CUSTOMER SATISFACTION WITH AIR TRANSPORT

Kanyarat Aueanantakorn*
Assumption University of Thailand

ABSTRACT

This research investigates factors that affect customer satisfaction in two Asian airlines, Levant and EAX. Three factor-types were chosen: logistics, marketing, and behavioral intention. Logistics factors included flight schedule and waiting time. Marketing factors included in-flight service quality, price and promotions, and brand image. The relationship between customer satisfaction and behavioral intention of the airline customers was examined. Finally, differences between the responses of customers of the two airlines were compared.
Quantitative methodology was applied to data from questionnaire responses from 200 Levant Airway's customers and 200 EAX Airway's customers. Data testing used descriptive and inferential statistic tools. Regression and independent T-test analysis were used as inferential tests. The result showed that for passengers of both airlines there was a relationship between in-flight service quality and customer satisfaction. However, only passengers of EAX Airways showed a relationship with satisfaction by price and promotion, and brand image and service quality. This suggests that in-flight service quality is usually a factor in customer satisfaction. The result also showed that customer satisfaction does lead to positive behavioral intentions to use an airline again. In all seven variables tested, passengers of Levant Airways had a significantly higher mean than passengers of EAX Airways.

บทคัดย่อ

งานวิจัยนี้มีเป้าหมายเพื่อวิเคราะห์ปัจจัยที่มีผลกระทบต่อความพึงพอใจของลูกค้าในธุรกิจสายการบิน ซึ่งมีวัตถุประสงค์หลักอยู่ 4 ข้อ คือ 1) เพื่อระบุปัจจัยการขนส่ง (logistics factors) เช่น ตารางการบินและเวลาที่รอคอยที่มีอิทธิพลต่อความพึงพอใจของลูกค้า 2) เพื่อระบุปัจจัยทางการตลาดที่เกี่ยวข้องเช่น คุณภาพการบริการในเครื่องบิน ราคาและโปรโมชั่น และภาพลักษณ์ของตราสินค้าที่มีอิทธิพลต่อความพึงพอใจของลูกค้าของสายการบิน 'คิว' และ สายการบิน 'ที' 3) เพื่อตรวจสอบความสัมพันธ์ระหว่างความพึงพอใจของลูกค้าและความตั้งใจพฤติกรรม (behavioral intention) ของลูกค้าสายการบิน และ 4) เพื่อตรวจสอบความแตกต่างของความพึงพอใจและความตั้งใจพฤติกรรมและปัจจัยที่มีอิทธิพลระหว่างลูกค้าของทั้งสองสายการบินที่ให้บริการเต็มรูปแบบการดำเนินการโดยสายการบินตะวันออกกลางและสายการบินเอเชียตะวันออกเฉียงใต้

---

*This is a much condensed version of Ms. Aueanantakorn's MSc thesis in part fulfillment of the requirements for the MSc degree in Supply Chain Management at Assumption University. Her email is: pretty_kan@live.com

งานวิจัยนี้เป็นงานวิจัยเชิงปริมาณและเก็บข้อมูลด้วยแบบสอบถาม แบบสอบถามนั้นถูกเก็บจาก ลูกค้าของสายการบิน 'คิว' 200 คน และลูกค้าของสายการบิน 'ที' 200 คน ข้อมูลที่เก็บมานั้นจะทำการวิเคราะห์ด้วยสถิติเชิงพรรณนาและเชิงอนุมาน เครื่องมือการวิเคราะห์การถดถอย (regression analysis) และ การวิเคราะห์ความเป็นอิสระต่อกัน (independent T-test analysis) เป็นเครื่องมือเชิงอนุมานที่ใช้ในงานวิจัยนี้

ผลจากงานวิจัยนี้ พบว่าคุณภาพการบริการภายในเครื่องของสายการบินมีความสัมพันธ์กับความพึงพอใจของลูกค้าของทั้งสองสายการบิน อย่างไรก็ตามงานวิจัยชี้ว่าราคาและโปรโมชั่น ภาพลักษณ์ของตราสินค้าและคุณภาพการบริการมีความสัมพันธ์กันเฉพาะลูกค้าของสายการบิน 'ที' ผลงานวิจัยยังแสดงให้เห็นอีกว่าความพึงพอใจของลูกค้า สามารถนำไปสู่ความตั้งใจของพฤติกรรมในทางบวก (positive behavioral intention) ในธุรกิจสายการบิน นอกจากนี้งานวิจัยยังแสดงให้เห็นว่า ปัจจัยทั้ง 7 ตัว (ตารางการบิน เวลาที่รอคอย ราคาและโปรโมชั่น ภาพลักษณ์ของตราสินค้า คุณภาพการบริการ ความพึงพอใจของลูกค้าและ ความตั้งใจของพฤติกรรมของลูกค้าสายการบิน 'คิว' มีค่าเฉลี่ยที่สูงกว่าสายการบิน 'ที'

INTRODUCTION

Airlines are part of a fast growing industry. The airline industry had estimated revenues of USD710 billion in 2013, a 4.6% increase from 2012 (IATA, 2014). Of this, USD $569 billion, or about 80%, of the total revenues, was associated with passenger transport. In 2014, IATA estimated that there would be 3,320 million scheduled passengers at the end 2014 (an increase of 5.7% over 2013). This involved 36.4 million commercial flights across about 50,000 routes (ATAG, 2014). Over the past several years, the North America and the Asia Pacific regions have been the most profitable, as well as having the largest numbers of routes and passengers (ATAG, 2014; IATA, 2014).

The airline industry can be characterized as a high-volume and low-profit service industry. It has its own vulnerabilities, such as the volatile price of fuel, and the ever-present risk of danger. It employs over 58 million people globally, and represents 3.4% of global GDP (ATAG, 2014).

The size and complexity of the airline industry require logistics management as a key function. This ranges from flight scheduling and route selection, to long-term and short-term provisioning of equipment and personnel, to accomplishing the most important tasks of the airline – on-time, safe and efficient performance (ATAG, 2014). Airline logistics management is a highly complex process, involving substantial business intelligence and coordination as well as multiple automated systems. Real-time monitoring systems are required to ensure appropriate completion of logistics tasks, as well as to identify upcoming challenges (Anderson-Lehman, Watson, Wixom, & Hoffer, 2004). Customers are not likely to notice the logistics processes, but the outcomes are highly relevant to the firm's success. In particular, customer service and on-time flight operation are the most important factors in customer satisfaction for airlines (Bowen,

Bowen, & Headley, 2013). These activities are enabled by airline logistics, and thus logistics directly contribute to customer satisfaction.

This research focuses on Levant Airways and EAX Airways. Levant Airways is a major carrier based in West Asia. The airline flies to 130 destinations, the majority being international destinations. EAX Airways, based in East Asia, provides passenger, freight, and corporate airline services, and operates catering and ground services. It is a long-haul international full-service carrier, providing service to destinations from East Asia. Its international routes cover 60 destinations in 30 countries.

Levant and EAX position their services as a premium product, and have won awards for quality in various areas. However, what is not well understood is how satisfied customers are with the firms' offerings. There have been a number of studies of customer satisfaction in the airlines industry, including its antecedents and outcomes (Chandrashekaran, Rotte, Tax, & Grewal, 2007; Chen, 2008; Chi & Gursoy, 2009; Cooil, Keiningham, Aksoy, & Hsu, 2007; Kim & Lee, 2011; Saha & Theingi, 2009; von Wangenheim & Bayón, 2007). However, these studies have mainly taken place in low-cost carriers or regional carriers rather than full-service airlines. They also have various problems of measurement, such as not using multiple indicators (Keiningham, Cooil, Aksoy, & Andreassen, 2007; Steven, Dong, & Dresner, 2012). This means that in this case study there is a need to examine customer satisfaction directly as it cannot be presumed from the literature and previous research studies. This is particularly true since few (if any) of the studies focus on West Asia airlines.

Thus, the research question is: "What factors have an influence on customer satisfaction of Levant and EAX Airways, and how does that customer satisfaction influence customer behaviors (such as repurchase, recommendation, or customer loyalty)?"
To answer this main research questions, four objectives are set as follows:

1. To identify the logistics factors i.e. flight schedule and waiting time that influence customer satisfaction with these two airlines.
2. To identify the marketing-related factors (in-flight service quality, price and promotions and brand image) that influence customer satisfaction toward Levant and EAX airlines.
3. To examine the relationship between customer satisfaction and behavioral intention of airline customers.
4. To examine the differences in satisfaction and behavioral intention and their influencing factors between the customers of these two full service airlines.

REVIEW OF RELATED LITERATURE

Logistics and Service

Logistics is a set of business processes devoted to acquisition and control of goods and/or services in order to meet customer needs (Mangan, Lelwani, and Butcher, 2008). Most standard logistics management techniques are directed at manufacturing. For airlines, in a service industry, there is a slightly different set of processes, practices, and operational goals (Shaw, 2012). At the strategic level, airline managers need to determine appropriate route configurations, flight frequency and timing, and passenger and freight capacity. At the tactical level, they need to make sure of sufficient capacity and staff to meet these needs, directly or

through partner relationships. At the operational level, logistics have to ensure placement of equipment and flight crew, maintenance, and other issues such as catering and baggage handling (Shaw, 2012).

One of the problems of airline logistics is determining the optimal placement for hubs (operational centers, as well as transfer points between flights). Hub practices are dependent on factors including destinations and distance, equipment in use, airport space availability, and passenger concentration and connectivity. This makes it a complex problem, and it is difficult to measure effectiveness (Martín & Voltes-Dorta, 2009). Another problem is route selection and route management (Pitfield, 2007). Airlines need to select routes based on passenger demands and requirements, along with operational factors such as airport space availability, travel times and refueling requirements, and existing market conditions (such as the market saturation of a particular route) as well as internal resources of staff and equipment (Pitfield, 2007). There are other operational problems. One is on-time performance, which is a key competitive advantage of passenger airlines. Typically, airlines do not have dedicated aircraft for every flight, but rely on using equipment on multiple flights. This means that airlines must coordinate arrivals and departures as well as ground activities (such as cleaning, maintenance, and catering services) to effectively manage on-time performance (Ramdas & Williams, 2008). As freight delivery and on-time passenger flights are competitive advantages, airlines must manage them carefully in order to be effective.

An important relevant theory is the Logistics Service Quality model (LSQ) developed by Mentzer (Mentzer, Flint, and Hult, 2001). It has been extensively used for research in many firms and industries around the world. Mentzer said that LSQ is a flexible model in its specific applications. Parts of it can be applied to airlines.

An important working theory in logistics is the 'Rights' theory. In this, "the basic role of logistics is to get the right amount of the right products to the right place at the right time" (Rosenbloom, 2011, p. 388). To accomplish this goal, logistics needs to manage transportation, materials, order processing and inventory control, packaging, and reverse logistics. This concept is at the heart of logistics planning and organization, and has to be skillfully managed (Rosenbloom, 2011). In this research, since the airline industry is essentially a service industry rather than a product industry, the emphasis is placed on the *right place* and the *right time.* These factors will influence the airline's ability to appeal to customers through offering services that meet their specific needs (Mentzer et al., 2001). In the airline context, the 'right place' and 'right time' means that the airline has staff and equipment in place for the scheduled arrival and departure times as scheduled by the airline (Shaw, 2012).

To identify the right place means choosing the appropriate location for hubs and appropriate routes between hubs and outlying locations (a strategic problem), as well as operationally ensuring that the right equipment and staff are available in locations (Shaw, 2012). There is also a problem of the right time. This refers both to strategic problems (selecting departure and arrival dates that meet customer needs) and operational problems (ensuring that airlines depart and arrive at the scheduled time and that all ground services are performed in order to enable this) (Shaw, 2012).

Logistics Factors Impacting Customer Satisfaction

The first airline logistics management factor that has been chosen for analysis in this study is the flight schedule (including origin/destination pairs or routes, and route times). Airline flight scheduling is a significant technical and operational challenge for an airline (Shaw, 2012). There is empirical research that indicates that these factors are components of customer satisfaction. For example, a study of Thai low-cost carrier customers found that flight schedules were one of the most important factors in customer satisfaction (Saha & Theingi, 2009). Flight schedule factors that were considered in that study included both the convenience of the departure and arrival times and on-time arrival and departures (discussed in more detail below). Schedule factors showed a direct effect on satisfaction, and had a stronger effect than any of the other factors that were identified (which included flight attendants, ground staff, and tangibles) (Saha & Theingi, 2009). A second study of low-cost carrier passengers, this time in Malaysia, confirmed the importance of flight schedule on customer satisfaction (Arokiasamy, 2014). This recent study sampled passengers of Thai Airways at Kuala Lumpur (n = 350) in early 2013. It found that the airline schedule was the second most important service component by ranking, after tangible features but before online service. Thus, this study also supported the relatively high importance of the airline schedule to customer satisfaction.

The second major factor in airline logistics management that will be examined is 'waiting times'. Waiting times refers to queuing and processing times for ground activities, including check-in and bag drop ('check-in'), boarding and disembarkation ('boarding'), and travel between areas of the airport ('transit') (Zhu, 2009). Waiting time can also occur in other situations, including flight delays, cancellations, and denied boarding (for example, situations where the flight is oversold) (Zhu, 2009). However, this research will focus on waiting times that are a part of the ordinary departure and arrival process when there are no service failures of this type.

On-time performance and waiting times are important for airlines because it is a significant competitive factor, especially in highly competitive markets (Rupp, Owens, & Plumly, 2003). Their study found that airlines in less competitive markets actually had poorer on-time performance than those in highly competitive markets. This suggests that airlines consider on-time performance and reduction of waiting times to be one of the factors in their ability to compete (Rupp et al., 2003). On-time performance is particularly important in markets that have strong passenger protection rules that require compensation in cases where flights are cancelled or delayed. One of these major markets is the European Union, where passengers can receive significant compensation and rebooking of their flights in the case of cancelled or delayed flights. There are also other countries that have similar protections. This is a potentially significant cost for airlines, particularly in cases where the airline does not have a good on-time performance record. From the consumer perspective, failure to provide on-time performance (including extended waiting times for boarding and late departure) is a significant dissatisfier in the airline market (Gursoy, Chen, & Kim, 2005). Dissatisfiers are quality or performance factors which are not sufficient to create customer satisfaction when performed well, but which create dissatisfaction when performed poorly (Gursoy et al., 2005). Thus, failing to manage waiting times could generate negative customer perceptions, while managing waiting times is one of the expected performance characteristics of the airline. These technical, institutional, and customer perception issues are some of the reasons why airlines need to manage waiting times, especially

with the cascading effect that can result from late performance or delays (Shaw, 2012). This justifies studying the importance of waiting times as a customer satisfaction factor.

Marketing Factors Impacting Customer Satisfaction and Behavioral Intention

There are a number of marketing factors that could impact customer satisfaction and behavioral intention toward air transportation. One of the most important factors in customer satisfaction with an airline is customer service quality (including in-flight service quality) (Bowen et al., 2013). Service quality refers to the gap between what the customer expected and what she received (Zeithaml, Parasuraman, & Berry, 2009). A service with few or no gaps is considered to be high quality, while one with a lot of gaps will be considered lower quality. Service quality is typically made up of a combination of tangible factors and intangible factors (the service or human element). As a result, the assessment of service quality can be somewhat subjective, although Zeithaml et al. (2009) proposed a model that identified five dimensions of service quality (responsiveness, assurances, tangibles, empathy, and reliability). This model can be used to understand what might comprise in-flight service. Under this model, in-flight service could include tangibles (quality of food and drink, seating comfort, entertainment, and cabin décor) as well as intangibles (flight attendant friendliness and promptness of responses).

A number of studies have shown that in-flight service is one of the main factors in customer satisfaction for airlines. Bowen et al. (2013) identified service quality, along with on-time operation, as one of the main determinants of customer satisfaction. Dimensions of in-flight service quality including assurance, in-flight meals, and helpfulness were also identified in a study of airline passengers (Clemes et al., 2008). A study of British Airways found a number of other requirements for in-flight service quality (Nicolini & Salini, 2006). The most important factor in their study was satisfaction with the cabin crew, but factors including the cabin environment and the food and drink service were also relevant. These characteristics can be understood as a combination of technical quality (the quality of the final product) and functional quality (quality in the way a process is performed). These are distinct because technical quality elements can be objectively measured, but functional quality has a high level of subjectivity (Nicolini & Salini, 2006). This is an important insight when considering the impact of in-flight service quality. A study of Thai low-cost carriers also showed the importance of service quality, particularly service quality of flight attendants and in-flight services such as meals, for customer satisfaction (Saha & Theingi, 2009). Thus, the published research clearly supports the importance of in-flight service in customer satisfaction.

The literature also supports the importance of price and promotions. Customer satisfaction is dependent in part on perceived value, or the extent to which the customer feels that what she has received was worth what she paid (Lamb et al., 2010). Thus, the customer's assessment of whether the price of a product was appropriate will be part of the assessment of whether the service quality of the flight was satisfactory (Zeithaml et al., 2009). The management of pricing in airline firms is dynamic; rather than tickets having a baseline price, business intelligence (BI) is used to forecast demand for routes and schedules, as well as customer willingness-to-pay (Anderson-Lehman et al., 2004). This gives airlines a high level of flexibility to manage their prices and offer promotions such as fare sales in order to encourage ticket purchases during periods of lower demand, while still maximizing profits during higher-demand periods (Anderson-Lehman et al., 2004). This pricing strategy is somewhat different from other

industries, in that is more responsive to specific demand for service at a particular period. Airlines also use a combination of pricing models, with some airlines using a la carte pricing (with individual services priced as add-ons) and some having a higher, all-inclusive price (Bowen et al., 2013). Finally, most airlines use pricing tiers, where customers can select a service level (and consequently a price level) that suits their needs (Moe & Fader, 2009).

The third additional factor that will be examined in this study is brand image. Brand image can be defined as the airline brand's perception in the eyes of its customers and what customers believe the brand stands for (Lamb et al., 2010). Brand image is important for the airline industry, as for other industries, because it acts as a source of information about expected quality and service levels (Lamb et al., 2010). In effect, the brand image acts as a promise to the customer about what she can expect. Brand image is considered to be one of the building blocks of customer loyalty in the customer-based brand equity (CBBE) model (Lamb et al., 2010). However, as empirical research in the service industries shows, the relationship between brand image and customer satisfaction is not as straightforward (though it does exist).

Brand image can be built in a number of different ways. One way that is used in the airline industry is advertising, or untargeted mass media marketing about the airline (Ha, John, Janda, & Muthaly, 2011). Other research in services shows that advertising has a direct impact on brand loyalty (repurchase of the product or service) through first building brand image, which then affected perceived quality and customer satisfaction (Ha et al., 2011). This is consistent with the relationship of brand image to customer satisfaction in the CBBE model (Lamb et al., 2010). Although this is not a direct route, it does suggest that brand image will have an impact on customer satisfaction.

Planned Intentional Behavior

The theory of planned behavior or TPB was originally adapted from the TRA model (Theory of Reason Action), as proposed by Ajzen (2005), which involves belief that people act or react based on influencing factors. The theory has five main variables: behavioral attitude, subjective norms, perceived behavioral control, intention, and behavior (Ajzen, 2005). Intention can be affected by behavioral attitude, subjective norms, and perceived behavioral control, while actual behavior can be affected by behavioral intention.

Behavioral intention refers to the mental or declared decision of a consumer to purchase a particular product (Ajzen, 2005). It is different from actual behavior. For example, consumers might have an intention to purchase, but in fact they might not actually make that purchase. Behavioral intention can be influenced by several additional factors, which are quality and brand image (Ajzen, 2005). In this present study, behavioral intention refers to intention to use services again from the two airlines in the near future.

Satisfaction and Airline Choice

Previously, the main question has been what impact of various service factors have on customer satisfaction. The final stage of this research will be concerned with the impact of customer satisfaction on future airline choice. This is a relevant question because customer satisfaction has an impact on the firm's financial performance through a number of routes, including direct

(increased business from repeat customers and referrals) and indirect (increased employee satisfaction and productivity) (Chi & Gursoy, 2009).

Customer satisfaction influences customer behavior in future because it provides a known solution to the same problem in future, which reduces the cognitive load of consumer decision making (Lamb et al., 2010). However, since there are a number of other factors involved in the consumer decision, it is not likely to generate full customer loyalty. There are a number of different routes through which customer satisfaction can influence behavior (Chandrashekaran, Rotte, Tax, & Grewal, 2007). For example, satisfaction strength is likely to increase repurchase intentions, but it is also likely to allow service recovery efforts to succeed and actually increase customer satisfaction and loyalty. However, lower levels of satisfaction do not result in these effects (Chandrashekaran et al., 2007). Thus, in order to increase customer intentions, it is necessary to generate strong customer satisfaction.

There is ample research that suggests that customer satisfaction is an antecedent to future selection of the airline (though it does not fully determine choice). A study of Thai low-cost airlines has shown that customers that show high satisfaction with the other dimensions of service quality are more likely to repurchase from the same airline (Saha & Theingi, 2009). Typically, customers that are more satisfied with service from a particular firm are more likely to increase their share of wallet (or how much they spend with the firm), although this may not amount to full customer loyalty (*only* purchasing from the firm) (Cooil, Keiningham, Aksoy, & Hsu, 2007). To contextualize this situation, a satisfied airline customer may not *always* purchase their tickets from this Airline, for example if the airline does not have appropriate routes or ticket availability. A study of Korean low-cost carrier passengers also showed that increased customer satisfaction with the airline's service was more likely to increase repurchase intentions (Kim & Lee, 2011). A study from Taiwan supports these findings, as it also shows a positive relationship between customer satisfaction and customer purchase intentions (Chen, 2008). (However, perceived value did have a stronger effect according to this study.)

Additionally, customer satisfaction may also lead to other post-purchase behaviors that expand the airline's customer base. Thai and Korean customers with high customer satisfaction are more likely to recommend the airline through word of mouth to family and friends (Kim & Lee, 2011; Saha & Theingi, 2009). Kim and Lee (2011) also found that dissatisfied customers were more likely to complain (though Saha and Theingi (2009) did not study this factor). Word of mouth is important because it generates improved brand reputation and expands the new customer base of the organization (von Wangenheim & Bayón, 2007). Thus, customer satisfaction also has an effect on the total number of customers, not just repeat customers.

Research Framework and Hypotheses

The research framework with all proposed hypotheses can be presented graphically in Figure 1 below.

Hypothesis 1a: Levant Flight schedule positively influences customer satisfaction.

1b: EAX flight schedule positively influences customer satisfaction

Hypothesis 2a: Levant waiting times positively influence customer satisfaction.

2b: EAX waiting time positively influences customer satisfaction

Hypothesis 3a: Levant in-flight service quality positively influences customer satisfaction.

3b: EAX in-flight service quality positively influences customer satisfaction

Hypothesis 4a: Levant price and promotion positively influence customer satisfaction.

4b: EAX price and promotion positively influence customer satisfaction

Hypothesis 5a: Levant brand image positively influences customer satisfaction.

5b: EAX brand image positively influences customer satisfaction

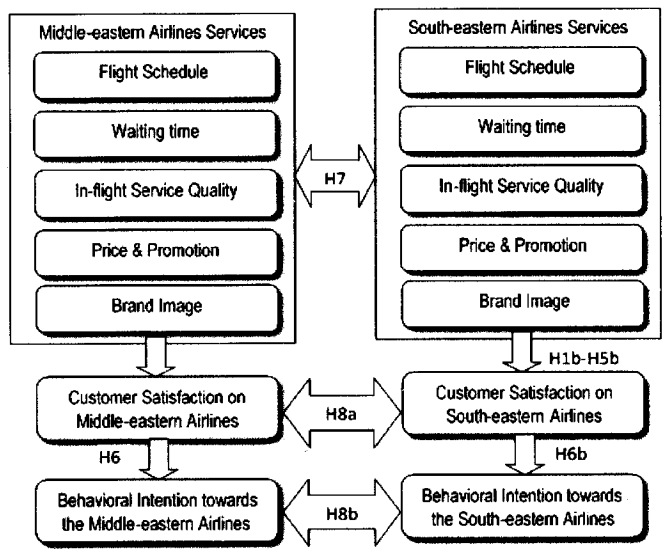
Hypothesis 6a: Levant customer satisfaction influences the behavioral intention of customers.

6b: EAX customer satisfaction influences the behavioral intention of customers

Hypothesis 7: Customers who use the two focal airlines perceive differently the factors of flight schedule, waiting time, in-flight service quality, price and promotion and brand image.

Hypothesis 8: Customers who use Levant airline differ in their satisfaction and behavioral intention from EAX customers.

Figure 1: Research Framework



METHODOLOGY

The quantitative approach was chosen for the study because it is more appropriate for testing hypotheses and generating results that can apply broadly across the population. The data was collected using paper-based self-reporting questionnaires which included Likert scales for attitudinal measurement. The target respondents of this research are separated into two groups in order to represent West Asia (Levant) and East Asia (EAX) airlines.

The sample of respondents was selected by the author in using convenience sampling at Bangkok's modern Suwannabhumi International Airport: passengers about to board planes of both airlines. Convenience sampling is not a representative or random sampling method, and can potentially produce unrepresentative results (Bryman & Bell, 2011). According to Krejcie and Morgan's (1970) standard sample size calculation tables, the appropriate sample size for

populations of above 1 million, with a 95% confidence level ($p \leq 0.05$) is n = 385. Therefore, the sample size of this research will be 400. In this case, the sample size will be equally separated into two groups of 200 for each airline. The questionnaire items were adapted from previous studies: Archana and Subha (2012); International Trade Administration (2008); Khraim (2013); Oliveira et al., (2012); Inra (2007); Khamsorn (2014); and Zeng et al., (2009).

The questionnaire measured seven variables:
*Five satisfaction factors (Flight Schedule, Waiting Times, In-Flight Service Quality, Price and Promotion, and Brand Image), plus two more,
*Two more: Customer Satisfaction, and Behavioral Intention.
The questionnaire also collected personal information and relevant behavioral information regarding the two airlines.

In order to ensure reliability of the questionnaire, a reliability test was conducted using Cronbach's alpha, a coefficient that measures the degree of internal consistency in a set of items. Data collected from the questionnaires was analyzed using SPSS, a standard statistical analysis package. The analysis included descriptive and inferential statistics, which used together, explain the current trends and state of the individual variables and identify any relationships between them (Freund et al., 2010). Inferential statistics tests used in this research were simple and multiple linear regression, and independent T-test. In the hypotheses, H1 to H5 were tested together using multiple linear regression, while H6 was tested individually using simple linear regression, and H7 and H8 were tested using the independent T-test.

FINDINGS

The results were that the gender of respondents was almost evenly split, with 49% female and 51% male. The majority of respondents were aged 31 to 40 years (49%) and most respondents earn US$ 3,000-5,000 per month (47%). Education is fairly homogenous, the majority of respondents having Bachelor degrees (84%). It was more common to not have a Bachelor degree (11%) than a postgraduate degree (5%). The five largest nationality groups included: Indian (8.5%), American (5.8%), Thai (5.0%), and German and Italian (both 3.8%). The outcome also indicated that majority of respondents (53%) had been flying with the airline for one year or less, while only 9% had been flying with them for more than three years. The most common answer was two to three times a year (49%), followed by more than three times a year (33%). For the destination, some respondents identified all regions of the world as their most travelled destination. Asia (44%) was the most common frequent destination, followed by Europe (18%). The most frequent purchase point was online (63%), followed by a travel agency (21%). Relatively few respondents bought their tickets through a call center (10%) or airline counter (6%). The majority of travelers (70%) were leisure or recreational travelers.

For hypotheses results, the findings showed that for passengers of Levant Airways, Flight Schedule and In-Flight Service Quality affected Customer Satisfaction. For passengers of EAX Airways, it was In-Flight Service Quality, Price and Promotion, and Brand Image which affected Customer Satisfaction. Passengers of both airlines had a positive, significant relationship between Customer Satisfaction and Behavioral Intention. Finally, there were significant differences in all seven variables between passengers of Levant Airways and EAX Airways.

Passengers of Levant Airways reported higher mean airline ratings, customer satisfaction and behavioral intention than Passengers of EAX Airways, with a mean difference of 0.5 points or higher.

To be specific, the Hypotheses supported by the findings were:

H1a, H3a, H3b, H4b, H5b, H6a, H6b, H7, H8.

Those not supported were:

H1b, H2a, H2b, H4a, H5a.

CONCLUSION

A review of the literature on passenger airline logistics and customer satisfaction identified two factors that may play a role, including waiting times and flight schedules. Flight schedules are related to the convenience of the passenger in terms of their arrival and departure, while waiting times relate to how much time the passenger perceives they are wasting. The primary research in this present study showed that these were not universally significant for customer satisfaction. While passengers of Levant Airways did have a relationship between flight schedules and customer satisfaction, neither group of passengers found waiting times to be significant.

The literature also identified marketing factors that could play a role in customer satisfaction, including in-flight service quality, price and promotions, and brand image. Out of these factors, passengers of both airlines revealed a relationship between in-flight service quality and customer satisfaction. However, only passengers of EAX Airways had a relationship between price and promotion and brand image and service quality. This suggests that in-flight service quality is usually a factor in customer satisfaction.

An adapted Theory of Planned Behavior (TPB) model was used to understand the relationship between customer satisfaction and behavioral intention. This model suggested that customer satisfaction would promote behavioral intention. Several empirical studies also supported this relationship. The research in this present study had a similar finding. Thus, customer satisfaction does lead to positive behavioral intentions for airlines.

The final objective was exploration of the differences between passengers of Levant Airways and EAX Airways. In all seven variables tested, Levant passengers had a significantly higher mean than EAX passengers. The reasons for this are unclear, although other studies that compared cross-culturally have had similar results. For example, it could be that Levant passengers have lower customer satisfaction requirements than AEC passengers for cultural reasons or other reasons (such as marketing expectations). However, it is also possible that EAX Airways is actually delivering poorer service than Levant Airways, as suggested by some of the comparative data such as the SkyTrax website.

This research, which directly measures customer satisfaction could help these airlines to create a strategy to improve satisfaction if needed, or to maintain it if it already high. Backstage operations which support the chosen satisfaction factors would be heavily implicated. There are few studies which directly examine the impact of logistics operations on customer satisfaction, as most studies focus on customer-facing services such as marketing factors.

REFERENCES

Ajzen, I. (2005). Atrtitudes, personality and behavior, *Organizational Behavior and Human Decision*, 50(2), 179-211.

Anderson-Lehman, R., Watson, H. J., Wixom, B. H., & Hoffer, J. A. (2004). Continental Airlines flies high with real-time business intelligence. *MIS Quarterly Executive, 3* (4), 163-176.

Archana, R., & Subha, M. V. (2012). A study on service quality and passenger satisfaction on Indian airlines. *International Journal of Multidisciplinary Research,* 2(2), 50-63.

Arokiasamy, A. R. (2014). Service quality on customer loyalty and intentions to switch in the airline industry of Malaysia. *Australian Journal of Basic and Applied Sciences, 8* (6), 279-284.

ATAG (2014). *Aviation benefits beyond borders.* Retrieved May 23, 2014 from Aviation Benefits: http://aviationbenefits.org/media/26780/ATAG

Bowen, E. E., Bowen, B. D., & Headley, D. E. (2013). *Development of a model of airline consumer satisfaction (Aviation Technology Faculty and Staff Publications. Paper 6).* Retrieved June 10, 2014 from http://docs.lib.purdue.edu/atpubs/6

Bryman, A., & Bell, E. (2011). *Business Research Methods.* Oxford: Oxford University Press. 3rd edition.

Chandrashekaran, M., Rotte, K., Tax, S. S., & Grewal, R. (2007). Satisfaction strength and customer loyalty. *Journal of Marketing Research, XLIV*, 153-163.

Chen, C. (2008). Investigating structural relationships between service quality, perceived value, satisfaction, and behavioral intentions for air passengers: Evidence from Taiwan. *Transportation Research Part A, 42*, 709-717.

Chi, C. G., & Gursoy, D. (2009). Employee satisfaction, customer satisfaction, and financial performance: An empirical examination. *International Journal of Hospitality Management*, 28, 245-253.

Clemes, M. D., Gan, C., Hao, T., & Choong, M. (2008). An empirical analysis of customer satifaction in international travel. *Innovative Marketing*, 4 (2), 49-62.

Cooil, B., Keiningham, T. L., Aksoy, L., & Hsu, M. (2007). A longitudinal analysis of customer satisfaction and share of wallet: Investigating the moderating effects of customer characteristics. *Journal of Marketing*, 71, 67-83.

Freund, R. J., Wilson, W. J., & Mohr, D. L. (2010). *Statistical Methods.* Burlington, MA: Academic Press.

Gursoy, D., Chen, M., & Kim, H. J. (2005). The UT Airwayss relative positioning based on attributes of service quality. *Tourism Management,* 26 (1), 57-67.

Ha, H., John, J., Janda, S., & Muthaly, S. (2011). The effects of advertising spending on brand loyalty in services. *European Journal of Marketing*, 45 (4), 673-691.

IATA. (2014, March). *Fact sheet: Industry statistics.* Retrieved May 23, 2014 from http://www.iata.org/pressroom/facts_figures/fact_sheets/Documents/industry-facts.pdf

Inra, I. (2007). Customer Satisfaction Survey, Retrieved June 20, 2014 from: http://ec.europa.eu/consumers/cons_int/serv_gen/cons_satisf/consumer_service_app_final_en.pdf

Keiningham, T. K., Cooil, B., Aksoy, L., & Andreassen, T. W. (2007). The value of different customer satisfaction and loyalty metrics in predicting customer retention, recommendation, and share-of-wallet. *Managing Service Quality, 17* (4), 361-384.

Khamsorn, L. (2014). Effect of the e-service quality on satisfaction and customer loyalty for online shoppers in Thailand. Master of Science in Supply Chain Management, School of Management, Assumption University, Bangkok.

Khraim, H. S. (2013). Ariline image and service quality effects on travelling customer's behavioural intentions in Jordan. *European Journal of Business and Management*, 5(22), 20-33.

Kim, Y. K., & Lee, H. R. (2011). Customer satisfaction using low-cost carriers. *Tourism Management*, 32, 235-243.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30 (3), 607-610.

Lamb, C., Hair, J., & McDaniel, C. (2010). *Marketing.* Mason, Ohio, USA: Cengage Learning.

Mangan, J., Lelwani, C. and Butcher, T. (2008). *Global logistics and supply chain management,* Hoboken N.J.: John Wiley and Sons.

Martin, J.C., & Voltes-Dorta, A. (2009). A bnote on how to measure hubbing practuces in airline networks. *Logistics and Transportation Review*, 45(1), 250-254.

Mentzer, J.T., Flint, D.J., & Hult, G.T. (2001). Logistics service quality as a segment-customized process. *Journal of Marketing*, 65, 82-104.

Moe, W. W., & Fader, P. S. (2009). The role of price tiers in advance purchasing of event tickets. *Journal of Service Research*, 12 (1), 73-86.

Nicolini, G., & Salini, S. (2006). Customer satisfaction in the airline industry: The case of British Airways. *Quality and Reliability Engineering International, 22,* 581-589.

Oliveira, P. R., Ferrer, J. C., & Parasuraman, A. (2012), Impact of delays on customers' safety perceptions and behavioral intentions, Journal of Airline and Airport Management, 2 (2), pp.88-100.

Pitfield, D. E. (2007). The impact on traffic, market shares and concentration of airline alliances on selected European—US routes. *Journal of Air Transport Management, 13* (4), 192-202.

Ramdas, K., & Williams, J. (2008). *An empirical investigation into the tradeoffs that impact on-time performance in the airline industry.* Retrieved May 14, 2014 from: http://public-prod-acquia.gsb.stanford.edu/sites/

Rosenbloom, B. (2011). *Marketing channels.* Mason, OH: Cengage Learning.

Rupp, N. G., Owens, D. H., & Plumly, L. W. (2003). *Does competition influence airline on-time performance?* Retrieved May 14, 2014 from: http://www.ecu.edu/cs-educ/econ/upload/ecu0301.pdf

Saha, G. C., & Theingi (2009). Service quality, satisfaction and behavioral intentions: A study of low-cost airline carriers in Thailand. *Managing Service Quality*, 19 (3), 350-372.

Shaw, M. (2012). *Airline Marketing and Management.* London: Ashgate Publishing.

Sherry, L., Wang, D., & Donohue, G. (2007). Air travel consumer protection: Metric for passenger on-time performance. *Transportation Research Recrod: Journal of the Transportation Research Board*, 22-27.

Steven, A. B., Dong, Y., & Dresner, M. (2012). Linkages between customer service, customer satisfaction and performance in the airline industry: Investigation of non-linearities and moderating effects. *Transportation Research Part E: Logistics and Transportation Review*, 48 (4), 743-754.

von Wangenheim, F., & Bayón, T. (2007). The chain from customer satisfaction via word-of-mouth referrals to new customer acquisition. *Journal of the Academy of Marketing Sciences*, 35, 233-249.

Zeithaml, V. A., Parasuraman, A., & Berry, L. L. (2009). *Delivering quality service: Balancing customer perceptions and expectations.* New York, NY: The Free Press.

Zeng, F., Hu, Z., Chen, R., & Yang, Z. (2009). Determinants of online service satisfaction and their impacts on behavioural intentions. *Total Quality Management*, 20(9), 953-969.

Zhu, Y. (2009). *Evaluating airline delays: The role of airline networks, schedules, and passenger demands.* Cambridge, MA: Massachusetts Institute of Technology.