over 60% of the respondents did not purchase their yurukyara goods from the characters' towns. As the goods are widely available all over the nation, trips to the specific towns are unnecessary.

### 4.3 Favorite Character

An interesting finding was the listing of favorite characters. More than 50% of the respondents named Disney characters as their favorite. This is followed closely by the characters from anime and manga recording 46.1%. While the yurukyara check box was provided in the questionnaire, none of the respondents selected it.

**Table 3** Favorite Character

| Favorite Character |                 |           |         |               |                    |
|--------------------|-----------------|-----------|---------|---------------|--------------------|
|                    |                 | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid              | Disney          | 178       | 53.9    | 53.9          | 53.9               |
|                    | Manga and Anime | 152       | 46.1    | 46.1          | 100.0              |
|                    | Total           | 330       | 100.0   | 100.0         |                    |

### 4.4 Perceived Yurukyara Target

The respondents were asked to indicate the target market for yurukyara. A little over 50% indicated children. However, 21.2% were unsure of the target market.

**Table 4** Perceived Yurukyara Target

| Yurukyara Target |              |           |         |               |                    |
|------------------|--------------|-----------|---------|---------------|--------------------|
|                  |              | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid            | Children     | 167       | 50.6    | 50.6          | 50.6               |
|                  | Young adults | 42        | 12.7    | 12.7          | 63.3               |
|                  | Elderly      | 51        | 15.5    | 15.5          | 78.8               |
|                  | Do not know  | 70        | 21.2    | 21.2          | 100.0              |
|                  | Total        | 330       | 100.0   | 100.0         |                    |

### 4.5 Relationships

Both awareness of yurukyara and visiting the towns of yurukyara (excluding wanting to meet the characters), and awareness and buying yurukyara goods have very weak negative correlations. The former has a very weak negative correlation,  $r (328) = -0.158$ ,  $p < 0.01$  while the latter also reflects a very weak negative correlation,  $r (328) = -0.118$ ,  $p < 0.05$ . The correlations are shown in Table 5.

**Table 5** Correlations

|                                     |                     | Awareness | Meet Yurukyara | yurukyara's place(excl. meet) | Buy yky good | Yurukyara   |
|-------------------------------------|---------------------|-----------|----------------|-------------------------------|--------------|-------------|
| Awareness                           | Pearson Correlation | 1         | -.013          | -.158**                       | -.118*       | .031        |
|                                     | Sig. (2- N)         |           | .815<br>330    | .004<br>330                   | .032<br>330  | .571<br>330 |
| Meet Yurukyara                      | Pearson Correlation | -.013     | 1              | .165**                        | -.091        | .071        |
|                                     | Sig. (2- N)         |           | .815<br>330    | .003<br>330                   | .098<br>330  | .201<br>330 |
| Visit yurukyara's place(excl. meet) | Pearson Correlation | -.158**   | .165**         | 1                             | .297**       | .051        |
|                                     | Sig. (2- N)         |           | .004<br>330    | .003<br>330                   | .000<br>330  | .356<br>330 |
| Buy yky good                        | Pearson Correlation | -.118*    | -.091          | .297**                        | 1            | .001        |
|                                     | Sig. (2- N)         |           | .032<br>330    | .098<br>330                   | .000<br>330  | .983<br>330 |
| Yurukyara                           | Pearson Correlation | .031      | .071           | .051                          | .001         | 1           |
|                                     | Sig. (2- N)         |           | .571<br>330    | .201<br>330                   | .356<br>330  | .983<br>330 |

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Traveling with the sole purpose of meeting yurukyara and visiting the local place of the character (excluding meeting the yurukyara) reflected a very weak positive correlation,  $r(328) = 0.165$ ,  $p < 0.01$ .

## 1) Yurukyara Effectiveness - Reason for destination selection

Based on the focus group discussions, visiting certain towns mainly because they are keen to 'meet' the yurukyara personally was ranked last among the list of travel motivation factors. When probed further as to the reasons for wanting to meet the yurukyara, the participants discussed that the yurukyara had a positive image and was known to be very 'kind' hence, they felt the kindness of the yurukyara made the mascot attractive and cute, further propelling them to meet the kind yurukyara. While another reason was also that they felt that the mascot was famous and that was the sole driving factor for them to go see the mascot. Participants selected other factors (which will be discussed in the next section) as main reasons that fuelled their travel destination selection showing the yurukyara's lack of effectiveness in attracting the young adult segment. It was also found that Disney ranked first in the choice of characters among the young adults with a majority of them consuming Disney merchandise and going to both Tokyo Disneyland and Disneysea. Hence, this shows that characters do appeal to young adults namely mainly Disney followed by Japanese manga and anime characters.

## 2) Destination factors / choices

Factor analysis was conducted to examine the number of factors that affect destination choices. There are four factors with eigenvalues greater than 1, contributing to approximately 62% of the total variability as shown in Table 6.

**Table 6** Total Variance Explained

| Component | Total Variance |               |              | Rotation Items of Significant Loadings |               |              |
|-----------|----------------|---------------|--------------|--|---------------|--------------|
|           | Total          | % of Variance | Cumulative % | Total                                  | % of Variance | Cumulative % |
| 1         | 2.647          | 22.245        | 22.245       | 2.201                                  | 19.517        | 40.317       |
| 2         | 1.031          | 8.462         | 40.707       | 2.113                                  | 19.259        | 40.166       |
| 3         | 1.008          | 8.501         | 52.207       | 1.212                                  | 11.583        | 52.300       |
| 4         | 1.010          | 8.431         | 61.618       | 1.006                                  | 9.709         | 61.816       |
| 5         | .602           | 7.338         | 69.156       |  |               |              |
| 6         | .742           | 6.744         | 75.890       |  |               |              |
| 7         | .612           | 6.088         | 81.968       |  |               |              |
| 8         | .610           | 5.548         | 87.307       |  |               |              |
| 9         | .648           | 4.999         | 92.307       |  |               |              |
| 10        | .610           | 4.638         | 97.145       |  |               |              |
| 11        | .714           | 2.857         | 100.000      |  |               |              |

Extraction Method: Principal Component Analysis.

The Rotated Component Matrix shows the factor loadings for each variable as illustrated in Table 7 below. Factor 1 can be grouped under tourist activities that include visiting local sights, hot springs and spa as well as outdoor activities such as skiing, snowboarding and hiking. Roadtrip adventures which include making random stops and enjoying the sights and activities that they can find along the way also fall under the Factor 1 umbrella. As any one of these variables increase, so will the other three.

**Table 7** Rotated Component Matrix

|                                    | Rotated Component Matrix <sup>a</sup> |       |       |       |
|------------------------------------|---------------------------------------|-------|-------|-------|
|                                    | 1                                     | 2     | 3     | 4     |
| Price                              | .059                                  |       | -.018 | .261  |
| Cost Effectiveness                 | .162                                  | .779  | .038  | -.125 |
| Meet Yurukyara                     | -.173                                 | -.773 | -.029 | -.184 |
| Visit Loc fm yurukyara             | -.009                                 | -.176 | .751  | -.259 |
| Buy yky good                       | .039                                  | .074  | .835  | .200  |
| Being with friends                 | .068                                  | .677  | -.141 | .033  |
| food tourism                       | -.583                                 | .614  | -.040 | .007  |
| visit sights                       | .751                                  | .069  | .055  | .002  |
| hot springs & spa                  | .568                                  | .050  | .097  | .070  |
| Outdoor activities                 | .745                                  | .097  | -.010 | .010  |
| Roadtrip-destination not important | .675                                  | .135  | -.143 | -.025 |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

Factor 2 on the other hand measures cost effectiveness of the trip (and not just the price that they have to pay to travel), going on trip with friends and enjoying local delicacies.

Surprisingly Factor 3 only covers visiting the local areas or rather hometowns of the yurukyara as well as purchasing yurukyara goods. Meeting the character themselves was not a key variable.

Finally Factor 4 denotes price; the cost of making the trip.

Mapped against the travelling factors by Kotler & Makens (2006), social interaction and escape and relaxation were the main two factors cited. During the focus group discussions 92% indicated that they made destination choices after discussing with their friends whom they usually travel with and that usually would be heavily influenced by the cost of travel and projected spendings.

## 5. Discussion

From the findings of the study demonstrate that yurukyara does appeal to a certain percentage of the society, it is by no means the most and only effective method of increasing domestic tourism among the young adult segment that tends to place importance on friends and socializing. Based on the study, young adults are more likely to prefer popular characters such as Duffy or manga characters versus yurukyara as they have more exposure with the former through trips to Disneyland, recommendation from friends or magazines. Also, the focus group discussions gave a slightly different set of results from the questionnaire as from the focus groups, most of the participants stated that they do not make travel choices based on yurukyara. On the other hand, from the survey, Factor 3 reflected visiting the hometown of yurukyara as well as buying the goods as key variables that contribute to destination decision-making and choice.

Even though meeting the yurukyara was not found to be the major factor in garnering tourists from the young adult segment, the high percentage recorded in the intent of purchase of yurukyara goods can be viewed as a means of helping local industries and the local tourism sector. This was definitely seen as a contradiction since most of the participants had either an indifferent or negative view towards yurukyara yet they were willing to purchase the merchandise. The contradiction is found to stem from the fact that though they personally feel indifferent or negativity towards yurukyara, the implicit symbolism of the yurukyara that of representing the essence of the town is acknowledged. Hence, the merchandise translates to travel memories and souvenirs.

An interesting aspect was uncovered during the study. Most young adults who were aware of yurukyara and could name at least one yurukyara were only able to name the mascot from their hometown. Hence, the exposure that they have received from various local media has ingrained in them the existence of yurukyara. However, most of them were not interested to learn about other mascots in other local areas. Hence while the participants are well aware of the local prevalence of various yurukyara, it does not interest them to check up on other available yurukyara. Therefore the actual penetration rate of yurukyara is rather low. Also, the respondents also were rather unsure of the main target of these characters. This presents the opportunity for local governments to focus on building a stronger brand with a core target segment and communicate it clearly to the mass public.

The findings reveal a huge gap between the objective of the creation and adoption of yurukyara by local governments versus its success within the young adult segment. While characters continue to play an important role in the Japanese society, local governments should formulate strategies that can gain more public awareness; apart from the locals about the respective yurukyara as well as create a stronger appeal and value in the mascots in order to engage the young adults and solicit their interests. The strategy should encompass the mascots building relationships with the young adults and not only focus on local products and festivals but, rather humanize yurukyara so that the young adults can identify with the yurukyara.

## 6. The Road Ahead

This study paves the way for future research in areas such as formulating strategies in bridging the gap between the objective of the yurukyara and the actual public perception as well as enhancing the appeal of yurukyara. Even though the revenues from the sales of yurukyara goods have been skyrocketing, most people did not make the purchase from the yurukyara towns as the goods are made available all over the nation. Hence, this creates an interesting future study on the actual pull of the goods in improving domestic tourism.

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## **THE IMPACT OF SUPPLY CHAIN MANAGEMENT INTEGRATION ON FINANCIAL PERFORMANCE**

by

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## **Abstract**

Previous research has highlighted the influence of organizational structure and processes on companies' financial performance. In this paper we present a preliminary study which investigates the impact of various supply chain perspectives on performance indicators such as Return on Assets (ROA), Return on Capital Employed (ROCE), Sales Growth, and the Earnings before Interest and Taxes (EBIT) margin. We start by investigating the organizational integration of Supply Chain Management (SCM) and its connection to logistics. Building on an established framework, we differentiate between four different perspectives, i.e. traditionalist, re-labeling, unionist and intersectionist, and test for significant differences in the financial performance of companies working from those perspectives. The findings are not unambiguous, but the descriptive results indicate that a potential relationship may exist. Finally, we develop various propositions which can be used to guide further research.

**Keywords:** Supply Chain Management, SCM, SCM perspectives, Financial Performance

## 1. Introduction

The relationship between logistics and SCM and their organizational integration has been widely debated without a general consensus being reached (Halldórsson et al., 2008). Larson et al. (2007) suggested four different perspectives and labels, i.e. logistics equals SCM (re-labeling), logistics subsumes SCM (traditionalist), logistics is subsumed by SCM (unionist), or logistics and SCM overlap partially (intersectionist). In this paper we first show how Supply Chain Management is understood within the top 250 companies in Austria. We conducted a replication study in order to test for the general perception of the SCM-logistics relationship. Although the importance of replication studies is frequently highlighted in academic literature (Alm, 2010), few papers based on such research have been published. Selecting Austria as a country of focus offers several advantages, such as a wide range of company sizes, a variety of international headquarters and a fairly advanced technological status (Strebinger and Treiblmaier, 2006). Due to the small size of the country, many Austrian companies face a similar business environment, which reduces the impact of regional developments as a confounding factor. Austria is an economically and logically well-developed region and is ranked as the 12th richest nation in the world according to GDP per capita (International Monetary Fund, 2012). The Logistics Performance Index, published by the World Bank ranks Austria in 11th place (Arvis et al., 2012).

Previous research has highlighted the manifold interdependencies between organizational strategy, structure, and processes (Chandler, 1962). Complex processes within the company are shaped by the conceptual understanding of “how business has to be done” and an organization’s structure, which in turn has implications for corporate culture and financial performance (Strebinger and Treiblmaier, 2004). In this paper we therefore focus on the influence of various supply chain perspectives and their impact on performance. In order to operationalize the latter construct, we utilize four commonly used performance indicators, i.e. Return on Assets (ROA), Return on Capital Employed (ROCE), Sales Growth, and the Earnings before Interest and Taxes (EBIT) margin. We refrain from deriving hypotheses, but rather present the results of an exploratory study which might serve as the basis for future research.

The remainder of the paper is organized as follows: Section 2 provides a review of the relevant literature followed by a discussion of the research methodology in Section 3. Research findings and further developed propositions are shown in Section 4. Finally, Section 5 presents the conclusions, discusses research limitations and future research directions.

## 2. Literature Review

### 2.1 Four Integration Perspectives on SCM

A multitude of definitions of “supply chain management” and “logistics” (Burgess et al., 2006; Kauffman, 2002; Lambert et al., 2005; Lummus et al., 2001; Mentzer et al., 2001; New, 1997;) and their relationship with each other (Halldórsson et al., 2008; Larson et al., 2007) can be found in the relevant literature. Larson et al. (2007) suggest four perspectives on logistics versus supply chain management which elucidate all possible relationships between those two concepts (see Figure 1). Traditionalists perceive SCM as a logistics function or a subset of logistics, i.e. an outside activity which includes customers and suppliers (Stock and Lambert, 2001). This perspective reduces SCM to a special type of logistics with an external

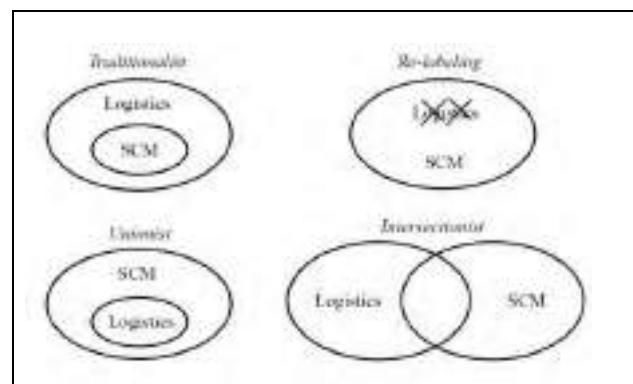
focus that would be situated within the logistics department dealing with logistical problems and opportunities in an inter-organizational context (Halldórsson et al., 2008).

According to the Re-labeling perspective, SCM is simply a name change; from logistics to SCM. Simchi-Levi et al. (2003), for example, do not distinguish between logistics and SCM. Logistics managers therefore simply become supply chain managers (Halldórsson et al., 2008).

“Unionists” position logistics within SCM. In their view, SCM subsumes numerous traditional business functional areas such as purchasing, logistics, operations, and perhaps even marketing (Halldórsson et al., 2008). In line with this position, Lambert et al. (1998, p.1) defined SCM as “the integration of key business processes from end-user to original suppliers that provide products, services, and information that add value for customers and other stakeholders”. Companies strictly following the unionist perspective do not position SCM inside the logistics department; they would rather create a new high-level position, e.g. Vice President of SCM, and proceed by changing reporting relationships and the organizational chart. Similarly, Tan et al. (2002) describe SCM as an integrated strategic approach to purchasing and logistics management, whereas Rich and Hines (1997) see it at the convergence of many academic disciplines.

The last group, called intersectionists, focuses on strategic, integrative elements across purchasing, logistics, operations, marketing and other functions. According to this perspective, supply chain managers are to be involved in third-party logistics provider negotiations, but not the actual pick-and-pack decision. Intersectionist organizations usually own a supply chain council or team, consisting of executives across functions and institutions. This council strives to break down SCM barriers in order to improve the overall supply chain performance rather than developing solutions which are suboptimal (Halldórsson et al., 2008).

**Figure 1** Perspectives on Logistics vs. SCM (Halldórsson et al., 2008)



The SCM perspective a company finally implements determines not only organizational structure, but also processes in day to day business. Several authors prefer supply chain perspectives that are recognized as being broad and interdisciplinary. This is especially true of the unionist’s perspective, which is expected to have a stronger positive influence on a company’s financial performance than other supply chain perspectives (Halldórsson et al., 2008; Lambert et al., 1998; Mentzer et al., 2001).

## 2.2 SCM Integration Perspectives and Financial Performance

Previous literature has shown the impact of SCM decisions on a company's financial performance (Lai and Cheng, 2003; LaLonde, 2000; Lambert and Pohlen, 2001; Morgan, 2004). Supply chain managers need to be able to accurately quantify the impact of their decisions and to communicate with top management (Ellram and Liu, 2002). They frequently have to convince executives that SCM investments will improve the financial ratios of the company (Lapide, 2012). Although the positive relationship between SCM and a company's performance seems to be logical and straightforward (Wagner et al., 2012), and studies in logistical literature associate outstanding logistics and SCM performances with positive financial performance, such as low costs, high revenues and efficient and effective asset utilization (Anderson et al., 1997; Christopher and Ryals, 1999; Ellram and Liu, 2002; LaLonde, 2000; Lambert and Burdureoglu, 2000), empirical proof is notoriously difficult to find (Frohlich and Westbrook, 2001). This is shown by the difficulty of accurately attributing costs and benefits to supply chain decisions, both technically and financially (Tan et al., 1999). In a standard managerial setting (multi-company, multi-site, multi-problem), many functions simultaneously contribute to a company's performance. Isolating the direct impact of SCM decisions on financial ratios without any confounding variables is a challenging task (Otto and Kotzab, 2002). It is therefore of critical importance for SCM managers to be able to translate outcomes of SCM decisions into monetary or financial terms, which is an important prerequisite of gaining top management's attention (Lai and Cheng, 2003; Lambert and Pohlen, 2001; Morgan, 2004).

In spite of the importance of this issue, it has been proven difficult to empirically determine the exact impact of supply chain decisions (Frohlich and Westbrook, 2001) and neither a large amount of empirical proof nor systematic analyses exist (Wagner et al., 2012). As a consequence, the majority of literature dealing with logistics and supply chain performance has focused on constructing performance measures rather than determining the impacts themselves (Beamon, 1999; Blumberg, 1994; Bowersox et al., 1999; Chow et al., 1994; Fawcett and Cooper, 1998; Gilmour, 1999; Gunasekaran et al., 2001; Korpela and Tuominen, 1996; van Landeghem and Persoons, 2001).

This situation is aggravated by the fact that the most commonly used metrics of supply chain and logistics performance are based on "soft" data, which is self-reported and perceptual (Töyli et al., 2008; Otto and Kotzab, 2002). These metrics subsequently need to be converted into monetary terms so that executives can actually interpret findings in "their own language", and can easily compare them with other performance indicators. Wagner et al. (2012) therefore recommend that using the ROA as a general measure of supply chain fit will benefit corporate practice. This is mainly achieved by providing managers with a language they are more familiar with than subjective, perceptual performance measures (Lapide, 2012).

Literature explores three key areas where SCM can actually affect the financial performance of an organization: profitability, liquidity and productivity of asset utilization (Anderson et al., 1997; Christopher, 1998; Christopher and Ryals, 1999; Ellram and Liu, 2002; LaLonde, 2000; Lambert and Burdureoglu, 2000). Since all those aspects are covered by the ROA, using this metric allows the supply chain community to substantiate operational supply chain improvements with financial data (Lapide, 2012). The ROA is therefore used as the main metric to analyze SCM impact on a firm's financial performance. In order to test for validity, other indicators (Return on Capital Employed (ROCE), Sales Growth and Earnings before Interest and Taxes (EBIT)) are included which are frequently used as measures of organizational performance.

### 3. Methodology

In order to find the most suitable research framework we followed the procedure suggested by Tranfield et al. (2003). The members of the research team were selected first based on their SCM experience. The members subsequently agreed on relevant keywords such as “SCM”, “logistics”, “SCM metrics”, and “financial impact” and used the databases “Emerald”, “EBSCO” and “ScienceDirect”. In order to verify that only those studies which meet all the inclusion criteria (Tranfield, 2003) were included in the review process, quality assessments based on Brown (2007) were conducted. Five criteria (literature review, theoretical clarity, theoretical robustness, contribution, strength of the paper) and four applicability ratings (not applicable, low, medium, high) were used in order to assess the relevance and quality of the publications. In a final step, data synthesis was used to extract important and relevant findings for further analysis and comparison. After finishing the review process the team members unanimously agreed that the most suitable concept for the assessment of the SCM-logistics relationship is the one introduced by Larson et al. (2007), which will be discussed below.

Based on the findings of the literature review, we developed a questionnaire with a focus on the basic understanding of SCM and its link to logistics, the hierarchical integration of the supply chain manager or the SCM department in the organization and the general strategic SCM orientation. In total, interview invitations were sent to the top 250 Austrian companies which were selected according to turnover. The interviews were conducted over the phone by logistics students who had received special training. In order to make sure that the terminology was consistent, the interviewers explained crucial terms, such as the SCM perspectives, using standardized definitions.

The Bloomberg database was used to gather the financial data, i.e. the Return on Assets (ROA), Return on Capital Employed (ROCE), Sales Growth, and the Earnings before Interest and Taxes (EBIT) margin (Bloomberg, 2013). In 109 cases (i.e. 43.6%) the companies both agreed to participate in the survey and the Bloomberg data was available.

## 4. Results

In a first step we identified the organizational (i.e. structural) implementation of supply chain management. A total of 64 % of the respondents (70 out of 109) stated that their company had officially embedded SCM into their company structure. For all further analyses we focused on those companies.

### 4.1 SCM Perspectives

We asked for the conceptual relationship between logistics and supply chain management, according to the classification elaborated above. The second column in Table 1 shows the Austrian distribution of the four perspectives. The unionist perspective is clearly the most popular one, followed by intersectionists, traditionalists and re-labeling perspectives. Subsequently, we compared our findings to those of Halldórsson et al. (2008), who conducted a similar study in American and Scandinavian companies. In order to test for significant differences in our findings, we conducted a Pearson’s chi-square test of independence, using R (R Core Team, 2013). The relation between the SCM Integration perspective and geographical location turned out to be insignificant, ( $df = 6$ ) = 4.97,  $p = 0.055$ , indicating that similar organizational structures exist in those countries.

**Table 1** A Comparison of SCM Perspectives

|                 | Austria | America | Scandinavia |
|-----------------|---------|---------|-------------|
| Unionist        | 31      | 47      | 12          |
| Intersectionist | 10      | 28      | 6           |
| Traditionalist  | 7       | 19      | 3           |
| Re-labeling     | 7       | 6       | 2           |
| Total           | 55      | 100     | 23          |

Note: The data for America and Scandinavia were taken from Halldórsson et al. (2008)

#### 4.2 SCM Perspectives and Financial Ratios

In order to find out whether the existence of a formal supply chain management strategy has a significant impact on financial performance, we conducted a t-test for independent samples. The results showed that those companies with a formal SCM system indeed performed better (average ROA 9.34% as opposed to 8.87%), but the difference turned out not to be significant ( $t(72)=-0.20$ ,  $p=0.84$ ). Subsequently, we investigated the impact of different SCM perspectives on the four financial performance indicators ROA, ROCE, Sales Growth and EBIT. Table 2 shows the average values. In order to account for significant differences we conducted a one-way ANOVA with the SCM perspective as the single factor. The impact on the ROA turned out to be non-significant ( $F(1, 46)= 0.154$ ,  $p=0.70$ ), as was the case for ROCE ( $F(1,46)=1.825$ ,  $p=0.183$ ), and EBIT ( $F(1, 34)= 0.154$ ,  $p=0.70$ ). The impact on sales growth (SG) was significant ( $F(1, 47)= 4.774$ ,  $p=.0.034$ ). Care has to be taken when interpreting the statistical tests, due to several limitations which we will discuss in the final section.

**Table 2** Financial Ratios

|                 | Companies | ROA    | ROCE   | SG     | EBIT  |
|-----------------|-----------|--------|--------|--------|-------|
| Unionist        | 31        | 10.05% | 23.18% | 18.92% | 6.32% |
| Intersectionist | 10        | 9.06%  | 12.23% | 30.23% | 4.16% |
| Traditionalist  | 7         | 8.00%  | 21.68% | 12.41% | 7.29% |
| Re-labeling     | 7         | 8.43%  | 10.74% | 87.69% | 7.90% |

#### 5. Further Research Directions and Conclusions

Corroborating previous studies, we found that the top 250 Austrian companies have multiple perspectives on the conceptual relationship between SCM and logistics. Most practitioners favor a unionist perspective ( $n = 31$ ), followed by intersectionist (10), traditionalist (7) and re-labeling (7). Our descriptive data indicated that there is an influence of SCM on organizational performance. Most results (t-test and ANOVAs) were not significant, but care has to be taken when interpreting the results, since the data are subject to several shortcomings, which was mainly due to the exploratory character of this study. First, the sample size studied was relatively small; in total, 109 out of 250 companies participated in the survey. Second, we did not test for any potential bias in the data. Third, the data was heteroscedastic and, due to the small sample size, there was a lack of statistical power. Notwithstanding these limitations, the findings from the literature and our data indicate that further research is required in order to assess the important impact of the organizational

adoption of a specific SCM perspective on financial performance. In the remainder of this section, we will derive several propositions which are of strategic importance for companies and warrant further attention from the academic community.

The descriptive data indicates a potential relationship between a formal integration of SCM and its financial impact. We therefore suggest:

P1: Companies with an organizational integration of SCM have better financial ratios than those without.

By taking a deeper look into the data of our survey it became obvious that financial performance differs between the four perspectives. Companies which follow narrow, single function, logistics-based perspectives (traditionalist and re-labeling) (Halldórsson et al., 2008) of SCM show a lower ROA than companies without SCM:

P2: A company's supply chain integration perspective has an influence on its financial ratios.

Companies which understand SCM from a broad perspective (i.e. unionist and intersectionist) had a higher ROA than those which do not. This outcome supports the unionists' perspective that an integrated supply chain management yields the best results (Halldórsson et al., 2008; Lambert et al., 1998; Mentzer et al., 2001). Based on these findings, one might even argue that is better not to invest time and money in SCM than to invest in the wrong SCM actions. We therefore further refine our second proposition:

- P2a: Implementing an SCM solution which lacks organizational fit is worse than having no formal SCM implementation.

- P2b: The unionist perspective has a greater positive influence on a company's financial ratios than other supply chain perspectives.

Based on these propositions, we suggest the following approach for further research. First, an in-depth understanding of how intra-organizational processes are affected by the introduction of SCM in a company is needed. A promising way to achieve this might be the application of a system dynamics model in one or more companies. Such models might subsequently serve as the basis for further empirical research including behavioral research based on surveys. Second, more empirical data is needed from organizations which have implemented SCM and are willing to share relevant performance indicators before and after the implementation. This line of research might also help to identify those indicators which are crucial for a company's success. Using a quasi-experimental research design might shed light on the question of which indicators are causally linked to financial performance. Third, models are needed which are based on theory and can be tested in large-scale surveys. These models not only need to take into account SCM perspectives and financial ratios, but also various moderating and mediating factors included in the model as well as potentially confounding variables. The relevance of those research questions for both practitioners and academics makes for a field which is of high strategic importance.

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## **FACTORS INFLUENCING GOLFERS' REVISIT INTENTIONS OF GOLF COURSES IN BANGKOK METROPOLITAN REGION**

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## **Abstract**

The purpose of this study is to investigate in relationships among perceived service quality of the golf course, the price of playing golf, past experience of playing golf in this golf course, overall customer satisfaction, and revisit intentions. This study employed the questionnaire survey method in total, 423 responses were sent out on hand. Although a random selection process was employed to generate a list of 7 golf courses (Hi-End golf courses) in Bangkok and Metropolitan. This result suggests the priority of an investment to manager competing against other golf courses. If they plan to improve service quality or other factors of the golf course, it would be more beneficial to enhance interpersonal quality. Therefore, this research could be useful information for golf course managers in an environment of keen competition with many courses.

**Keywords:** golf courses, golfer, past experience, service quality, price fairness, overall customer satisfaction, revisit intention

## **1. Introduction**

Golf has developed rapidly and has been developed to the same standards as the International. The course designed by world-class standards in order to play golf and attract golfers and those interested in golf with nice golf course for more in Thailand. That's golf course in Thailand as an attention of foreign. As the price, golf course in Thailand is more than any other country in the Asian region, except Vietnam, Myanmar or Laos as well as the popularity of the golf course of foreign-invested enterprises are more. Business golf is steadily growing at a rate of not less than 10 percent of the current popularity of golf still hot in Thailand golfers. For the family market in Thailand to expand the market coverage golfer of all ages, from youth to elderly group. This study investigates in relationships among perceived service quality of the golf course, the price of playing golf, past experience of playing golf in this golf course, overall customer satisfaction, and revisit intentions. Knowledge of these differences could provide the managers of golf courses with vital

information to help them establish more efficient marketing strategies to attract more golfers. However, the research has focused on factors to impact intentions to revisit. Investigating relationships among service quality of golf course that provides to customer, price of playing golf, overall customer satisfaction and revisit intentions of golfers.

## **2. Objectives of the Study**

The objective of this study is to determine the relationships between service quality, price fairness, and overall customer satisfaction and revisit intentions among golfers. The study will investigate as follows:

2.1 To study relationship among service quality, price fairness, and past experience in relationship to overall customer satisfaction.

2.2 To study relationship among service quality, price fairness, past experience, and overall customer satisfaction in relationship to revisit intentions.

## **3. Expected Benefit**

The relationships that influence golfers' intentions to revisit public golf facilities is an important issue to address. In other words, investigating perceived service quality including the facilities provides customers and the price of playing golf in the relationship to overall customer satisfaction and revisit intentions among golfers. Service quality and satisfaction have been shown to be positively related to reuse behavior; thus:

3.1 It would be profitable for golf course managers to have better understandings to their determinants. Obtaining an understanding of customer satisfaction and service quality will enhance understanding of customer needs and help organization management to produce the products and services that their customers desire.

3.2 The study of factors influencing patronizing of golf courses may provide golf course managers necessary information to improve the quality of service and satisfaction in relationship to price in order to attract potential golfers and retain their current golfers.

3.3 This relationship is identified because it impacts customer behavioral intentions (e.g. revisit, and reuse).

To understanding the impact of service quality and satisfactions on behavioral intentions will provide golf managers the important information on revisit intentions.

## **4. Literature Review**

In this section, we summarized relevant literature on factors and defines the basic element of the conceptual framework involving service quality, price fairness, past experience, overall customer satisfaction and revisit intention that serves as the theoretical foundation for the study.

### **4.1 Past Experience**

Past Experience is defined as the “sum of accumulated life experience a recreationist has within a particular recreation activity or style of participation” (Virden, 1992). Moreover, Petrick (2002b) concluded that golfers with less experience were more likely to be satisfied with the golf experience than golfers with more experience. Although golfers with less experience were more satisfied, golfers with more experience were found to have higher intentions to revisit. This finding suggests that golf course managers should focus their golf courses efforts on golfer with less experience since they are more unsure of their intentions to revisit.

#### 4.2 Service Quality

In the services are defined as intangible occurrences, processes, or performances produced and consumed simultaneously (Chelladurai, 2005), and as intangible or nonphysical products (Shank, 2004). Service quality is more difficult to be evaluated than goods quality. Thus, we are referring to suggested from Joon Chael Lee (2010) that eliminating the expectations measure and relying just on the perception component would improve the SERVQUAL model. Then, we adopt the SERVQUAL measure from Parasuraman, Zeithaml, and Berry (1988), in the table presented the SERVQUAL framework, there are five dimensions of service quality (tangibles, reliability, responsiveness, assurance, and empathy) and presented SERVQUAL, a 22-item instrument that assesses five dimensions of service quality (Table 1).

**Table 1** Five Dimensions of Service Quality

|                |   |
|----------------|---|
| Tangibles      | Appearance of physical facilities, equipment, personnel, and communication materials. |
| Reliability    | Ability to perform the promised service dependably and accurately.                    |
| Responsiveness | Willingness to help customers and provide prompt service.                             |
| Assurance      | Knowledge and courtesy of employees and their ability to convey truth and confidence. |
| Empathy        | The caring, individualized attention that the firm provides to its customers.         |

Source: Parasuraman, Zeithaml, and Berry (1988): “Communication and Control Processes in the Delivery of Service Quality,” Journal of Marketing, Vol. 52 (1988), 36 – 48.

#### 4.3 Price Fairness

Hwang (2008) explained that *Price* is the significant element to impact consumer satisfaction of recreational experiences. Spending some amount of money is inevitable for recreational participants to enjoy their recreational activities. In the other hand, Xia et al., (2004) explained that *Fairness* perception is a comparative process that in pricing area means a comparison between current price and a reference point, which might be a price paid in another buying occasion, a price set by another store, the level of estimated cost for the product, the price paid by another person. The last type is a social comparison that has a more intense effect on perceived price fairness, because people accept with difficulty to pay more than other persons. Hence, Price Fairness is the consumer satisfaction of pricing to enjoy their activities or another buying occasion.

#### 4.4 Overall Customer Satisfaction

Satisfaction is an overall affective response to a perceived discrepancy between prior expectation and perceived performance after consumption. In practice, service quality and

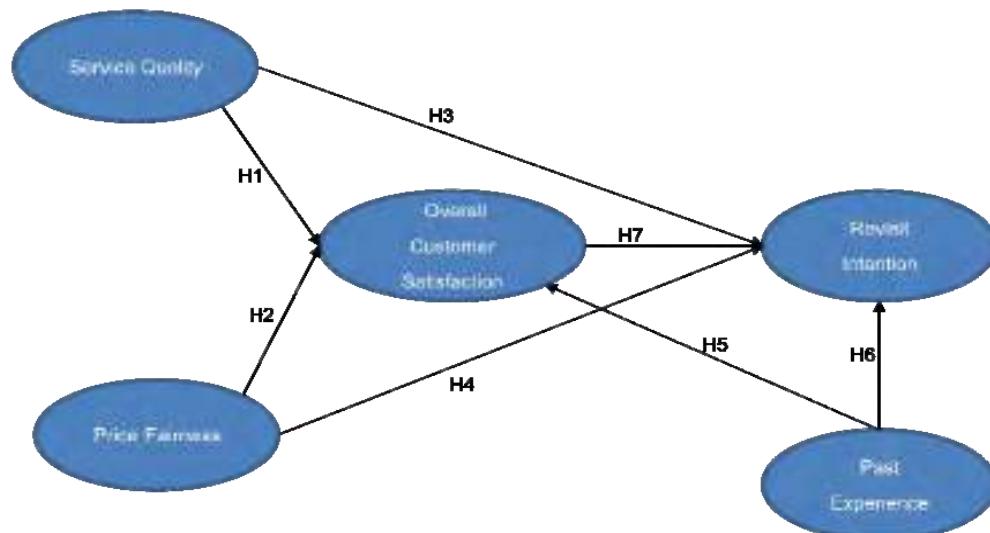
satisfaction are often used interchangeably, because both are evaluation variables relating to consumers' perceptions about a given product or service. However, some authors have made an effort to suggest a set of differences between service quality and customer satisfaction. Overall satisfaction refers to the customer's overall subjective post-consumption evaluation judgment base on all encounters and experiences with a particular organization. The researcher expected that, the golfers would be quite satisfied with the sport of golf if they perceived service quality and perceived price fairness by own past experience. This study is focused on golfers' need-satisfaction concerning the service quality and price fairness of golf courses to repeat visitation.

#### 4.5 Revisit Intention

*Revisit intention* from repurchase intentions, a term usually used when discussing buying something. Repurchase intentions are the customers' intentions to purchase some goods or services from the same organization again (Hwang, 2008); its importance is emerging from decisions of customers regarding goods and services. Establishments that create customer loyalty have a big advantage among their rivals. Repurchase intentions are a vital factor to measure customer loyalty. Therefore, one expectation is that perception of service quality and price fairness dimensions depending on golfers' past experience. Consequently, relationships among dimensions of service quality and price fairness, golfers' satisfaction, and intentions to revisit the same golf courses might be influenced by golfers' feel to their past experience. Hence, the revisit intention construct has been conceptualized as Chen and Tsai (2001, p.1116) was offers through the "visitor's judgment about the likeliness to revisit the same destination".

#### 5. Conceptual Framework

**Figure 1** Modified Model for golfers' intentions to revisit a golf course



#### 6. Hypothesis

This study seeks to find the answers for the following research questions;

Q1: How does perceived service quality, price fairness, past experience of the golf course relate to overall customer satisfaction?

Q2: How does perceived service quality, price fairness, past experience and overall customer satisfaction of the golf course relate to revisit intentions?

The answer the mentioned questions, the following hypothesis are set;

Hypothesis 1: Perceived service quality has a positive effect on overall customer satisfaction.

Hypothesis 2: Perceived price fairness has a positive effect on overall customer satisfaction.

Hypothesis 3: Perceived service quality has a positive effect on revisit intention.

Hypothesis 4: Perceived price fairness has a positive effect on revisit intention.

Hypothesis 5: Perceived past experience has a positive effect on overall customer satisfaction.

Hypothesis 6: Perceived past experience has a positive effect on revisit intention.

Hypothesis 7: Perceived overall customer satisfaction has a positive effect on revisit intention.

## 7. Methodology

### 7.1 Population and Sample Size

This study is conducted at private at 7 clubs of *High-Ended* golf courses only in Bangkok and Metropolitan Regions (Thailand).

1. Ayodhya Links Golf Club - Ayutthaya
2. Thai Country Club - Chachoengsao
3. The Royal Golf & Country Club - Samutprakarn
4. Bangpoo Golf & Sport Club - Samutprakarn
5. Green Valley Country Club - Samutprakarn
6. Muang Kaew Golf Course - Samutprakarn
7. Panya Indra Golf Club - Bangkok

This study has 6 paths, so require the sample size at 30 questionnaires; and one limitation of this study lies in its inability to generalize the results, because data were collected only from golf course in Bangkok and Metropolitan, findings and conclusions of the study may not be golfers other cities or provinces in Thailand. This research was distributed 450 questionnaires for 7 golf course and which have been returned 423 questionnaires.

### 7.2 Validity

The researcher sent the questionnaire to 3 experts to evaluate of the University of the Thai Chamber of Commerce, to evaluate the questionnaire object and the results were higher than 0.5 in all case. The validity test using IOC is presented in table 2.

**Table 2** Validity test using IOC

| Variables                     | IOC   |
|-------------------------------|-------|
| Past Experience               | 0.833 |
| Service Quality               | 0.863 |
| Price Fairness                | 0.866 |
| Overall Customer Satisfaction | 0.833 |
| Revisit Intention             | 0.888 |

### 7.3 Reliability

Reliability analysis was conducted by examining the value of Cronbach's alpha to test instruments' reliability. The internal consistency of measures used in this study is verified by considering Cronbach alpha. The rule of thumb of Cronbach's alpha is that a value greater than 0.9 means the internal consistency is excellent. A value greater than 0.7 is generally considered acceptable. The Cronbach's alpha of all constructs was calculated to test the reliability of the scale used in the study. Reliability analysis was conducted by examining the value of Cronbach's alpha to test instruments' reliability. The internal consistency of measures used in this study is verified by considering Cronbach alpha. The rule of thumb of Cronbach's alpha is that a value greater than 0.9 means the internal consistency is excellent. A value greater than 0.7 is generally considered acceptable. The Cronbach's alpha of all constructs was calculated to test the reliability of the scale used in the study. Hence, the results are presented Cronbach's Alpha score in table 3.

**Table 3** Reliability test using Cronbach's Alpha

| Variables                     | Amount of Items | Cronbach's Alpha |         |
|-------------------------------|-----------------|------------------|---------|
|                               |                 | (Pre-Test)       | (Final) |
| Past Experience               | 4               | 0.917            | 0.925   |
| Service Quality               | 22              | 0.966            | 0.965   |
| Price Fairness                | 5               | 0.814            | 0.889   |
| Overall Customer Satisfaction | 4               | 0.918            | 0.850   |
| Revisit Intention             | 3               | 0.930            | 0.954   |

In the table shows the results of factor analysis (Variables). All items loaded at more than 0.7 and indicated that the use of factor analysis was appropriate, and that extracted factors were distinct and reliable. The result shows that the reliability coefficients were acceptable ( $>0.7$ ) for all constructs. The five constructs are Past Experience, Service Quality, Price Fairness, Overall Customer Satisfaction and Revisit Intention. Then each of the constructs was formed by adding the scores of each of the items included in the construct.

### 7.4 Hypotheses Test

This study seeks to find the answers for the following research questions;

Q1: How does perceived service quality, price fairness, past experience of the golf course relate to overall customer satisfaction?

Q2: How does perceived service quality, price fairness, past experience of playing golf and overall customer satisfaction relate to revisit intentions?

“*Multiple Regression*” this statistics is widely used in determining the relationship between more than one independent variables and one dependent variable. Decide whether there is a significant relationship between the variables in the linear regression model of the data set faithful at 0.05 significance level. As the result of p-value is much less than .05, reject the null hypothesis that  $\beta=0$ . Hence there is a significant relationship between the variables in the linear regression model of the data set faithful.

Base on adjusted the *Multiple Excluded Variables of Determination*, the analysis result reveals the p-value  $> 0.05 (.000)$ . This implies a positive relationship between those two variables of the data set has faithful or has not faithful.

**Table 4** Brief of Hypothesis Testing

| Hypothesis  | The Result |
|---|------------|
| H1: Perceived service quality has a positive effect on overall customer satisfaction.             | Accept     |
| H1o: Perceived service quality doesn't have a positive effect on overall customer satisfaction.   | Reject     |
| H2: Perceived price fairness has a positive effect on overall customer satisfaction.              | Accept     |
| H2o: Perceived price fairness doesn't have a positive effect on overall customer satisfaction.    | Reject     |
| H3: Perceived service quality has a positive effect on revisit intention                          | Accept     |
| H3o: Perceived service quality doesn't have a positive effect on revisit intention                | Reject     |
| H4: Perceived price fairness has a positive effect on revisit intention                           | Accept     |
| H4o: Perceived price fairness doesn't have a positive effect on revisit intention                 | Reject     |
| H5: Perceived past experience has a positive effect on overall customer satisfaction.             | Accept     |
| H5o: Perceived past experience doesn't have a positive effect on overall customer satisfaction.   | Reject     |
| H6: Perceived past experience has a positive effect on revisit intention                          | Accept     |
| H6o: Perceived past experience doesn't have a positive effect on revisit intention                | Reject     |
| H7: Perceived overall customer satisfaction has a positive effect on revisit intention.           | Reject     |
| H7o: Perceived overall customer satisfaction doesn't have a positive effect on revisit intention. | Accept     |

As per hypothesis, in the table 4 is show all research hypotheses are tested and hypothesis 1 to hypothesis 6 are retained or accepted, and just has only one hypothesis (H7) is rejecting. Rejected the null hypothesis (H7) because base on adjusted the Multiple Excluded Variables of Determination in table below show that; the analysis result reveals the p-value > 0.05 (0.427). Therefore, the researcher accepts H7o and rejects H7a. This can be concluded that “Perceived Overall Customer Satisfaction” has not a positive effect on “Revisit Intention” with the regression coefficient ( $\beta = 0.035$ ). This implies a very weak positive linear relationship between those two variables of the data set has not faithful.

## 8. Conclusion and Discussion

The results of this dissertation provide golf course managers with the managerial information on launching a more effective marketing strategy to attract more customers. This study explains why service quality should be ameliorated to enhance customer satisfaction which impacts revisit intentions for customer retention. Furthermore, when establishing a

marketing plan, managers should present prices or promotions for customers. To do this, managers should first know the characteristics of their customers.

This study supported the relationships between service quality, price fairness, overall customer satisfaction, and revisit intentions. In addition, the results of this study were consistent with the common concept presented by several studies indicating that satisfaction with price is positively related to customer satisfaction and repurchase intentions (Grewal et al., 2004; Homburg et al., 2005; Matzler et al., 2006). In the golf context, general golfers' satisfaction with service quality, price fairness and past experience positively affect overall customer satisfaction. However, service quality, price fairness, past experience positively influenced revisit intentions in the overall sample, excepted overall customer satisfaction did not positively affect on revisit intentions.

The results of this study have several implications for golf course managers. First, we suggest that golf course managers need to understand their customers of satisfaction and perceived service quality in order to better predict golfers' future revisit intentions. This result suggests that real-time golf course surveys include a measure of service quality associated with satisfactions. Further, results suggest that it be important for golf course management to understand the variables related to golfers of satisfaction and perceived service quality and their intentions. In addition, the result of intentions past experience and revisit intention measuring the effect of golfer relationship from their accumulated experiences suggests that golf course management should realize that golfers utilize multiple sources when they determine their future to revisit. Also, the result of intentions price fairness with overall customer satisfaction and revisit intention measuring the effect of golfer relationship from price promotions, including a discount on greens fees, coupons, and reasonable packages, should be provided for golfers because they consider price as a determinant of customer satisfaction with the golf course.

Golf course managers should realize the use of each variables measurement. If their goal is the prediction of revisit intentions, measuring overall satisfaction will attract golfers' future revisit intentions. This result suggests the priority of an investment to manager competing against other golf courses. If they plan to improve their service quality or other related factors of the golf course, it would be more beneficial to enhance interpersonal quality. Therefore, this research could be useful information for golf course managers in an environment of keen competition with other courses.

## **9. Limitation of the study**

The current study was an initial attempt to gain a more thorough understanding of the relationship between golfers' perceived service quality, price fairness, past experience, overall satisfaction, and revisit intention. The study are investigated to study test relationship between service quality, price fairness, and past experience in relationship to overall customer satisfaction; and to study test relationship among service quality, price fairness, past experience, and overall customer satisfaction in relationship to revisit intentions.

As stated in chapter 1, the study is limited only golfers in Bangkok and metropolitan regions. And it was focused on high-ended golf course and limit private class of golf course. The model tested in this study intended to be a complete look at all influences of each

variable on satisfaction formation, which are expected the golfer to revisit in golf courses. Thus, future research is necessary in order to determine if the results of this study are representative of other golf courses in Bangkok and metropolitan regions.

## 10. Recommendation for the Future Research

A study in the topic of "Factors influencing golfers' revisit intentions of golf courses in Bangkok and Metropolitan Region" involved with more complication in term of definitions and measurements. Hence, the study should investigate the relationship between golfers' perceived service quality, price fairness, past experience, overall satisfaction, and revisit intention.

Thus, future research should study factors influencing golfers' satisfaction between private and public golf courses. The differences of relationships between private and public golf courses should be investigated based on customer satisfaction.

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**THE STUDY OF FRONT-LINE EMPLOYEE MOTIVATION  
IN RETAILING BUSINESS: EMPIRICAL EVIDENCE  
FROM DEPARTMENT STORES IN BANGKOK**

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# **THE STUDY OF FRONT-LINE EMPLOYEE MOTIVATION IN RETAILING BUSINESS: EMPIRICAL EVIDENCE FROM DEPARTMENT STORES IN BANGKOK**

by

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## **Abstract**

**Purpose** - The purpose of this study is to investigate the four relationships between the four factors, which are employees' achievement motivation, pay satisfaction, job satisfaction and organization commitment in the front-line employees who work in department stores of retailing business in Bangkok, Thailand.

**Design/methodology/approach** - The theoretical framework of this study is designed with the aim of stipulating the four research hypotheses. The questionnaire is distributed to 384 samples of the front-line employees who work in department stores in Bangkok. The analysis results were based on descriptive statistics, means, factor analysis, correlation analysis and regression analysis to analyze the data to test four hypotheses identified.

**Findings** - The findings indicate that pay satisfaction has a positive relation to employees' achievement motivation, employees' achievement motivation also has a positive relation to job satisfaction. In addition, pay satisfaction and job satisfaction also have a positive relation to organization commitment.

**Research Implications** - The findings provide some guidelines to retailers that they need to improve organization commitment to reduce the employees' turnover rate in the retailing business. They need to improve employees' achievement motivation, pay satisfaction and job satisfaction to increase employees' service quality and create more profit for business. The results of this study provide some information for the researcher to study in these four factors in the future.

**Research Limitations** - this research is limited to explore the front-line employees who work in department stores in Bangkok, so the results does not reflect the whole retailing business in Thailand and the results does not represent the others fields.

**Keywords:** employee motivation, front-line employee, department stores, retailing business, pay satisfaction, job satisfaction, organization commitment, Bangkok

## 1. Introduction

Thailand's retailing business refers to all businesses that sell various goods and take all kinds of services to consumers in different kinds of stores in Thailand (Thailand Retail Industry Report, 2011). Thailand retailing business has developed very fast with growth rate at least 3-5% in the year 2011 (Thailand Retail Industry report, 2011). The retailing business is one of the more important parts in economy of Thailand (Jongadsayakul, 2012). Not only the Thais who live in Bangkok are their major customers, but also are the foreign tourists. As Thailand is a tourism country that can attract many foreign tourists to travel and do shopping in Bangkok every day, these foreign tourists also promote the consumption in Bangkok every day (Sookmark, 2011).

While the retailing business in Thailand is changing and expanding very fast, there are some big problems that can hinder its development and success. The first problem is about high employee turnover rate in Thailand retailing business. The employee turnover in Thailand's retailing business was 32.86% in the year 2002, 27.29% in the year 2003, 31.61% in the year 2004, and 46.94% in the year 2005, it was high turnover rates and increase year by year in Thailand retailing business (Napasirikulkit, 2006). The second problem concerns the service quality of the front-line employees in Thailand's retailing business. Customers need the good service from the front line employee, employee' services quality is directly to influence the profit of the retailing business (Kongnawang, 2010). The third problem is that many retailers can't succeed in retailing business and have been taken over in these years, so many foreign retailing stores have been opened in Bangkok in these few years (Thailand competitive report, 2012).

Therefore, to understand the motivation of the front-line employees is very important for retailers to succeed in retailing business. Thus, this study focuses on four objectives. First, to investigate the effect of pay satisfaction on achievement motivation of the front-line employees in department stores in Bangkok's retailing business, Thailand. Second, to investigate the effect of pay satisfaction on organization commitment of the front-line employees in department stores in Bangkok's retailing business, Thailand. Third, to investigate the effect of achievement motivation on job satisfaction of the front-line employees in department stores in Bangkok's retailing business, Thailand. Fourth, to investigate the effect of job satisfaction on organization commitment of the front-line employees in department stores in Bangkok's retailing business, Thailand. The expected results are benefit to reduce the retailing employees' turnover rate in the retailing business. The results are benefit to retailers to improve their employees' achievement motivation, pay satisfaction, job satisfaction and organization commitment in retailing business. The results are benefit to retailers to motivate their employees to have higher work performance, improve the service quality, and be more productive.

This study focuses on exploring the relationship between the four factors, which are pay satisfaction, achievement motivation, job satisfaction and organization commitment. The first relationship is pay satisfaction is effect by employees' achievement motivation and is positively related to achievement motivation (Smith and Rupp, 2003). Smith and Rupp thought pay satisfaction effects the employees' achievement motivation, the employees who satisfaction with their pay from organization, the employees will work hard to achieve their goal for their organization and also create more benefit for organization, thus the employees will be motivated to have a high achievement motivation. The second relationship is pay satisfaction is a factor that effects on organization commitment and has a positively related to organization commitment (Suma, 2013). Suma found that pay satisfaction is significant positively affects on the employees' organization commitment in developing the country. The employees who satisfaction with the pay from organization, they will have more commitment with their organization and willing to remain their job with organization. The third relationship is the employees' achievement motivation is effect job satisfaction and has been positively related to job satisfaction (Saleem, 2011). The forth relationship is job satisfaction is a factor affect on organization commitment and is positively related to organization commitment (Gunlu, 2010). Gunlu found that job satisfaction have a significant effect on normative commitment and affective commitment. The employees who satisfaction with their job, they will want to stay with their job and more commitment with their organization. The employees have a high job satisfaction, they will have a high organization commitment.

In order to achieve the objectives of this study, four main research questions as follows:

1. How does pay satisfaction affect achievement motivation of front-line employees in department stores in Bangkok's retailing business, Thailand?
2. How does pay satisfaction affect organization commitment of front-line employees in department stores in Bangkok's retailing business, Thailand?
3. How does achievement motivation affect job satisfaction of front-line employees in department stores in Bangkok's retailing business, Thailand?
4. How does job satisfaction affect organization commitment of front-line employees in department stores in Bangkok's retailing business, Thailand?

## **2. Literature Review**

This study reviews the four factors are employees' achievement motivation, pay satisfaction, job satisfaction and organization commitment in department store in Bangkok.

### **2.1 Employee's achievement motivation**

Achievement motivation includes three aspects that are need for achievement, need for affiliation, and need for power. Achievement motivation has been developed by McClelland (1971). Achievement motivation is very important for human resource management (Saleem, 2010). Achievement motivation is influencing all the important life activities and performances of employees, the employees who have high achievement motivation, they will have high job performance in the organization (Kunnanatt, 2008). Achievement motivation was defined as the individuals need to improve well or doing hard for success, and persevere in effort when they face difficulties (Kumar and Singh, 2010). Base on the McClelland's achievement motivation theory, there are three important dimensions of achievement motivation, they are need for achievement, need for affiliation,

need for power. Need for achievement is the desire to complete the difficult jobs, master complex task, achieve a high standard of success, and surpass others (Garg, 2013). Need for affiliation as a need for open and sociable interpersonal relationships from organization (Kassin and Markus, 2008). Need for power is defined as the desire of individuals to control and influence others, they want to be leader to win others follow their decision (Dollinger, 2008).

Employees' achievement motivation has a positive relationship with their job satisfaction. Kumar and Singh (2010) have explored the relationship between achievement motivation and job satisfaction in the employees of Tata Consultancy Services. They found that the employees who have high achievement motivation, they were more satisfied with their job, and they have high job satisfaction than the others who have low achievement motivation. The achievement motivation is effected by pay satisfaction. Pay satisfaction is a factor effect on employees' achievement motivation, and it is a positively related to achievement motivation. Carr (2005) thought the employees who are satisfied with their pay from the organization, the employees will be motivated to build a goal and work hard to achieve their goal for organization, thus they have high achievement motivation.

## 2.2 Pay satisfaction

Pay satisfaction has been studied in different fields such as human resource management, employee motivation and turnover. Pay satisfaction of employee is very important for the organization managers to manage their employees (Scarpello, 2011). Scarpello thought the employees' pay satisfaction effect that whether the employees work hard in their organization, pay satisfaction effect that whether the employees willing to remain their job with organization. The employees who satisfied with their pay, they will be motivated to improve their work performance and the other desirable behaviors (Carraher, 2011). Pay satisfaction was defined as the amount of all positive feelings or negative feelings of the employees have toward their pay (Vandenbergh and Michel et al., 2008). This study focused on four important dimensions of pay satisfaction, which include pay level satisfaction, pay raises satisfaction, benefits satisfaction and pay administration satisfaction. Day (2011) has defined pay level satisfaction as an employee satisfied with salary level that the employee receives. Omar (2006) has defined pay raises satisfaction as an employee satisfied with the pay increase that the employee receives. Carraher (2008) has defined benefits satisfaction as an employee satisfied with the benefit package of organization. Lievens (2007) has defined pay administration satisfaction as one way to reflect the satisfaction of employee has toward the pay structure of organization.

Pay satisfaction is a factor that effects employee achievement motivation, it is positively related to achievement motivation. Ghazanfar (2010) thought the employees satisfied with their pay, they will build a goal and work hard to achieve the task of organization, they are motivated to have high achievement motivation. Pay satisfaction is a factor that effect on organization commitment, it is positively related to organization commitment. Vandenbergh and Michel et al., (2008) thought the employees who have high pay satisfaction will lead to the employees loyal to their organization and have more commitment with organization.

### **2.3 Job satisfaction**

Job satisfaction has been study in different fields such as human resource management, organization management and organization behavior in these years. Job satisfaction is very important for managers to understand their employee behaviors and attitudes (Boles, 2007). Job satisfaction was defined as an individual's attitude has toward individual's job and to reflect individual's positive feelings or negative feelings with their job (Boles, 2007). Based on the Job Descriptive Index theory of Smith, Kendall and Hulin in 1969, this study focused on measure job satisfaction by the three important dimensions of job satisfaction, which include satisfaction with co-worker, satisfaction with supervision and satisfaction with promotion. Friday (2002) has defined satisfaction with co-worker relates to satisfaction with co-worker on a work place. Johnson (2000) has defined satisfaction with supervision as one way to reflect the employees satisfied with the supervision of managers in the work place. Cortina (2000) has defined satisfaction with promotion as one way to reflect the employees satisfied with the promotion opportunities in an organization.

Job satisfaction is a factor that affects organization commitment and it is positively related to organization commitment. Yousef (2002) has explored that job satisfaction directly and positively effects organization commitment. Boles (2007) found that the sales employee's job satisfaction was strongly related to organizational commitment. Job satisfaction is affected by employee's achievement motivation. Snoeker (2010) found that employees' achievement motivation is positively related to employee's job satisfaction.

### **2.4 Organization commitment**

Organization commitment is an important factor that has been studied in these years. The managers are very interesting in to build an organization with highly committed workforce to motivated their employees have more commitment with their organization (Chen, 2005). Organization commitment is very important for organization management their employees, organization commitment influences the important outcomes of organization such as turnover, the employees' behavior and organizational support (Jain, 2008). Organization commitment was defined as a psychological state that reflects the relationship between employee and organization commitment and effects the employee's decision to stay in the organization (Stephens, 2005). This study focused on three important dimensions of organization commitment, which include affective commitment, normative commitment and continuance commitment. Boles (2007) has defined affective commitment as one dimension of organization commitment that reflects the employees feeling, belongingness and attachment with their organization. Bansal (2008) has defined continuance commitment as a high costs associated with leaving the organization, and creates a feeling of needing to continue employment. Michael (2009) has defined normative commitment as the way to improve the employee to have psychological contract between the organization and the employee, the employee stay in the organization based on their belief, faith and duty for organization.

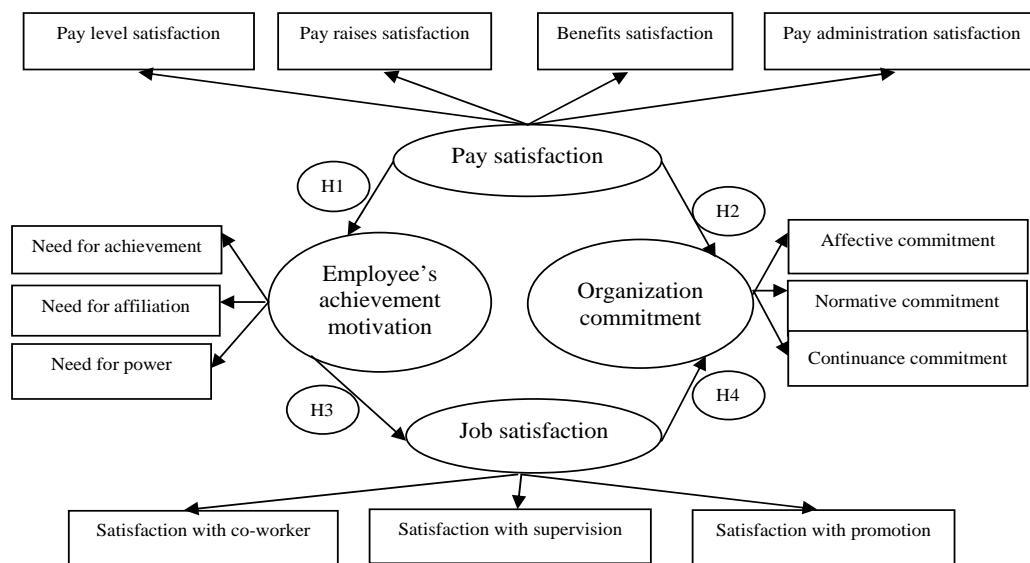
Organization commitment is a factor which is effect by pay satisfaction and job satisfaction. Pay satisfaction affects organization and is positively related to organization commitment (Vandenbergh and Michel et al., 2008). They thought the employees are not satisfied with pay from organization, they don't want to work effort on their job, they will leave the organization, the outcomes is increasing turnover rate in this business. Job satisfaction affects organization is a positively related to organization commitment (Adio,

2009). The relationship between job satisfaction and organization commitment is that the employee who has more satisfaction with their job and will be more committed with organization (Yousef, 2002).

## 2.5 Conceptual model

The conceptual model of this study is as the figure 1.

**Figure 1** Conceptual mode of the research



There are four hypotheses in this study. As follows,

Hypothesis 1: Pay satisfaction has a positive relation to employees' achievement motivation.

Hypothesis 2: Pay satisfaction has a positive relation to organization commitment.

Hypothesis 3: Employees' achievement motivation has a positive relation to job satisfaction.

Hypothesis 4: Job satisfaction has a positive relation to organization commitment.

## 3. Methodology

This study is through distributed questionnaires to explore the relationships of four factors, which are employees' achievement motivation, pay satisfaction, job satisfaction and organizational commitment. The sample population of this study is the front-line employees who work in the department stores in Bangkok. The department stores include Central, Robinson, Zen and The Mall. The sample is chosen on voluntary basis. They include sales employees, cashiers and the others. Base on the sample size formula of Cochran (1977), the sample size of this research is total 384 samples.

The initial data are obtained from questionnaires distributed to the front-line employees who work in department stores in Bangkok. The questionnaire is translated from English into Thai language in order to facilitate the respondents to understand and answer all the questions with ease. The data were collected on October 2013. The questionnaires were

collected between Monday and Friday because the retail stores did not have many customers during week day and the front-line employees had more time (than during weekends) to understand the questionnaires, thus, they were able to answer them carefully. All the questionnaires were collected at the department stores including The Mall Bangkapi branch, The Mall Ram branch, Central Plaza Rama 9 branch, Central Plaza Lat Phrao branch, Central world, Siam Phragon, Central Plaza Rama 3 branch, Central Plaza Bang Na branch and The Mall Ngamwongwan branch, all of which are located in Bangkok, Thailand.

The data with five-point Likert-type scale were collected and were then analysed. After that, Statistics Package for the Social Sciences (SPSS) was used to calculate the input of data concerning the test results of the four hypotheses. The test results were analyzed by using descriptive statistics, means, factor analysis, correlation analysis and the regression analysis.

#### **4. Research Instrumentation**

The questionnaire is designed based on literature review about the four factors that are employees' achievement motivation, pay satisfaction, job satisfaction and organization commitment. All the questions in this questionnaire is adapted from the related research of these four factors. All the questions in this questionnaire are design in a simple and convenient form. All the questions in this questionnaire are closed questions. The questions are extracted from the related literatures and journals, all the questions are in accordance with this research. After testing modified, this questionnaire has been designed by a formal questionnaire. The questionnaire is divided by 5 parts with total 60 questions.

#### **5. Data Analysis**

This study used Statistics Package for the Social Sciences (SPSS) input the initial data to analyze the test results of the four hypotheses. The test results based on used descriptive statistics, means, factor analysis, correlation analysis and regression analysis to analyze the data to analyze the test result and confirm the four hypotheses as hypothesis 1, hypothesis 2, hypothesis 3 and hypothesis 4.

#### **6. Results**

All the data of total 384 questionnaires have been analyzed. The information of participants in this research are that 164 of the respondents (42.7 percent) are male and 220 (57.3 percent) are female. 178 of respondents (46.4 percent) are between 26 years to 35 years. 181 of respondents (47.1 percent) is high school or vocational education, 253 of respondents (65.9 percent) are single, 186 of respondents (48.4 percent) had working experience between 1 year to 5 years. 338 of respondents (88.0 percent) are sale employee and the other 46 of respondents (12.0 percent) are cashier and others (such as managers, waiter). 209 of respondents (54.4 percent) are ranged from 1 to 5 years. 241 of respondents (62.8 percents) ranged between 9000 to 1500THB.

**Table 1** Descriptive statistics of the independent variables and dependent variable

| Variable                         | N   | Minimum | Maximum | Mean  | Std. Deviation |
|----------------------------------|-----|---------|---------|-------|----------------|
| Pay satisfaction                 | 384 | 1.31    | 5.00    | 3.133 | 0.645          |
| Job satisfaction                 | 384 | 1.92    | 5.00    | 3.455 | 0.629          |
| Organization commitment          | 384 | 1.75    | 5.00    | 3.419 | 0.629          |
| Employee' achievement motivation | 384 | 1.83    | 5.00    | 3.552 | 0.513          |
| Valid N (list wise)              | 384 |         |         |       |                |

The number of respondents in the sample was 384. Table 1 is descriptive statistics of the four factors: pay satisfaction, job satisfaction, organization commitment and employees' achievement motivation. Table 1 shows that minimum and maximum, mean and standard deviation of these four variables. The table clearly shows that the minimum and the maximum of pay satisfaction is 1.31 and 5.00. The mean and standard deviation of pay satisfaction is 3.133 and 0.645. This means shows the satisfaction level of pay satisfaction is neutral. The minimum and the maximum of job satisfaction is 1.91 and 5.00. The mean and stand deviation of job satisfaction is 3.455 and 0.629. This means shows the satisfaction level of job satisfaction and it is at agree level. The minimum and the maximum of organization commitment is 1.75 and 5.00. The mean and stand deviation of organization commitment is 3.419 and 0.629. This means shows the level of organization commitment is of agree level. The minimum and the maximum of employees' achievement motivation is 1.83 and 5.00. This mean and stand deviation of employees' achievement commitment is 3.552 and 0.513. This mean shows that the level of employees' achievement commitment is agreed level.

### 6.1 Factor analysis

In order to test each dimension of pay satisfaction, job satisfaction, organization commitment and employees' achievement motivation to measure each variable. The factor analysis will be used to test every dimension. If all the questions loading on each factor is more than 0.3, it can be used to measure the dimension and more than 0.5 is good (George, 2009). As the Table 2, Table 3, Table 4, Table 5.

**Table 2** Factor analysis of pay satisfaction

| Item |  | Pay level | Pay raise | Benefit | Pay administration |
|------|--|-----------|-----------|---------|--------------------|
| P1.1 | I satisfied with my current monthly salary   | 0.720     |           |         |                    |
| P1.2 | Compare with other organization, I satisfied with my overall organization level of pay | 0.779     |           |         |                    |
| P1.3 | I satisfied with the amount of my current salary meet the market pay standards.        | 0.760     |           |         |                    |
| P1.4 | I satisfied with my net income that meets my need                                      | 0.759     |           |         |                    |
| P2.1 | I satisfied with my most recent pay raise  |           | 0.639     |         |                    |
| P2.2 | I satisfied with my supervisor's pay has over my pay                                   |           | 0.555     |         |                    |
| P2.3 | I satisfied with the pay raises I have typically received in the past                  |           | 0.794     |         |                    |
| P2.4 | I satisfied with my pay raises are determined  |           | 0.678     |         |                    |
| P3.1 | I satisfied with my benefit package  |           |           | 0.780   |                    |
| P3.2 | I satisfied with the value of my benefits  |           |           | 0.784   |                    |

| Item |   | Pay level | Pay raise | Benefit | Pay administration |
|------|---|-----------|-----------|---------|--------------------|
| P3.3 | I satisfied with amount the company pays toward my benefits                               |           |           | 0.792   |                    |
| P3.4 | The amount of benefits (such as Bonuses, Commissions, Social Security Debt) meets I needs |           |           | 0.704   |                    |
| P4.1 | I satisfied with the organization administers   |           |           |         | 0.679              |
| P4.2 | I satisfied with the information of organization gives about pay issues                   |           |           |         | 0.756              |
| P4.3 | I satisfied with the consistency of the organization's pay policies                       |           |           |         | 0.752              |
| P4.4 | I satisfied with the differences in pay among jobs in the organization                    |           |           |         | 0.674              |

The result of factor analysis of pay satisfaction as Table 2, Table 2 shows that all the questions of four dimensions of pay satisfaction have been retained. 16 questions of four dimensions loaded on four main factors with a loading of 0.555 to 0.780. All the questions to measure four dimensions of pay satisfaction are more than 0.5. Thus, there is strong evidence that all the questions can measure four dimensions of pay satisfaction.

**Table 3** Factor analysis of job satisfaction

| Item |   | Supervision | Co-worker | Promotion |
|------|---|-------------|-----------|-----------|
| J1.1 | I satisfied with my supervisor  | 0.885       |           |           |
| J1.2 | I satisfied with the quality of the supervision   | 0.909       |           |           |
| J1.3 | The supervisor helps me to deal more effectively in my job                                  | 0.894       |           |           |
| J1.4 | I satisfied with the competence of my supervisor in making decisions                        | 0.883       |           |           |
| J2.1 | I satisfied with the spirit of cooperation among my co-worker                               |             | 0.875     |           |
| J2.2 | I satisfied with the chance to tell other worker how to do things                           |             | 0.882     |           |
| J2.3 | I satisfied with the chance to develop close friendships with my co-workers                 |             | 0.875     |           |
| J2.4 | I satisfied with the friendliness of my co-workers  |             | 0.891     |           |
| J3.1 | I satisfied with the opportunities for advancement on this job                              |             |           | 0.839     |
| J3.2 | I satisfied with the way my job provides for a secure future                                |             |           | 0.823     |
| J3.3 | I satisfied with the way promotion on this job that meets my needs                          |             |           | 0.902     |
| J3.4 | I satisfied with the number of times of opportunities that I have been promoted on this job |             |           | 0.863     |

The result of factor analysis of job satisfaction as Table 3, Table 3 shows that all the questions of three dimensions of job satisfaction have been retained. 12 questions of three dimensions loaded on three main factors with a loading of 0.823 to 0.909. All the questions to measure three dimensions of job satisfaction are more than 0.5. Thus, there is strong evidence that all the questions can measure three dimensions of job satisfaction.

**Table 4** Factor analysis of organization commitment

| Item |  | Affective | Normative | Continuance |
|------|--|-----------|-----------|-------------|
| C1.1 | I feel like "part of the family" at this organization.   | 0.806     |           |             |
| C1.2 | This organization has a great deal of personal meaning for me.   | 0.870     |           |             |
| C1.3 | I feel a strong sense of belonging to the organization.  | 0.830     |           |             |
| C1.4 | I would be very happy to spend the rest of my career with this organization.                               | 0.816     |           |             |
| C2.1 | I believe in the value of remaining loyal to one organization.   | 0.581     |           |             |
| C2.2 | If I got another offer for a better job elsewhere, I would not feel it was right to leave my organization. | 0.708     |           |             |
| C2.3 | I believe that a person must always be loyal to his or her organization.                                   | 0.837     |           |             |
| C2.4 | I believe that loyalty in organization is important.   | 0.823     |           |             |
| C3.1 | Too much in my life would be disrupted if I decided I wanted to leave my organization now.                 |           |           | 0.805       |
| C3.2 | Right now ,staying with organization is a necessity for me.  |           |           | 0.612       |
| C3.3 | It would not be too costly for me to leave my organization in the near future.                             |           |           | 0.817       |
| C3.4 | I am afraid of what might happen if I quit my job without having another one lined up.                     |           |           | 0.665       |

The result of factor analysis of organization commitment as Table 4, Table 4 shows that all the questions of three dimensions have been retained. 12 questions of three dimensions loaded on three main factors with a loading of 0.581 to 0.870. All the questions to measure three dimensions of organization commitment are more than 0.5. Thus, there is strong evidence that all the questions can measure three dimensions of organization commitment.

**Table 5** Factor analysis of employee' achievement motivation

| Item |  | Achievement | Affiliation | Power |
|------|--|-------------|-------------|-------|
| E1.1 | I am pleased when I can take on added job responsibilities.            | 0.873       |             |       |
| E1.2 | I am always looking for opportunities to improve my skills on the job. | 0.884       |             |       |
| E1.3 | I like to set challenging goals for myself on the job.                 | 0.866       |             |       |
| E1.4 | I try very hard to improve on my past performance at work.             | 0.849       |             |       |
| E2.1 | I am uncomfortable when forced to work alone.                          |             |             | 0.800 |
| E2.2 | I go out of my way to make friends with new people.                    |             |             | 0.415 |
| E2.3 | I am always getting involved with group projects.                      |             |             | 0.540 |
| E2.4 | I like to work with my co-workers.                                     |             |             | 0.531 |
| E3.1 | I prefer to work alone and be my own boss.                             |             |             | 0.781 |
| E3.2 | Status symbols are important to me.                                    |             |             | 0.712 |
| E3.3 | I am eager to be my own boss.  |             |             | 0.669 |
| E3.4 | like to command co-workers rather than they command me.                |             |             | 0.706 |

The result of factor analysis of employees' achievement motivation as Table 5, Table 5 shows that all the questions of three dimensions have been retained. 12 questions of three dimensions loaded on three main factors with a loading of 0.415 to 0.870. All the questions to measure three dimensions of employees' achievement motivation are more than 0.5, except

the question E2.2 I go out of my may to make friends with new people is loading of 0.415. Base on the factor analysis of George (2009) though the factor loading is more than 0.3 can be retained to measure main factors, more than 0.5 is good. Thus, E2.2 I go out of my may to make friends with new people is retained to measure employees' achievement motivation. There is strong evidence that all the questions can measure three dimensions of employees' achievement motivation.

## 6.2 Correlation analysis between independent variables and dependent variables

Correlation analysis is the use of statistical correlation to evaluate the strength of the relations between variables. Before using regression analysis, correlation between independents must be tested. If the absolute values of the correlation between the independent variables is below 0.75 (Wuensch, 2013), these independent variables can be used to test regression analysis. Table 1 shows the results of correlation analysis.

**Table 6** Correlation between independent variables and dependent variables

|                         |                     | Pay satisfaction | Job satisfaction | Organization commitment | Achievement motivation |
|-------------------------|---------------------|------------------|------------------|-------------------------|------------------------|
| Pay satisfaction        | Pearson Correlation | 1                | .538 **          | .562 **                 | .306 **                |
|                         | Sig. (2-tailed)     |                  | .000             | .000                    | .000                   |
|                         | N                   | 384              | 384              | 384                     | 384                    |
| Job satisfaction        | Pearson Correlation | .538 **          | 1                | .641 **                 | .440 **                |
|                         | Sig. (2-tailed)     | .000             |                  | .000                    | .000                   |
|                         | N                   | 384              | 384              | 384                     | 384                    |
| Organization commitment | Pearson Correlation | .562 **          | .641 **          | 1                       | .530 **                |
|                         | Sig. (2-tailed)     | .000             | .000             |                         | .000                   |
|                         | N                   | 384              | 384              | 384                     | 384                    |
| Achievement motivation  | Pearson Correlation | .306 **          | .440 **          | .530 **                 | 1                      |
|                         | Sig. (2-tailed)     | .000             | .000             | .000                    |                        |
|                         | N                   | 384              | 384              | 384                     | 384                    |

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 6 clearly shows that all the correlations between independent variables were significant at the 0.01 level (2-tailed), all the absolute values of the correlations between the independent variables are less than 0.75 (Wuensch, 2013). Thus, all the independent variables were included in the regression analysis between independent variables and dependent variables. Thus, the result shows that there is not any problem of multicollinearity.

1. The correlation of pay satisfaction (correlation=0.306, sig=0.000) was significant on employees' achievement motivation at the 0.01 level (2-tailed).
2. The correlation of pay satisfaction (correlation=0.562, sig=0.000) was significant on organization commitment at the 0.01 level (2-tailed).

3. The correlation of employees' achievement motivation (correlation=0.440, sig=0.000) was significant on job satisfaction at the 0.01 level (2-tailed).

4. The correlation of job satisfaction (correlation=0.641, sig=0.000) was significant on organization commitment at the 0.01 level (2-tailed).

### 6.3 Regression analysis between independent variables and dependent variables

Regression analysis is one of the most commonly used statistical techniques in social and behavioral sciences as well as in physical sciences. Its main objective is to explore the relationship between a dependent variable and one or more independent variables (which are also called predictor or explanatory variables). This study used regression analysis to confirm all 4 hypotheses as shown in Table 7, Table 8, and Table 9 respectively.

**Table 7** Regression analysis between independent variable (pay satisfaction) and dependent variable (employees' achievement motivation)

| Model            | Unstandardized Coefficients |            | Standardized Coefficients | T      | Sig. |
|------------------|-----------------------------|------------|---------------------------|--------|------|
|                  | B                           | Std. Error | Beta                      |        |      |
| 1 (Constant)     | 2.788                       | .124       |                           | 22.490 | .000 |
| Pay satisfaction | .244                        | .039       | .306                      | 6.290  | .000 |

a. Dependent Variable: Employee' achievement motivation

As for H1, Table 7 shows that pay satisfaction has a positive relationship with employees' achievement motivation. The result confirms that H1 was supported (see Table 7) because p-value of pay satisfaction was below 0.01 (coefficient=0.306, p-value=0.000), thus, the effect of pay satisfaction on employees' achievement motivation was significant at the 0.01 level. The coefficient of job satisfaction yielded the positive value of 0.306. Therefore, pay satisfaction is significantly and positively related to employees' achievement motivation. The effect level of employees' achievement motivation is 0.306. H1 is supported.

**Table 8** Regression analysis between independent variable (employees' achievement motivation) and dependent variable (job satisfaction)

| Model                            | Unstandardized Coefficients |            | Standardized Coefficients | T     | Sig. |
|----------------------------------|-----------------------------|------------|---------------------------|-------|------|
|                                  | B                           | Std. Error | Beta                      |       |      |
| 1 (Constant)                     | 1.541                       | .202       |                           | 7.624 | .000 |
| Employee' achievement motivation | .539                        | .056       | .440                      | 9.564 | .000 |

a. Dependent Variable: Job satisfaction

As for H3, Table 8 shows that employees' achievement motivation has a positive relationship with job satisfaction. The result of this study confirms that H3 was supported (see Table 8) because p-value of employees' achievement motivation is below 0.01 (coefficient=0.440, p-value=0.000), thus, the effect of employees' achievement motivation on job satisfaction was significant at the 0.01 level. The coefficient of employees' achievement

motivation yielded the positive value of 0.440. Therefore, employees' achievement motivation is significantly and positively related to job satisfaction. The effect level of employees' achievement motivation is 0.440. H3 is supported.

**Table 9** Regression analysis between independent variables (pay satisfaction, job satisfaction) and dependent variable (organization commitment)

| Model            | Unstandardized Coefficients |            | Standardized Coefficients | T      | Sig. |
|------------------|-----------------------------|------------|---------------------------|--------|------|
|                  | B                           | Std. Error | Beta                      |        |      |
| 1 (Constant)     | .868                        | .139       |                           | 6.266  | .000 |
| Pay satisfaction | .294                        | .042       | .305                      | 6.946  | .000 |
| Job satisfaction | .472                        | .043       | .477                      | 10.868 | .000 |

a. Dependent Variable: Organization commitment

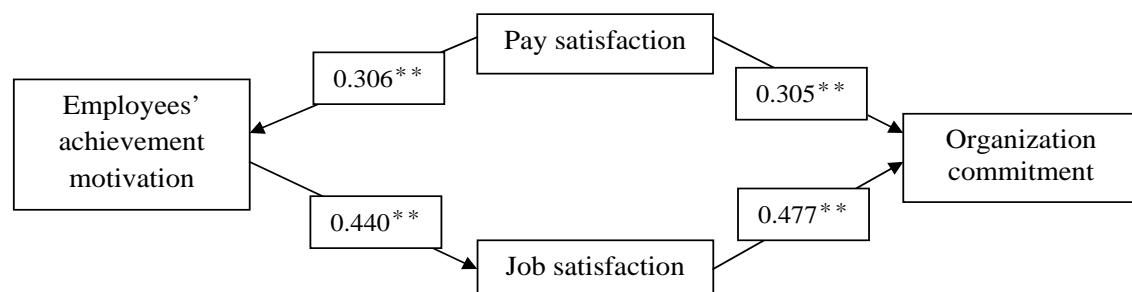
As for H2, Table 9 shows that pay satisfaction has a positive relationship with organization commitment. The result confirms that H2 was supported (see Table 9) because p-value of pay satisfaction is below 0.01 (coefficient=0.305, p-value=0.000), thus, the effect of pay satisfaction was significant at the 0.01 level. The coefficient of pay satisfaction yielded the positive value of 0.305. Therefore, pay satisfaction is significantly and positively related to organization commitment. The effect level of pay satisfaction is 0.305. H3 is supported.

As for H4, Table 9 shows that job satisfaction has a positive relationship with organization commitment. The result confirms that H4 was supported (see Table 4) because p-value of job satisfaction is below 0.01 (coefficient=0.477, p-value=0.000), thus, the effect of job satisfaction on organization commitment was significant at the 0.01 level. The coefficient of job satisfaction has yielded the positive value of 0.477. Thus, the effect of job satisfaction on organization commitment is significantly and positively related to organization commitment. The effect level of job satisfaction is 0.477. H4 is supported.

#### 6.4 Result of independent variables effect on dependent variables

Figure 2 clearly shows that the result of independent variables effect on dependent variables and the effect level of each independent variable.

**Figure 2** Result of independent variables load in dependent variable



\*\*correlation is significant at 0.01 level (2-tailed)

H1: Pay satisfaction has an effect on and is positively related to employees' achievement motivation. The effect level of pay satisfaction on employees' achievement motivation is 0.306 (beta = 0.306, p < 0.01). Thus, H1 is supported.

H2: Pay satisfaction has an effect on and is positively related to organization commitment. The effect level of pay satisfaction on organization commitment is 0.305 (beta = 0.305, p < 0.01). Thus, H2 is supported.

H3: Employees' achievement motivation has an effect and is positively related to job satisfaction. The effect level of employees' achievement motivation on job satisfaction is 0.440 (beta = 0.440, p < 0.01). Thus, H3 is supported.

H4: Job satisfaction has an effect on and is positively related to organization commitment. The effect level of job satisfaction on organization commitment is 0.477 (beta = 0.447, p < 0.02). Thus, H4 is supported.

## 7. Discussion and conclusion

### 7.1 Discussion

All the research questions and hypotheses have been studied. First, a major objective of this study is to explore H1: Pay satisfaction has a positive relation to employees' achievement motivation in front-line employees in Bangkok retailing business. The findings confirm that H1 was supported. This study shows similar findings as those of the predecessors such as Ghazanfar's (2010), Stringer's (2011), and Carr's (2005). Ghazanfar found that the benefits do not have a significant impact on work motivation (such as need to achieve the organization's goals) in the sales departments of the cellular service providers in Lahore. Stringer also found that pay fairness is important for front-line employees, and the majority of employees perceived that goals were clear. The result of this study shows that pay satisfaction is significant for Bangkok's front-line employees' achievement motivation. The employees who have a high pay satisfaction will be motivated towards their job performance and try to build and achieve work goals by themselves. Perhaps this is because they can also achieve other personal goals such as improving the standard of living and motivation environment.

The second, a major objective of this study is to explore H2: Pay satisfaction has a positive relation to organization commitment in front-line employees in Bangkok retailing business. The findings confirm that H2 was supported. This study shows similar findings as those of the predecessors such as Suma (2013), Vandenberghe et al., (2008). Suma (2013) explored on the extent to how these employees were committed to their job and satisfied with different dimensions of their job in the public sector of Shkoder, Albania. Vandenberghe et al., (2008) also explored employees' attitude towards equity, pay satisfaction, and affective commitment as well as their turnover in Botswana. The result shows that pay satisfaction has an effect on organization commitment of front-line employees in Bangkok's retailing business. It is suggested that the managers take some measures to increase front-line employees' pay satisfaction because those who have high satisfaction with pay will contribute to the success of the business. This is because employees who have commitment with their organization will continue to stay for a long time, working hard and creating more benefits for the organization.

The third, a major objective of this study is to explore H3: The employees' achievement motivation has a positive relation to job satisfaction in front-line employees in

Bangkok retailing business. The findings confirm H3 was supported. This study shows similar findings as those of the predecessors such as Kumar and Singh (2011), Yurtseven (2012) and Wood and Vilkinas (2005). Kumar and Singh found that the employees who are interested in their jobs would find more opportunities to satisfy their need for achievement, recognition, personal growth, and autonomy. Yurtseven (2012) also found that employees' motivation is a process of satisfying employees' different needs and expectations. The result of this study shows that employees' achievement motivation is important for job satisfaction among retailing front-line employees in Bangkok, Thailand. The employees who have high achievement motivation will work hard to achieve their goals. This will lead to employees having more satisfaction with their jobs and more willingness to continue to reach their goals. The employees who can complete the tasks for organization will create more benefits for the organization.

The fourth, a major objective of this study is to explore H4: Job satisfaction has a positive relation to organization commitment in front-line employees in Bangkok retailing business. The findings confirm that H4 was supported. This study shows similar findings as those of the predecessors such as Gunlu (2009), Boles (2007) and Koh and Boo (2004). Gunlu found that job satisfaction has a significant effect on organizational commitment of the employees who work in the large-scale hotel in Tokyo. Boles (2007) found that various facets of sales employee's job satisfaction are very strongly related to organizational commitment. The result of this study shows that job satisfaction is significantly related to front-line employees' organization commitment including those working in Bangkok's retailing business, Thailand. Therefore, it is necessary for retailers to find ways to enhance employees' job satisfaction so as to increase their organization commitment. The outcome is that they are willing to continue their job, thus reducing the turnover rate in the retailing business.

## 7.2 Conclusion

All the research questions and hypotheses have been studied. First, pay satisfaction is an important factor that affects achievement motivation among front-line employees in Bangkok's retailing business. Second, pay satisfaction is an important factor for organization commitment among front-line employees in Bangkok retailing business. Third, employees' achievement is positively related to job satisfaction. Thus, it is an important factor for job satisfaction among front-line employees in Bangkok retailing business. Finally, job satisfaction is positively related to and has an effect on organization commitment. Thus, job satisfaction is an important factor for employees' organization commitment among front-line employees in Bangkok's retailing business.

The results of this study provide some benefits to retailers and researchers. First, the results are benefit to retailers through improve retailing employees' achievement motivation and organization commitment to reduce the high employees' turnover rate in retailing business. Second, the results are benefit to retailers that how to improve the retailing employees' achievement motivation, pay satisfaction, job satisfaction and organization commitment and success business. Third, the results are benefit to retailers to improve their management, through develop flexible motivation plans to encourage the retailing employees to improve their service quality, it will create more benefit for organization. Finally, the results provide some information for researchers who desire to continue studying on employees' achievement motivation, pay satisfaction, job satisfaction and organization commitment in the future.

## 8. Theoretical and practical contribution

There are some practical contributions of this study. First, the results provided some guides to retailers and managers improve the employees to have high pay satisfaction, high job satisfaction and high achievement motivation it will motivate their employees to work hard and have more commitment with organization, the outcome could make more benefit for retailing business. Second, the results provided some guides to retailers to improve the competitiveness of retailing business, make more benefit and succeed in their retailing business. Third, the results are benefit to reduce the employees' turnover rate in retailing business. Fourth, the results are benefit to improve the retailing employees' service quality in retailing business. Final, this study could offer some information for the researchers to study the retailing front-line employee motivation in retailing business in Bangkok, Thailand. The result of this study can be guidelines for researchers to further their study regarding these four factors in other types of subjects and/or in different parts of the world in the future.

## 9. Limitations and future research

There are three limitations in this study. First, this study explores the employees of retailing business in the Bangkok area only. Therefore, its results perhaps cannot be applied for use in other areas of business or other provinces in Thailand or other types of subjects. In other words, the results of this study are limited to front-line employees in department stores in Bangkok. Hence, it is suggested that further research should be conducted to explore the four factors of motivation of front-line employees in retailing business in the other provinces of Thailand. However, since the model of this research as well as its results can be useful information for future research, the methodology as well as its constructs may be applied for use to investigate other provinces of Thailand in the future studies.

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## **SOUTHEAST ASIA AND LATIN AMERICA - A DECADE OF TRADE RELATIONS (2002-2012)**

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## **Abstract**

Besides North-South trade relations, there is an unprecedented rise of South-South goods and services flows. There is no better example than the trade relations between ASEAN members and Latin America. This paper analyzes the trends in the inter-regional trade between Southeast Asia and Latin America (specifically Bloc 6-Argentina, Brazil, Chile, Colombia, Mexico and Peru) over a period of ten years, from 2002 to 2012. The study results show that the trade flows between Southeast Asia and Latin America-Bloc 6 continue to demonstrate a tremendous growth. Southeast Asia-Latin America free trade agreements provide the foundations for inter-regional trade by liberalizing goods and services trade as well as some regulatory barriers. The paper also recommends measures to remove existing trade barriers and to promote the greater cooperation between the two regions.

**Keywords:** trade relations, inter-regional trade, free trade agreements, ASEAN, Southeast Asia, Latin America

## **1. Introduction**

It has been more than three decades (1980-2013), since Latin America economies started to liberalize their trade policies. This process, strongly backed up by the successful concluded Uruguay round of the General Agreement on Tariffs and Trade, has added remarkable momentum to boost the interregional trade between Latin American economies and developed or

other emerging economies. Most tariff trade barriers were replaced and tariff levels were cut substantially. Latin America has gradually become an interesting trading partner for Southeast Asia (SEA), particularly ASEAN members, and other countries throughout the world. The commercial relations between SEA and Latin America (specifically Bloc 6 – Argentina, Brazil, Chile, Colombia, Mexico and Peru-given the size and growth of those economies) are among those new trends in the interregional trade agenda.

Trade relations between SEA and Latin America-Bloc 6 have started to gain importance since 1970s with the emergence of the resource-scarce “tiger”-Singapore as one of the major investors in Latin America-Bloc 6, and a buyer of the region’s natural resources. The trade volumes between the two economies have steadily increased, especially when Chile and Peru sped up their pace on a free-trade agenda negotiating Free Trade Agreements (FTAs) with countries of SEA such as Vietnam, Singapore, Thailand and Malaysia.

Thus, it is of interest to investigate trade between the two regions comprehensively. This paper outlines the major characteristics of Southeast Asia and Latin America-Bloc 6, specifically, to determine whether the two regions’ trade is complementary or competitive and which products have dominated the trade. The paper also reviews FTAs signed between the two regions and how they are facilitating the flows of trade. Based on the discussion, the paper suggests measures to remove existing trade barriers and to promote the greater cooperation between the two regions.

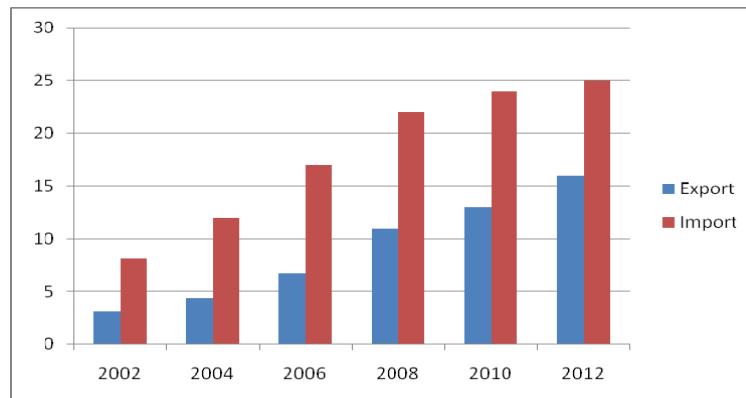
The paper consists of the following sections: Section II will discuss the trend and structure of two regions trade. Section III reviews the roles of FTAs in creating opportunities for trade. The last section concludes the paper and proposes measures for future cooperation.

### **The Southeast Asia-Latin America-Bloc 6 commercial relationship: Trend and Structure**

Entering the 21<sup>st</sup> century, particularly during the times when the United States and European Union (EU) were struggling to solve internal crunches that severely affected their trade performance, trade flows between ASEAN and Latin America-Bloc 6 continued to demonstrate a tremendous growth. Between 2002 and 2012, while several industrialized markets reduced their absolutely dominant roles as Latin America-Bloc 6’s export destinations and import origins, ASEAN became a much more important trade partner, though still on a relatively small scale. Figure 1 clearly shows a steady growth in trade between Latin America-Bloc 6 and ASEAN. The Bloc6’s exports to SEA increased 5 times between 2002 and 2012 whereas Bloc 6’s imports from SEA rose 3.125 times from US\$ 8 billion in 2002 to US\$ 25 billion in 2012. By 2012, ASEAN has become the third largest trading partners of Bloc 6, after the tradition partners such as the USA and EU (see Table 1 and 2).

The Figure 1 also reflects the fact that ASEAN is more important as a source of imports of Latin America, than as a destination for Latin-American exports. ASEAN share in total Latin American imports increased from 16% in 2002 to 29% in 2012, while in the case of exports, ASEAN's share increased from 9% in 2002 to 19% in 2012. A persistent feature of the trade relationship between these two regions is the increasing trade deficit of Latin America. Based on data reported by Latin American-Bloc 6 (see Table 1 and 2), in 2012 exports to ASEAN reached \$16.7 billion while imports from that region amounted to \$25.2 billion.

**Figure 1** Bloc 6 Trade with ASEAN, 2002-2012 (US\$ Billions)



Source: Authors calculations based on IDB-DATAINTAL (2002-2012)

**Table 1** Bloc 6's export destinations, 2002-2012 (US\$ Billions)

|             | 2002 | 2004 | 2006 | 2008 | 2010 | 2012 |
|-------------|------|------|------|------|------|------|
| Africa      | 3.8  | 7.3  | 11   | 16   | 14   | 18   |
| Americas    | 214  | 271  | 368  | 444  | 437  | 466  |
| EU          | 38   | 56   | 85   | 122  | 110  | 107  |
| Middle East | 5.1  | 7.4  | 11   | 16   | 20   | 21   |
| ASEAN       | 3.1  | 4.4  | 6.7  | 11   | 13   | 16   |

Source: SEA-LAC calculations based on IDB-DATAINTAL (2002-2012)

**Table 2** Bloc 6's import origins, 2002-2012 (US\$ Billions)

|             | 2002 | 2004 | 2006 | 2008 | 2010 | 2012 |
|-------------|------|------|------|------|------|------|
| Africa      | 3.5  | 8.2  | 11   | 21   | 14   | 17   |
| Americas    | 164  | 195  | 251  | 338  | 323  | 343  |
| EU          | 42   | 55   | 74   | 116  | 111  | 121  |
| Middle East | 2.3  | 3.7  | 5.2  | 10   | 8.7  | 12   |
| ASEAN       | 8.1  | 12   | 17   | 22   | 24   | 25   |

Source: Authors calculations based on IDB-DATAINTAL (2002-2012)

Argentina, Brazil and Mexico have played significant roles in this surge of trade between the two regions. Chile, Peru and Colombia have also been active contributors, although on a relatively smaller scale. As shown in Table 3, between 2002 and 2012, Brazil's exports to ASEAN countries achieved US\$ 53.5 billion, followed by Argentina (US\$ 25.5 billion), Mexico (US\$ 8.85 billion), Chile (US\$ 8.28 billion), Peru (US\$ 2.56 billion) and Colombia (US\$ 1.897 billion). Singapore, Indonesia and Thailand are among the biggest buyers of Bloc 6's products.

Regarding Bloc 6 imports from SEA, Mexico has appeared as a major importer for ASEAN's products within the Latin American-Bloc 6 markets. Mexico bought more products from Malaysia, Thailand and Singapore than the rest of ASEAN. The total import value stood at almost US\$ 115 billion in a period of ten years (see Table 3), way doubled the amount in Brazil (US\$ 52.1 billion). Mexico's imports from SEA shared nearly 72% of the total import value from SEA to Bloc 6. This situation is, to some extent, easily explained given the size of the Mexican economy and its resilience against the global financial crisis, thanks to its stable macroeconomic policies and prudent fiscal measure in order to maintain favorable conditions for cross-regional trade.

**Table 3** Trade between Bloc 6 and SEA, 2002-2012 (US\$ Millions)

| Export to<br>ASEAN | Argentina | Brazil | Chile | Colombia | Mexico | Peru  | Total  |
|--------------------|-----------|--------|-------|----------|--------|-------|--------|
|                    | 25,488    | 49,368 | 6,812 | 1,827    | 8,325  | 2,095 | 93,915 |
| BRUNEI             | 3.3       | 7.4    | 0.0   | 0.2      | 8.2    | 3.5   | 23     |
| CAMBODIA           | 59        | 38     | 2     | 3        | 2      | 1     | 105    |
| INDONESIA          | 6,415     | 10,311 | 1,826 | 103      | 670    | 443   | 19,768 |
| LAO PDR            | 0.1       | 1.8    | 3.9   | 0.0      | 1.3    | 0.6   | 8      |
| MALAYSIA           | 6,014     | 8,603  | 1,142 | 87       | 1,124  | 104   | 17,074 |
| MYANMAR            | 3.1       | 89.0   | 0.3   | 0.2      | 4.6    | 3.3   | 101    |
| PHILIPPINES        | 4,038     | 4.1    | 1.5   | 0.7      | 0.5    | 0.4   | 4,045  |
| SINGAPORE          | 384       | 14,986 | 766   | 1,403    | 4,451  | 97    | 22,087 |
| VIET NAM           | 4,111     | 3,256  | 1,115 | 34       | 487    | 515   | 9,518  |
| THAILAND           | 4,460     | 12,072 | 1,955 | 196      | 1,577  | 927   | 21,187 |

| Import to<br>ASEAN | Argentina | Brazil | Chile | Colombia | Mexico  | Peru  | Total   |
|--------------------|-----------|--------|-------|----------|---------|-------|---------|
|                    | 12,145    | 52,150 | 7,437 | 5,420    | 114,852 | 5,490 | 197,494 |
| BRUNEI             | 0.1       | 16     | 0.1   | 0.1      | 1.4     | 0.0   | 18      |
| CAMBODIA           | 44        | 67     | 37    | 10       | 320     | 13    | 491     |
| INDONESIA          | 2,129     | 10,483 | 1,638 | 1,101    | 9,395   | 1,014 | 25,760  |
| LAO PDR            | 0.9       | 5.6    | 0.1   | 0.4      | 4.2     | 0.6   | 12      |
| MALAYSIA           | 2,670     | 13,302 | 1,357 | 1,167    | 45,357  | 1,382 | 65,235  |
| MYANMAR            | 79        | 9      | 2     | 2        | 57      | 1     | 150     |
| PHILIPPINES        | 450       | 3,360  | 292   | 119      | 13,170  | 161   | 17,552  |
| SINGAPORE          | 1,474     | 9,426  | 576   | 588      | 18,526  | 387   | 30,977  |
| VIET NAM           | 762       | 2,699  | 652   | 490      | 5,718   | 422   | 10,743  |
| THAILAND           | 4,536     | 12,783 | 2,883 | 1,943    | 22,303  | 2,109 | 46,557  |

Source: Authors calculations based on UNCTAD-COMTRADE data (2002-2012)

Looking further into the individual ASEAN members, it is reported that a compound annual growth of bilateral trade between Singapore and Latin America stands at a lofty 17 % over the past decade. In 2012 alone, the trade value between Latin American and Singapore amounted to US\$ 29.3 (Morris, 2013). Meanwhile, trade with Malaysia registered at US\$ 1.5 billion in 2012 and is expected to grow 10% by the end of this year-2013 (Bahrom, 2013).

There was a high concentration of Bloc's exports on food and beverage which accounted for the largest proportion, worth US\$ 19 billion, followed by manufactured goods (US\$ 14.7 billion) and machinery and transport equipment (11.8 billion) (see Table 4). Of particular interest is Singapore, a focal point for trade in SEA, where demands for high quality food and processed goods are substantially large. Coffee and bananas accounted for one third of all food and beverage exports. Other important exports were vegetables, flowers and seeds, vegetable oil, fruit, sugar, beverages, tomatoes, cereal preparations, orange juice and tobacco (Eugenio Muchnik and Pedro Tejo, 1998).

The past decade also witnessed a significant surplus in the trade value of the “*machinery and transport equipment*” category. The cross-region trade in this category alone accounted for more than half of the total trade between the two regions (68.2%). Ships, cars, electronics, equipment, and parts and components are among import products of this category (Asian Development Bank, Inter-American Development Bank, and Asian Development Bank Institute, 2012). The amount Bloc 6 imported from SEA in the “*machinery and transport equipment*” category was 12 times higher than the amount it exported (see Table 4). Of which, Malaysia is the Bloc 6's main import origin. Malaysia maintained its place as the second major import source for Brazil's imports among ASEAN countries, after Thailand. By 2012, the value of machinery and transport equipment imported from Malaysia to Bloc 6 soared up almost US\$ 2 billion; rising by 312% compared to that in 2002. The import market was especially focused on integrated circuits and hard disks (Bahrom, 2013).

**Table 4** Bloc 6 and ASEAN trade, 2002-2012 (US\$ Million)

| Products                                      | Bloc 6 exports to ASEAN by Sector | Bloc 6 imports from ASEAN by Sector | Total     |
|---|-----------------------------------|-------------------------------------|-----------|
| Food & Beverage                               | \$19.122                          | \$6.484                             | \$25.607  |
| Mineral fuels, lubricants & related materials | \$7.594                           | \$4.342                             | \$11.937  |
| Manufactured goods                            | \$14.720                          | \$13.780                            | \$28.501  |
| Machinery & transport equipment               | \$11.868                          | \$129.742                           | \$141.610 |

Source: SEA-LAC calculations based on UNCTAD-COMTRADE data (2002-2012)

In terms of the trade pattern, previous studies concluded that trade between Bloc 6 and ASEAN by no means presented as a simple “periphery” model characterizing the region as an exporter of basic commodities and an importer of manufactures (Eugenio Muchnik and Pedro Tejo, 1998). The intra-industry (IIT) type was found in the commercial relationships between the

two regions, mainly in the sectors of electronics and automobile. For example, Philippines-Chile and Vietnam-Colombia were reported to have some intra-industry potentials (Adriana Roldán and Camilo Pérez, 2011). More than half of trade (56%) between Thailand and Mexico was found to be of the IIT-type, driven by the production of components and parts of vehicle and office equipment (JIIA, 2005; Mikic and Jakobson, 2010). Similarly, Indonesia-Mexico and Singapore-Mexico have also been recorded to show high evidence of IIT-type of trade flows in electronics (Adriana Roldán and Camilo Pérez, 2011). The extent of overlap in their exchanges may be considered as having been hitherto a “horizontal” type of exchange (Eugenio Muchnik and Pedro Tejo, 1998).

### **Free Trade Agreements as a tool to lower costs for interregional trade**

Evidences from practices suggest that high costs can cause the low inter-regional trade. High costs primarily result for two main factors: trade barriers such as tariff and non-tariff barriers and high transport costs (Asian Development Bank, Inter-American Development Bank, and Asian Development Bank Institute, 2012). Given the geographic distance between SEA and Latin America, high transport costs resulting from poor infrastructure and limited and inefficient transport services will discourage trade between cross-region partners, especially when Latin America-Bloc 6 primarily export food and raw materials. The resulting trade costs translate into higher prices for food and raw materials for consumers and firms in SEA and lower returns for producers in Bloc 6. Free trade agreements (FTAs) have appeared to be an important means to address this issue, although they should not be viewed as a one-size-fit-all instrument.

As mentioned earlier, reciprocal interest between SEA and Bloc 6 can be traced back to the 1990s when Mexico was the first Latin America country to become a member of the Asia-Pacific Economic Cooperation (APEC) in 1993, followed later by Chile in 1994 and Peru in 1997 (Adriana Roldán and Camilo Pérez, 2011). APEC meetings have been an appropriate scenario to strengthen cross-regional commercial relations between Bloc 6 and ASEAN-7 (Singapore, Thailand, Indonesia, Philippines, Malaysia, Brunei and Vietnam). At the regional level, three Latin American countries (Chile, Peru and Mexico) are engaged in the Trans Pacific Partnership (TPP) agreement, of which Singapore, Malaysia, Brunei and Vietnam are also a party too. TPP was expanded from the Trans-Pacific Trans-Pacific Strategic Economic Partnership Agreement (TP SEPA or P4). P4 is the only FTA with members from both sides of the Pacific and the only one between ASEAN members and Latin America-Bloc 6. It serves as a strategic link between distant trade partners. The expansion of the P4 is significant since it will add new variables to the strategic environment of the West and Eastern hemisphere and because of the impact it could have and the changes it may bring about (Chiang, 2008).

Paralleling the TPP is the recently launched Pacific Alliance (2012), comprising four market-oriented economies, Mexico, Chile, Peru and Colombia. The Pacific Alliance (PA) is also now seeking to court ASEAN in bloc to bloc negotiations (Shyamala Devadason and Thirunaukarasu Subramaniam, 2013). ASEAN free trade area has identified key economic sectors within the group that could have complementary elements with the PA in the future. The PA has recently met in the Colombian city of Cali to discuss tariffs elimination on most goods to promote free trade between the countries and increase exports to Asia. The PA has established a

strategic plan to share trade offices (Proexport Colombia, ProChile and PromPeru) in Asia in order to strengthen the trade front and to share experiences in promoting exports and attracting tourism and foreign investment (Adriana Roldán and Camilo Pérez, 2011).

At bilateral level, the first FTA between a Latin American-Bloc 6 country and an ASEAN member was the one signed between Peru and Singapore, which entered into force in 2009. Since then, the number of FTAs signed and implemented has been increasing annually to a total of 6 as of October 2013. In 2010 alone, four agreements were signed between countries of these two regions (see Table 5). Chile currently has 5 FTAs with ASEAN such as Brunei and Singapore in P4, Malaysia, Vietnam and Thailand.

**Table 5** FTAs between Latin America-Bloc 6 and ASEAN by status

| Name of agreements      | Year |
|-------------------------|------|
| In Force                |      |
| Trans Pacific EPA (P-4) | 2006 |
| Singapore - Peru FTA    | 2009 |
| Viet Nam - Chile FTA    | 2011 |
| Peru - Thailand PTA     | 2011 |
| Malaysia - Chile FTA    | 2012 |
| Chile-Thailand FTA      | 2013 |
| Under Negotiation       |      |
| Singapore - Mexico FTA  | 2000 |
| TPP                     | 2009 |

Source: APTIAD

Two thirds (2 out of 6, including P4 and Singapore-Peru FTA) of the FTAs currently in force between Latin American-Bloc 6 and ASEAN countries cover the liberalization of trade in goods and services (FTA + EIA), which is an indicator of deeper economic integration, going beyond the traditional coverage of trade in goods. Most of these agreements also incorporate comprehensive provisions on services and cover additional elements, including intellectual property rights (IPRs) and the Singapore issues (investment, government procurement, trade facilitation, and competition) (Asian Development Bank, Inter-American Development Bank, and Asian Development Bank Institute, 2012). Their inclusion in regional trade agreements indicate the increasing importance of covering additional areas where there may be barriers to trade between countries, including behind the border barriers (APTIAD, 2012). The meaningful provisions on new issues aim to ensure the highest possible economic welfare gains from increased trade (Asian Development Bank, Inter-American Development Bank, and Asian Development Bank Institute, 2012).

**Table 6** New issues in FTAs between Latin America-Bloc 6 and ASEAN

| Agreement               | Intellectual Property | Singapore Issues |                  |            |                    |
|-------------------------|-----------------------|------------------|------------------|------------|--------------------|
|                         |                       | Gov. Procurement | Competition Pol. | Investment | Trade Facilitation |
| Malaysia - Chile FTA    |                       |                  |                  |            | x                  |
| Peru - Thailand PTA     |                       |                  |                  |            | x                  |
| Chile-Thailand FTA      |                       |                  |                  |            | x                  |
| Singapore - Peru FTA    | x                     | x                | x                | x          | x                  |
| Trans Pacific EPA (P-4) | x                     | x                | x                | x          |                    |

Source: APTIAD

In terms of tariff liberalization, the majority of FTAs between ASEAN and Latin America-Bloc 6 eliminate tariffs on more than 90 percent of bilateral trade within a 10-year period. While some take a gradual approach to liberalization, the others such as the Trans-Pacific SEPA, and Singapore's agreements with Peru liberalize more than 90 percent of bilateral trade immediately upon implementation. For example, Singapore offers immediate duty-free access to all products of Peru, whereas Peru provides immediate duty-free access to 87 percent and 98 percent of Singapore's exports to these countries, respectively, and phase out liberalization for a number of goods over a period of 10 years (Valdete Berisha-Krasniqi, Antoine Bouët, Carmen Estrades and David Laborde, 2011). The Trans-Pacific SEPA liberalized 98.9% of all trade upon entry into force in 2009, and will reach 100% by 2015 (ADB and IDB, 2012).

With regard to services liberalization, again Trans-Pacific SEPA and Singapore-Peru FTA are classified as comprehensive coverage of services since they cover the five key sectors of GATS (business and professional, communications, financial, transport, and labor mobility and entry of business persons). The key service sector covered in the majority of the FTAs between ASEAN and Latin America-Bloc 6 is labor mobility and entry of business persons (ADB and IDB, 2012).

According to ADB and IDB, in order to reduce trade-related transaction costs, it is important for FTAs to include IPRs and the four Singapore issues. Moreover, since technology and knowledge are integral parts of goods and services that are traded across borders (e.g., medicine, electronics, films, books, and computer software), IPR protection can promote cross-regional trade and greater economic integration. Among 6 FTAs in force, only the Trans-Pacific SEPA contains IPR commitments.

Regarding the four Singapore issues, the Singapore-Peru FTA and Trans-Pacific SEPA can be regarded as above standard, meaning the FTAs include all liberalization and regulation provisions; specific obligations to adopt or maintain competition laws, possibly including a definition of anti-competitive behavior. Regarding the quality of government procurement chapters in FTAs, only the Trans-Pacific SEPA has an above standard government procurement chapter, which includes the WTO Agreement on Government Procurement (GPA) on advance liberalization of government procurement markets and increase transparency and effective competition. The Trans-Pacific SEPA also covers substantial obligations going beyond the GPA

(GPA-plus), such as electronic and e-government procurement, ensuring integrity, SME development, cooperation and training, and establishment of a single market (ADB and IDB, 2012).

The last one in the Singapore issues is trade facilitation. Of the 6 ASEAN and Bloc 6 in effect, 3 have a customs procedure chapters. However only the Trans-Pacific SEPA and Singapore-Peru FTAs are classified as having above standard trade facilitation chapters while the Thailand-Peru PTA and Malaysia -Chile FTA are qualified as standard (ADB and IDB, 2012).

## **2. Conclusion and recommendations**

Looking back over a period of the last ten years, it seems that although business transactions between the two hemispheres are still relatively small on a global scale, vast potential for expansion does exist. Entering world trade with a similar economic background and being endowed with a wealth of natural resources, both sides have enormous strengths that can supplement each other. Both regions have unique strengths in naturalresources, industry, and services. The study reveals ASEAN and Latin America-Bloc 6 are growing as important trading partners to each other despite the long geographical distance. ASEAN ranks 3<sup>rd</sup> after the EU and the USA in trading with Bloc 6 and ASEAN is more important as a source of imports of Latin America over that last decade. The two regions also have huge potentials in intra-industry trade, especially in the sectors of electronics and automobile. In order to cement the progress that has been achieved in the past decade and to build more mature and diverse trade patterns, ASEAN and Latin America-Bloc 6 should jointly prepare economic plans well in advance. The ASEAN-PA bloc-bloc approach can be a good start to deepen interregional trade relations since members of each bloc have been actively engaged in a number of FTAs (Evelyn Devadason and Thirunaukarasu Subramaniam, 2013). Quickly concluding TPP negotiations is also essential to enhance links between resources and higher value-added production and strengthen the multilateral trading system since the TPP is the only current initiative that includes several economies in both ASEAN and Bloc 6.

The accelerated pace of FTAs signed among countries of ASEAN and Bloc 6 in the last ten years reflects the increasing importance of trade, investment and cooperation relations between the two regions. Two thirds of the FTA's scope, the study shows, goes beyond the traditional coverage of trade in goods incorporate comprehensive provisions on services and cover additional elements, including intellectual property rights and new issues of investment, government procurement, trade facilitation, and competition. However, there is still plenty of room for improvement and to increase the number of trade agreements to further market access. Existing trade agreements between Latin America and Asia-Pacific can also be revised to increase their scope and coverage to lower further trade-related transaction costs, stimulate technology transfer and industrial competitiveness. Governments should establish institutional support systems for businesses, particularly for SMEs, to increase the use of FTA preferences and increase the competitiveness of SMEs' export supply.

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## **USING PROJECT MANAGEMENT OFFICE (PMO) TO IMPROVE PROJECT MANAGEMENT ABILITIES**

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## Abstract

Project Management Office (PMO) is not a new phenomenon but, many questions remain about its role, implementation, relevance and value for the host companies. The purpose of this research is to check if and how can Project Management Office bring and hold value for companies. The sub-questions of this research considered the reasons for PMO Implementation, and its optimal implementation and liabilities. The technology was checked in the case study. The chosen procedure allowed collecting wide data taking into attention organizational environment and project environment. In total, 15 interviews were conducted, and 45 survey responses were analyzed. Present Project Management Offices and PMO-like inventions as well as current challenges of project management were tested, and expected value of project management was recognized. According to organizational background and recommendations from the literature, the research was made for the business about Implementation /development of Project Management Office implementation and functional.

**Keywords:** Project Management Office (PMO), Value of Project Management, PMO Implementation, PMO Liabilities

## 1. Introduction

The Project Management Office (PMO) is an organizational entity Implemented to assist project managers, teams and various management levels on strategic matters and functional entities throughout the organization in implementing project management principles, practices, methodologies, tools and techniques. The interest of the companies to develop and maintain organizational project management competency with the help of the specialized organizational entity PMO started in 1990s and stays significant these days. A recent survey-based on the

synchronic description of a large number of PMOs and their organizational contexts has shown extreme variety in both the form and function of PMOs. Many of Implemented Project Management Offices were recognized that starting from 1995. Other scholars found that many PMOs are lastly implemented when they were in the age of 1-5 years. The implementation of PMO in companies is increasing in number. The emergence of and the need for the PMO are associated with the increasing number and complexity of projects throughout the business world which led to a certain form of centralization. The project management office is a tool that addresses the need for selecting and managing multiple simultaneous projects in such a manner as to maximize the value obtained.

An organizational body or entity assigned various liabilities related to the centralized and coordinated management of those projects under its domain. The liabilities of the PMO can range from providing project management support functions to actually being responsible for the direct management of a project. Organization's project management needs are the drivers for implementing and running a Project Management Office. PMOs are specialized organizational units that play various roles and have different tasks. PMO efforts are arranged with strategic needs of the organization. Rather high degree of freedom in the way of how Project Management Office is organized, how much power it exercises and what liabilities it takes. Based on Project Management Institute functions performed by PMO can include administrative support of projects, resource arrangement of project staff, competencies development of project managers, and facilitation of communication between project's personnel. Thus, these days Project Management Office is an important subject. But, the academics argue about the efficiency of PMOs. 41% of respondents from non-Project Management Office staff found role fulfillment by PMOs in their companies moderately good or poor (ESI International 2011).

According to information about the young age of many Project Management Offices tested the frailty and repetitious transformations of PMOs. With repetition of those conclusions, adding that Project Management Office transformations observed do not reflect PMO life cycle of gradual Development.

The idea that Project Management Offices have to transform and change functions and organization in order to fit into the Present organizational needs and hold value-adding into companies was articulated by many scholars. The aim of the research project is to check if and how Implementation and performing of a PMO would bring value to a company. For achieving it, the proposed research seeks to answer the following questions:

1. What kinds of issues/problems trigger the Implementation of a Project Management Office?
2. What liabilities should the PMO have?
3. How should the Project Management Office be organized in terms of structure, size, level of authority, and personnel?

Relation between the findings and Present theories, traditions and best practices will be explored. PMO increase the potential for project success is the increasing complexity of the multi-project environment.

## 2. Literature Review

The use of the Project Management Office has a long history dating back to the 1930's. Lastly, the topic of PMO has resurfaced with its strong needs. Discusses key factors to achieving a project office's long-term vision. The following motivations for setting up a Project Management Office:

Improving all elements of project management and achieving a common project management approach; more efficient use of human and other resources in a multiple project environment; and improving quality (Dai, C., Wells, W. 2004). The most popular aims of Implementation of PMO are to standardize project management procedure, improvement of information and administer control systems over the projects run simultaneously.

The five Project Management Office stages are also indicative of an organization's maturity in project management:

1. The Project Office
2. The Basic PMO
3. The Standard Project Management Office
4. The Advanced PMO
5. The Centre of Excellence

Lack of qualified project managers, problems with cost and time overwhelm in projects, and lack of comprehensive practices about a project portfolio management as triggering factors of Project Management Office implementation. It is considerable that project management standards and methods correlate with project performance (Dai, C., Wells, W. 2004). That standardized project management may drive project success. Thus, assigning project management standardization liability to PMO may lead to the goal of project management improvement.

One way of implementation and reconfiguration of Project Management Offices recognized to be organizational tensions: economic, political, standardization of project management procedure versus flexibility, raising or reducing organizational capacity to deliver projects. Different triggers guide to Implementation and transformation of the PMO, but the general aim of Project Management Office stays stable: it is improving quality of project management. About the ways to organize a PMO, describe staff approaches with no project managers, having only supportive role to projects approaches when project managers report directly to Project Management Office. According of study, generalized PMOs supply better services for virtual project managers But, the author stresses that research may be credible just for virtual project management and should not be centralized.

Project Management Office can be a virtual unit (Andersen, Henriksen, and Aarseth, 2007, p.98). Virtual PMO, the discharge of the functions of Project Management Office in the absence of an organizational entity, is the viable option for companies. The disadvantages of such a solution, according to the authors, could be possible inability to bring gradual improvements in the abilities within the organization or meet the needs, and difficulty to stay up-to-date utilizing the latest tools, techniques and technology. Three types of PMOs were recognized (Table 1):

**Table 1** Types of Project Management Offices

|                            | Type 1       | Type 2      | Type 3      |
|----------------------------|--------------|-------------|-------------|
| Decision-making authority  | Considerable | Less        | Moderate    |
| Number of projects         | Many         | Few         | Most        |
| Number of project managers | Many         | Few, if any | Few, if any |

The aspects of the PMO implementation that should be considered when implementing the Project Management Office are:

1. How much decision-making authority it has?
2. Is the entity distributed over the organization or grouped in one unit?
3. Where in the organization is it located?

Organization and liabilities of PMO are not static; they constantly evolve along with the changing background, new organizational needs and maturity of project management ability.

## **2.1 Project Management Office Liabilities**

Project Management Institute suggests the range from project management support to the direct management of projects (PMI 2008). APM list the minimum functional of a PMO: administrative support and assistance to project managers; project information management; and assurance of project management processes (APM 2006). Governance and strategic management related liabilities (being mentioned in many literature sources and being an important part of a mature Project Management Office functional) were not included into the framework. This was in order to reduce the research complexity, considering that in the case organization projects are not the main part of the business delivery.

## **2.2 Value of Project Management Office**

Hurt and Thomas (2009) state that effective PMOs can bring value to an organization by addressing specific problems of project management and, when those are resolved, hold value by changing its' goals and objectives, structures and processes. Certain elements should be in place, between them: a long-time idea; sentimental, Confidence, focused and quickly demonstrating value Project Management Office leadership; competent staff and a culture of discipline.

Performance is often used as the ultimate dependent variable in the literature on companies. After checking of the contribution of PM to organizational performance and applied competing values framework to PM in order to define the organizational performance in the background of PM and its assessment criteria.

## **3. Research Methodology**

Qualitative approach was chosen for the given research project, as it allows collecting more wide and rich data, and ensures more flexibility rather than quantitative approach. The case

study has been conducted in an engineering Company. The organization experienced the period of rethinking its PMO. As the company has 3 rather independent projects, 3 cases were recognized for the case study research.

The data were collected through interviews with different project's personnel, as well as via survey sent to project managers. Relevant company documentation was studied to increase the validity of findings. First, the company background was overviewed to explain why the company management became interested in the Project Management Office existence and work, how the organization used to deal with projects, and how the functions traditionally associated with PMO were carried out during the research. Comparison is provided between the projects.

Then, it was recognized what kind of needs exist in the company and explored if the Implementation of Project Management Office could be a good solution. Since different PMO realization ways exist, the scholar checked what form would best suit the company.

Certain limitations to the research are related to the research procedure. The chosen research method (case study of 3 projects in one organization) does not provide the ground for statistical generalization of findings; but, it allows analytical generalization. The time and resources of the scholar were limited, which constrained the amount of the collected data and number of data sources. The attempt was made to gather good-quality data and consider perspectives of different project's personnel. The case organization is international; But, just the Iranian organization was within the scope of the research.

Aubry, Hobbs and Thuillier (2008) suggest that Project Management Office is a complex subject that could be understood as part of a historical process within an organizational background, as it is embedded into the host organization and both evolve simultaneously. Thus, case study method is considered to be more appropriate for the research, because it allows collecting highly detailed data about the processes and events.

A case study has been conducted in an engineering Company. The organization experienced interest in growing project management maturity. The study framework implies considering PMO as a part of the project management background, which is in turn placed into a wider organizational background. The first research question therefore touches upon the organizational environment (namely, such aspects of it as business, organizational features and organizational culture) and Present challenges of project management. The second research question relates to the liabilities of Project Management Office, while the third research question deals with the way of PMO implementation. The arrows indicate the assumption that Project Management Office should address the needs and challenges of project management, and perform in order to ensure value of project management.

The current PMO inventions and their effects on the project management in the organization will be highlighted, and the future possibilities will be explored. The outcomes of the research will be the description of the current situation in the company in terms of project management and the justified recommendations for the company about the development of role, liabilities and implementation of Project Management Office.

#### **4. Case Organization**

The case study is based on the Engineering Company providing engineering projects to other companies. The research was implemented at 2013 in Toseae Sanaye Tasisati Iran (TSTI) Company. TSTI Company was Implemented in 1984 by a group of engineers with extensive experience in their respective engineering fields: TSTI Company has gained wide recognition and outstanding reputation through its quality workmanship, innovative engineering and project management skills enabling it to expand from being a mechanical and electrical (M&E) contractor into a full-service engineering and construction contractor catering to major domestic and international clients.

TSTI Company ranks among Iranian's leading engineering and construction firms specializing in Engineering, Procurement and Construction of Mechanical and Electrical Services including: Residential, urban, Industrial, Oil, Gas and Petrochemical Project. The case study is based on the Company's Projects. The organization is principally divided into 3 projects.

#### **5. Data collection**

As an advantage of case study method, dealing with contemporary events allows the scholar to use full variety of evidence: documents, archival records, observations, interviews with the people involved, and artifacts. Using of multiple data sources mitigates the potential problem of construct validity. Thus, 3 types of data sources were used in the research project:

1. Documentation. Relevant document sources such as organizational charts, organizational culture survey results, the company project management procedure, and the company general management procedure were accessed via the company intranet.
2. Direct observation. Internal news published in the intranet and press-releases were reviewed in order to overview strategic goals, organizational changes and new directives and inventions related to project management.
3. Interviews and Survey. Potential project's personnel of PMO were recognized in each project, and the subject area was discussed with them and The data collected via questionnaire were used descriptively.

#### **6. Data Analysis**

There is no standardized procedure to analyze qualitative data due to their diverse nature. But, usually 3 processes are applied: summarizing, categorization, and structuring of meanings. For the survey data analysis, quantitative methods were applied depending on the type of variables. Mostly the quantitative data served for producing descriptive statistics. Only few statistical dependencies were found. For identification areas for improvement in project management (based on the survey data), Importance Performance Analysis was applied. The combined data from the company documentation, interview transcripts and descriptive survey data were summarized, partly coded and divided into categories following the conceptual framework of the research.

Project Management Office roles are spread over the organization and have different forms. Below the reader will find the description of PMO inventions in each project.

Project1: there is rather well-functioning Project Management Office on the project level with wide experience. The PMO exists since 2005; in 2010 it has been extended over the regions but centralized in Iran in 2013.

Project2: the Project Management Office is declared but is rather new and not so mature. Quality and Environment manager and PMO roles are usually embraced by one person; they are both on project and section levels. There is a need to clarify the role and liabilities of Project Management Office in order to improve project management ability.

Project3: there is a role of Planning manager, but no PMO role exists. There is an ongoing initiative of implementing a Project Office on a section level. The objectives and implementation strategy were being defined when the data were collected.

## 7. Discussion

Most informative discussions about cross- section projects took place in Project2 and Project3, both of them identifying a number of difficulties undertaking them.

Representatives of Project2 mentioned some potential benefits of cross- section projects:

- Spread knowledge and develop expertise
- Opportunity for better profits
- Reduce the risk of one section
- Support for project sponsor in managing resources, deliverables, quality and financials.

Project3 representatives mentioned that there is more difficult to cope with cross-projects. It is easier to reach common understanding within the Projects: firstly, some regulations are being set up; secondly, in conflict situations upper management helps to make the decision. As a conclusion, there could be political reasons for absence of common rules and regulations on cross- section projects delivery. Some sections sounded positively for this fact interpreting it as an opportunity for higher profits in case of successful negotiations. Others notify of more challenging environment for those projects and poorer performance.

In the Project1, cross- section projects were taken care of by Project Management Office; no particular difficulties were mentioned during the interview. The areas for project management improvement were recognized by analysis of the survey data. In the Project1 monitoring and control of project performance are expected to be improved. Interesting that this finding underpins the statement of the PMO responsible about temporarily freezing of projects supervision which took place before.

In the Project2, promotion of project culture and competencies development is recognized to require improvement. In addition, interviewees recognized the problems related to resources availability, and importance of using a good risk management approach.

In the Project3, additional areas for improvement are promotion of project culture and competencies development, plus some operational-level tasks. This supports the idea of Implementation of a simple, first-stage project office which is an ongoing initiative in one of the sections. Project3 interviewees mentioned the benefits they expect after Implementation of a project office: control resources; improve sales-to-delivery and delivery-to-sales processes; structured, well-defined and documented way of working. In the Project2, the interviewees mentioned that the need for high project performance is self-evident. In all 3 projects a number of liabilities from Area are rated highest in terms of desired quality of meaning that high project performance is greatly appreciated.

Interviewees in all three projects mentioned reinforcement of organization project management ability as a goal: increase project management expertise (Project3); improve delivery of bigger projects, use project management procedure and tools more efficiently (Project2). Project1 named improvement and refinement of the project management processes, and preparation of project managers with leadership and administrative skills prevailing over technical skills as a future task.

About decision-making authority, Project2 and Project3 survey respondents consider that Project Management Office needs to have more decision-making authority over projects. One survey respondent from Project1 suggests that approaches to handle projects by PMO must be adjusted to the size and complexity of the projects. Project1 and Project2 survey respondents expressed the strongest wish for a Project Management Office on the organizational level. The discussions during the interviews demonstrated different preferences: mostly, they concerned PMO on the project level. One of the challenges for an organizational-wide Project Management Office is separation of the projects: It is very fragmented company, which means that it's quite difficult to arrange people, managers in different branches around one way of working. The organization is not ready for a full-functioning company-wide PMO yet. In this background, the initiation of Project Management Office having only few objectives aimed to arrange Project1 and Project2 seems quite reasonable.

In Project1 seemed that the Present PMO is rather confident and clear about the future; it is backed up by several years of experience and rather good effectiveness. The vision of the Project Management Office is to stay a small organization, provide support to smaller projects and supervise large, strategically important and cross-functional projects. Namely, it is demanded to resume to monitoring and control of project performance and conducting project audits, and improve cross-project learning. The proposal for project2 is also to differentiate level of authority over projects depending on the types of projects: cross- section and strategically important projects deserve more attention. Thus, project categorization has to be applied. The current scheme of multiple PMOs at different hierarchical levels is reasonable. Technical project managers do not have to be arranged into one separate unit. Talking about Project3, their vision is to start Project Management Office as a small project support office on a section level in order to improve project delivery. There is no concern about taking direct liability over projects yet; thus, project managers should not be integrated into separate section at the moment. Possibly, the PMO should have more control over larger projects including several parties. The need to improve many aspects of project management process is indicated by the survey findings; but, they are not considered to be an area for external support.

## 8. Conclusion

The Project Management Office is an organizational entity Implemented to assist project managers, teams and various management levels on strategic matters but, uncertainty level about its role, implementation, relevance and value for the host companies is still considerable. The present research aimed to identify if and how can PMO bring and hold value, highlighting the specifics of the engineering company. The case study procedure allowed collecting wide data taking into attention organizational environment and project environment, including flow of the events. The drivers of Project Management Office Implementation or re-thinking were found to be the intention to increase project management maturity; the expected value comprises such elements as increase of profits through improved project delivery, strengthening competitive advantage and finding new business opportunities, growing competencies of the Organization and developing personnel.

The methods of Project Management Office implementation were discussed about the type of projects, decision-making authority and Project Management Office personnel. The main ideas drawn from the investigation are assigning different liabilities and level of authority over different types of projects, location of Project Management Offices in the organizational units understanding a need for it, and keeping technology-oriented project managers within their home organizational units. Regarding Project Management Office liabilities, the analysis has demonstrated that project-related competence development and cross-project learning are a potential area of Project Management Office liabilities in all the three projects. The success factors of Project Management Office are addressing specific needs of the company, clear definition and communication of Project Management Office goals, aim, role, authority, and liabilities, gradual development, strong leadership, competent personnel experienced in project management.

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