

Evaluating the determinants of Vietnamese frequent flyers' loyalty in civil aviation industry: The case of Delta air lines

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ABSTRACT

Customer loyalty plays an important role for the success of aviation companies. Most airlines companies recognized that a frequent flyer is about 10 times more valuable than an associational flyer. As a result, it is essential to evaluate determinants of Vietnamese frequent flyers related to loyalty toward American-based airlines like Delta Air Lines. The customer loyalty was impacted by service quality, brand image, perceived value, pricing policy, and customer satisfaction. A sample of 300 Vietnamese frequent flyers of Delta Air Lines was collected for this study. The primary data was analyzed with SPSS and AMOS. The results indicate that service quality had no impact on customer loyalty of Delta Air Lines frequent flyers in Vietnam while the rest variables maintained some effects. There were several limitations of this study such as sampling, questionnaires design, and data collection. This research also contributed implications for further studies about customer loyalty in aviation industry.

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1. Introduction

Today, in Vietnam, most carriers that operate American routes have the similarity in tangible values like fleets (jumbo jets), in-flight equipment (video-on-demand for each passenger), and menus (more delicious and plentiful, Asian-oriented menu) as well as intangible ones such as flight timetable, connecting time at the Asian hubs, and attitudes and enthusiasm of cabin crews. Hence, it is essential to conduct an effective and excellent frequent flyer program in order to keep clients' satisfaction and loyalty as well as attract more people to travel with the carriers. The principal reason for conducting frequent flyer program was to keep travelers' travel with the same carrier when they need as well as increase their flying times. Most airlines recognized that a frequent flyer is about 10 times more valuable than an associational flyer. As other service industries, the aviation industry has been forced to generated competitive advantages among global competition. Clients' expectation continuously increases day by day and subsequent demands for improving service quality (Lin et al., 2009; Chou et al., 2011; Kim and Lee, 2011; Anh et al., 2019; Allahham, 2013). Competitive advantage of any airlines is to deliver superior service quality. Moreover, service quality also enhances customer satisfaction as well as improve brand image in clients' minds. Through perfect service quality, aviation firms can create successfully a competitive advantage over other companies. Morash and Ozment (1994) stated that high service quality will result in enlarging customer patronage and retention as well as market share and profitability. Even though many airlines recognized that service quality is very important and there are many researches related

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to this area, the researchers are also interested in conducting a study on customer satisfaction and loyalty of Vietnamese frequent flyers of Delta Air Lines.

2. Literature review

2.1. Service quality

Service quality was defined as an overall impression of customers in the relationship between organization's inferiority or superiority and its delivered services (Bitner & Hubbert, 1994). Gursoy et al. (2004) and Ishaq et al. (2014) reported that quality of service in aviation industry was a set of various interactions between passengers and airlines companies that comprised human resources in influencing customers' perceptions as well as the image of the carriers. In addition, service quality was a measurement of the level of matching between delivered service and customer expectations. Delivering high service quality became a marketing requirement among carriers within the current strong competition (Ostrowski et al., 1993). In 2006, Park and his partners stated that critical factor for developing and sustaining relationship with customer was service quality since it influences significantly on customer satisfaction and service quality has become a compulsory factor of service firms in order to become successful in a competitive environment (Lin et al., 2009).

2.2 Brand image

Brand image was reported as the firm's perception in clients' minds, so when they need to purchase goods or services, they often have positive opinion about the goods or services supplied by the brand they refer (Nguyen & Leblanc, 2002). Brand image was created from customers' perceived quality and it affected positively to perceived value. Many empirical service literatures have illustrated that customer satisfaction is affected positively by brand image (Hart & Rosenberger III, 2004; Faullant et al., 2008). However, the relationship between brand image and customer satisfaction was tested as not significant in several studies (Bloemer et al., 1998; Clemes and Gan, 2009).

2.3. Perceived value

Perceived value was defined as the perception about quality, social value, benefit and price that clients would like to purchase goods or services (Bishop, 1984; Velimirovic et al., 2011). In 1985, Dodds and Monroe stated that perceived value is an important factor of clients' purchasing intention. They often tend to buy a product with high perceived value. In addition, perceived value can be identified as an evaluation of consumer on what they give and get when purchasing a product or service (Zeithaml, 1988). Perceived value is hence formed to judge the overall quality of the goods or services but is not the actual quality of that goods or services (Zeithaml, 1988). According to Holbrook and Corfman (1985), there are many factors that impact on perceived value namely quondam experiences, level of education, observed risk, and situational variables such as: purchase intention and situation, time pressure, and social background. In other words, perceived value is consumers' subjective judgments on service quality from their previous experiences, knowledge, and feelings.

2.4 Pricing policy

Pricing policy is a complicated concept that can be taken into many forms. Diamantopoulos and Mathews (1995) defined price as the bringing back of goods or services after one person put on the utility a value. Pricing policy has an important role in the economy and it are able to effect directly on customer making decision, satisfaction as well as loyalty. In 1993, Lichtenstein et al. stated that good pricing policy perception is effective in attracting more customers. As a result, they will repurchase the goods or services intentionally.

2.5 Customer satisfaction

Customer satisfaction was defined as a human's feeling towards an enjoyment or a disappointment of a good or service's performance in comparison with his or her expectation (Kotler, 2000). In 1989, Yi described customer satisfaction as an outcome of perception, evaluation as well as psychological reaction to the consumption experience with the good or service. It is a consideration that service quality was an overall attitude of clients to service enterprises (Levesque & McDougall, 1996). Sureshchander et al. (2002) believed that the level of customer satisfaction was defined by their past experiences at their point of view toward service firms. In order to deliver service effectively and efficiently, it is very import to determine customer satisfaction. Moreover, when customers are satisfied, they will benefit the firms much, including: repeat patronage, positive word-of mouth communications, enhancing companies' reputation (Cronin & Taylor, 1992; Anderson & Gerbing, 1998; Bolton et al., 2000; Russ, 2006; Cam et al., 2019). As a result, the aviation enterprises must understand what passengers need and expect so the firms will implement improvements to create high quality services to meet customers' needs and expectations. This will be a competitive advantage for the airlines in huge competition today.

2.6 Customer loyalty

In 1999, Oliver defined customer loyalty as a promise of customer to purchase the similar goods or services of the previous preferred experiences. He also recommended that the customer loyalty is a commitment made by clients that they are going to repurchase the goods or services when needs appear. According to Lee and Cunningham (2001), customer loyalty is "a tendency to be a customer of current suppliers depending on their previous experiences and expectations for the future".

Moreover, in Uncles et al. (2003), customer loyalty is clients' manifest behaviors toward several things related to the company such as: goods or services categories, brand name, and brand image. Customer loyalty is very essential for any firms that would like to be successful in the market and this element is strongly affected by customer satisfaction.

3. Research methodology

3.1. Data collection

In this research, there were 314 collected responses. However, the reliable sample size was 300 after deleting some unreliable ones. The sample size was big enough to reflect the population's characteristics. The target respondents are Vietnamese SkyMiles members who stay at Silver, Gold, Platinum, and Diamond and they have already experienced Delta Air Lines frequent flyer program and their responses can illustrate the Delta Air Lines customer loyalty.

3.2. Structure equation modeling (SEM)

In order to predict and resolve the relationship among independent and dependent variables as well as to provide quantitative test for hypothesis testing, structure equation modeling test was utilized because it uses different models. Analyzing observed variables and latent variables as well as measurement errors are also involved in SEM test. As a result, the results of validity and reliability then become more reliable. In addition, SEM covers confirmatory factor analysis. Hence, after running confirmatory factor analysis, SEM model would be adjusted and tested with the aim of examining built hypotheses.

3.3. Confirmatory factor analysis (CFA)

Confirmatory factor analysis may help researchers test the measured variables represented how good constructs are. It is a tool to decide which hypothesis needs to be accepted or rejected in the previous built model. It also gives an assertive measurement theoretical testing. CFA was used to measure good-of-fit of the model and the data points, so it requires several indexes such as: Chi-square (CMIN), adjusted chi-squared in degree of freedom (CMIN/df), good-of-Fit (GFI), comparative fit index (CFI), Tucker and Lewis index (TLI), and a root mean squared error approximation (RMSEA). When Chi-square test has P-value less than .05, the model is considered as appropriate with the market data. In 2009, Tho and Trang stated that when the model is relevant with the data, it must satisfy the following requirements such as: $TLI \geq 0.9$, $CFI \geq 0.9$, $CMIN/df \leq 2$, and $RMSEA \leq 0.08$. According to Hair et al. (1998), the testing of composite reliability and variance extracted must be more than 0.5

3.4. Bootstrap testing

By running bootstrap testing in Microsoft Excel, a resampling method that enhances the sample plays a similar role as the population, the result of the sample can reflect the result of the population. Thus, this test increases the reliability of the hypothesis. Criteria for conforming the test is the TDIST value of each impact which must be approximated to 1.

4. Findings

4.1. Appropriate measure

Table 1 displays the overall fit summary for CFA of customer loyalty after standardizing.

Table 1
Model fit summary (CFA)

| Index | Value | Conclusion |
|------------------------|--------------|-------------|
| Chi-squared (CMIN) | 592.771 | |
| Degree of freedom (df) | 335 | |
| CMIN/df | 1.769 < 2 | Satisfied |
| Chi-squared P-value | 0.000 < 0.05 | Significant |
| CFI | 0.916 > 0.9 | Satisfied |
| TLI | 0.905 > 0.9 | Satisfied |
| RMSEA | 0.051 < 0.08 | Satisfied |

From the results of Table 1, it can be clearly observed that all indexes were satisfied with the requirements. Thus, we can conclude that there were enough provided evidences of reasonably excellent fit.

4.2. Convergent Measure

Table 2 presents the results of convergent measure for different components of the proposed algorithm.

Table 2
Regression weight (CFA)

| | | Estimate | S.E. | C.R. | P | | | Estimate | S.E. | C.R. | P | | |
|-----|---|----------|-------|------|--------|-----|-----|----------|-------|-------|--------|--------|-----|
| PV3 | ← | PV | 1.000 | | | SQ4 | ← | SQ | 1.000 | | | | |
| PV1 | ← | PV | 1.237 | .114 | 10.806 | *** | SQ2 | ← | SQ | .877 | 10.855 | *** | |
| PV2 | ← | PV | 1.087 | .107 | 10.136 | *** | SQ3 | ← | SQ | .944 | .095 | 9.896 | *** |
| PV5 | ← | PV | .961 | .105 | 9.118 | *** | SQ5 | ← | SQ | .891 | .082 | 10.905 | *** |
| PV4 | ← | PV | 1.053 | .118 | 8.945 | *** | PP1 | ← | PP | 1.000 | | | |
| PV6 | ← | PV | .871 | .099 | 8.831 | *** | PP2 | ← | PP | 1.410 | .122 | 11.529 | *** |
| CS1 | ← | CS | 1.000 | | | *** | PP3 | ← | PP | .857 | .092 | 9.317 | *** |
| CS2 | ← | CS | 1.042 | .085 | 12.321 | *** | PP4 | ← | PP | 1.128 | .110 | 10.221 | *** |
| CS3 | ← | CS | 1.010 | .087 | 11.617 | *** | CL1 | ← | CL | 1.000 | | | |
| CS4 | ← | CS | .793 | .079 | 9.995 | *** | CL2 | ← | CL | .887 | .088 | 10.088 | *** |
| CS5 | ← | CS | .903 | .092 | 9.825 | *** | CL4 | ← | CL | .881 | .096 | 9.167 | *** |
| BI2 | ← | BI | 1.000 | | | *** | CL3 | ← | CL | .837 | .091 | 9.158 | *** |
| BI4 | ← | BI | .846 | .073 | 11.559 | *** | | | | | | | |
| BI3 | ← | BI | .826 | .067 | 12.269 | *** | | | | | | | |
| BI5 | ← | BI | .788 | .080 | 9.799 | *** | | | | | | | |
| BI6 | ← | BI | .717 | .078 | 9.251 | *** | | | | | | | |

Table 2 presents the result of regression weight (CFA). It can be clearly observed that p-value was 0.000 that was less than 0.05. Therefore, The results are significant.

Table 3
Standardized Regression Weights (CFA)

| | | Estimate | | | Estimate | | Estimate | | | | |
|-----|---|----------|-------|-----|----------|----|----------|-----|---|----|-------|
| PV3 | ← | PV | 0.657 | BI2 | ← | BI | 0.796 | PP1 | ← | PP | 0.684 |
| PV1 | ← | PV | 0.783 | BI4 | ← | BI | 0.684 | PP2 | ← | PP | 0.824 |
| PV2 | ← | PV | 0.707 | BI3 | ← | BI | 0.699 | PP3 | ← | PP | 0.618 |
| PV5 | ← | PV | 0.624 | BI5 | ← | BI | 0.639 | PP4 | ← | PP | 0.703 |
| PV4 | ← | PV | 0.637 | BI6 | ← | BI | 0.602 | CL1 | ← | CL | 0.74 |
| PV6 | ← | PV | 0.582 | SQ4 | ← | SQ | 0.776 | CL2 | ← | CL | 0.699 |
| CS1 | ← | CS | 0.737 | SQ2 | ← | SQ | 0.746 | CL4 | ← | CL | 0.612 |
| CS2 | ← | CS | 0.77 | SQ3 | ← | SQ | 0.676 | CL3 | ← | CL | 0.643 |
| CS3 | ← | CS | 0.722 | SQ5 | ← | SQ | 0.674 | | | | |
| CS4 | ← | CS | 0.632 | | | | | | | | |
| CS5 | ← | CS | 0.626 | | | | | | | | |

Table 3 illustrates the result of standardized regression weights. We can easily observe that all estimate values were greater than 0.5 at significant level $p = 0.000$ (Anderson & Gerbing, 1988). Hence, it can be concluded that there was convergent validity in the measure.

4.3 Divergence Test

Table 4 illustrates the covariance among variables. As can be clearly seen, the significance of perceived value and service quality (0.132), customer satisfaction and service quality (0.166), brand image and service quality (0.493), service quality and pricing policy (0.092) as well as customer loyalty and service quality (0.992) were greater than 0.05. Thus, they were not significant.

Table 4
Covariance (CFA)

| | | Estimate | S.E. | C.R. | P | |
|----|---|----------|------|------|-------|------|
| PV | ↔ | CS | .214 | .040 | 5.405 | *** |
| PV | ↔ | BI | .264 | .044 | 5.959 | *** |
| PV | ↔ | SQ | .040 | .027 | 1.505 | .132 |
| PV | ↔ | PP | .197 | .035 | 5.631 | *** |
| CL | ↔ | PV | .180 | .037 | 4.831 | *** |
| CS | ↔ | BI | .333 | .049 | 6.760 | *** |
| CS | ↔ | SQ | .041 | .030 | 1.386 | .166 |
| CS | ↔ | PP | .221 | .038 | 5.819 | *** |
| CL | ↔ | CS | .239 | .042 | 5.714 | *** |
| BI | ↔ | SQ | .022 | .032 | .686 | .493 |
| BI | ↔ | PP | .249 | .041 | 6.130 | *** |
| CL | ↔ | BI | .137 | .042 | 3.283 | .001 |
| SQ | ↔ | PP | .043 | .025 | 1.684 | .092 |
| CL | ↔ | SQ | .000 | .030 | -.010 | .992 |
| CL | ↔ | PP | .173 | .036 | 4.858 | *** |

Table 5
Correlation (CFA)

| | | | Estimate | | | | Estimate |
|----|---|----|----------|----|---|----|----------|
| PV | ↔ | CS | 0.454 | CL | ↔ | CS | 0.471 |
| PV | ↔ | BI | 0.515 | BI | ↔ | SQ | 0.048 |
| PV | ↔ | SQ | 0.106 | BI | ↔ | PP | 0.516 |
| PV | ↔ | PP | 0.494 | CL | ↔ | BI | 0.248 |
| CL | ↔ | PV | 0.395 | SQ | ↔ | PP | 0.121 |
| CS | ↔ | BI | 0.584 | CL | ↔ | SQ | -0.001 |
| CS | ↔ | SQ | 0.099 | CL | ↔ | PP | 0.403 |
| CS | ↔ | PP | 0.498 | | | | |

The correlation values demonstrated the divergence difference was statistically significant between each pair of variables though the model under consideration. Table 5 gives us the information about those correlations. It can be clearly observed that each pair correlation was less than 0.9 so it proved that each pair of variables was well-correlated each other.

4.4 Composite reliability

In order to test the reliability of measurement, composite reliability result was displayed in Table 6 as follows,

Table 6
Composite reliability

| | | | Estimate | Error variance | Item R-squared |
|------------------------------|---|----|----------|----------------|----------------|
| PV3 | ← | PV | 0.657 | 0.568 | 0.432 |
| PV1 | ← | PV | 0.783 | 0.387 | 0.613 |
| PV2 | ← | PV | 0.707 | 0.500 | 0.500 |
| PV5 | ← | PV | 0.624 | 0.611 | 0.389 |
| PV4 | ← | PV | 0.637 | 0.594 | 0.406 |
| PV6 | ← | PV | 0.582 | 0.661 | 0.339 |
| CS1 | ← | CS | 0.737 | 0.457 | 0.543 |
| CS2 | ← | CS | 0.770 | 0.407 | 0.593 |
| CS3 | ← | CS | 0.722 | 0.479 | 0.521 |
| CS4 | ← | CS | 0.632 | 0.601 | 0.399 |
| CS5 | ← | CS | 0.626 | 0.608 | 0.392 |
| BI2 | ← | BI | 0.796 | 0.366 | 0.634 |
| BI4 | ← | BI | 0.684 | 0.532 | 0.408 |
| BI3 | ← | BI | 0.699 | 0.511 | 0.489 |
| BI5 | ← | BI | 0.639 | 0.592 | 0.408 |
| BI6 | ← | BI | 0.602 | 0.638 | 0.362 |
| SQ4 | ← | SQ | 0.776 | 0.398 | 0.602 |
| SQ2 | ← | SQ | 0.746 | 0.443 | 0.557 |
| SQ3 | ← | SQ | 0.676 | 0.543 | 0.457 |
| SQ5 | ← | SQ | 0.674 | 0.546 | 0.454 |
| PP1 | ← | PP | 0.684 | 0.532 | 0.468 |
| PP2 | ← | PP | 0.824 | 0.321 | 0.679 |
| PP3 | ← | PP | 0.618 | 0.618 | 0.382 |
| PP4 | ← | PP | 0.703 | 0.506 | 0.494 |
| CL1 | ← | CL | 0.740 | 0.452 | 0.548 |
| CL2 | ← | CL | 0.699 | 0.511 | 0.489 |
| CL4 | ← | CL | 0.612 | 0.625 | 0.375 |
| CL3 | ← | CL | 0.643 | 0.587 | 0.413 |
| Composite reliability | | | | | 0.962 |

Table 6 tells us that composite reliability of variables was 0.962 which was greater than 0.7. According to Hair et al. (1998), when the composite reliability is greater than 0.7, it would represent a good and acceptable fit.

4.5. Structure equation modeling

Fig.1 displays the overall fit summary for CFA of customer loyalty after standardizing and they are summarized in Table 7.

Table 7
Model fit summary (SEM)

| Index | Value | Conclusion |
|------------------------|--------------|-------------|
| Chi-squared (CMIN) | 609.672 | |
| Degree of freedom (df) | 338 | |
| CMIN/df | 1.804 < 2 | Satisfied |
| Chi-squared P-value | 0.000 < 0.05 | Significant |
| CFI | 0.911 > 0.9 | Satisfied |
| TLI | 0.900 = 0.9 | Satisfied |
| RMSEA | 0.052 < 0.08 | Satisfied |

Table 7 describes the result of SEM model fit. As can be clearly observed, all indexes were satisfied the requirements. The CMIN/df value was less than 2 as well as CFI and TLI values were greater or equal than 0.9. Moreover, Chi-square p-value was 0.000 that was less than 0.05 so it was proved that the results were significance. Furthermore, RMSEA value was less than 0.08 so it also satisfied the requirement. Thus, there were enough evidences for proving excellent model fit.

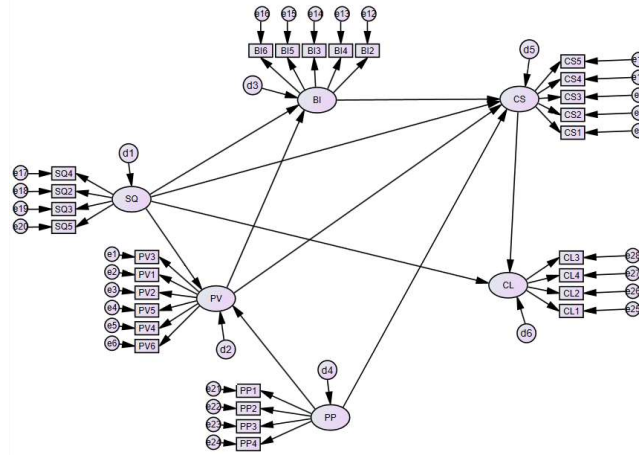


Fig. 1 SEM model

Table 8
Standardized regression weights (SEM)

| | | Estimate | | | | Estimate | |
|----|---|----------|-------|----|---|----------|--------|
| BI | ← | SQ | 0.06 | CS | ← | BI | 0.407 |
| PV | ← | SQ | 0.049 | CS | ← | PV | 0.154 |
| PV | ← | PP | 0.344 | CS | ← | PP | 0.284 |
| PV | ← | BI | 0.392 | CL | ← | CS | 0.474 |
| CS | ← | SQ | 0.033 | CL | ← | SQ | -0.048 |

4.8 Discussion on Hypotheses Testing

Table 9 summarized hypothesizes of this study. As can be clearly observed, the four hypothesizes called H_{1a} (Service quality has positive relationship with brand image), H_{1b} (Service quality has positive relationship with perceived value), H_{1c} (Service quality has positive relationship with customer satisfaction), and H_{1d} (Service quality has positive relationship with customer loyalty) were not supported since their p-values were greater than 0.05. In one word, it can be stated that service quality played nothing in measuring customer loyalty toward frequent flyers of Delta Air Lines. Among remained hypothesizes, hypothesis H₅ (Customer satisfaction has positive relationship with customer loyalty) had the greatest standardized regression weight (0.474) so customer satisfaction had a strong impact on customer loyalty of frequent flyers of Delta Air Lines. The standardized regression weights of hypothesizes H_{2b} (Brand image has positive relationship with customer satisfaction), H₃ (Perceived value has positive relationship with customer satisfaction), H_{4b} (Pricing policy has positive relationship with customer satisfaction) were 0.407, 0.154, 0.284 respectively which means brand image, perceived value, and pricing policy had positive impacts on customer satisfaction. Perceived values were also effected by brand image and pricing positively with standardized regression weights were 0.392 and 0.344 respectively.

Table 9
Summary of Hypotheses Testing

| Hypothesis | Standardized regression weights | P-value (significant level 0.05) | Conclusion |
|--|---------------------------------|----------------------------------|-------------|
| H1a: Service quality has positive relationship with brand image. | 0.060 | 0.393 | Not support |
| H1b: Service quality has positive relationship with perceived value. | 0.049 | 0.452 | Not support |
| H1c: Service quality has positive relationship with customer satisfaction. | 0.033 | 0.597 | Not support |
| H1d: Service quality has positive relationship with customer loyalty. | -0.048 | 0.481 | Not support |
| H2a: Brand image has positive relationship with perceived value. | 0.392 | 0.000 | Support |
| H2b: Brand image has positive relationship with customer satisfaction. | 0.407 | 0.000 | Support |
| H3: Perceived value has positive relationship with customer satisfaction. | 0.154 | 0.048 | Support |
| H4a: Pricing policy has positive relationship with perceived value. | 0.344 | 0.000 | Support |
| H4b: Pricing policy has positive relationship with customer satisfaction. | 0.284 | 0.000 | Support |
| H5: Customer satisfaction has positive relationship with customer loyalty. | 0.474 | 0.000 | Support |

4.9 The revised research model

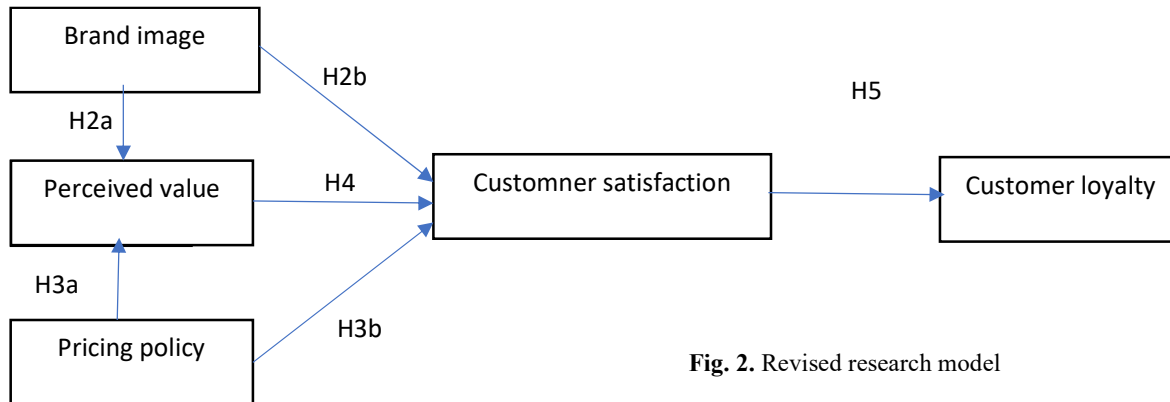


Fig. 2. Revised research model

5. Conclusion and recommendation

The results have shown positive relationships between brand image, perceived value, pricing policy, and customer satisfaction and customer loyalty of Delta Air Lines toward Vietnamese frequent flyers. The effects might be direct or indirect but they reflected well the theories and previous researches. The results have indicated that customer satisfaction strongly effected customer loyalty with significant level so it was essential for airlines companies, which would like to remain loyal to frequent flyers, to improve their customer satisfaction via brand image, perceived value, and pricing policy. Moreover, it was proved that perceived values were impacted by brand image and pricing policy. Thus, aviation firms should pay more attention on building strong brand name as well as on issuing suitable pricing policy for frequent flyer program members. The research model helped to discover determinants that had impact on customer loyalty so it could be utilized for determining customer loyalty of aviation enterprises in the future.

After drawing the result of the study, several limitations were recognized. First of all, this study was conducted within Vietnam market and with Vietnamese frequent flyers only so it could not reflect for the whole population of frequent flyers of Delta Air Lines in specific and aviation companies in general. However, this was also a recommendation for further studies about customer loyalty for frequent flyer program members. Next, this research might not cover all determinants of customer loyalty in aviation industry so the result reflected only one part of customer view point about customer loyalty. In the future, further researches should be built to discover more determinants that had impact on customer loyalty in order to generate a broader picture about aviation industry. Finally, the sample size was only 300 Vietnamese respondents so it might not reflect enough for a huge aviation company with long-lasting operation time like Delta Air Lines. The researcher suggested that further studies should be conducted with more respondents and more nationalities in order to achieve better result.

References

- Anh, T., Hanh, P., Cam, L., Van, K., & Dinh, L. (2019). A study of the factors affecting the content created by international travellers in Vietnam. *Management Science Letters*, 9(12), 2051-2062.
- Allahham, A. (2013). Determinants of customer satisfaction in healthcare services. *International Journal of Business and Management Innovation*, 2(12), 59-64.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), 411.
- Bishop Jr, W. R. (1984). Competitive intelligence. *Progressive Grocer*, 63(3), 19-20.
- Bitner, M. J., & Hubbert, A. R. (1994). Encounter satisfaction versus overall satisfaction versus quality. *Service Quality: New Directions in Theory and Practice*, 34(2), 72-94.
- Bloemer, J., De Ruyter, K., & Peeters, P. (1998). Investigating drivers of bank loyalty: the complex relationship between image, service quality and satisfaction. *International Journal of bank marketing*, 16(7), 276-286.
- Bolton, R. N., Kannan, P. K., & Bramlett, M. D. (2000). Implications of loyalty program membership and service experiences for customer retention and value. *Journal of the Academy of Marketing Science*, 28(1), 95-108.
- Cam, L. N. T., Anh, T. T., Moslehpour, M., & Thanh, X. D. T. (2019, February). Exploring the Impact of Traditional and Electronic Word of Mouth on Travel intention. In *Proceedings of the 2019 5th International Conference on E-Business and Applications* (pp. 83-87). ACM.
- Chou, C. C., Liu, L. J., Huang, S. F., Yih, J. M., & Han, T. C. (2011). An evaluation of airline service quality using the fuzzy weighted SERVQUAL method. *Applied Soft Computing*, 11(2), 2117-2128.
- Clemes, M. D., Wu, H. C. J., Hu, B. D., & Gan, C. (2009). An empirical study of behavioral intentions in the Taiwan hotel industry. *Innovative Marketing*, 5(3), 30-50.

- Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. *Journal of Marketing*, 56(3), 55-68.
- Dodds, W. B., & Monroe, K. B. (1985). The effect of brand and price information on subjective product evaluations. *ACR North American Advances*.
- Faullant, R., Matzler, K., & Füller, J. (2008). The impact of satisfaction and image on loyalty: the case of Alpine ski resorts. *Managing Service Quality: An International Journal*, 18(2), 163-178.
- Gursoy, D., Kim, K., & Uysal, M. (2004). Perceived impacts of festivals and special events by organizers: an extension and validation. *Tourism Management*, 25(2), 171-181.
- Hart, A. E., & Rosenberger III, P. J. (2004). The effect of corporate image in the formation of customer loyalty: An Australian replication. *Australasian Marketing Journal (AMJ)*, 12(3), 88-96.
- Holbrook, M. B., & Corfman, K. P. (1985). Quality and value in the consumption experience: Phaedrus rides again. *Perceived Quality*, 31(2), 31-57.
- Ishaq, M. I., Bhutta, M. H., Hamayun, A. A., Danish, R. Q., & Hussain, N. M. (2014). Role of corporate image, product quality and customer value in customer loyalty: Intervening effect of customer satisfaction. *Journal of Basic and Applied Scientific Research*, 4(4), 89-97.
- Kim, Y. K., & Lee, H. R. (2011). Customer satisfaction using low cost carriers. *Tourism Management*, 32(2), 235-243.
- Kotler P. (2000). *Marketing Management*. 10th edition. New Jersey, Prentice-Hall.
- Lee, M., & Cunningham, L. F. (2001). A cost/benefit approach to understanding service loyalty. *Journal of Services Marketing*, 15(2), 113-130.
- Levesque, T., & McDougall, G. H. (1996). Determinants of customer satisfaction in retail banking. *International Journal of Bank Marketing*, 14(7), 12-20.
- Lichtenstein, D. R., Ridgway, N. M., & Netemeyer, R. G. (1993). Price perceptions and consumer shopping behavior: a field study. *Journal of Marketing Research*, 30(2), 234-245.
- Lin, S. P., Chan, Y. H., & Tsai, M. C. (2009). A transformation function corresponding to IPA and gap analysis. *Total Quality Management*, 20(8), 829-846.
- Morash, E. A., & Ozment, J. (1994). Toward management of transportation service quality. *Logistics and Transportation Review*, 30(2), 115.
- Nguyen, N., & Leblanc, G. (2002). Contact personnel, physical environment and the perceived corporate image of intangible services by new clients. *International Journal of Service Industry Management*, 13(3), 242-262.
- Oliver, R. L. (1999). Whence consumer loyalty?. *Journal of marketing*, 63(4_suppl1), 33-44.
- Ostrowski, P. L., O'Brien, T. V., & Gordon, G. L. (1993). Service quality and customer loyalty in the commercial airline industry. *Journal of Travel Research*, 32(2), 16-24.
- Park, J. W., Robertson, R., & Wu, C. L. (2006). Modelling the impact of airline service quality and marketing variables on passengers' future behavioural intentions. *Transportation Planning and Technology*, 29(5), 359-381.
- Russ, K. R. (2006). Consumer expectation formation in health care services: A psycho-social model.
- Sureshchandar, G. S., Rajendran, C., & Anantharaman, R. N. (2002). The relationship between service quality and customer satisfaction—a factor specific approach. *Journal of Services Marketing*, 16(4), 363-379.
- Tho, N. D., & Trang, N. T. (2009). *Nghien Cuu Khoa Hoc trong Quan Tri Kinh Doanh* (Science Study in Business Administration). Ho Chi Minh City. Nha Xuat Ban Thong Ke (Statistics Press).
- Uncles, M. D., Dowling, G. R., & Hammond, K. (2003). Customer loyalty and customer loyalty programs. *Journal of Consumer Marketing*, 20(4), 294-316.
- Velimirović, D., Velimirović, M., & Stanković, R. (2011). Role and importance of key performance indicators measurement. *Serbian Journal of Management*, 6(1), 63-72.
- Yi, Y. (1991). A Critical Review of Consumer Satisfaction. In V. A. Zeithaml (Ed.), *Review of Marketing 1990* (pp. 68-123).
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2-22.

