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EDITORIAL

It is my proud privilege to welcome you all to the IASTEM International Conference at Kyoto, Japan in association with The IIER. I am happy to see the papers from all part of the world and some of the best paper published in this proceedings. This proceeding brings out the various Research papers from diverse areas of Science, Engineering, Technology and Management. This platform is intended to provide a platform for researchers, educators and professionals to present their discoveries and innovative practice and to explore future trends and applications in the field Science and Engineering. However, this conference will also provide a forum for dissemination of knowledge on both theoretical and applied research on the above said area with an ultimate aim to bridge the gap between these coherent disciplines of knowledge. Thus the forum accelerates the trend of development of technology for next generation. Our goal is to make the Conference proceedings useful and interesting to audiences involved in research in these areas, as well as to those involved in design, implementation and operation, to achieve the goal.

I once again give thanks to the Institute of Research and Journals, IASTEM, The IIER for organizing this event in Kyoto, Japan. I am sure the contributions by the authors shall add value to the research community. I also thank all the International Advisory members and Reviewers for making this event a Successful one.

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KEY FACTORS OF SUCCESS TO RETAIN CUSTOMERS OF LOW COST AIRLINES

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Abstract- Low cost airlines are very successful in Thai domestic Market and ASEAN market. The purposes of this research were to investigate the five key factors of success of many low cost airlines in Thailand from the perspective of international tourists who visited Bangkok, Thailand in the last quarter of 2017. Data collection process were conducted from three important international airports in Thailand Suvannabhui, Don Muang, and Chiang-Mai international Airport. Where independent variables included gender, age, levels of education, occupation, income, country of origin, and expectations and dependent variables included their level of satisfaction, experience and their real experiences during the flight of low cost airline. A purposive and simple random sampling method was used to obtain 400 respondents. The respondents, however, were more male than female in mixed of proportion. The findings revealed that the majority respondents were between 21-40 years old. Most were single with either high school or an undergraduate degree. The findings also revealed that the majority of respondents regularly use low cost airlines mainly because of low ticket price, available of flights, and channel of buying tickets. The majority came to Bangkok more than one time and spent about 30 days in Thailand.

Index Terms - : Key Factors of Success, Low Cost Airlines, International Passengers

I. TRODUCTION

The available of low cost airlines is essential to the success of tourism industry in Thailand in which tourism itself has been so vital to the Thai economy for many decades, and certainly will be more important in the near future. Tourism industry and low cost airlines help in creating service jobs and local employment and brings foreign currencies to stimuli and expand the Thai economy. Low cost airline is one of the most important factors that can help to attract both new tourists and returning inbound tourists to visit and revisit tourist destinations in Thailand due to its cheap prices and many available flights. In general, the standard quality of Thai low cost airlines' service has been known for being the best among the ASEAN countries. Low cost airlines have been increasingly referred to as a major key ingredient of a business and in differentiating and building a competitive edge in Thai tourism industry. Low cost airlines are known to offer a high level of satisfaction based on inbound tourists' experiences where low cost does not mean low quality of service at all. In general, positive tourists' experience often lead to a positive comment of satisfaction which, in turn, reveals a high demand and a willingness to revisit of the same tourist destinations again and again. In addition, it is more likely to suggest or to recommend other tourists about what many different kinds of positive experience they gain from the using of low cost airlines [1].

Low cost airlines is essential for tourism of ASEAN nations and it is highly promoted by ASEAN nations to increase their Gross Domestic Products every year. This is because tourism is one of a few industries that can bring large revenues with less cost than other industries. Tourism industry of ASEAN nations is considered as the most important industry that can generate the gross domestic products by 5 to 10 percent faster than any other industries. This is because the tourism industry often a leading in creating jobs and bringing foreign currencies into ASEAN economy [2]. Many studies have revealed that the emergence of low cost airlines is often associated with the satisfaction and loyalty of international tourists in the long run due to its low cost and good service quality. The relationship of low cost airlines and growth of tourism has been determined and found that positive increase in low cost airlines is associated with the growth of tourism industry in the long run [3]. The next important question is how to properly promote the growth tourism industry with other factors rather than low cost airlines? From a survey of the research, most of the studies focused on the satisfaction of low cost airlines in general but less research on tourists' experience on service quality of low cost airlines in Thailand. The study of factor of success of low cost airlines conducted from the perspective of international tourists can help to provide an understanding of problems and obstacles of Thai low cost airlines and offer a proper marketing strategic plan for the future growth of both low cost airlines and tourism industry. This research is aimed to investigate the experience of

international tourists and their experience of using low cost airlines in order to find the marketing plan and strategy to enhance international tourists' loyalty and possible to promote Bangkok to be the number one hub of tourist destinations in ASEAN nations.

II. LITERATURE REVIEW

As the low cost airlines of ASEAN Economic Community grows tremendously, the study of the success factors of low cost airlines is becoming increasingly important. In addition, low cost airlines are expanding regionally, nationally, and globally have become larger portions of the success in business services and contributing to the expansion of Gross National Product (GNP). Many ASEAN nations aimed at enhancing the growth and performance of their tourism industry which requires the expansion of low cost airlines as well as reliable methods of measurement, assessment, and improvement. Then, accurate and reliable instruments that assess service quality of low cost airlines are of great interest to many researchers. In fact, the most importance and widely used service quality instrument is known as SERVQUAL. In fact, many of modern studies of service quality in tourism were based on the theory and the method of SERVQUAL which was developed by Parasuraman, Zeithamal and Berry (1993) [4]. The principle of this theory is based on the gap between the expectation of service quality and the real experience of service received by international tourists. However, the questionnaire of original theory utilized the Likert seven-scales to assess 22 items of service quality in five dimensions which covered the areas of assurance, empathy, reliability, responsiveness, and tangibility. The SERVQUAL is a simple but useful technique and can be applied in many different types of business services and many industries. Since SERVQUAL is based on the proposition that service quality can be measured as the gap between the particular areas in which international tourists expect and the performance they perceive to have really received. Basically, the idea of the principle is the measurement in the service quality gaps.

III. METHODOLOGY

The present research utilized a quantitative survey research method which aimed to examine the international tourists' experience of using low cost airlines during their visiting many tourist destinations in Thailand and to elicit and collect data for their comments and opinions about their perceptions of low cost airlines' factor of success. In addition, the purposes of this research were to be able to use the findings of this research to create a marketing strategic plan to enhance international tourist's satisfaction of using low cost airlines in the future. Statistics analysis used in this study were percentage, mean, and standard

deviation. A simple random sampling technique and Taro Yamane table technique was conducted to obtain a sample group that included 400 international tourists from various tourist destinations around Bangkok [6]. A Likert five-scale questionnaire was developed and utilized as a research tool for collecting data at major international airports in Thailand. The independent variables of this study included gender, age, level of education, occupation, income, and country of origin. The dependent variables included tourists' perception of factors of success for low cost airlines.

IV. FINDINGS

The findings of this research unveiled the demographic information that respondents were both male and female in the same proportion or with a ratio of 50:50. However, the majority respondents who often traveled with low cost airlines were between 31-40 years old. Most of the respondents from the survey were single with an undergraduate degree. Most of the respondents were considered themselves as middle income with an average income of the respondents was between 35,001-45,000 baht per month. The limited service of low cost airlines had not been an important factor for the respondents to choose low cost airline since it has been offset by the low price of ticket. Moreover, the findings revealed that the majority of respondents use low cost airlines regularly because of low ticket price and good quality of service. The majority came to Bangkok for the first time and spent about 10 days in Thailand. More importantly, the five important factors of success that were observed by the international tourists in descending order according to mean were low price, reliable of service provider, proper time of flight, on time services, and convenience online ticket.

The findings from TABLE 1 revealed five different international tourist perception level on factors of success of low cost airlines as follows: 1) "low price of ticket" was rated as number one with a mean of 4.83 and 0.974 SD 2) "Reliable of Service Provider" was rated as number two with a mean of 4.67 and 0.671 SD. 3) "Proper time of the flights" was rated as number three with a mean of 4.54 and 0.709 SD. 4) "On time flight service" was rated as number four with a mean of 4.35 and 0.765 SD. 5) "Convenient of online ticket" was rated as number five with a mean of 4.31 and 0.932 SD.

TABLE 1
Importance of factors of success

	Mean	S.D.	Rank
Factors of success			
1. Low price of ticket	4.83	0.974	1

2. Reliable of Service Provider	4.67	0.971
3. Proper time of the flights	4.54	0.709
4. On time flights services	4.35	0.765
5. Convenient online tickets	4.31	0.932

- [4] A. Parasuraman, V.A.Zeithamal, and L.Berry , “More on Improving service measurement,” Vol. 30. 1993.
- [5] S. Serirut. “Business Research.” Thammasat Univeristy. 1999.
- [6] T. Yamane, “Statistics: An introductory analysis,” 3rd Edition, 1973, New York, Harper and Row.
- [7] K. Wanichbancha, “SPSS for windows to analyze data,” Bangkok: CK and Photo Studio. 2001.
- [8] Carolina Armijo de Vego, et. al., Successful Waste Management in Mexico. Waste Management. 28 (2008).
- [9] G. Simkins, A. Noland. Environment Management System. Occasional Paper for Environment. 2004.
- [10] K. Wongleedee. “An Investigation of Senior Tourists In Thailand.” Suan Sunandha Rajabhat Univeristy. Bangkok.Thailand.

V. FUTURE STUDIES

Certainly there is some limitation of this research. One of the limitations of this research came from the use of the Likert five-scale which may not have an ability to distinguish the importance of success factors from expectation and from reality since some of the respondents was first time users of low cost airlines. It also does not take into account of the reasons behind each factor of success. Therefore, the findings may not be generalized to all low cost airlines properly. Hence, future research should use a combination of Likert five-scale with in-depth interviews and focus groups. In other words, future studies should use a combination of qualitative and quantitative methods in order to effectively measure the importance of factors of success from the perspective of the international tourists.

CONCLUSIONS

Low cost airlines growth is increasing important to the economy of ASEAN nations as well as to the growth of tourism industry. This research focused on the factors of success of low cost airlines and the findings revealed the ranking of five important factors of success as follows: low price, reliable of service provider, proper time of flight, on time services, and convenience online ticket. Even though low cost airlines provide only limited services but most of the passengers seem to be happy with that limited services and most importantly with low prices.

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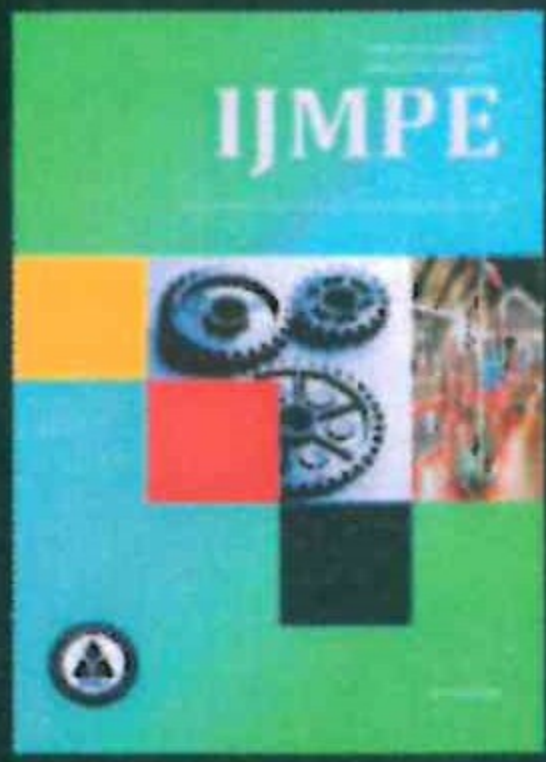
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REFERENCES

- [1] S. Jariyachamsit and K. Wongleedee “An investigation of Service Quality in Thai Tourism: An Experience of International Tourists in Thailand. Suan Sunandha Rajabhat Univeristy.
- [2] K. Schwab,”The Global Competitive Report 2013-2014, Geneva:World Economic Forum. 2013
- [3] P. Kotler. Marketing Management. 11th edition. USA: Pearson Education. 2003.

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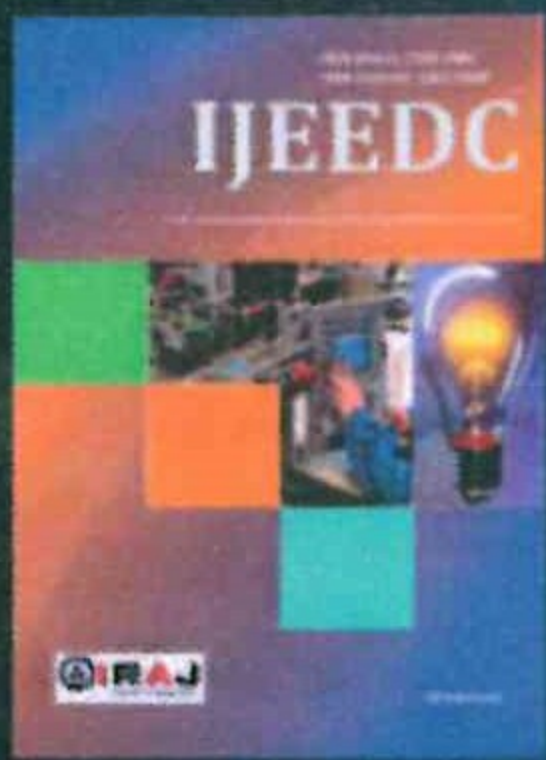


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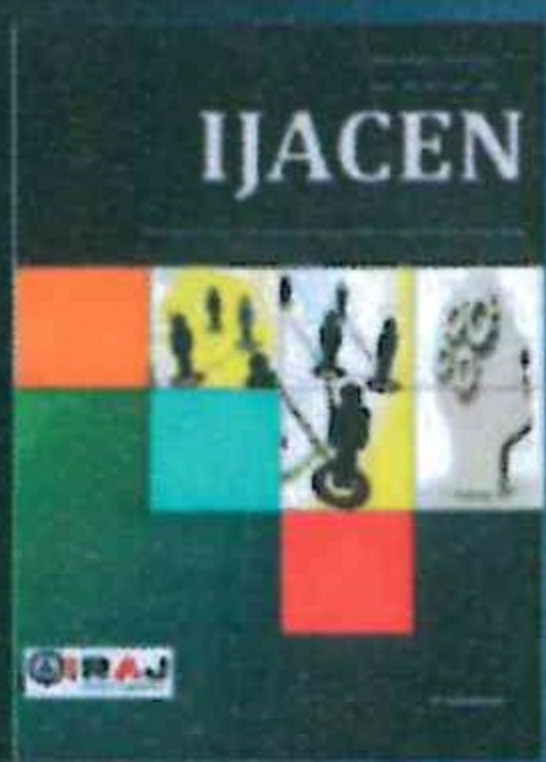


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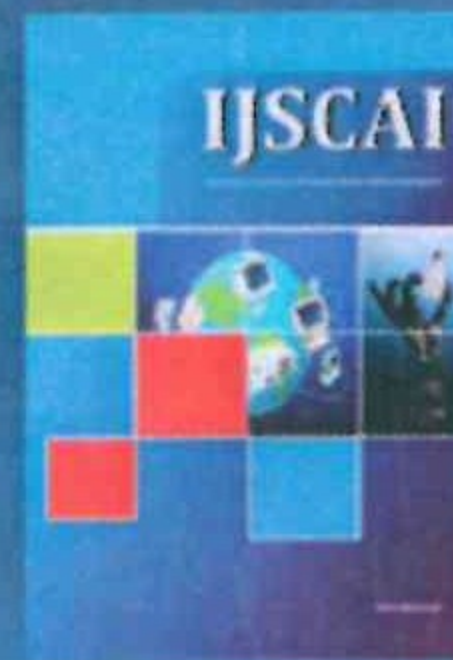
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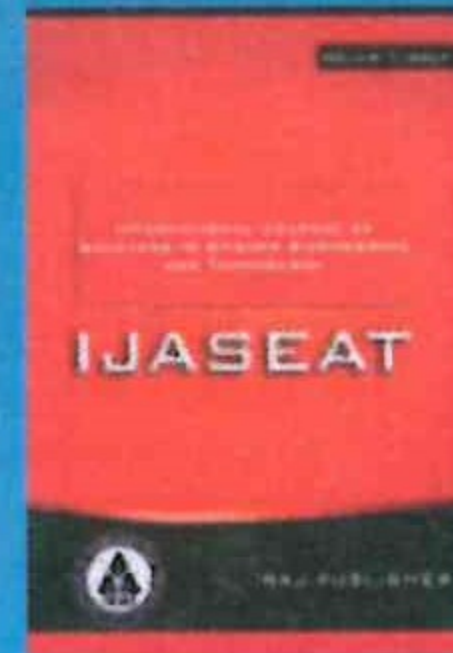
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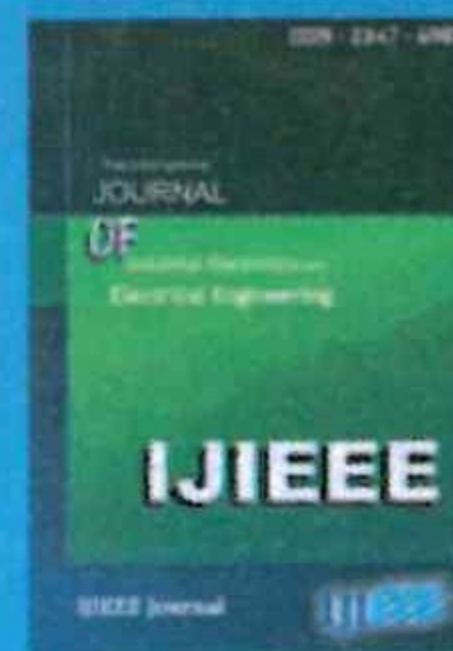
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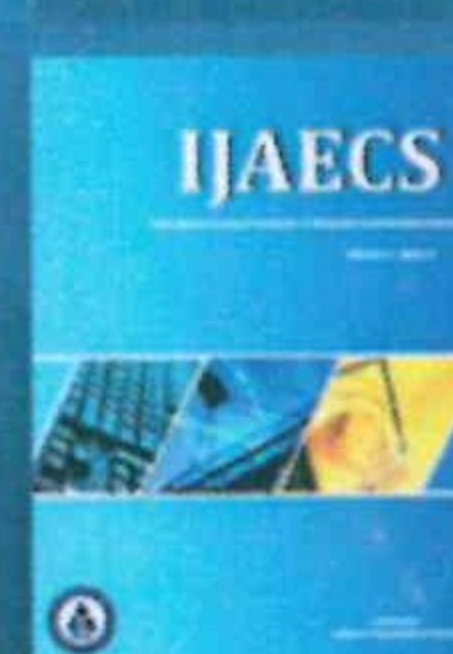
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