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EXPLORING QUALITY DETERMINANTS IN AIRLINE SERVICES: A STUDY OF CUSTOMER EXPERIENCE IN VIETNAM

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Abstract

The increasing prices of oil, rank as one of the main threats to airlines. Generally, all airlines will adjust their prices to deal with oil price variations, and this often impacts customer service satisfaction. However, there tends to be gap in research exploring the relationship between the changing oil prices and its impact on customer satisfaction in the airline sector. This research gap widens particularly in the context of an airline operating in the developing country context. This study therefore explores the relationship between oil prices, perceived service quality, customer loyalty and customer satisfaction for a Vietnamese airline. The study reports the findings from a survey of 235 passengers of Vietnam airlines and explores the relationships between prices, service quality, service satisfaction and loyalty. Our findings indicate that increasing oil prices do affect the customer satisfaction negatively however customer loyalty largely remains unaffected.

Keywords: *Service quality, airline services, oil prices, customer satisfaction, customer loyalty*

INTRODUCTION

According to West (2015), there is a relationship between oil price and economic strength. Net oil importing countries, where the volume of oil imports is greater than the volume of oil exports, face difficulties from high oil prices. Service industries operating in the transportation sectors such as airlines, railway, watercraft, etc. face the effects of such costs to the extent of their levels of oil consumption (Nandha and Brooks, 2009; Aggarwal et al., 2012). On an annual basis, 243 million tons of fuel are used in the aviation industry, making up 6.3% of the total global refinery production. In this study we examine the effect of oil prices on customer satisfaction, by exploring (Nygren et al., 2009) the relationship between oil prices and service quality in Vietnam Airlines, as experienced by customers. Research results support that the airline industry faced a difficult year in 2012 (Tyler, 2013). According to the available data, the revenues of the airline industry reached $638 billion while the total profit was $7.6 billion due to the record prices of oil that attained $111.8 per barrel. In contrast, this industry significantly developed in 2003 because the oil price was lower than $30 a barrel. The negative impacts from higher oil prices in this sector, seem to particularly significant for small airlines (Chung, 2014).

Vietnam Airlines is a national airline that was founded in 1993. It is valued as the youngest and most modern airline in the area. In addition, this is the only traditional airline in

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Vietnam with a large full-service airline and was established from a state-owned enterprise. The company tries to improve their operation through expanding their route network, developing operations with Skyteam alliance and finding ways of cutting costs (e.g. fuel cost). According to the standards of ASK (e.g. Available Seat Kilometers), their productivity of each employee rises 10% on an annual basis that is an above average degree when compared with other airlines in SkyTeam and Oneworld alliances such as China Southern Airlines, Korean Air and American Airlines. Vietnam airliens has emerged as a four-star airline and progressively working towards becoming a premium airline service provider (five-star airline) in South East Asia after 2020. Over the last 25 years; they have improved their flight routes from 25 to 57 international routes and from 18 to 37 domestic routes. By August 2015, they had implemented 1.39 million flights (equivalent to serving 160 million customers). Between 2008 - 2014, Vietnam airline experienced low levels of operating efficiency; the majority cause was the effect of fuel prices. As is well known, Jet fuel (Jet A-1) is mainly consumed by aircraft, followed by petrol that is used for vehicles on land. Vietnam Airline's expenses for these fuels made up its highest percentage in their total cost with 37.7% between 2008 and 2013 (BSC, 2014). However, this fuel cost always changes depending on the crude oil price in the world. Vietnam Airlines announced that their jet fuel expenses rose dramatically from 2008 to 2012. According VN airline's experts, the changing of one-unit dollar in fuel price will affect the fuel cost from 150 to 160 billion VND (7.1 to 7.5 million USD). More seriously, fuel costs and international airport fees often rose while the value of VND is decreased. This trend often occurs because of the high inflation rate in Vietnam. In recent years, fuel prices surged sharply in 2018 and reached its peak at USD 92.99/barrel. The average price in 2018 was 85.1 USD/barrel, an increase of 12.1 USD/barrel and equivalent to a 16% rise compared to plan. The increased fuel prices accounted for 24.2% of all airlines' total costs (up to USD 188 billion). It resulted in a significant drop in airlines' profits and also resulted in passenger volume declining by 3.6% (VA Annual report 2018). This does indicate that there is a need to investigate how oil prices may affect customer's decision to use the airline services due to increased costs and how it affects their satisfaction level.

This study therefore builds on this premise and aims to arrive at a conclusion based on the data collected via survey from the customers of Vietnam Airlines. The survey development build on four main factors, including service price, service quality, customer satisfaction and customer loyalty. Service quality builds on the approach proposed by SERVQUAL framework (Parasuraman, Zeithaml, and Berry, 1988).

LITERATURE REVIEW

Oil Price Fluctuations and Airline Service Business

A number of research contributions have addressed the effect of oil prices in the airline industry. Research results support that that oil prices indirectly impact on airlines' profit, level of competition, customer satisfaction and investment (Assaf, 2011; Tyler, 2013; Tipping, Schmahl, and Duiven, 2015). Most of these studies were carried out in large countries such as England, the US, France and China. In this study we offer a contribution to explore these effects in a smaller economy like Vietnam, where these topics have received less attention.

According to (He, Wang, and Lai, 2010), oil is an important cost element in the transportation sector. Oil prices are subject to may fluctuations in recent decades. The effects of such fluctuations can be negative or positive depending on the extent of oil price change. In addition, the level of impact differs across the type of transportation business (Nandha and Brooks, 2009; Aggarwal et al., 2012). The fluctuation of oil prices affects the airline industry at both micro and macro levels. Macro impacts refer to the growth in operational costs, and the consequent decline in gross margins, profit and cash flows, as well as changes in stock prices (Mohanty et al., 2013).

In contrast, decreasing oil prices are reflected in gains in production costs (Finn, 2000). In terms of the micro impacts, high oil prices affect the income of individuals as well as consumer demand due to the depreciation of domestic currency and the rise of living cost (Fofana, Chitiga, and Mabugu, 2009). In what concerns the airline business, traveling is likely to be reduced, particularly in long distance travel (Ringbeck, Gautam, and Pietsch, 2009; Becken, 2011). In addition, passengers tend to choose cheap airline fares that are appropriate to their budget (Euromonitor International, 2010). As a result, the volume of passengers in the traditional airline will be reduced and the extent of competition in the airline industry will be increased (Clark, 2008). Airlines therefore face more challenges with increases in oil prices, namely delaying progress of the firm's investment decisions, raising the level of competition and ticket prices, while customers tend to switch to cheaper airlines (Assaf, 2011).

The oil consumed in Vietnam is mainly sourced from importing refined petroleum products because Vietnam does not have enough of the right conditions and equipment to build more oil refinery plants. Although, Vietnam has some plants, it just meets to one-third in its local consumption. Therefore, Vietnam is vulnerable to the fluctuations of oil prices (Trung, and Vinh, 2011) With a huge oil consumption and a lacking of refining capacity, Vietnam has become a price-taker in the global oil market and, therefore, the global oil price always affects oil prices in the Vietnam market (Van, 2013).

Airline Service Quality, Price, Customer Satisfaction and Customer Loyalty

Airlines always try to be attractive and retain more clients than their rivals with various tactics (Chen and Hu, 2013). That has led to a strong competition in this industry. Many airlines have used price strategies but it seems to be not enough to become a winner in the market (Tseng and Chiu, 2008). Even though a price or product strategy can bring same good results to service quality, they will be easily imitated, when compared to a service quality strategy (Prakash and Mohanty, 2013). Customers are now very demanding and airline carriers always keep trying to reach competitive advantage. Therefore, customer expectations and upgrading service quality in this field is significantly growing up (Tsai, Hsu, and Chou, 2011; Kim and Lee, 2011).

In this context, airlines should pursuit a permanent effort to understand what their customers need and expect from their service (Huang, 2009). Building on prevalent service quality models (Parasuraman, Berry, and Zeithaml, 1991), a good understanding of customer expectation will help organizations provide excellent services. Moreover, service quality is always at the forefront of an airline's criteria and they offer incentives and special programs for their clients aiming to create loyal customers (Baker, 2013). Numerous researchers support that the SERVQUAL model is an adequate approach to evaluate clients' expectations and perceptions (Pakdil, and Aydm, 2007; Chen, 2008).

SERVQUAL is popularly used in the airline industry for measuring service quality, including five dimensions such as tangibility, reliability, responsiveness, assurance and empathy (Lerrthaitrakul and Panjakajornsak, 2014). Several researchers have pointed out the benefits of SERVQUAL for improving service quality in an organization. Hirmukhe (2012) stated that this tool helps an organization easily to recognize customers' expectations. As a result, an organization can improve the shortcomings in their service (Mukhtar, Saeed, and Ata, 2013, Yu et al., 2013). In addition, SERVQUAL also supports organizations which have limited resources, helping them to deliver their resources to bring the best services for customers (Purcarea, Gheorghe, and Petrescu, 2013).

According to Johnson and Gustafsson (2000), service quality and customer satisfaction is the same; these elements are even interchanged in both theory and practice. However, some others such as Berry et al. (1988), Dabholkar et al. (2000), Parasuraman et al. (1986) and Schneider and White (2004) believe that there are some differences in the

construct between service quality and customer satisfaction, having some certain generalities between customer satisfaction and service quality (Baker, 2013 and Sureshchadar et al., 2002). According to Zeithmal and Bitner (1996), the concept of satisfaction is broader than the concept of service quality and therefore perceived service quality is an element that belongs to customer satisfaction. Also, service quality significantly affects customer satisfaction (Baker, 2013; Spreng and Mackoy, 1996). This has been also confirmed by Kumar, Batista and Maull (2011) and Kumar et al. (2014) who showed that service quality is correlated with customer satisfaction and customer loyalty. These evidences show that there is a relationship between service quality and customer satisfaction (Bitner, 1990). More correctly, Oliver (1993) points out a specific relationship between them that service quality is the forerunner of customer satisfaction. In other words, the result of good service quality is customer satisfaction (Spreng and Mackoy, 1996). To be more specific, customer satisfaction will be increased by service quality, leading to customer loyalty and their pushing recommendations (Nadiri and Hussain, 2005). Therefore, service quality also impacts on customer loyalty, for example, negative problems related to service quality will reduce 20% in customer loyalty so an organization should focus more on service quality (Goodman, 1989). In airlines, customer complaints are seen to be indispensable and are part of the organization aim to support upgrading service quality and customer satisfaction (Davidow, 2003). To be more specific, airlines solve negative complaints to retain customers and based on positive complaints to improve their service quality as well as satisfaction. These are widely acknowledged and used by many organizations (Strauss and Schoeler, 2004).

Sureshchandar et al., (2002) said that recent studies consider customer satisfaction as a multi-dimensional construct, but the basic element, which is used to measure customer satisfaction, is the same with service quality. In other words, customer satisfaction and service quality have same configurable dimensions that through similar items spread across the various dimensions. In addition, SERVQUAL is not only good in evaluating service quality when using it to measure the level of organization's service but also good in predicting customer satisfaction about a service when measuring as a function of various experiences within the organization (Sureshchandar et al., 2002). Besides, Lambert and Luiz (2011), who studied the airline industry, found out that the reliability was ranked first in five SERVQUAL dimensions. In other words, reliability is the most important factor to passengers and the least important in dimensions is the tangible factor.

In terms of price and service quality, many researchers mentioned that the price should be appropriate to the level of the service provided because customers always want to use more and better services when they pay more than the normal price (Tolpa, 2012). Airlines apply price structure to define market segments and rely primarily on the price sensitivity of customers because most of the airline's customers are sensitive to airfare (Stern, 1989). Park et al., (2006) highlighted that fare is a key element in affecting the satisfaction and buying behavior of air passengers. For example, the high oil price also impacts on air travel expenses and travel budget (e.g. high airline fare) therefore, customers tend to choose short-haul flights instead of an expensive and a long trip for holidays (Ringbeck et al., 2009). In addition, some researchers pointed out that loyal customers often accept paying more for that service as long as this price increases to an acceptable extent (Consuegra et al., 2007). Surprisingly, the most of passengers in the airline industry want to use the best services on a flight at the most convenient time with the lowest price. However, that seems to happen rarely and, therefore, they should trade-off these conditions to reduce this level of disutility, depending on budget constraints (Belobaba et al., 2009). With respect to airlines, if they just focus only on improving service quality without controlling prices or

vice versa, they cannot retain their customers in the long-term. Therefore, they should find a balance between price and service quality in the most reasonable way (Cao and Goh, 2004).

Research Model

This study examines whether oil prices indirectly impact on customer satisfaction and loyalty in the Vietnam's traditional airline. This research also investigates whether there is a relationship between oil price and service quality. Based on the discussions presented by the review of the extant literature in the earlier sections this study put forwards the following research hypotheses in Vietnamese airlines context as also illustrated in Fig. 1.

H1: Customer Satisfaction positive impact on Customer Loyalty
H2: Price has negative impact on Customer Satisfaction
H3: Service Quality is positively correlated with Customer Loyalty
H4: There is a positive correlation between Price and Service Quality
H5: Service Quality has positive impact on Customer Satisfaction

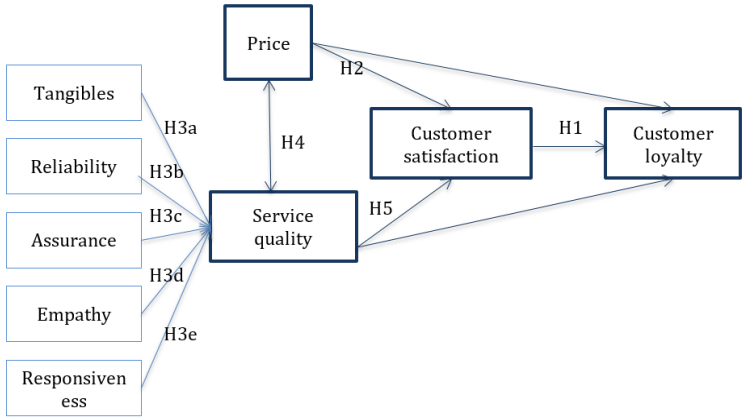

Figure 1. Conceptual Model for Exploring the Relationship Between Oil Prices, Service Quality and Satisfaction and Loyalty Variables

MATERIALS AND METHODS

This study follows a quantitative survey questionnaire-based approach to collect the data. There are many approaches to collecting data in quantitative research such as by mail or an internet survey, self-administered questionnaire, telephone survey, experimental research, among others. Self-administered questionnaire is the most common tool, also labelled as self-completion questionnaire. This approach requires questionnaires to be designed in a standardized format, in which each question should provide a list of available answers for respondents. More important, these questions should be simple and understandable (Gilbert, 2008). One of the advantages of such method is the ample range for geographic coverage of the study since distance is not an issue and the researcher can gather a huge volume of data (Self and Roche, 2002). Moreover, this approach is preferred when respondents are busy and want privacy in their responses (Hague, Hague, and Morgan, 2013). In the same vein, it avoids the bias that are inherent to the alternative interviewing process.

The study targeted passengers traveling on Vietnam Airlines, including domestic and foreign service users. The study addressed a representative group of respondents, supported by simple random sampling. A total of 252 passengers were surveyed, covering both genders, and representative of different levels of income, and different profiles in what concerns the frequency of use of the airline service. As for geographic coverage,

questionnaires were sent to customers in South, Middle, North Vietnam and other parts of country.

The questionnaire was organized in several parts. The first part being primarily about general information about the customers, including age, sex and occupation. The second part included three questions focused on customer's evaluation of the Vietnam Airlines fare in the changing oil price. The third part, focused on evaluating the level of customer perception of service quality as well as customer satisfaction with Vietnam Airlines. The survey resorted to an adaptation of the five dimensions proposed in the SERVQUAL scale - tangibility, responsiveness, empathy, reliability and assurance (Parasuraman, Zeithaml, and Berry, 1988). The fourth part included three questions, related to the level of customer satisfaction when using the services of Vietnam Airlines. The final section asks about customer loyalty with this airline. Most of the questions were measured on a Likert five-point scale, following the level of customer assessment. There were also some open-ended questions. Data analysis resorted to descriptive statistics, Cronbach's Alpha test, regressions and correlation analysis using SPSS software.

RESULTS AND DISCUSSIONS

The data collected included 252 passengers. From these, 235 were fully answered and 17 were incomplete. Therefore, final sample size included full data collected from 235 respondents. The majority of respondents' age ranged from 18 to 29 years (74%), followed by the age range from 30 to 39 (20%), and the smallest proportion corresponded to passenger over 50. The biggest share of users reported to be business people and students, holding 30% and 27% of the answers respectively. Other respondents (28%) included teachers, engineers, bankers, brokers, architects, sales and three groups, which make up a small proportion of the total of respondents are service staff, employees and homebuilders (respectively, 8% 6% and 1%).

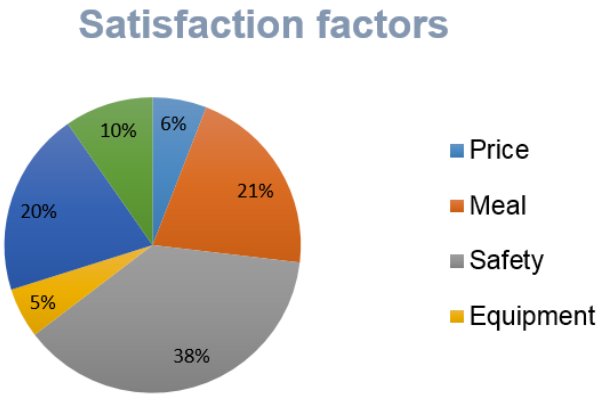

Figure 2. Factors Contributing to Overall Satisfaction with Vietnam Airlines.

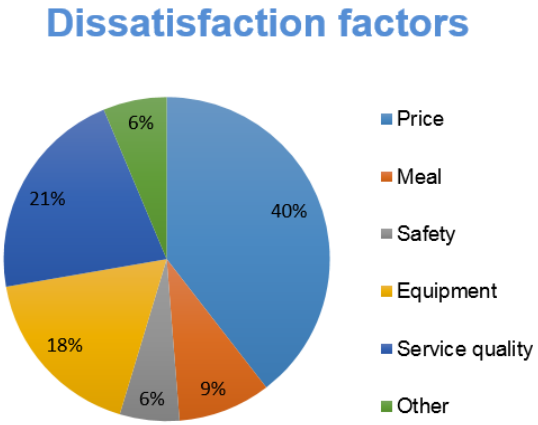

Figure 3. Factors Contributing to Overall Dissatisfaction with Vietnam Airlines.

The factor for which customers expressed higher levels of satisfaction included safety (37.8%) and the quality of meals offered on board (21%) (Figure 2). Customers also declared to be happy with some of the following elements: timeliness of the airline flights, and the offer of many direct flights. The two factors that received less appreciation were service price and company equipment. In what concerns dissatisfaction factors, 39.5 % were not happy with company process (Figure 3). This was followed by the perceptions about the equipment of Vietnam Airlines (17.6 %) and by some reports about being dissatisfied with its staff's attitude and luggage safety.

In order to test the hypotheses, correlation analysis was carried out (see Table 1). The data supported the existence of a strong correlation between Service quality and Customer Loyalty

(r = 0.757). Similarly, there is a strong correlation between Customer Satisfaction and Service Quality (r = 0.754). In addition, some pairs such as Oil Price and Customer Loyalty as well as Customer Satisfaction and Customer Loyalty have a moderate correlation with r = 0.441 and 0.541 respectively. However, there is a weak and negative correlation between Customer Satisfaction and Oil price (r = -0.166) (H2). With a negative correlation, potentially indicates that if the Oil Price increases, Customer Satisfaction will decrease and vice versa. Regression analysis further verified this as the relationship between customer satisfaction and price is quite weak (R = 0.166), typically the price element in the regression model accounts for 27 per cent of the total variation in the customer satisfaction (Table 2).

Table 1. *Correlation between service quality, oil prices, satisfaction and loyalty variables*

	Service Quality	Oil Price	Customer Satisfaction	Customer Loyalty
Service Quality	1			
Oil Price	.428***	1		
Customer Satisfaction	.754ªª	-.166*	1	
Customer Loyalty	.757**	.441**	.541**	1

**. Correlation is significant at the 0.01 level (2-tailed)
*. Correlation is significant at the 0.05 level (2-tailed)

Table 2. *Results of Regression Analysis between Customer Satisfaction and Price*

	Dependent variable: Customer satisfaction						
Independent variable	**R**	**R Square**	**F**	**Beta**	**t**	**Sig**	**VIF**
Price	0.166	0.027	6.647	-0.166	-2.578	0.011	1.000

It is well documented in literature that if any organization performs well on five dimensions of SERVQUAL its service quality will increase. Hence if Vietnam Airlines improves these five dimensions, it would lead to improved Service Quality offerings. The results show there is a moderate correlation between Oil Price and Service Quality (r = 0.428), supporting H_4. To further explore the impact of the individual dimensions of SERVQUAL and its impact on Oil price correlation analysis was run between them.

Table 3 shows that SERVQUAL dimensions are also moderately correlated with Oil Prices. The existence of a statistically significant relationship for an airline company indicates that differing dimensions may influence the perceived price gap. Table 4 shows positive and significant correlation of SERVQUAL dimensions with Customer Satisfaction and Customer Loyalty supporting H_3 and H_5. The Regression analysis suggested that Customer Satisfaction explains 29.3% of the variation in the Customer Loyalty, with significance levels supporting H_1 (see Table 5).

Table 3. *Correlation between Service Quality variables and Oil prices*

	Service Quality	Oil Price
Tangibles	.861**	.422**
Assurance	.786**	.391**
Reliability	.774**	.386**
Empathy	.855**	.383**
Responsiveness	.933**	394**

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

Table 4. *Correlation between Service Quality variables, Customer Satisfaction and Customer Loyalty*

	Customer satisfaction	**Customer Loyalty**
Tangible	.633**	.687**
Assurance	.614**	.528**
Reliability	.608**	.579**
Empathy	.624**	.595**
Responsiveness	.652**	.684**

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

Table 5. *Regression analysis to explore H_1*

R	R square	F	Beta	t	Sig.	VIF
0.541	0.293	97.674	0.541	9.883	0.000	1.000

Independent variable: Customer Satisfaction; Dependent Variable: Customer Loyalty

The relationship between Customer Satisfaction and Price was found to be quite weak (R = -0.166), typically the price element in the regression model accounts for 27 per cent of the total variation in the customer satisfaction. Based on significance level, it is smaller 0.05 therefore these variables are significant. More important, its Beta is -0.166 (Table 6). Hence, it can be concluded that price negatively impacts on customer satisfaction, supporting H_2.

Table 6. *Regression analysis to explore H_2*

R	R square	F	Beta	t	Sig.	VIF
0.166	0.027	6.647	-0.166	-2.578	0.011	1.000

Independent variable: Price; Dependent Variable: Customer Satisfaction

The results also shown that approximately 94% of the variance of Service Quality can be accounted for by the combination of the five SERVQUAL dimensions. In addition, VIF of five elements is smaller than 10 therefore multi-collinearity problems will not occur. In general, this regression model has statistical significance (Sig < 0.05). A matter of concern was the Beta of all dimensions, which were positive. To be clear, reliability, assurance, tangibility, empathy and responsiveness have a positive effect on the Service Quality of Vietnam Airlines (Table 7). In particular, responsiveness, which is one of the five SERQUAL dimensions, mostly affects service quality (Beta = 0.552); followed by the tangible factor (Beta = 0.177). And the factor having the least impact on service quality is assurance (Beta = 0.102).

Table 7. *Descriptive Analysis exploring H_3*

	Beta	t	Sig.	VIF
Reliability	.123	4.855	.001	2.652
Assurance	.102	3.668	.000	3.194
Tangibles	.177	5.823	.000	3.846
Empathy	.115	3.479	.001	4.528
Responsiveness	.552	19.855	.000	3.202

Independent variables: SERVQUAL dimensions; Dependent Variable: Service Quality

Regression results (Table 8) showed that Service Quality can explain about 56.8% of the change in Customer Satisfaction. With positive Beta (Beta = 0.754), two variables tend to increase or decrease together, therefore supporting H_5.

Table 8. *Regression Analysis between Customer Satisfaction and Service Quality (H_5)*

	Dependent variable: Customer satisfaction						
Independent variable	**R**	**R Square**	**F**	**Beta**	**t**	**Sig**	**VIF**
Service quality	0.754	0.568	310.354	0.754	17.617	0.000	1.000

Overall the results allowed for supporting the first hypothesis, suggesting that customer satisfaction positively affects customer loyalty in Vietnam Airlines. This result is aligned with former research studies (Gremler and Brown,1997; Cronin and Taylor, 1992; Kumar, Batista and Maull, 2011). H_2 was also supported and aligned with literature such as Malik, Ghafoor, and Iqbal (2012); Park, Wu, and Robertson (2006); and Peng and Wang (2006) that highlighted that customers can be unhappy when the price is too high or unreasonable. Some authors referred that all five SERVQUAL dimensions are essential for service quality (Hoffman and Bateson, 2010). However, the most important dimension that was salient in this study is reliability and the last is tangibles. The results also showed that tangible, responsiveness, empathy, reliability and assurance also positively affect to service quality in Vietnam Airlines. It was hypothesized that there is a relationship between price and service quality. This hypothesis was drawn from some following other researchers. that suggested that organizations should adjust their price to match up the service quality delivered (e.g. good service with reasonable price). In fact, the majority of customers of the airline industry expect to use the service on a flight at the most convenient time with a lowest price (Belobaba, Odoni, and Barnhar, 2009). That seems to happen rarely for

customers because airlines are only able to balance rationally between price and service quality and customers should trade off these two things (Cao and Goh, 2004).

Lastly, Hypothesis 5, was supported suggesting that customer satisfaction in Vietnam Airlines is positively affected by service quality. This hypothesis is based on previous literature such as the work of Newman (2001); Sureshchandar, Rajendran, and Anantharaman, (2002); Seth and Deshmukh (2005); and Kumar et al. (2014), who pointed out that service quality strongly impacts on customer satisfaction. After analyzing the data to test the research hypotheses, this research also found some other interesting results. Service Quality not only positively affects to Customer Satisfaction but also Customer Loyalty towards Vietnam Airlines. This result is similar to previous research (Kumar, Batista and Maull, 2011). In addition, the two dimensions of the SERVQUAL, i.e., tangibles and responsiveness have the strongest effect on Customer Loyalty towards Vietnam Airlines. The findings therefore support all the research hypotheses proposed earlier in this study.

CONCLUSIONS

The main objectives of this research work were to examine the effect of oil price on customer satisfaction and explore the relationship between oil price and service quality in Vietnam Airlines. The research findings show that oil price indirectly and negatively affect customer satisfaction. To be more specific, an increasing oil price (e.g. fare and surcharge) makes customers unhappy and vice versa. It means the price does not match up to the quality of service delivered. However, customer loyalty was found to be positively impacted by the oil price. This can be attributed to a couple of factors. Firstly, loyal customers often are happy to pay higher price within an acceptable extent as stated by Consuegra, Molina, and Esteba (2007) and therefore the higher price does not negatively affect these customers. Secondly, Vietnam has only one traditional airline offering full service, which is Vietnam Airlines, and therefore the majority of customers have no choice than to use the services of this airline regardless of the price. Their unhappiness is reflected in the negative correlation with customer satisfaction.

Our findings also show that service quality of Vietnam Airlines strongly and positively affects customer satisfaction and customer loyalty. That means offering a good service quality satisfies customers and retains a good relationship between the customers in the long-term and vice versa. In general, overall customer satisfaction and customer loyalty are mostly affected by the service quality while the price changes do not significantly influence them. Therefore, it can be concluded that the changing oil price does not significantly impact on service quality or customer loyalty. The five SERVQUAL dimensions was found to be strongly and positively impacting the overall service quality in Vietnam Airlines. Responsiveness, tangibles and reliability emerged as significant factors. Our study shows that the best way to mutually benefit an organization should be to find a balance between price and service quality particularly in time of a changing oil prices such as compensating higher price with better service and vice versa.

This study adds to the existing literature on SERVQUAL particularly on the limited literature focused on the airline sector. Moreover, our findings add to the limited evidence from the developing country context. The findings of this study would benefit academics and practitioners alike and improve their understanding of the dynamics of the relationship between the different factors in the airline industry. Practitioners would benefit from the better understanding of the SERVQUAL and its relationship with oil prices and performance outcomes (satisfaction and loyalty) which will help them to make adequate strategies to meet/exceed customer expectations.

As is the case with any research study, this research also has certain limitations. Findings of this research is based on the quantitative

survey-based approach therefore future research can use both qualitative and quantitative approaches to collect more in-depth information to strengthen the findings. Our findings are also based on a limited survey response (235 responses) from a single traditional airline. Future studies can therefore focus on gathering evidences from larger sample and from more airlines who have recently started operating in Vietnam to draw a conclusive discussion which can potentially be generalized across the airline sector in Vietnam. Usage of other robust statistical techniques such as structural equation modeling (SEM), factor analysis and others would further strengthen the findings. Future studies can also focus on comparing different sectors to explore how the relationship between service quality, oil prices, customer satisfaction and customer loyalty varies across different sector.

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