Relationship of information technology and customer loyalty in air transport

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Abstract. Customer loyalty is the key indicator of business success on online firms. Many organizations in the Airline Industry have add value of e-service not only aiming to be competitive but also to reduce costs and to increase revenues. Nowadays, the development of Information Technology (IT) has brought organizations in the air transport to grow rapidly. This led organizations in the air transport to build long-term relationships with their passengers. Thus, this study was conducted to investigate the relationship of customer loyalty and the information technology of airlines industry by analyzing 88 data collected from passengers using e-service offered by organizations in the air transport. Three dimensions of online service were identified namely: word of mouth, web sites design and ease of use. The findings from regression analysis demonstrated thate-word of mouth commit to customer loyalty. Several implications and recommendations for organizations are outlined.

Introduction

In the modern world, many people used the airline companies to travel from one place to another place. In the airlines industry, technology advancement is one of the innovative strategy for organizations to be competitive. The websites of the businesses in the air transport industry not only provide the organization's information but also provide online service to their customers such as e-ticketing. Furthermore, after Air Asia started the concept of e-ticketing in 2001, organizations discovered many benefits of purchasing tickets over the internet. Moreover, passengers have more freedom to choose variety of services via online rather than via travel agents. For example, passengers are satisfied of getting the lower price of ticket through e-ticketing when comparing with buying from travel agents. In addition, customers who are satisfied are willing to buy more products, to be loyal and engage in positive WOM [1]. As a result, customers are inspired by the use of e-commerce. The researcher foreseen the importance of customer loyalty as mentioned by [2] that recommendations from loyal customers can extend extremely fast online when comparing to spreading the word of mouth offline. The propagation of technologies offering self-service has increasingly changed the way customers interact with organizations. For example, self-service as airlines kiosk require the participation of passengers as a means of increasing productivity and reducing costs. Thus, it is interesting to study the content of ease of use which might be another factor that lead to the loyalty of

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online customers. The researcher recognized the need to investigate other factors in relations to technologies to understand ways to improve online customer loyalty. According to the previous studies about customer loyalty,[3] also stated that maintaining customer loyalty is vital for the business. It is about building relationship between customers and organizations. This become long term relationship because the acknowledgement customers have received are the contributors to the organization profitability in long-term businesses. Therefore, this research aims to investigate the relationship between Information Technology and Customer loyalty and to recommend the best use of Information Technology for organizations in Air Transport.

2 Literature review

Customer loyalty is vital especially on online businesses. The effect on online shopping is similar for air travel. Online shopping offer most of the passengers' requirements as booking travel or buying airline tickets. As a result, it is a huge potential for businesses to grow extremely fast in the airline industry. There are many studies mentioned that customer loyalty depend on service quality[4], [1].[5]mentioned about the 2 types of loyalty, which is behavioral loyalty and attitudinal loyalty. The aspects behavioural loyalty means repurchase purpose, word-of-mouth message, and suggestion of the organization [6]. In addition, it is vital to maintain the relationship with existing customers. The roles of loyal customers are to recommend the organizations to other customers which is beneficial to organizations by increasing the customer base at no additional cost of advertising[7]. Many researches recognized the importance of online customer loyalty since it is an important information for organizations to forecast on line customer behavior[1].Therefore, the researcher conducted this study to examine the factors affecting customer loyalty in using technologies.

The use of technology in business made organizations achieve competitive advantage. The concept of technology use in airline business seems to be linked to e-service. In addition, with the use of the internet as a medium helped organizations to overcome the barriers of time and place to communicate worldwide [8].

According to [9], customers tend to look for company access which gives them support through the Internet. [10] also recommended that time and space have allowed technologies to offer globally as the example of electronic communication, information gathering, transaction processing and data interchange within and between businesses. The benefits of technology can result in a substantial cost reduction. As a result, a greater number of airlines and travel agencies prefer online service delivery to meet e-customer demand [11]. The researcher continued the following concept of technology with the goal of finding factors contribute to repeat purchase behaviors.

According to [12], WOM is the scope of shared personal experiences and opinions among relatives, friends or colleagues. Previous researchers found that customer satisfaction is positively related to WOM[13]. The findings from [14]indicated that WOM is a relatively important driver of trust and intention in e-commerce settings and it leads to customer loyalty. Furthermore, previous studies conducted by[15], as well as [16]can also re-confirm that the presence E-WOM has a significant and positive effect on customer satisfaction and loyalty. From this finding, it can be concluded that WOM can ensure that existing andnew customers are willing to be loyal to organizations.

According to research by [17] showed that website design is the main factor that influences customer quality judgments, satisfaction and loyalty because website design played an important role on how customers judge the website quality. Other studies suggested that a better and beautiful website design is connected to user satisfaction

The perception of ease of use can lead to increased satisfaction because it simplifies and promotes the performance of the online services. Moreover, the availability of information and ease of navigation determined conditions for satisfaction. As the previous study by [18] described that ease of use determined service quality and is decisive for customer satisfaction. Ease of searching the products through better search tools and navigation may indicate the efficiency of using the service which lead to higher overall customer satisfaction [19].

3 Materials and methods

This research utilized correlational research design involving passengers using e-service in air transport. The author used convenience sampling to distribute the questionnaire using e-survey to 88 respondents. The questionnaire was developed based on the existing questions on the intended variables. The measures used to gauge three independent variables which are word of mouth, ease of use and web design. There are 5 items to measure word of mouth, 4 items to measure ease of use, 3 items to evaluate web design, and 5 items to assess customer loyalty. An example of the question measuring the item is, “I trusted this website when I realized that their system is secure.” Web design items were adapted from [14].Items for assessing WOM were adopted from [20]. An example of question measuring WOM item is, “I say positive things about this e-commerce provider to other people. “Ease of use were adapted from Ribbink et al. (2004).Respondents were asked to rate on a 7-point Likert scale (1 = Strongly disagree to7 = Strongly agree).

4 Results

A total of 88 respondents are passengers using e-service of air transport participated in this study. With regards to the respondents’ profile, A total of 25 respondents (28%) are male, and 63 respondents (72%) are female. The age of the respondents, 71% is in the age group between 18 and 25 years old, 22% were in the age group between 26 and 30 years old, 2% were aged between 31 and 35 years old, 3% were in the age group between 41 and 45 years old, 2% were in the age category of more than 46 years old. The majority of respondents are Thai nationality, with 78% Thai, 12% Chinese,10% Japanese. Majority of respondents were frequent users of organizations in air transport as Air asia, Thai airways, Thaiviet jet. 31% of the respondents used e-service once a month, 33% used it twice or 5 times a month and 36% used more than five times in a month. The most popular airline website frequently used was Air Asia (58%).

Table 1. Result of multiple regression analysis.

Model	Standardized coefficient	t-value	Sig.
Dependent variable: customer loyalty			
Word of mouth	0.362	7.230	0.000
Ease of use	0.208	4.060	0.000
Web design	0.100	2.482	0.014

Multiple –regression analysis was used to measure the effect of the three dimensions of online service namely; word of mouth, ease of use and web design on customer loyalty. The

results were shown in Table 1. The significant value for all independent variables word of mouth, ease of use and web design were <0.05. In addition, the standardized coefficient for all variables showed a positive signs demonstrating positive influence of the online service dimensions on customer loyalty. The most important factor contributing to customer loyalty was word of mouth followed by ease of use and the least important factor contributing to customer loyalty was web design. The findings of this paper support the notion that technology are very important in improving service. Technology is one type of service that provides help for customers to reach their goals, which leads to improvement of online customer loyalty.

5 Conclusions and recommendations

As mentioned above, strengthening relationship of customers is the key success factor to reach customer loyalty.As the findings shown by [21,22] stated that almost 4.54 billion people around the world used airline companies worldwide to travel in 2018.In this research, the researcher aimed to identify technology as factors that influence customer loyalty. Three variables were identified; namely, website design, ease of use, and word of mouth. Based on the results of regression analysis, word of mouth is the most important predictors of customer loyalty. Therefore, organizations should emphasize on technology use to enhance e-word of mouth to achieve customer loyalty.

There are recommendations of the study for practitioners to design technologies to enhance word of mouth to achieve higher levels of online customer loyalty. From the findings of this research, the author recommend 2 strategies for organizations to apply in the air transport which are Word of Mouth strategy and Ease of use via website strategy [23].

Firstly, Word of Mouth Strategy: organizations in air transport should maintain their reputation by offering e-service as what was promised to passenger on price, features, and etc [24, 25]. Training is another tool to focus since the finding confirmed that word of mouth has become the most important factor contributing to customer loyalty which is a vital tool in air transport. The researcher recommended that airline companies provide a proper campaign of “free gift for membership” to encourage existing customers to spread the positive experiences to their existing and potential customers. Once organizations in the air transport have customer loyalty plans, this would help building a closer relationship between passengers and organizations.

Finally, application of Ease of use via website Strategy, from the findings of the least factors contributing to customer loyalty, the researcher would like to recommend airline business organizations to make the benefits of website use not only to provide information but also to attend to any complaints from customers. From the findings of this research, it is recommended that airline companies fully utilize their website to offer e-service and use as a tool to anticipate the passengers need. Moreover, airline companies could make the most of website usage by applying the FAQ section on their website to gather information of passengers as their primary concerns. In this way, this strategy can develop customer loyalty via ease of use during online transaction as well.

Moreover, this data can be utilized by the related field managers, working staff, owners, and the hiring HR department to understand which type of technology best suited the airline companies. Also, this data can be re-utilized by scholars, analysts and business researchers in their upcoming articles discussion and literature review portion. Furthermore, there are also some limitations within this study like there is a lack of information regarding the customers’ behavior aspects that may be helpful to make more desirable outcomes in its analysis portion. Also, there is not enough information about cultural influence of

customers in this paper. These technical limitations can be apply by the upcoming scholars in their future research study.

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