Factors Influencing In-flight Service Quality towards Airline Passenger Loyalty in Myanmar, at Yangon Airport

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Abstract

This study aims to analyze the influence of in-flight service quality on factors towards airline passenger loyalty in Myanmar, at Yangon Airport. The key variables as the factors include perceived value, electronic-word of mouth (EWOM), passenger satisfaction and airline brand image. This research employs a non-probability sampling method in collecting data from online questionnaires using quantitative research methodology with simple and multiple linear regressions and descriptive data analysis to provide a comprehensive understanding of passengers' perceptions and experiences. The results show that passenger satisfaction is the strongest influence on passenger loyalty, followed by airline brand image and EWOM. **Purpose**: The purpose of this study aims to identify the influence of in-flight service quality on the variables towards passenger loyalty in Myanmar, at Yangon Airport. As the aviation industry continues to grow, understanding the influence of in-flight service quality on the factors towards passenger loyalty has become crucial for airlines. By identifying the influence of in-flight service quality through the passenger loyalty, this study examines the positively impact on passenger loyalty which helps to Myanmar airlines enhancing positive passenger experiences through in-flight service and building long-term relationships with passengers leading to ultimate growth. **Design/Methodology/Approach**: This study employs quantitative research method to comprehensively investigate the influence of in-flight service quality on the variables towards passenger loyalty. Through a non-probability method using snowball sampling approaches, data is collected online surveys from passengers who have flown with Myanmar airlines and flown from Yangon Airport. The survey in the questionnaires includes three sections with total 29 items to collect data. Moreover, JAMOVI Program is used to test the reliability of questionnaires with pilot test and the hypotheses of the research. **Findings**: This study reveals that the influencing of in-flight service quality towards passenger loyalty based on the factors: passenger satisfaction which is the most significantly influence, followed by airline brand image and lastly, EWOM. **Research Limitations/Implications**: This study is specific to Myanmar Airlines and their services, limiting the application to the broader airline industry, which varies in quality across different airlines, regions, and customer segments. However, this study has implications for airlines seeking to enhance passenger experiences and loyalty through tailored in-flight service offerings. **Originality/value**: This study contributes to the growing body of knowledge in the field of aviation and passenger perceptions, particularly in the unique context of Yangon Airport and Myanmar's aviation landscape.

Keywords: In-flight Service Quality, Perceived Value, Electronic-Word of Mouth (EWOM), Passenger Satisfaction, Airline Brand Image, Passenger Loyalty

JEL classification code: M3, M30, M31, M37

Introduction

Background of the study

The airline industry plays a vital role in transportation, connecting people and doing business across the destinations to and from. In recent years, the data of using air transportation in Myanmar has indicated the significant growth with an increasing number of passengers (*World Bank, 2009*).

Figure 1.

Numbers of passengers carried by air carriers registered in Myanmar

Source: *International Civil Aviation Organization, Civil Aviation Statistics of the World and ICAO staff estimates (2009).*

Due to the covid-19 breakdown in Myanmar in 2020-2021, the numbers of passengers carried by air transport declined from seven digits to six digits by data shown in Department of Civil Aviation, Ministry of Transport and Communications, Myanmar (https://www.dca.gov.mm/). Starting from 2022, the numbers turned to increase seven digits back and the airlines in Myanmar are back to operate their routes and sectors to sectors in both domestics and international throughout the world. As the industry is competitive, airlines have to identify their cores to differentiate themselves from the others. Since airline industry is based on the service serving to passengers on board, the in-flight service quality offered to passengers must be superior services which fulfill the passengers' expectations with the result of leading to passenger loyalty on the airlines. Understanding the factors that influence passenger loyalty is crucial for airlines to thrive among competitive market and to maintain their reputation.

Accordingly, the background of this study is to analyze the influence of in-flight service quality on the factors which influencing the passenger loyalty in the airline industry. This study will look into these variables; perceived value, electronic-word of mouth (EWOM), passenger satisfaction and airline brand image on passenger loyalty. The previous studies by other researchers have already shown the relationships between these variables. With the expansion of similar and different perspectives, the research expects this study complete the representation of information as a reliable source.

Problem statements

As society continually adapts to evolving lifestyles and a changing world, the need for flexibility and adaptability becomes increasingly vital. It is crucial to recognize that passengers prioritize various aspects of in-flight service quality differently, making it a challenge to identify a single "most important" factor influencing loyalty. Addressing these complexities necessitates comprehensive research, with the dual objectives of (1) assessing the current state of in-flight service quality in the airline industry and (2) identifying gaps and offering recommendations to elevate service standards. Thus, this research seeks to investigate the factors shaping the influence of in-flight service quality on airline passenger loyalty. By exploring multiple dimensions, including perceived value, electronic word-of-mouth (EWOM), passenger satisfaction, airline brand image, and passenger

loyalty in the context of Myanmar Airlines, we aim to enhance passengers' positive in-flight experiences and encourage their return to fly with Myanmar airlines in the future.

Objectives of the study

1) To identify the influence of in-flight service quality on perceived value, EWOM, passenger satisfaction, and airline brand image in the airline industry.

2) To identify the influence of perceived value, EWOM, passenger satisfaction, and airline brand image on passenger loyalty in the airline industry.

Research Questions

1) Does in-flight service quality have a significant influence on perceived value?

2) Does in-flight service quality have a significant influence on EWOM?

3) Does in-flight service quality have a significant influence on passenger satisfaction?

4) Does in-flight service quality have a significant influence on airline brand image?

5) Do perceived value, EWOM, passenger satisfaction, and airline brand image have a significant influence on passenger loyalty?

Significance of the study

This study will help the airlines in Myanmar to get benefits focusing on the influence of in-flight service quality on the factors through passenger loyalty. Passengers who have a positive experience during their flight are more likely to have a favorable impression of the airline and become returning customers and recommend the airline to their surroundings. As a result of retaining passenger loyalty, it leads to maintaining the airline's reputation and increasing customer base. Overall, in-flight service quality is important because it directly impacts perceived value, EWOM marketing, passenger satisfaction met with expectations, airline brand image, and passenger loyalty. By focusing on the quality of in-flight service, airlines can improve themselves by fostering passenger loyalty, enhancing their reputation, and building long-term success in the industry by earning more and more profit.

Literature Review and Hypotheses Development

Theories of Each Variable

In-flight Service Quality

In the airline industry, service quality encompasses a range of engagements involving passengers, airlines and the actions of cabin crews have a significant impact on how passengers perceive the airline companies (Namukasa, 2013). According to Khudhair et al. (2019), it is vital to regard in-flight services as a fundamental element of airline service quality. These services are provided to passengers during their time on flight. Passengers frequently spend considerable durations within the airplane, providing them ample opportunities to assess the disparities between their expectations and actual experiences. Yas et al. (2022) stated that regarding in-flight services, passengers' primary concerns encompass their perceptions of cleanliness and comfort within the flight, the quality and variety of in-flight entertainment, the standard of food and beverage offerings, as well as the feelings of safety, and the professionalism and communication skills of cabin crews. Therefore, in-flight services hold a crucial significance for passengers in assessing the value they receive and in making their airline selection accordingly (Li et al., 2017).

Perceived Value

Chen and Liu (2017) described that for the related construct of perceived value, most studies in the literature focus on measuring the product recognized value from a consumer dimension. Parasuraman and Grewal (2000) indicated that perceived value is the evaluation of the benefits of a product or a service by customers based on their advance sacrifices and ex-post perceived performance when they use value-added services. Additionally, perceived value is an important index for those customers in a status to repurchase. Perceived value is simply the customer's overall assessment of the standard process of receiving customer services (Hellier et al., 2003). While engaging with a product or service, it is crucial for companies to ensure customer satisfaction with perceived value, as well as, creating a favorable impression on the organization (Kuo et al., 2009). Al-gharaibah (2020)

stated that among the customer characteristics, the perception is about the value of the product or service or brand. Therefore, the perceived value is an important intervening variable.

E-Word of Mouth

According to Ismagilova et al. (2017), electronic word of mouth (EWOM) is defined as the dynamic and ongoing information exchange process between potential, actual, or former consumers regarding a product, service, brand, or company, which is available to a multitude of individuals and institutions via the Internet. Prior to EWOM, was word of mouth known as a "functional means of information" for customers to express their level of satisfaction about the service or product quality, which can discourage or encourage other potential customers to purchase or not that product or service (Kanwel et al., 2019). In the research of Verma and Yadav (2021), several key words can be used to refer to e such as Internet Word of mouth, Internet Recommendation, Online Opinion, User Review, Consumer Generated Consent etc. EWOM serves as a catalyst in motivating consumer behavior towards information exposure (Nurittamont, 2021). Sosanuy et al. (2021) stated that customers have more faith in the opinions of their peers or fellow customers compared to company advertisements, and they find a sense of belonging by conforming to communal behavior.

Passenger Satisfaction

Passenger satisfaction refers to the services offered by the airline companies meet the expectations of passengers effectively and achieve the highest level of satisfaction depending on how an airline treats and handles its customer (Yas et al., 2022). Satisfaction is essentially a comparison between customer expectations before and after using the service, according to (Suanmali, 2014). Research indicates that the quality of service offered to each customer directly influences their satisfaction levels thus positively influencing competitiveness of companies (Jusoh et al., 2018). Satisfaction with airlines services is defined by the level of content exhibited by consumers (Thanh Hai et al., 2017). Additionally, Khudhair et al. (2021) stated that the services with strategic objectives employed by airline companies provides customer satisfaction.

Airline Brand Image

Airline image can be defined as the perception of an airline reflected in the associations held in the passengers' memory which distinguish the one airline from others (Chen & Liu, 2017). Satornsantikul and Nuangjamnong (2022) defined that brand image refers to the impression and confidence that consumers hold, which is reflected in the associations stored in their memory. The brand image plays the vital role in attracting the passengers and forms the differentiation from the competitors by providing positive benefits that can leverage positive consumer behavior. Shafiee et al. (2014) stated that as the aviation industry is regarded as one of the most strategic industries in the country and also in world, the role of brand is very remarkable to be differentiation from competitors and to increase the possibility of passenger intention. Namukasa (2013) stated that brand image is created by in-flight service by developing a good customer service by air crews. The brand image emerges from consumers' encounters and their perception of service quality, as it is the customers' assessment of service quality that ultimately influences the brand image (Soltani et al., 2016). Therefore, brand image refers to the manner in which consumers interpret all the brand cues originating from the product itself, its services, and communication initiatives.

Passenger Loyalty

Passenger loyalty is one of the key success factors for the airline industry in most global markets (Yas et al., 2022). Specifically, customer loyalty has been fundamental in the airline industry where players are interested in expanding their market sizes through the provision of high-quality services (Mardani et al., 2015). Donsuchit and Nuangjamnong (2022) stated that customer loyalty is characterized by contented customers who maintain a positive connection with the company, fostering trust and resulting in the consistent choice of purchasing products or services from the company instead of its competitors. According to Yas et al. (2022), the growth of airlines is tied to customer loyalty that was established by customer satisfaction, perceived value, consistency in service delivery and the overall quality of services offered. The customer loyalty causes to form re-purchase intention and recommendation intention (Chen & Liu, 2017). Customer loyalty is to make a purchase in the future, not to move to another service provider or brand, and to provide positive information to others, therefore, customer loyalty cannot be influenced by competitors (Ratna Ningsih & Wayan Jaman, 2019).

Related Literature Review

In-flight Service Quality and Perceived Value

Parasuraman and Grewal (2000) stated that service quality is a logical driver of perceived value. Hellier et al. (2003) also proved that perceived equity of service has a positive direct effect on the perceived value of the service. Chen and Liu (2017) indicated that in order to get customers' more value than initially expected, it needs to deliver a high standard of service quality enough to satisfy their needs. The perceived value is derived by passengers regarding the benefits and overall worth they receive from the in-flight services provided by airline (Yas et al., 2022). In-flight services including the first impression entering the aircraft, assistance by cabin crews, entertainment, cleanliness of restrooms and food and beverage quality are various aspects of passenger's perceived value between expectations and experiences during the flight. Perceived value from a customer's standpoint can be viewed through quality, benefit and social psychology from goods or services (Kuo et al., 2009).

In-flight Service Quality and E-Word of Mouth

Al-gharaibah (2020) indicated that E-word of mouth is important and companies in the airline industry have to improve word of mouth by providing high quality services. Similarly, E-word of mouth is all informal communication intended to the customers through technology which relates to certain characteristics of the goods and service offered by the seller (Ratna Ningsih & Wayan Jaman, 2019). According to previous studies, E-word of mouth greatly influences information searching and trust in both service and product of a company (Sosanuy et al., 2021). Therefore, E-word of mouth plays a significant role in shaping customers' perceptions, influencing their purchase decisions and impacting the brand image of an airline in relation to its in-flight service quality. E-word of mouth communications offer customers credible information about services that customers have experienced leading to increased confidence in purchase decisions, reduced risk of bad choices and social approval (Ismagilova et al., 2017). Namukasa (2013) has investigated that airline passengers encountered with in-flight services evaluate airline service quality based on their experiences. It is well established in the studies that those experiences are shared to their surroundings and affected to others intention to use their recommended airline for travel purposes.

In-flight Service Quality and Passenger Satisfaction

Namukasa (2013) demonstrated that the in-flight services provided by cabin crews have a notable impact on passenger satisfaction. To enhance passenger satisfaction, in-flight cabin crews should emphasize serving the passengers by effectively communicating the service features. Similarly, previous studies by Kuo et al. (2009) supported that service quality has a positive impact on customer satisfaction because the source of satisfaction is reflected by the evaluation between the actual experience and expectation. High-quality services lead to customer satisfaction which are intentions to repurchase and retentions, therefore, airlines can foster passenger satisfaction by providing the desired level of comfort on flight (Harith et al., 2021). According to Thanh Hai et al. (2017), service quality aims to efficiently satisfy customers' desires and wants, leading to higher satisfaction levels because quality is determined by how well a company meets customer needs through its service. Yas et al. (2022) conducted in the studies how the link between service quality and passenger satisfaction relies on customer preferences, shaped by their unique experiences and perspectives regarding in-flight services. Hence, the airline industry assesses service quality from a detailed perspective as it plays a crucial role in enhancing passenger satisfaction.

In-flight Service Quality and Airline Brand Image

Chen and Liu (2017) proposed that a positive corporate image benefits organizations customer retention and attracting new customers. By the same token for the airline industry, a strong brand image attracts passengers apart from the competitors by offering the functional and experiential benefits to passengers during the flight. The same thing was stated by Ratna Ningsih and Wayan Jaman (2019) in research showing that the airline offering high-quality services that meet passenger expectations establishes a favorable brand image by fostering trust. Previous studies by Soltani et al. (2016) showed that there is a positive link between service quality and brand image because customer perceptions on service quality combine to form a company's brand image. Thereby, brand image is vital for every industry who are offering services to customers be utilized. Namukasa (2013) suggested in her study about the case of Uganda airline industry is that effective coordination of airline service components and clear communication aids in creating a harmonious brand image. Similarly, Shafiee et al. (2014) also believed that positioning the brand in customers' minds is essential especially in the service sector, hence, service quality on flight impact airline image in the context of airline industry.

Perceived Value and Passenger Loyalty

In the study by Yas et al. (2022), it was proposed that in the airline industry, passenger loyalty is a key for expanding marketing share through its services because loyalty stems from customer behaviors and perceptions towards service providers. Airlines' growth is tied to passenger loyalty, influenced by satisfaction which comes from perceived value on service consistency and overall quality. Based on the study of Chen and Liu (2017), it was stated that perceived value received from service quality, in the case of Taiwan Airline, impacts passenger loyalty. For the reason that, it is a vital indicator for returning customers and reflecting the interaction between passengers and airline services. As a result, improved perceived value leads to purchase intention and repeatedly buying behavior. Li et al. (2017) also found that business offers value-focused services, same as in airline industry, to influence passenger decisions which impacts satisfaction leading to loyalty. Additionally, Parasuraman and Grewal (2000) stated that perceived value and customer loyalty are becoming increasingly significant in business practices which are offering service quality which boots perceived value influencing customer loyalty. Furthermore, Kuo et al. (2009) supported with the studies in customer service industry that perceived value has a positive impact on loyalty which comes from increased customer satisfaction based on real experiences.

E-Word of Mouth and Passenger Loyalty

Ratna Ningsih and Wayan Jaman (2019) established that online reviews and discussions significantly impact customers' perceptions which leading customers to reuse a service. Searching information provided by experienced customers help others to choose airlines by implying positive EWOM communication and influencing passenger loyalty to airline service. Al-gharaibah (2020) stated that during the time of COVID-19, businesses are shifting online and emphasizing the growing significance of online word of mouth. His study proposed that online presence is crucial for customer engagement and loyalty in the airline industry. Nurittamont (2021) claimed in her study that EWOM is crucial for directing consumer exposure in electronic marketing, playing a key role in purchase choices behavior. As a result, her hypothesis supported that EWOM communication influences on consumer engagement, purchase intention as well as customer loyalty. Namukasa (2013) suggested in the case of Uganda airline industry that in order to build customer-airline relationships and to enhance passenger loyalty, the effective coordination of diverse communication strategies supports the airline to reach customers' minds.

Passenger Satisfaction and Passenger Loyalty

Yas et al. (2022) revealed that passenger satisfaction has a positive impact on passenger loyalty because customer loyalty arises from behaviors and perceptions towards airlines which are service providers, closely linked to customer satisfaction. Previous studies by Kanwel et al. (2019) and Chen & Liu (2017) indicated that enhancing customer satisfaction is vital for increased repurchase, recommendation and overall loyalty on service sectors such as airline industry. The effect of passenger satisfaction on passenger loyalty in the airline industry have been carried out by Namukasa (2013) and Khudhair et al. (2021) that passengers' experiences from airline services fulfill their needs and meet with expectations can foster passenger loyalty. In other words, passenger satisfaction links to passenger loyalty in the airline industry.

Airline Brand Image and Passenger Loyalty

Loyalty is evident through the creation of a favorable brand image built by meeting customer expectations. This finding is supported by (Ratna Ningsih & Wayan Jaman, 2019) study in Indonesia aviation services to explore the relationship between brand image and customer loyalty. An effective brand image successfully gains consumers' favor and trust, leading them to become loyal customers who repeatedly purchase products or services from that particular brand (Soe & Nuangjamnong, 2021). Chen and Liu (2017) proved that a superior brand image is a reflection of an airline's commitment to excellence across various touchpoints of the customer journey which leads to sustained passenger loyalty. Similarly, Shafiee et al. (2014) believed that brand image is regarded as an important factor which will lead to loyalty in the study of aviation industry. Namukasa (2013) also recommended in her study that enhancing the formation of brand image in passengers' perceptions serves as potentially leading to the cultivation of genuine passenger loyalty.

Therefore, the researchers have proposed hypotheses

Hypothesis 1 (H1): In-flight service quality has no significant influence on perceived value.

Hypothesis 2 (H2): In-flight service quality has no significant influence on EWOM.

Hypothesis 3 (H3): In-flight service quality has no significant influence on passenger satisfaction.

Hypothesis 4 (H4): In-flight service quality has no significant influence on airline brand image.

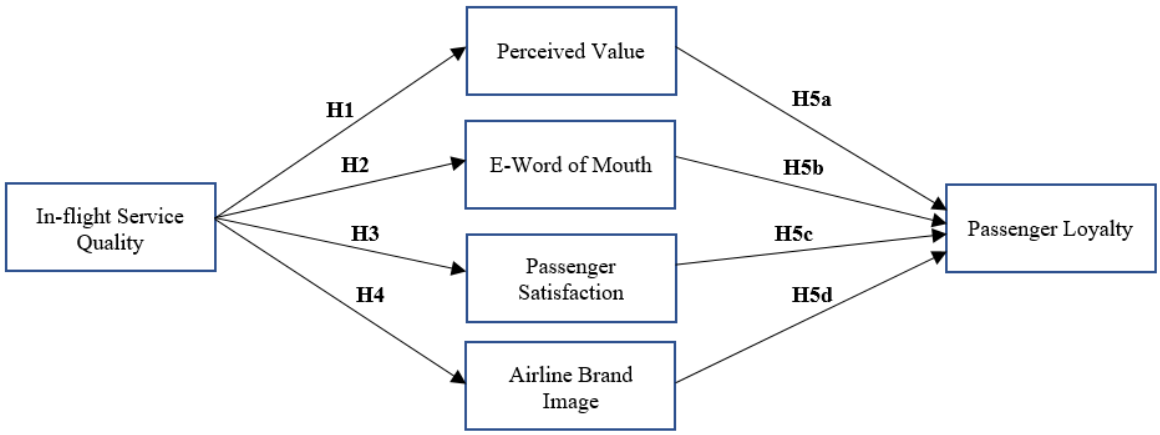
Hypothesis 5 (H5): Perceived value (H5a), EWOM (H5b), passenger satisfaction (H5c), and airline brand image (H5d) have no significant influence on passenger loyalty.

Conceptual Framework

The conceptual framework is derived from the five research frameworks. The first research framework from "Exploring the Impact of Airlines Service Quality on Customer Loyalty: Evidence from Taiwan" by Chen and Liu (2017). The second research model from "The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services" by Kuo et al. (2009). The third research design from "The Effect of Service Quality and Electronic Word of Mouth (EWOM) Towards he Loyalty through Brand Image (The Study on the Customers of Sriwijaya Air in Indonesia)" by Ratna Ningsih and Wayan Jaman (2019). The fourth research framework from "The Influence of Destination Image on Tourist Loyalty and Intention to Visit: Testing a Multiple Mediation Approach" by Kanwel et al. (2019). Lastly, the fifth research framework from "Impact of Airline Service Quality on Passenger Satisfaction and Loyalty: Moderating influence of Price Sensitivity and Quality Seekers" by Yas et al. (2022). These research frameworks revealed the relationships between variables. Five independent variables have been used: in-flight service quality, perceived value, EWOM, passenger satisfaction, and airline brand image, which have a significant influence on dependent variable, passenger loyalty as shown in Figure 2.

Figure 2.

Factors Influencing of In-flight Service Quality towards Airline Passenger Loyalty in Myanmar, at Yangon Airport



Source: Authors.

Research Methodology

Research design, population, sample and sample procedure

The purpose of this study is to determine the influence of in-flight service quality on factors towards airline passenger loyalty in Myanmar Airlines. Given the quantitative nature of this study, we employed multiple analytical techniques, including Cronbach's Alpha, Multiple Linear Regression, and Simple Linear Regression.

In this research, the targeted demographic comprises individuals with prior experience traveling on Myanmar Airlines via Yangon Airport. Given the incompetence to ascertain the exact population of passengers utilizing Myanmar Airlines, the research is conducted under the assumption of an unknown population. The sample size was determined utilizing Cochran's formula (1977), specifically designed for estimating sample sizes when the population size is unknown. To establish the requisite survey size with a 95% confidence level, a 50% standard deviation, and a 5% margin of error, a sample size of 385 respondents was deemed appropriate for this study.

Nonetheless, due to practical constraints and time limitations, a non-probability sampling method was employed, entailing non-random participant selection. Respondents were selected based on predefined criteria aligned with the research's objectives. Consequently, the researchers selected for a non-probability sampling approach, specifically utilizing the snowball sampling method, as it offered proximity and convenience given the prevailing time constraints.

The questionnaire comprises three sections: Screening questions (3 items), Demographic information (7 items), and measurement variables (29 items), encompassing six key variables within the research model. First, we utilized Cronbach's Alpha to gauge the questionnaire's reliability and identify any potential ambiguities or uncertainties in the measurement items. A pilot test was carried out with a small sample of 50 respondents, facilitating adjustments by the researchers. Second, we conducted a descriptive analysis of the demographic information provided by 385 respondents. Third, we employed Simple Linear Regression (SLR) to examine the influence of in-flight service quality on specific factors of interest, namely perceived value, electronic word-of-mouth (EWOM), passenger satisfaction, and airline brand image. Then, lastly, fourth, Multiple Linear Regression (MLR) was utilized to determine the individual impact of each variable on passenger loyalty.

Validity and Reliability Test

The researchers employed a comprehensive evaluation of the questionnaire's validity and reliability. To ensure item quality, the Item Objective Congruence (IOC) Index was utilized for screening each question within the questionnaire. Content validity was assessed through consultation with three subject matter experts. Each expert assigned a weight to indicate their judgment on the item's relevance, with +1 signifying applicability, 0 indicating uncertainty, and -1 indicating inapplicability. For an item to be considered suitable, the collective weight score across all three experts had to exceed 0.5. Especially, the IOC values for all questionnaire items in this study ranged from 0.67 to 1.00, surpassing the 0.5 threshold, affirming the appropriateness of all questions for distribution among the respondents. To further analyze the questionnaire, a pilot test involving 50 respondents was conducted. This endeavor aimed to identify any inconsistencies or errors within the questionnaire items.

Subsequently, the reliability of the questionnaire was assessed using Cronbach's Alpha, a widely recognized indicator for measuring research reliability. According to Peter (1979), a minimum acceptable value for Cronbach's Alpha is 0.6, signifying an acceptable level of reliability (Cronbach, 1951). The findings revealed the reliability of the variables under examination, with Cronbach's Alpha coefficients exceeding 0.6. Specifically, In-flight service quality exhibited a reliability coefficient of ($\alpha = .776$), Perceived value demonstrated reliability with ($\alpha = .898$), EWOM achieved a reliable score of ($\alpha = .912$), Passenger satisfaction was found to be highly reliable with ($\alpha = .938$), Airline brand image exhibited a reliability coefficient of ($\alpha = .928$), and Passenger loyalty displayed a commendable reliability coefficient of ($\alpha = .939$).

Data Analysis

Reliability Testing

The researcher decided to find out any inconsistencies or errors of variable in the questionnaire once again for all 385 respondents. Cronbach's Alpha test of Reliability is used to evaluate and analyze the reliability of questionnaire. Table 1, the Cronbach's alpha for each variable demonstrates the reliability and validity of all the variables since values greater than 0.6 indicates that the reliability of that factors is acceptable. The variable that has the highest reliability is Passenger Satisfaction with the value .895, following by EWOM with .859, Passenger Loyalty with .859, In-flight Service Quality with .790 and lastly Airline Brand Image with .766.

Table 1.

Cronbach's Alpha *(n=385)*

Variables	Cronbach's Alpha	Number of Items	Results
In-flight Service Quality	.790	5	Reliable
Perceived Value	.802	5	Reliable
EWOM	.859	5	Reliable
Passenger Satisfaction	.895	5	Reliable

Airline Brand Image	.766	4	Reliable
Passenger Loyalty	.859	5	Reliable

Descriptive Analysis of Demographic Data

The researchers conducted a descriptive analysis to examine the demographic particulars of individuals who have utilized Myanmar Airlines and have taken flights departing from Yangon Airport. Descriptive statistics, in this context, relate to the process of transforming raw data into informative insights, offering insights into the characteristics of the respondents as well.

To filter the appropriate respondents, three screening questions were set at the beginning of the survey. These questions involved inquiries about the respondents' age (specifically if they were over 18 years old), prior experience flying with Myanmar Airlines, and previous flights from Yangon Airport. Consequently, the study amassed a total of 385 respondents who met the required criteria based on their responses to these screening questions. Any responses not aligning with the research objectives were excluded from consideration.

The demographic information under scrutiny encompassed gender, age, occupation, monthly income level, frequency of travel with Myanmar Airlines within a year, the factor deemed most significant concerning in-flight service quality, and evaluation of aircrew service quality during the flight. The primary aim was to gain insight into the respondent profiles. The details of these 385 respondents were elucidated through a frequency distribution, as presented in Table 2.

Table 2, shows the frequency distribution and percentage in sample size of 385 respondents are as follows: ***Gender:*** Among all 385 respondents, their distribution shows the higher percentage of female with 54.5% than male respondents that have 45.5%. The results of respondents for female and male are 210 and 175 respectively. ***Age:*** The most respondent in this research is age between 26-35 years old with 222 respondents that have 57.5% and the lowest respondents are age over 55 years old that have 4.4% with 17 respondents. ***Occupation:*** Among all the 385 respondents, company employees have the highest proportion having 158 respondents (41%), following by students having 75 respondents (19.5%), following by business owners having 62 respondents (16.1%), following by other occupations having 53 respondents (13.8%), following by unemployed having 15 respondents (3.9%), following by government employees having 12 respondents (3.1%) and lastly, retired having 10 respondents (2.6%). ***Monthly income:*** Among all the 385 respondents, 153 respondents earn a monthly income of 1,000,001 MMK and above (39.7%), following by a monthly income of 500,001 MMK - 1,000,000 MMK with 122 respondents (31.7%), and following by two groups, each having 55 respondents (14.3%) for 300,001 MMK - 500,000 MMK and below 300,000 MMK. ***Flown frequency with Myanmar airlines in a year:*** From 385 respondents, 253 respondents (65.7%) have flown 1-3 times, following by 86 respondents (22.3%) have flown 4-6 times and lastly, following by 46 respondents (12%) have flown over 7 times. ***The most important factor about in-flight service quality while on board:*** Among all 385 respondents, 247 respondents (64.1%) consider about safety, 74 respondents (19.2%) consider about convenience of flying, 47 respondents (12.2%) consider about hospitality of air crews, 11 respondents (2.9%) consider about size of luggage, and lastly, 6 respondents (1.6%) consider about meals. ***The most important factor about air-crews service quality while on board:*** From 385 respondents, 237 respondents (61.6%) consider about skillful (service mind), 103 respondents (26.7%) consider about courteous, 27 respondents (7%) consider about appearance, and lastly, 18 respondents (4.7%) consider about language fluency.

Table 2.

The analysis of demographic factors using frequency distribution and percentage

Demographic Factors	Frequency	Percentage
Gender		
Male	175	45.5
Female	210	54.5
Total	**385**	**100**
Age		
19 - 25 years old	52	13.5
26 - 35 years old	222	57.7

36 - 45 years old	42	10.9
46 - 55 years old	52	13.5
Over 55 years old	17	4.4
Total	**385**	**100**
Occupation		
Unemployed	15	3.9
Company Employee	158	41
Government Employee	12	3.1
Retired	10	2.6
Student	75	19.5
Business Owner	62	16.1
Others	53	13.8
Total	**385**	**100**
Monthly income		
Below 300,000 MMK	55	14.3
300,001 MMK - 500,000 MMK	55	14.3
500,001 MMK – 1,000,000 MMK	122	31.7
1,000,001 MMK and above	153	39.7
Total	**385**	**100**
Flown frequency with Myanmar airlines in a year		
1 - 3 times	253	65.7
4 - 6 times	86	22.3
Over 7 times	46	12
Total	**385**	**100**
The most important factor about in-flight service quality while on board		
Safety	247	64.1
Meals	6	1.6
Convenience of flying	74	19.2
Hospitality of air crews	47	12.2
Overhead components concern	0	0
Size of luggage	11	2.9
Total	**385**	**100**
The most important factor about air crews service quality while on board		
Skillful (service mind)	237	61.6
Courteous	103	26.7
Appearance	27	7
Language fluency	18	4.7
Total	**385**	**100**

Descriptive Analysis with Mean and Standard Deviation

In this part, the summary of Mean and Standard Deviation of each variable, consisting of in-flight service quality, perceived value, electronic-word of mouth, passenger satisfaction, airline brand image, and passenger loyalty. From Table 3, the highest mean of In-flight Service Quality was “In-flight service with Myanmar Airlines that I select to fly with is always clean and hygienic” which equals to 3.69. The highest mean of Perceived Value was “It is worthwhile for me to fly with Myanmar Airlines, which provides good quality services” which equals to 3.72. The highest mean of Electronic-Word of Mouth was “The review posts about Myanmar Airlines are helpful to me in making the decision to purchase tickets” which equals to 3.69. The highest mean of Passenger Satisfaction was “I will choose Myanmar Airlines again on my next travel by flight” which equals to 3.80. The highest mean of Airline Brand Image was “I use Myanmar Airlines for my travel which has a reliable brand image” which equals to 3.85. The highest mean of Passenger Loyalty was “I have a good flying experience with Myanmar Airlines and I certainly keep flying with Myanmar Airlines whenever I travel” which equals to 3.72.

Table 3.

The result of Mean and Standard Deviation

In-flight Service Quality	**Mean**	**S.D.**
Cabin crews on flights are always courteous in communication and expert in their roles of duties.	3.67	0.914
In-flight service with Myanmar Airlines that I select to fly with is always clean and hygienic.	3.69*	0.925
I enjoy getting fresh and enough portion of meals throughout the route.	3.51	1.125
For security and safety on board, I do confident with Myanmar Airlines.	3.67	0.849
Whenever I have long flights with Myanmar Airlines, cabin crews always serve and provide me convenience and hospitality onboard.	3.68	0.923
Perceived Value		
I enjoy all the services provided by Myanmar Airlines.	3.63	0.828
It is worthwhile for me to fly with Myanmar Airlines, which provides good quality services.	3.72*	0.857
My onboard experience on Myanmar Airlines met with expectations.	3.60	0.827
Compared to other airlines, Myanmar Airlines always provide me with the best value of services.	3.11	1.015
Whenever it comes to choosing, I always prefer Myanmar Airlines rather than others.	2.88	1.086
Electronic-Word of Mouth		
The review posts about Myanmar Airlines are helpful to me in making the decision to purchase tickets.	3.69*	0.925
I always read the reviews about Myanmar Airlines and take consideration when I make decisions to purchase.	3.62	0.996
I always share my reviews and recommendations about Myanmar Airlines' in-flight service.	3.30	1.017
Reviews and feedbacks from Myanmar Airlines on official websites passengers always make me confident in choosing Myanmar Airlines.	3.49	0.971
I always gather information from passengers' reviews about Myanmar Airlines before I make the purchase.	3.51	0.974
Passenger Satisfaction		
Myanmar airline services met my expectation.	3.55	0.815
I will choose Myanmar Airlines again on my next travel by flight.	3.80*	0.968
I am satisfied that Myanmar Airlines successfully provide its in-flight service.	3.61	0.838
I am happy with the way of providing in-flight services by Myanmar Airlines.	3.64	0.859
I am happy whenever I fly with Myanmar Airlines.	3.60	0.864
Airline Brand Image		
I use Myanmar Airlines for my travel which has a reliable brand image.	3.85*	1.021
My choice of Myanmar Airlines is influenced by the positive image of the service provided.	3.59	0.852
With Myanmar Airlines' image, I have experienced positive emotional benefits from the services the airline provides.	3.62	0.836
Myanmar airline has very unique image when compared to other airlines.	3.06	0.991
Passenger Loyalty		
When buying air tickets and air services, Myanmar Airlines are always my first choice.	3.64	1.112
My loyalty to this airline has been constantly increasing over time.	3.35	0.940
I have been loyal to Myanmar Airlines and I am not considering changing to the other airline.	2.57	1.095
I am loyal to Myanmar Airlines because I have had positive experiences.	3.41	0.914
I have a good flying experience with Myanmar Airlines and I certainly keep flying with Myanmar Airlines whenever I travel.	3.72*	1.074

Note * the highest mean score

Hypothesis Testing Results

Summary of Simple Linear Regression

In the first part, simple linear regression was used as a statistical analysis approach to determine the level of influence of in-flight service quality towards perceived value, e-word of mouth, passenger satisfaction and airline brand image. The details of the results are presented in tables below.

Hypothesis 1

$H1_o$: In-flight service quality has no significant influence on perceived value.

$H1_a$: In-flight service quality has a significant influence on perceived value.

Table 4 provides a concise summary of the Simple Linear Regression Analysis for Hypothesis 1. The results in this table reveal a significant level at <.001, which is considerably less than the significant level of 0.05. This outcome leads to the rejection of the null hypothesis. In turn, this suggests that in-flight service quality has a statistically significant influence on perceived value. This influence is further supported by a standardized coefficient (β) of .738, signifying that a 1% increase in in-flight service quality corresponds to a substantial 73.8% increase in perceived value. Overall, these findings provide strong evidence in favor of the research hypothesis, affirming the influence of in-flight service quality on perceived value.

Table 4.

Summary of Simple Linear Regression Analysis for Hypothesis 1

Variables	B	SE B	β	t > 1.96	Sig.	VIF
(Constant)	0.729	0.1265		5.76	<.001	
In-flight Service Quality (ISQ)	0.730	0.0341	0.738	21.40	<.001*	1.00

Note. $R^2 = 0.545$, *Adjusted* $R^2 = 0.543$, *$p < .05$, *Dependent Variable = Perceived Value*

SE B = the standard error for the unstandardized beta; B = the unstandardized beta; β = the standardized beta; VIF = Variance Inflation Factor; Sig. = p-value

Hypothesis 2

$H2_o$: In-flight service quality has no significant influence on EWOM.

$H2_a$: In-flight service quality has a significant influence on EWOM.

The outcomes presented in Table 5 indicate a significant level of <.001, which is less than the significant level of 0.05. Consequently, the null hypothesis is rejected, leading to the conclusion that in-flight service quality does indeed have a significant influence on electronic word-of-mouth (EWOM). This influence is substantiated by the standardized coefficient (β) of .451, suggesting that a 1% enhancement in in-flight service quality results in a notable 45.1% increase in electronic word-of-mouth. In sum, these findings lend support to Hypothesis 2, affirming the considerable effect of in-flight service quality on electronic word-of-mouth.

Table 5.

Summary of Simple Linear Regression Analysis for Hypothesis 2

Variables	B	SE B	β	t > 1.96	Sig.	VIF
(Constant)	1.690	0.1885		8.97	<.001	
In-flight Service Quality (ISQ)	0.503	0.0508	0.451	9.90	<.001*	1.00

Note. $R^2 = 0.204$, *Adjusted* $R^2 = 0.202$, *$p < .05$, *Dependent Variable = Electronic-Word of Mouth*

SE B = the standard error for the unstandardized beta; B = the unstandardized beta; β = the standardized beta; VIF = Variance Inflation Factor; Sig. = p-value

Hypothesis 3

$H3_o$: In-flight service quality has no significant influence on passenger satisfaction.

$H3_a$: In-flight service quality has a significant influence on passenger satisfaction.

As evident in Table 6, the level of significance is <.001, which is notably lower than the significant level of 0.05. Consequently, the null hypothesis was definitively rejected, leading to the conclusion that in-flight service quality indeed has a significant influence on passenger satisfaction. This influence is further substantiated by the standardized coefficient (β) of .756, indicating that a 1% enhancement in in-flight service quality results in a substantial 75.6% increase in passenger satisfaction. In summary, the findings offer strong support for Hypothesis 3, emphasizing the substantial influence of in-flight service quality on passenger satisfaction.

Table 6.

Summary of Simple Linear Regression Analysis for Hypothesis 3

Variables	B	SE B	β	t > 1.96	p	VIF
(Constant)	0.772	0.1293		5.97	<.001	
In-flight Service Quality (ISQ)	0.787	0.0348	0.756	22.59	<.001*	1.00

Note. $R^2 = 0.571$, Adjusted $R^2 = 0.570$, *p < .05, Dependent Variable = Passenger Satisfaction
SE B = the standard error for the unstandardized beta; B = the unstandardized beta; β = the standardized beta; VIF = Variance Inflation Factor; Sig. = p-value

Hypothesis 4

$H4_o$: In-flight service quality has no significant influence on airline brand image.

$H4_a$: In-flight service quality has a significant influence on airline brand image.

As demonstrated in Table 7, the level of significance is <.001, significantly below the significant level of 0.05. Consequently, the null hypothesis was rejected, leading to the conclusion that in-flight service quality indeed has a significant influence on airline brand image. This influence is further emphasized by the standardized coefficient (β) of 0.686, signifying that a 1% enhancement in in-flight service quality results in a significant 68.6% increase in airline brand image. In summary, the findings provide robust support for Hypothesis 4, confirming the significant influence of in-flight service quality on airline brand image.

Table 7.

Summary of Simple Linear Regression Analysis for Hypothesis 4

Variables	B	SE B	β	t > 1.96	p	VIF
(Constant)	0.995	0.1399		7.11	<.001	
In-flight Service Quality (ISQ)	0.696	0.0377	0.686	18.46	<.001*	1.00

Note. $R^2 = 0.471$, Adjusted $R^2 = 0.469$, *p < .05, Dependent Variable = Airline Brand Image
SE B = the standard error for the unstandardized beta; B = the unstandardized beta; β = the standardized beta; VIF = Variance Inflation Factor; Sig. = p-value

Summary of Multiple Linear Regression

In this analysis, multiple linear regression was employed as a statistical approach to explore the relationships between variables, specifically, perceived value, electronic word of mouth (EWOM), passenger satisfaction, and airline brand image, in relation to passenger loyalty. Multicollinearity, a potential concern in multiple regression, was assessed to determine whether any unnecessary variables should be excluded. A recommended guideline, as proposed by Akinwande et al. (2015), is to maintain Variance Inflation Factor (VIF) values less than or equal to 5 to avoid issues with overlapping variables. Additionally, the extent to which independent variables explain the dependent variable can be assessed through the R-squared value, indicating the proportion of variation in the dependent variable accounted for by the independent variables. As depicted in Table 8, all variables exhibited VIF values less than 5, indicating the absence of multicollinearity, thereby affirming the independence of the variables. Furthermore, the R-squared value was .696 at a 95% confidence level, signifying that the independent variables—perceived value, EWOM, passenger satisfaction, and airline brand image—can collectively explain approximately 69.6% of the variance in the dependent variable, passenger loyalty.

Hypothesis 5

H_0: Perceived value (H5a), EWOM (H5b), passenger satisfaction (H5c), and airline brand image (H5d) have no significant influence on passenger loyalty.

$H_Ø$: Perceived value (H5a), EWOM (H5b), passenger satisfaction (H5c), and airline brand image (H5d) have a significant influence on passenger loyalty.

From the results presented in Table 8, it can be observed that the significant level for perceived value (H5a) was .105, which exceeds the significant level of 0.05. Consequently, the null hypothesis was failed to reject, leading to the conclusion that perceived value does not significantly influence passenger loyalty. The standardized coefficient (β) for perceived value was .0816, suggesting that a one-unit increase in perceived value is associated with an 8.16% decrease in passenger loyalty.

For EWOM (H5b), the significant level was found to be <.001, indicating statistical significance. Therefore, the null hypothesis was rejected, indicating that EWOM significantly influences passenger loyalty. The standardized coefficient (β) for EWOM was .1665, implying that a 1% increase in EWOM corresponds to a 16.65% rise in passenger loyalty.

Similarly, for passenger satisfaction (H5c), the significant level was <.001, confirming statistical significance. The null hypothesis was rejected, signifying a significant influence of passenger satisfaction on passenger loyalty. The standardized coefficient (β) for passenger satisfaction was .3557, indicating that a 1% increase in passenger satisfaction leads to a substantial 35.57% increase in passenger loyalty.

Lastly, with regard to airline brand image (H5d), the significant level was <.001, demonstrating statistical significance. Consequently, the null hypothesis was rejected, suggesting a significant influence of airline brand image on passenger loyalty. The standardized coefficient (β) for airline brand image was .3327, implying that a 1% increase in airline brand image results in a noteworthy 33.27% increase in passenger loyalty.

In summary, the findings provide strong support for Hypothesis 5, highlighting the distinctive influences of perceived value, EWOM, passenger satisfaction, and airline brand image on passenger loyalty.

Table 8.

Summary of Multiple Linear Regression Analysis for Hypothesis 5

Variables	B	SE B	β	t > 1.96	p	VIF
(Constant)	-0.4292	0.1330		-3.23	<.001	
H5a: Perceived Value (PV)	0.0969	0.0597	0.0816	1.62	0.105	3.16
H5b: Electronic-Word of Mouth (EWOM)	0.1754	0.0366	0.1665	4.80	<.001*	1.50
H5c: Passenger Satisfaction (PS)	0.4011	0.0666	0.3557	6.02	<.001*	4.35
H5d: Airline Brand Image (ABI)	0.3852	0.0626	0.3327	6.15	<.001*	3.65

Note. $R^2 = 0.696$, *Adjusted* $R^2 = 0.692$, *$p < .05$, *Dependent Variable = Passenger Loyalty*

SE B = the standard error for the unstandardized beta; B = the unstandardized beta; β = the standardized beta; VIF = Variance Inflation Factor; Sig. = p-value

Summary, Conclusion and Recommendations

Summary of Findings

Using simple linear regression in Table 9 for the hypotheses testing in H1, H2, H3, and H4 the findings revealed that these four hypotheses have failed to reject the null hypotheses. Therefore, In-flight service quality has no significant influence on perceived value (H1), EWOM (H2), passenger satisfaction (H3), and airline brand image (H4).

Table 9.

Summary results from H1, H2, H3, and H4 (Simple Linear Regression)

Hypothesis	P-value	β	Result
H1o: In-flight service quality has no significant influence on perceived value.	< .001*	.738	Rejected Ho
H2o: In-flight service quality has no significant influence on EWOM.	< .001*	.451	Rejected Ho
H3o: In-flight service quality has no significant influence on passenger satisfaction.	< .001*	.756	Rejected Ho
H4o: In-flight service quality has no significant influence on airline brand image.	< .001*	.686	Rejected Ho

Note. **P-value <0 .05; β - The standardized beta*

Table 10 presents the results of hypothesis testing, indicating the relative influence of independent variables on passenger loyalty through multiple linear regression. Notably, the most influential factor affecting passenger loyalty is passenger satisfaction, as evidenced by the highest coefficient of .3557. In accordance with the hypothesis testing, three independent variables that demonstrated statistically significant influence were retained, while one was not. The hierarchy of significance among these independent variables influencing passenger loyalty

is as follows: passenger satisfaction holds the first rank, followed by airline brand image in the second position, and electronic word of mouth (EWOM) secures the third rank.

Table 10.

Summary results from H5 (Multiple Linear Regression)

Hypothesis	P-value	β	Result	Rank
H5a: Perceived value has no significant influence on passenger loyalty.	.105	.0816	Failed to reject H_o	-
H5b: EWOM has no significant influence on passenger loyalty.	< .001*	.1665	Rejected H_o	3rd
H5c: Passenger satisfaction has no significant influence on passenger loyalty.	< .001*	.3557	Rejected H_o	1st
H5d: Airline brand image has no significant influence on passenger loyalty.	< .001*	.3327	Rejected H_o	2nd

Note. **P-value <0 .05; β - The standardized beta*

Discussion based on Findings

The hypothesis testing shows that in-flight service quality has a significant influence on word of mouth, passenger satisfaction, and airline brand image. Moreover, the variables (electronic word of mouth, passenger satisfaction, and airline brand image) have significantly influenced passenger loyalty.

In-flight Service Quality and Perceived Value

This study has established a significant relationship between in-flight service quality and perceived value, as evidenced by the p-value of less than .001. These findings align with the research conducted by Yas et al. (2022), which asserts that passengers formulate their perceived value based on the benefits and overall value derived from the in-flight services provided by the airline. A closer examination of the descriptive analysis of in-flight service quality, based on responses to five questions in the close-ended questionnaire, reveals that the mean score for in-flight service quality is 3.64. Among these questions, the item with the lowest mean is "I enjoy getting fresh and a sufficient portion of meals throughout the route," which registers a mean score of 3.51, falling below the overall average. Notably, this particular question also exhibits the highest standard deviation of 1.125. This variation in scores suggests that respondents' opinions are widely dispersed. In light of these results, it is recommended that the airline consider enhancing the in-flight experience by offering additional rounds of snack service during flights, especially if passengers perceive the initial service as insufficient. Furthermore, a focus on the quality of meals served is essential, ensuring they are not only nutritious but also satisfying, thus enhancing the overall passenger experience.

In-flight Service Quality and E-Word of Mouth

This study has illuminated a significant correlation between in-flight service quality and Electronic Word of Mouth (EWOM), as indicated by a p-value of less than .001. This finding aligns with the research conducted by Al-gharaibah (2020), affirming the importance of EWOM in the service industry, particularly within the context of high-quality services experienced during flights. Upon closer examination of the descriptive analysis of in-flight service quality, derived from responses to five questions in the closed-ended questionnaire, it is evident that the mean score for in-flight service quality stands at 3.64. Notably, among all the questions, the item with the lowest mean is "I enjoy receiving fresh and a sufficient portion of meals throughout the route," which is rated at 3.51, falling below the overall average mean. Additionally, this specific question displays the highest standard deviation, measuring at 1.125. This dispersion in respondents' scores indicates a wide variation in perceptions. Based on these results, it is recommended that the airline considers enhancing the in-flight experience by providing additional rounds of snack service during flights, especially to cater to passengers who may perceive the initial service as inadequate. Furthermore, a focus on the quality of meals offered is essential, ensuring they are both nutritious and satisfying, thereby enhancing the overall passenger experience.

In-flight Service Quality and Passenger Satisfaction

This study showed that in-flight service quality has a significant influence on passenger satisfaction. The significant value of in-flight service quality and passenger satisfaction is less than .001. This study is confirmed by Yas et al. (2022) that there is a link between service quality and passenger satisfaction, shaped by experiences getting from in-flight services. By examining a descriptive analysis of in-flight service quality which came from five questions in the close-ended questionnaire collected, the statistical data shows that the means of in-flight

service quality is 3.64. The lowest mean among all questions was "I enjoy getting fresh and enough portion of meals throughout the route." which equals 3.51, lower than average mean. In addition, this question has the highest standard deviation of 1.125. As the standard deviation result shows, the score of respondents is spread out. From this result, the airline should provide additional snack service rounds during flights to accommodate the passengers if they feel the initial serving is inadequate and should focus on the quality of the meals offered, ensuring that they are both nutritious and satisfying by enhancing their overall experience.

In-flight Service Quality and Airline Brand Image

This study showed that in-flight service quality has a significant influence on airline brand image. The significant value of in-flight service quality and airline brand image is less than .001. This study is confirmed by Ratna Ningsih and Wayan Jaman (2019) that the airlines that offer high-quality services meet passenger expectations and will lead to establish a positive airline brand image. By examining a descriptive analysis of in-flight service quality which came from five questions in the close-ended questionnaire collected, the statistical data shows that the means of in-flight service quality is 3.64. The lowest mean among all questions was "I enjoy getting fresh and enough portion of meals throughout the route." which equals 3.51, lower than average mean. In addition, this question has the highest standard deviation of 1.125. As the standard deviation result shows, the score of respondents is spread out. From this result, the airline should provide additional snack service rounds during flights to accommodate the passengers if they feel the initial serving is inadequate and should focus on the quality of the meals offered, ensuring that they are both nutritious and satisfying by enhancing their overall experience.

E-Word of Mouth and Passenger Loyalty

This study showed that EWOM has a significant influence on passenger loyalty. The significant value of EWOM and passenger loyalty is less than .001. This study is confirmed by Ratna Ningsih and Wayan Jaman (2019) that online reviews and discussions are communications between customers shared about their perceptions which leads to reuse the airline's service. By examining a descriptive analysis of EWOM which came from five questions in the close-ended questionnaire collected, the statistical data shows that the means of EWOM is 3.52. The lowest mean among all questions was "I always share my reviews and recommendations about Myanmar Airlines' in-flight service." which equals 3.30, lower than average mean. In addition, this question has the highest standard deviation of 1.017. As the standard deviation result shows, the score of respondents is spread out. From this result, the airline should make feedback channels easily accessible and user-friendly for customers.

Passenger Satisfaction and Passenger Loyalty

This study showed that passenger satisfaction has a significant influence on passenger loyalty. The significant value of passenger satisfaction and passenger loyalty is less than .001. This study is confirmed by Namukasa (2013) and Khudhair et al. (2021) that passengers who fulfills their needs and meet with their expectations arises towards loyalty. By examining a descriptive analysis of passenger satisfaction which came from five questions in the close-ended questionnaire collected, the statistical data shows that the means of passenger satisfaction is 3.64. The lowest mean among all questions was "Myanmar airlines services met my expectation." which equals 3.55, lower than average mean with lowest standard deviation of 0.815. As the standard deviation result shows, the score of respondents is spread out. From this result, the airline should offer the in-flight services that make passengers meet full of expectation by offering and serving best quality services.

Airline Brand Image and Passenger Loyalty

This study showed that airline brand image has a significant influence on passenger loyalty. The significant value of airline brand image and passenger loyalty is less than .001. This study is confirmed by Shafiee et al. (2014) that in airline industry, brand image is an important factor that leads to passenger loyalty. By examining a descriptive analysis of airline brand image which came from five questions in the close-ended questionnaire collected, the statistical data shows that the means of airline brand image is 3.53. The lowest mean among all questions was "Myanmar airline has very unique image when compared to other airlines" which equals 3.06, lower than average mean with standard deviation of 0.991. As the standard deviation result shows, the score of respondents is spread out. From this result, the airline should craft memorable in-flight experiences including signature meals, amenities or entertainment that passengers will associate exclusively.

Recommendations based on Findings

The findings of this research clearly establish that in-flight service quality wields a significant influence on several critical factors, namely Electronic Word of Mouth (EWOM), passenger satisfaction, and airline brand image. Among these factors, passenger satisfaction emerges as the most influential driver of passenger loyalty, followed closely by airline brand image, with EWOM ranking third in significance.

Consequently, airlines should maintain a steadfast focus on consistently delivering outstanding in-flight services to elevate passenger satisfaction. Achieving this goal necessitates comprehensive training for cabin crews to ensure the delivery of high-quality service that caters to passengers' needs and professionally handles various situations. Additionally, maintaining clean and tidy cabins and facilities, offering a diverse range of in-flight entertainment options, and providing well-prepared and flavorful meals are pivotal elements in enhancing passenger satisfaction. Moreover, responding to passenger preferences by regularly upgrading in-flight amenities, technology, and services to align with evolving passenger expectations and industry trends is paramount.

The second key factor influencing passenger loyalty is the airline's brand image. By consistently delivering high-quality services that align with the airline's brand values, airlines can create a positive and memorable experience for passengers. It is essential for airlines to ensure that every aspect of the in-flight journey reflects their core brand attributes through personalized interactions, attention to detail, and innovative amenities. Training cabin crew to embody the brand's personality and ensuring seamless service delivery are pivotal aspects. The cabin's aesthetics, ambiance, and meal presentation should harmonize with the brand's identity. Regular maintenance and swift service recovery in case of issues demonstrates the airline's unwavering commitment to quality. By creating a robust brand association, passengers can connect positive experiences with the airline's values, ultimately leading to differentiation and long-term customer relationships and advocacy.

The third and final factor influencing passenger loyalty is the Electronic Word of Mouth (EWOM). Given that passengers share their experiences and reviews on social media, airlines should be driven to implement high service quality during flights, which encourages passengers to share positive feedback and recommendations about their in-flight experiences. Actively engaging with passengers on social media platforms and encouraging them to share their experiences is instrumental in gaining insights for service enhancement and fostering stronger customer engagement. A prompt response to comments and reviews demonstrates that passengers' feedback is valued.

Particularly, perceived value is a factor that does not exert a direct influence on passenger loyalty. However, this does not diminish its significance. By offering services that go beyond the basics and cater to individual preferences, airlines can elevate the overall travel experience. The unwavering commitment to improving all aspects of in-flight service quality ultimately enhances passengers' perceived value, which, in turn, contributes to greater passenger loyalty.

Implications based on findings

The implications derived from the study's findings and theoretical framework underscore that airlines have the potential to influence passenger loyalty significantly through in-flight service quality. This can be achieved by consistently delivering exceptional in-flight services, underpinned by the comprehensive training of cabin crews, meticulous cabin maintenance, a diverse array of entertainment options, the provision of well-prepared meals, and proactive communication to address passengers' needs. Additionally, by offering personalized services and upholding a steadfast commitment to in-flight quality, airlines in Myanmar can ultimately enhance passengers' perceived value. This enhancement of perceived value subsequently contributes to fostering a positive brand image, encouraging passengers to share favorable recommendations with their social circles. This current effect leads to the retention of existing customers and the attraction of new ones, thereby nurturing a stronger sense of passenger loyalty.

Limitations of the study

This study has certain limitations that warrant consideration. First and foremost, the research was conducted within a specific timeframe. Consequently, external factors such as economic conditions, technological advancements, or changes in industry regulations may have influenced the dynamics of in-flight service quality and passenger loyalty in ways that are not entirely captured by this study. Secondly, the observations and data collection for this study are centered on Myanmar Airlines and their specific services. This geographical and

contextual focus may limit the extent to which the findings can be extrapolated to the entire airline industry. In-flight service quality can vary significantly across different airlines, regions, and customer segments, which could potentially impact the broader applicability of the study's results. Acknowledging these limitations is essential, as it opens up opportunities for future research endeavors to build upon this study and provide a more comprehensive understanding of the intricate factors that influence in-flight service quality in relation to passenger loyalty across diverse airline contexts and operational landscapes.

Further Studies

This study primarily delved into the influence of four key independent variables, namely perceived value, EWOM, passenger satisfaction, and airline brand image, on passenger loyalty within the context of Myanmar Airlines at Yangon Airport. To expand and deepen the existing body of knowledge, future research endeavors could explore various avenues - *Comparative Analyses*: Researchers may consider adopting a comparative approach that spans multiple airlines operating in diverse regions. Such an approach could shed light on patterns and distinctions in how in-flight service quality influences passenger loyalty across different airline contexts and geographical locations. *Longitudinal Studies*: Long-term, longitudinal studies tracking passengers' loyalty behaviors over an extended period can provide valuable insights into the sustained impact of in-flight service quality on passenger retention. *Cultural Moderators*: Investigating the potential moderating effects of cultural differences on the relationship between service quality and passenger loyalty could offer a deeper understanding of how these dynamics fluctuate in various global contexts. These future research directions have the potential to enhance our comprehension of how in-flight service quality contributes to passenger loyalty in the continually evolving landscape of the airline industry.

References

Akinwande, M. O., Dikko, H. G., & Samson, A. (2015). Variance Inflation Factor: As a Condition for the Inclusion of Suppressor Variable(s) in Regression Analysis. *Open Journal of Statistics*, *05*(07), 754–767. https://doi.org/10.4236/ojs.2015.57075

Al-gharaibah, O. (2020). Brand Equity and Loyalty in the Airline Industry : The Role of Perceived Value and Online Word of Mouth. *International Journal of Innovation, Creativity and Change*, *14*(9).

Chen, C.-M., & Liu, H.-M. (2017). Exploring the Impact of Airlines Service Quality on Customer Loyalty: Evidence from Taiwan. *International Journal of Business and Management*, *12*(5). https://doi.org/10.5539/ijbm.v12n5p36

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*(3). https://doi.org/10.1007/BF02310555

Donsuchit, T., & Nuangjamnong, C. (2022). *Determinant of Influencing Customer Loyalty and Repurchase Intention toward Mobile Application Food Delivery Service in Bangkok*.

Hellier, P. K., Geursen, G. M., Carr, R. A., & Rickard, J. A. (2003). Customer repurchase intention: A general structural equation model. *European Journal of Marketing*, *37*(11–12). https://doi.org/10.1108/03090560310495456

Ismagilova, E., Dwivedi, Y. K., Slade, E., & Williams, M. D. (2017). Electronic Word of Mouth (eWOM) in the Marketing Context A state of the art analysis and future directions. In *SpringerBriefs in Business*.

Jusoh, A., Mardani, A., Omar, R., Štreimikienė, D., Khalifah, Z., & Sharifara, A. (2018). Application of mcdm approach to evaluate the critical success factors of total quality management in the hospitality industry. *Journal of Business Economics and Management*, *19*(2). https://doi.org/10.3846/jbem.2018.5538

Kanwel, S., Lingqiang, Z., Asif, M., Hwang, J., Hussain, A., & Jameel, A. (2019). The influence of destination image on tourist loyalty and intention to visit: Testing a multiple mediation approach. *Sustainability (Switzerland)*, *11*(22). https://doi.org/10.3390/su11226401

Khudhair, H. Y., Jusoh, A., Mardani, A., Nor, K. M., & Streimikiene, D. (2019). Review of scoping studies on service quality, customer satisfaction and customer loyalty in the airline industry. In *Contemporary Economics* (Vol. 13, Issue 4). https://doi.org/10.5709/ce.1897-9254.320

Khudhair, H. Y., Jusoh, A., Nor, K. M., & Mardani, A. (2021). Price sensitivity as a moderating factor between the effects of airline service quality and passenger satisfaction on passenger loyalty in the airline industry. *International Journal of Business Continuity and Risk Management*, *11*(2–3). https://doi.org/10.1504/IJBCRM.2021.116274

Kuo, Y. F., Wu, C. M., & Deng, W. J. (2009). The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services. *Computers in Human Behavior*, *25*(4). https://doi.org/10.1016/j.chb.2009.03.003

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*. https://doi.org/10.1016/j.jairtraman.2017.01.006

Mardani, A., Jusoh, A., Zavadskas, E. K., Khalifah, Z., & Nor, K. M. D. (2015). Application of multiple-criteria decision-making techniques and approaches to evaluating of service quality: a systematic review of the literature. In *Journal of Business Economics and Management* (Vol. 16, Issue 5). https://doi.org/10.3846/16111699.2015.1095233

Namukasa, J. (2013). The influence of airline service quality on passenger satisfaction and loyalty the case of Uganda airline industry. *TQM Journal*, *25*(5). https://doi.org/10.1108/TQM-11-2012-0092

Nurittamont, W. (2021). The role of e-wom communication impact to consumer's purchasing intention to healthy food products: An empirical study to testing the mediator and moderator variables. *International Journal of Innovation, Creativity and Change. Www.Ijicc.Net*, *15*(4).

Parasuraman, A., & Grewal, D. (2000). The impact of technology on the quality-value-loyalty chain: A research agenda. *Journal of the Academy of Marketing Science*, *28*(1). https://doi.org/10.1177/0092070300281015

Peter, J. P. (1979). Reliability: A Review of Psychometric Basics and Recent Marketing Practices. *Journal of Marketing Research*, *16*(1). https://doi.org/10.1177/002224377901600102

Ratna Ningsih, D., & Wayan Jaman, I. A. (2019). *The Effect of Service Quality and Electronic Word of Mouth (E-WOM) Towards the Loyalty Through Brand Image (The Study on the Customers of Sriwijaya Air in Indonesia)*. *11*(12). https://doi.org/10.7176/EJBM

Satornsantikul, A., & Nuangjamnong, C. (n.d.). *The Journal of Social Sciences Studies and Research Online The Impact of Brand Image and Brand Loyalty on Customer Satisfaction: A case study of Luxury Brand in Thailand*. https://doi.org/10.5281/zenodo.7016126

Shafiee, M. M., Sanayei, A., Shahin, A., & Dolatabadi, H. R. (2014). The role of brand image in forming airlines passengers' purchase intention: Study of Iran aviation industry. *International Journal of Services and Operations Management*, *19*(3). https://doi.org/10.1504/IJSOM.2014.065370

Soe, S. S., & Nuangjamnong, C. (n.d.). *Factors Affecting Customer Loyalty towards Hearty Heart Cosmetics: A Case Study Local Brand in Yangon, Myanmar*.

Soltani, M., Esfidani, M. R., Jandaghi, G., & Soltaninejad, N. (2016). The Effect of Service Quality on Private Brand Image and Purchase Intention in The Chain Stores of ETKA. *World Scientific News*, *47*(2).

Sosanuy, W., Siripipatthanakul, S., Nurittamont, W., & Phayaphrom, B. (2021). Effect of electronic word of mouth (e-WOM) and perceived value on purchase intention during the COVID-19 pandemic: the case of ready-to-eat food. *International Journal of Behavioral Analytics*, *1*(10).

Suanmali, S. (2014). Factors Affecting Tourist Satisfaction: An Empirical Study in the Northern Part of Thailand. *SHS Web of Conferences*, *12*. https://doi.org/10.1051/shsconf/20141201027

Thanh Hai, P., Duc Toan, L., Viet Tam, V., & Thi Thuong, M. (2017). Factors affecting customer satisfaction with the quality of services: empirical evidence at Da Nang international airport, Vietnam. *Asian Journal of Empirical Research*, *7*(3). https://doi.org/10.18488/journal.1007/2017.7.3/1007.3.61.74

Verma, S., & Yadav, N. (2021). Past, Present, and Future of Electronic Word of Mouth (EWOM). *Journal of Interactive Marketing*, *53*. https://doi.org/10.1016/j.intmar.2020.07.001

Yas, H., Jusoh, A., Nor, K. M., Alkaabi, A., Jovovic, N., & Delibasic, M. (2022). IMPACT OF AIRLINE SERVICE QUALITY ON PASSENGER SATISFACTION AND LOYALTY: MODERATING INFLUENCE OF PRICE SENSITIVITY AND QUALITY SEEKERS. *Transformations in Business and Economics*, *21*(3).