

The Passengers' Feedback System Improvement in Low Cost Airline

¹Taksina seanyen

²Apaporn Hasoh

³Weerapan Chuayprasit

⁴Suttha Sanpetpanich

⁵Suwanna Khiewphakdi

^{1, 3} Phranakhon Rajabhat University

²Kasembundit University

⁴Stamford University

Email: apaporn.h@gmail.com

Received March 6, 2020; **Revised** April 26, 2020; **Accepted** June 20, 2020

Abstract

This paper analyzes the feedback process of passengers of low-cost airlines providing services in Thailand. Considering the existing feedback mechanisms, it raises the question of how to improve the overall feedback process to gain more insights about passengers. The researcher focused on the tools available today and used the results from the literature review and survey results to suggest ways to improve. Low-cost airlines will use the results of this survey together with their own commercial strategies to improve operations and services. This research is a survey of 400 passengers using low-cost airline services at Don Mueang Airport. The study indicated that there is a significant relationship in; Registration in the loyalty program and giving feedback, giving feedback and feedback channels, and the feedback process and flight frequency.

Keywords: Low cost airline, Feedback, passenger behavior, Feedback channel

Introduction

The aviation industry has been revolutionized by low-cost airlines. The market share of low-cost airlines has grown unprecedented worldwide in Europe, Oceania, South America, Asia and Australia. The rise of low-cost airlines requires the airline industry to adapt and meet specific needs (Pandey, 2020). Intense competition in the aviation industry makes airlines looking for the best strategy to maintain. (Sengpoh, 2015). Especially in Asia, air transportation is becoming a common form of travel, facilitated offered by low-cost airlines (Zhang et al., 2008). Not surprisingly, the rise of low-cost airlines and competition among them gives passengers more options to find better alternatives that provide lower fares and higher service standards. (Dolnicar, Grabler, Grun and Kulnig, 2011). These are all creating flight experiences, which have become important to differentiate the service and operation of each airline (Vojtek and Smudja, 2019). To gain a competitive advantage in the low-cost airline market, airlines must make significant efforts to increase passenger loyalty and increase word-of-mouth behaviors, thereby eventually increasing the firm's profits (Dolnicar et al., 2011; Mikulic and Prebezac, 2011). With high competition in the low-cost airline market that operated and services in Thailand. Therefore, the researcher has studied the passenger feedback system in order to provide useful suggestions for the airline further.

Research Objectives

To examine passengers behavior which divided into 2 terms. Firstly in term of characteristics, focus on the frequency of travel, main decision drivers of passengers when choosing an airline and membership in loyalty program(s). Secondly in term of review behavior, focus on if and how often passengers are giving feedback and reading reviews from other passengers, what would be their expectations in terms of feedback process itself and benefits (rewards for giving feedback) and feedback channel they preferred.

Literature Review

Due to fierce competition in the airline industry, airline companies need to focus on the experience and satisfaction of passengers (Siering, Deokar and Janze, 2018). In particular, customer

feedback is important as it is a measure of results for business efficiency (Li et al., 2017). A similar analysis was conducted between Ban and Kim's study (2019) based on airline passengers' online review and An and Noh (2009). The results of both studies show that there are different factors of flight quality that may be important, such as: seat class, beverages served, empathy of crew, presentation style and food quality. Not only considering the characteristics of the flight but still have to consider the operating results. The factors that must be considered include overall carrier on-time performance, cancellations, waiting queues, involuntary denied boarding, mishandled baggage, refunds, ticketing and etc. The Chow (2015) study shows the existence of a strong relationship between punctual airline operations and passenger complaints. Similar research conducted by Ubogu (2013) but is considered an airport-related satisfaction. Although the research does not focus on airlines or in-flight services but the method is the same and it is worth noting that the analysis points to the three important variables that passengers consider choosing an airport; the location of the airport in that region, time to access the airport and the frequency or number of flights, this is an airline perspective.

When talking about the passenger's perspective on how they perceive the quality that affects their loyalty to the airline. This has been reflected in the results of the Weber (2005) study, in which travelers participating in the survey emphasized to ensure that the airline received feedback from passengers. Airlines have created and implemented different feedback processes, including the collection, analysis and use of information. In collecting feedback and reviews of passengers, various tools are used which will be explained in the next paragraph. For data analysis, identifying various service dimensions and linking to passenger satisfaction. As well as creating complete insights about passenger travel satisfaction. For example, Hussain, Hasser and Hussain (2015) proposes the use of the SERVQUAL framework to define the dimensions of service quality. The data collected will be analyzed using the structural equation modeling and the results show that service quality, value recognition and the brand image has a significant positive impact on passenger satisfaction. Research by Chou, Liu, Huang, Yih and Han (2011) leverages the SERVQUAL framework with fuzzy weights. They can translate expectations and values into numerical forms. The other research that uses SERVQUAL is the research by Basfirinci and Mitra (2015) which is used in conjunction with the Kano

model. From the research, it can be concluded that the solution to the quality of the standardized service around the world is not enough for the airlines and Airlines need to adjust and arrange the services according to the needs of each market.

For collecting feedback, we have considered the methods available to review and read reviews (passenger views). For the purpose of analysis is to distinguish between two types of tools. The first type is portal (or platform) that is disclosed to the public such as Trip advisor (2019) through proactive methods. Trip advisor has compiled passenger data such as specified and favorite behavior. This is a widely used social media platform and the visitor's goal is to gain insights into travel tips. Brochado et al. (2019) emphasizes the importance of feedback about the flight experience that passengers have shared on social media platforms. As mentioned, it has been confirmed by Hudson and Thal (2013) that has highlighted their research benefits. By stating that companies in the tourism industry will receive from their participation in social media. Clearly, even a single bad review can have a big impact on the airline's business and operations. Having an online social network and public platform makes it easy for passengers to leave comments and gather feedback from other passengers. Skytrax (airlinequality.com) is an airline quality evaluation website that conducts online assessments after customers use each airline directly (Siering, Deokar and Janze, 2018). Skytrax works for over 150 airlines around the world, from the largest airlines in the world to small domestic carriers and is a globally recognized brand that provides inspection and professional testing service standards for airlines. They hire professional auditors to assess the quality of the work, both on the plane and in the airport. These evaluations are based on consistent standards (Xu, Liu and Gursoy, 2018). Platforms like Trip advisor and Skytrax (airlinequality.com) are user-centric and focus on providing ease of public review and access to reviews. Which they provide free access to travelers, which not only means posting reviews but also to read the written experience from other passengers. The platform that generates the most revenue from the Review Participation program. All passengers will be rewarded by increasing his or her rank on the platform, which is a form of prestige on social networks.

The second type of tools is software that is used as a service model and used by airlines to gather information. A good example might be the customer experience management service used

by many airlines. This service can collect specific information and behavior from multiple channels, including reservation systems, applications, surveys etc. Companies are fully aware of the needs of passengers, even without passengers telling them. One of the main sources of information is the loyalty program. Which is useful for airlines to receive information about passenger satisfaction and motivation for passengers to choose the services of the airline through identifying things such as referred seat, class of travel, budget, frequency of travel, specific time periods and etc. Support for research conducted by Mimouni– Chaabane and Volle (2010), the main prize is monetary savings, exploration, entertainment, recognition, and social benefits. The most popular thing is earned extra miles which can be used as discounts on your next trip or receive free extra services (extra baggage, priority boarding, lounge access and etc.). On the other hand, the social platforms mentioned earlier are paid services and fees that airlines pay based on the number of passengers boarding. In addition to the foregoing, Wojtek and Smudja (2019) study found that the main points of the analysis of the survey indicate that the frequency of travel does not relate to whether passengers will comment or not and membership in the Loyalty program is related to whether passengers express their views or not.

Hypothesis

To assess and point out directions for improvement, we conducted a survey consisting of different questions with the aim of testing three main hypotheses and sub-hypotheses:

H1. Giving feedback about the flight experience depend on the frequency of travel.

h1.1: People who fly more often are more likely to provide and read a review about the flight experience;

h1.2: People who fly more often use price and time of departure as main decision drivers when choosing an airline.

H2. Giving feedback about the flight experience depend on the enrollment in loyalty program(s).

h2.1: Members of loyalty program(s) are more likely to provide a review about the flight experience.

h2.2: Members of loyalty program(s) use ancillaries/services and number of connections as main decision drivers when choosing an airline.

H3. Feedback process (anonymous and unbiased service, Channel) motivates people to provide review about the flight experience.

h3.1: People who are providing reviews expect some sort of reward;

h3.2: People who are providing and reading reviews think that unbiased service would be beneficial;

h3.3: People who fly more often think that unbiased service would be beneficial;

h3.4: Members of loyalty program(s) expects mostly loyalty miles as rewards.

h3.5: People who are providing reviews preferred to give feedback in flight as a channel for giving feedback.

Methodology and Data Collection

We have collected data from passenger of low-cost airlines in the amount of 400 people using three main airlines (Low cost airlines); Thai air Asia, Nok air and Thai lion air at Don Mueang Airport, which is the country's secondary airport that provides services to all low-cost airlines and uses Pearson Chi-Square statistics for inspection. The relationship between variables and hypothesis were tested.

Results

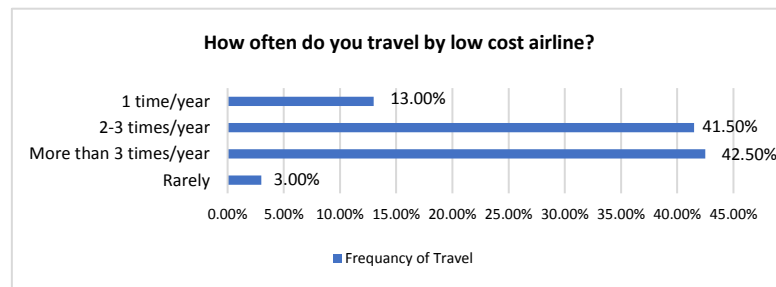


Fig. 1. Frequency of Travel

According to the Fig. 1, most respondents travel by low-cost airlines. (Traveling more than times/year, 42.50% and traveling 2–3 times/year, 41.50%) and just 3% rarely traveled at all.

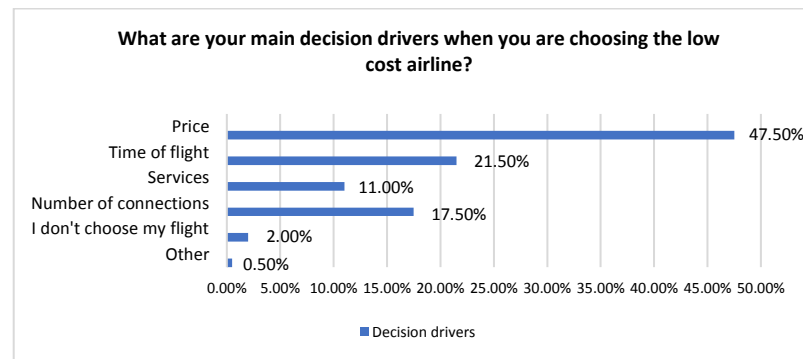


Fig. 2. Main Decision Drivers for Choosing an Airline

As shown in Fig. 2, there are 3 main decisions to choose low-cost airlines, such as price (47.50%), Time of flight (21.50%) and Number of connections (17.50%).

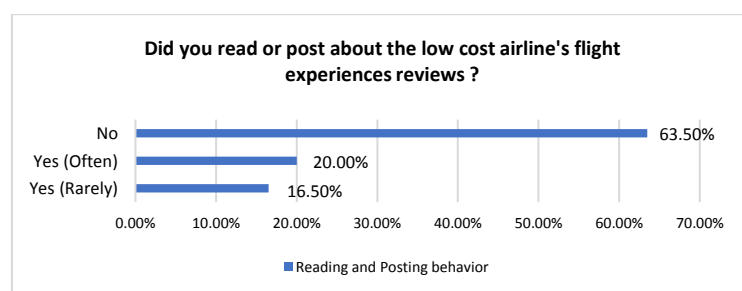


Fig. 3. Reading and Posting Review Behavior

Next, Fig. 3 shows that more than half of the unread or post about the low cost airline's flight experiences reviews (63.50%)

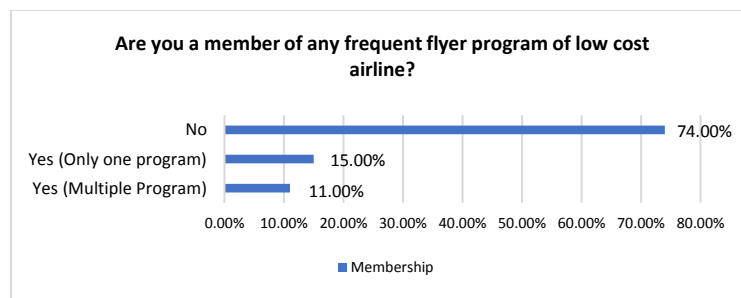


Fig. 4. Membership in any Loyalty or Frequent Flyer Programs

Fig. 4, more than half of the respondents are not members of the frequent flyer program (74%).

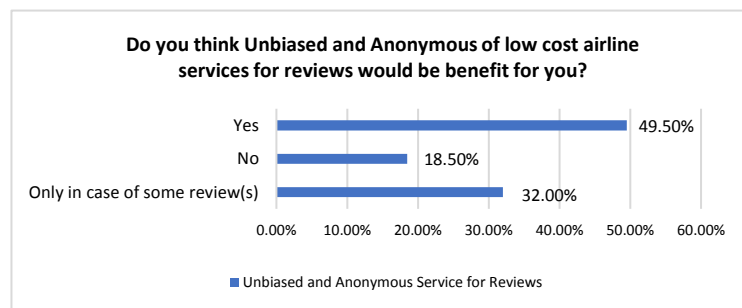


Fig. 5. Unbiased and Anonymous Service for Reviews

Nearly half (49.50%) of Unbiased and Anonymous Service for Reviews respondents think that Unbiased and Anonymous of low cost airline services for reviews are useful, and 32.00% of respondents think that Unbiased and Anonymous Service for Reviews useful in some cases.

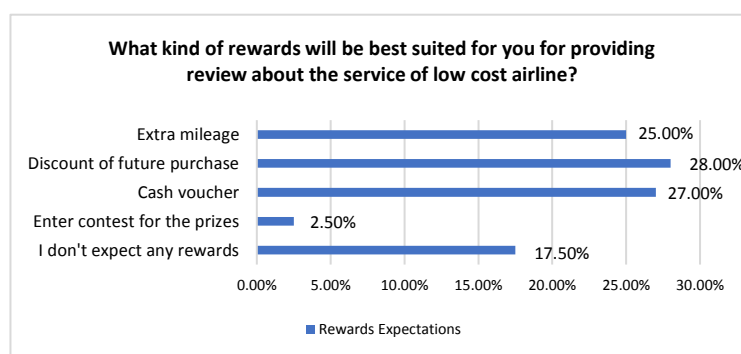


Fig. 6. Rewards Expectations for Providing Feedback

From the results of Fig. 6, it was found that there are three major kind of reward expectations; Discount of future purchase (28.00%) Cash voucher (27.00%) and Extra mileage (25.00%) and some of respondents don't expect any rewards (17.50%)

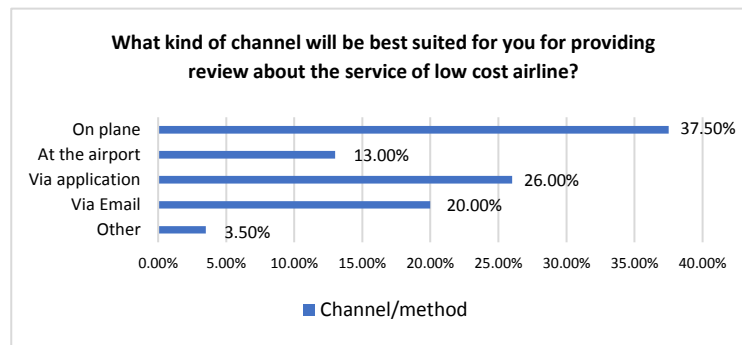


Fig. 7. Channel for giving feedback

As shown in Fig. 7, it is found that there are three top channels of the channel that are appropriate for respondents to provide feedback on low-cost airline services, including giving feedback on plane (37.50%). via application (26.00%) and via email (20.00%)

Hypothesis Review

Hypothesis 1 is a review of the feedback about the flight experience, depending on the frequency of travel (include 2 sub-hypothesis as specified above). With the sub-hypothesis 1.2 has examined the travel differences of 2 groups of people: people who fly often (2–3 times/year and more than 3 times/year) and people who fly rarely (rarely and 1 time/year) to the first hypothesis are compiled and showed on Figures 8 and 9.

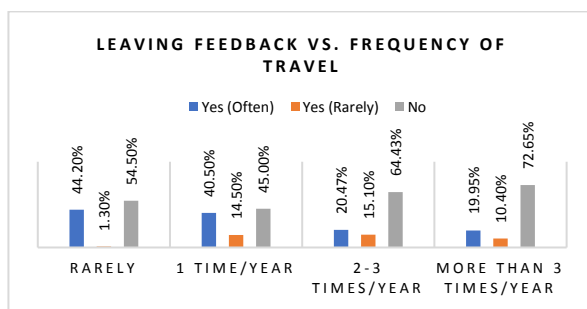


Fig. 8 Giving Feedback vs. Frequency of Travel

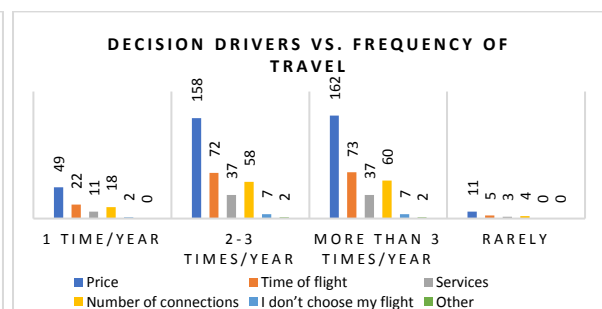


Fig. 9. Decision Drivers vs. Frequency of Travel

The first point in reviewing this hypothesis is to consider that people who fly more often are more likely to give and read reviews about their flying experience. As shown in Figure 8, it is found that only a group of people who fly once a year provide services and read more reviews than others (54% total), so we can say that it is not necessary that people who fly often is more likely to give and read comments in the decision drivers section. Those who fly more often use the price and time

of departure as the primary decision driver when choosing an airline. When talking about decision-drivers, people who fly more often will use the price (320 times chosen by respondents who fly more often) and departure times (145) as the main decision-drivers. Aside from this, it is important to mention that the number of connections is a very important decision-driver (118).

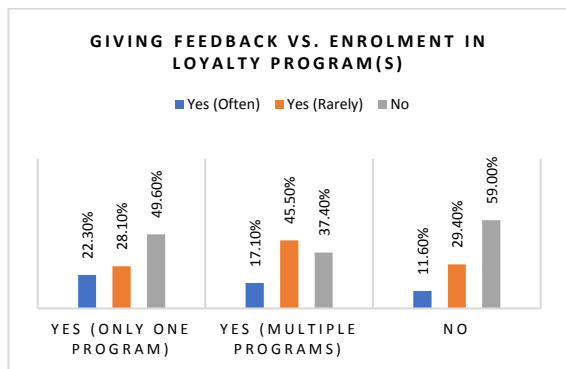


Fig. 10. Giving Feedback vs. Enrolment in Loyalty Program(s)

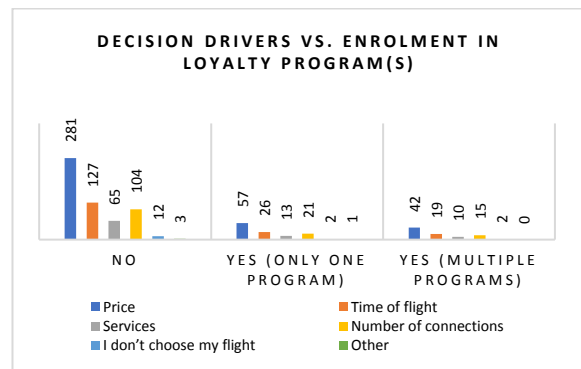


Fig. 11. Decision Drivers vs. Enrolment in Loyalty Program(s)

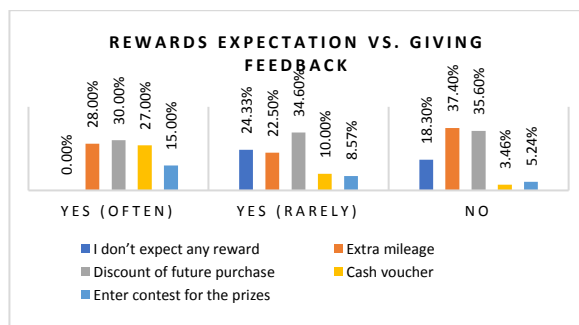


Fig. 12. Rewards Expectation vs. Giving Feedback

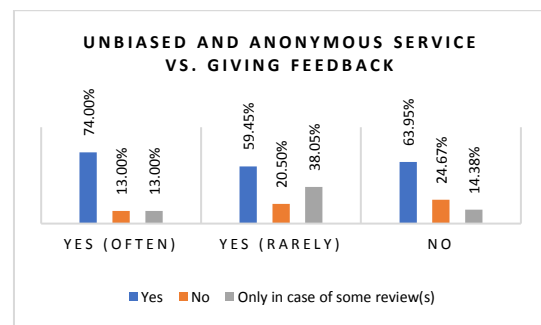


Fig. 13. Unbiased and Anonymous Service vs. Giving Feedback

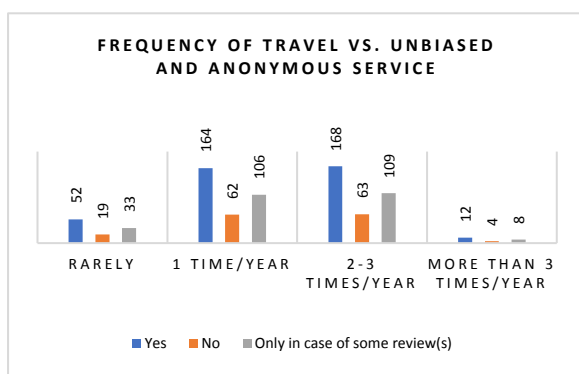


Fig. 14. Frequency of Travel vs. Unbiased and Anonymous Service

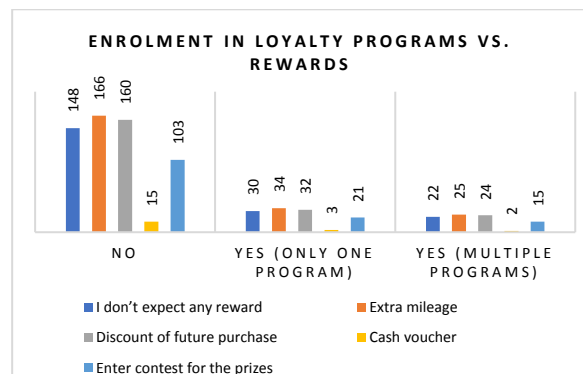


Fig. 15. Enrolment in Loyalty Programs vs. Rewards

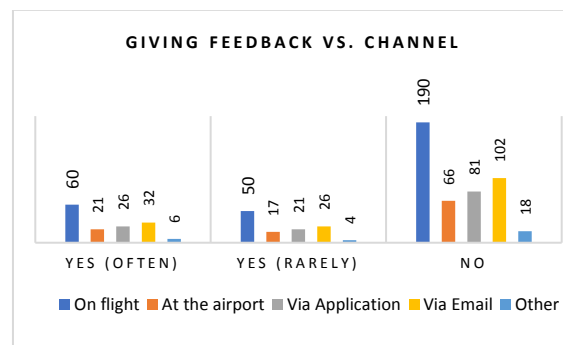


Fig. 16. Giving Feedback vs. Channel

With the second hypothesis, we were investigated whether commenting about the flight experience is based on enrollment in the loyalty program. The results related to the second hypothesis are compiled and shown in Fig. 10 and 11. The second point in this subsection determines whether members of the Loyalty Program are likely to give and read reviews about their flying experience. As shown in Figure 10, this message may be true, as we have only about 50.3 % of the members and about 62.6 % of the members said they leave and read feedback about their flying experience. When talking about decision-drivers as shown in the figure 11. Price is still the most important factor for loyalty program members and non-member passengers.

With the third hypothesis, we are investigating whether the feedback process (Anonymous and unbiased service, feedback channels) encourage people to comment on their flying experience. We support this with 4 sub-hypotheses. The results related to the third hypothesis and sub-hypotheses are compiled and shown in Fig. 12, 13, 14 and 15 respectively. The starting point for the third hypothesis is that those who make comments expect to receive some kind of return. From Fig. 12, people who give and read reviews often expect to receive awards, and only 23.57 % of people who rarely give and read comments do not expect to receive any awards. As shown in the Fig. 13, most commented frequently (87%) or somewhat (97.5%) think that a neutral and anonymous for the review to be helpful. When talking about the frequency of travel. As shown in Figure 14, those who fly more than three times a year hardly think that neutral and anonymous services are useful. Later, in fig. 15, members of the loyalty program expect that most of the miles will be rewarded. But those who are not registered in any program, should be talking about this final question that may have a slight overlap, meaning that the mileage may be achieved and can still

be used in some airline programs to offer discounts to passengers for future purchases and finally, the Fig.16 respondents want to give the most feedback while on the plane.

Statistical Tests

Considering the only response from the previous subsection, it is not possible to decide whether to accept or reject the stated research hypothesis. Capturing similar topics in the same airline industry, Vojtek and Smudja (2019), the author collects information from travelers about giving feedback on overall airline services and using chi-square tests to explore. Relationships and differences in responses. For the purposes of this analysis, chi-square statistics were tested to examine the relationships between variables as follows;

Hypothesis 1 (Giving feedback about the flight experience depend on the frequency of travel):

H0: Giving feedback about the flight experience is not associated with the frequency of travel;

H1: Giving feedback about the flight experience is associated with the frequency of travel.

Hypothesis 2 (Giving feedback about the flight experience depend on the enrollment in loyalty program(s):

H0: Enrollment in loyalty program(s) is not associated with giving feedback;

H1: Enrollment in loyalty program(s) is associated with giving feedback.

Hypothesis 3 (Giving feedback about the flight experience depend on channel to give feedback):

H0: Giving feedback about the flight experience is not associated with the channel to give feedback;

H1: Giving feedback about the flight experience is associated with the channel to give feedback.

Hypothesis 4 Feedback process (anonymous and unbiased service) motivates people to provide review about the flight experience) we conducted three tests:

Comparing to the flying frequency of passengers:

H0: Feedback process is not associated with flying frequency of passengers;

H1: Feedback process is associated with flying frequency of passengers.

Comparing to the enrollment in loyalty program(s):

H0: Feedback process is not associated with the enrollment in loyalty program(s);

H1: Feedback process is associated with the enrollment in loyalty program(s).

Table 1 Chi-square Test Results

Hypothesis	Pearson Chi-Square value	df	Asymp. Sig. (2-sides)
Hypothesis 1	1.412	2	0.494
Hypothesis 2	18.548	6	0.017
Hypothesis 3	6.908	3	0.023
Hypothesis 4 (Travel frequency)	20.729	3	0.008
Hypothesis 4 (Loyalty program)	7.732	4	0.102

The significance level selected for the statistical tests conducted is $\alpha = 0.05$. From the table, it can be concluded that from this research, there are three hypotheses that are statistically related. That is to say, the second hypothesis reveals the statistical relationship found between enrollment in loyalty programs and comments. The third hypothesis reveals a statistical relationship between the feedback and the feedback channels. The fourth hypothesis reveals a statistical relationship between the feedback process and the flight frequency of passengers

Findings Consolidation and Discussion

The results of literature review and survey analysis support the Vojtek and Smudja (2019) study of passenger feedback, which correlates with travel frequency and loyalty program membership significantly. Airlines must have convincing and effective methods to collect and analyze feedback or comment of passenger. On the other hand, passengers expect transparent behavior in the service and operation of the airline. According to the literature review, the airline uses various channels to collect flight experience information from passengers and use different frameworks to

gain insights about passenger needs. A simple solution to analyzing airline data is not enough for airlines and to get quality and useful educational results, complex frameworks have been implemented in Hussain et al. (2015)'s study. According to the literature analysis, there are two ways to collect feedback: publicly available platform and software as a service model used by airlines. The first channel is an opportunity for people and the second is a closed system for internal use lines. The main benefit of using the feedback mechanism on both the passenger side and the airline side is budget savings, exploration and recognition.

The survey was conducted with the objective of examining the nature of passenger travel and reviewing behaviors to assess and suggest directions for improvement. The overall conclusions are;

The frequency of travel is related to the feedback process that passengers expect. Unbiased and anonymous feedback and review service; Membership in the loyalty program has a relationship whether the passenger will leave feedback or not and the channel of feedback is related to the passenger will leave feedback or not. From the results, there are suggestions as follows;

Data collection: It is very important for passengers to be confident in their review, so we recommend using new methods to design unbiased services, anonymous and channel permission, such as using a device to facilitate data collection. Data Processing: Must have a complex framework for data processing. Our suggestion is to use a combination method, which means using both statistical and intelligent calculation techniques. (Such as logical integration, it is possible to distinguish passengers according to their preferences)

Conclusion

When considering the overall feedback process, airlines need to have relevant methods for collecting information and passengers need a transparent and reliable way to provide and access recommendations. Changing the focus on the passenger side, commenting will depend on how the overall response process is established. But may depend on the motivation and nature of the trip. This article aims to assess the feedback process and tools and to verify that the comments are based on the characteristics of the passenger. The analysis is carried out in two steps. The literature review

states that airlines need a reliable way to collect and analyze opinions from passengers and passengers expect the transparent behavior of the airline, personal service and high quality. The main points of the analysis of the survey indicate that the frequency of travel is unrelated to whether or not a passenger will give a feedback and that membership in the loyalty program is related to whether the passenger will give a feedback.

From all the findings, two recommendations have been set for airlines to consider at certain times when designing the passenger feedback process. Airlines should use a new approach to designing anonymous, unbiased services, permission and channel, such as using the device to facilitate data collection. And should use both statistical and intelligent techniques for data processing frameworks. A suggestion for further analysis is to invest in more effort to get more answers. Make sure that a broader audience with captured demographic characteristics remains.

References

- An, M., & Noh, Y. (2009). Airline customer satisfaction and loyalty: impact of in-flight service quality. *Service Business*, 3(3), 293–307.
- Basfirinci, C., & Mitra, A. (2015). A cross cultural investigation of airlines service quality through integration of Servqual and the Kano model. *Journal of Air Transport Management*, 42, 239–248.
- Brochado, A., Rita, P., Oliveira, C., & Oliveira, F. (2019). Airline passengers' perceptions of service quality: themes in online reviews. *International Journal of Contemporary Hospitality Management*, 31(2), 855–873.
- 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 SERVQUA L method. *Applied Soft Computing*, 11(2), 2117–2128.
- Chow, C.K.W. (2015). On-time performance, passenger expectations and satisfaction in the Chinese airline industry. *Journal of Air Transport Management*, 47, 39–47.
- Dolnicar, S., Grabler, K., Grun, B., & Kulnig, A. (2011). Key drivers of airline loyalty. *Tourism Management*, 32, 1020–1026.

- Hudson, S., & Thal, K. (2013). The Impact of Social Media on the Consumer Decision Process: Implications for Tourism Marketing. *Journal of Travel & Tourism Marketing*, 30(1-2), 156-160.
- Hussain, R., Hasser, A. A., & Hussain, Y. K. (2015). Service quality and customer satisfaction of a UAE-based airline: An empirical investigation. *Journal of Air Transport Management*, 42, 167-175.
- Hyun-Jeong, Ban, & Hak-Seon, Kim. (2019). Article Understanding Customer Experience and Satisfaction through Airline Passengers' Online Review. *Sustainability*, 11(15), 4066.
- Mimouni-Chaabane, A., & Volle, P. (2010). Perceived benefits of loyalty programs: Scale development and implications for relational strategies. *Journal of Business Research*, 63(1), 32-37.
- Mikulic, J., & Prebezac, D. (2011). What drives passenger loyalty to traditional and low-cost airlines? A formative partial least squares approach. *Journal of Air Transport Management*, 17, 237-240.
- Sengpoh L. (2015). The Competitive Pricing Behaviour of Low Cost Airlines in the Perspective of Sun Tzu Art of War Procedia. *Social and Behavioral Sciences*, 172(2015), 741-748.
- Siering, M., Deokar, A. V., & Janze, C. (2018). Disentangling consumer recommendations: Explaining and predicting airline recommendations based on online reviews. *Decis Support Syst*, 107, 52-63.
- Li, W., Yu, S., Pei, H., Zhao, C., & Tian, B., (2017). A hybrid approach based on fuzzy AHP and 2-tuple fuzzy linguistic method for evaluation in-flight service quality. *Journal of Air Transport Management*, 60, 49-64.
- Tripadvisor. (2019). *Airlines review section*. Retrieved from <https://www.tripadvisor.com/Airlines>
- Ubogu, A. E. (2013). Determinants of Passengers' Choice: A Case Study of Mallam Aminu Kano International Airport (Nigeria). *International Journal for Traffic and Transport Engineering*, 3(3), 230-242.
- Vojtek, N, Smudja, B. (2019). IMPROVING THE PASSENGER FEEDBACK PROCESS IN AIRLINE INDUSTRY. *International Journal for Traffic and Transport Engineering*, 9(2), 255-269.
- Weber, K. (2005). Travelers' Perceptions of Airline Alliance Benefits and Performance. *Journal of Travel Research*, 43(3), 257-265.

Xu, X., Liu, W., & Gursoy, D. (2018). The impacts of service failure and recovery efforts on airline customers' emotions and satisfaction. *Journal of Travel Research*, 58, 1034–1051.