

# THE INFLUENCE OF PASSENGER PERCEIVED SERVICE QUALITY ON PASSENGER SATISFACTION AND LOYALTY: CASE OF DRUKAIR ROYAL BHUTAN AIRLINES

\*Melam Zangmo, Wasin Liamprecha and Sujinda Chemsripong

Faculty of Business, Economics and Communications  
Naresuan University, Phitsanulok, Thailand  
melamzam@gmail.com

**Abstract-** The objective of this study was to examine the influence of passenger perceived service quality on passenger satisfaction and loyalty in the context of Bhutan airlines, specifically Drukair Royal Bhutan Airlines (Drukair). To achieve this objective, the research was comprised of three specific objectives. Data was collected using fully structured questionnaires. The random sampling technique was used to collect the data and it covered 382 respondents on international flights of Drukair at Paro International Airport. The statistical package for social sciences (SPSS 17) was used to analyze the data. To test the hypothesis regression analysis was performed. The results indicated that passengers perceived service quality to have a significant influence on both satisfaction and loyalty. Further, customer satisfaction itself has a significant effect on loyalty. It is recommended that Drukair should consider implementing various strategies for improving service quality, especially in-flight entertainment and a more accessible and informative web site.

**Keywords:** Service quality, Customer satisfaction, Customer loyalty, Drukair, Airlines, Bhutan

## 1. Introduction

Globally, the aviation industry has become an important and reliable means of transportation. It also plays a major role in the economic development of a nation. The delivery of high quality service has therefore become a marketing instrument among air carriers as a result of competitive pressure. Archana & Subha [1] stated that the aviation sector is the most important segment in the economic development of a nation where it plays a vital role in moving people and products domestically and internationally especially over long distance.

Many companies have been disappointed by the lack of results from their quality efforts [2]. If customers receive low quality service from the same airline frequently, customers will be dissatisfied and eventually might decide to take their business elsewhere [3].

Satisfied customers form the foundation of any successful business as customer satisfaction leads to repeat purchases, brand loyalty and positive word of mouth promotion [4].

## 2. The airline industry in Bhutan

Bhutan is a small and landlocked country located in the eastern Himalayas with a total land area of 38,394 square kilometers and a population of 683,407 (census, 2009). Air transport is important to the nation as it plays a vital role in the economic development of the country. The airline industry was established by Royal decree in 1981 and Bhutan's national carrier Drukair Royal Bhutan Airlines (Drukair) began operations in 1983.

For the last three decades, Drukair was the only airline in Bhutan. However, the government has been encouraging competition and Bhutan Airlines (Tashi Air Pvt Ltd) started operating for domestic service initially and in October 2013 started operating in international sectors.

## 3. Background of Drukair Royal Bhutan Airlines

Drukair is a Government of Bhutan owned airline run by the government's Investment Wing, Druk Holding and Investments. Drukair began small with one 18-seat Dornier 228-200 on January 14, 1983. The first link was to Kolkata in India and subsequently followed by six destinations in South Asia, including Thailand. Today, the fleet has been upgraded to Airbus 319s and an ATR 42-500. Drukair is now a professional corporate entity under the aegis of the Druk Holding and Investments of the royal government.

## 4. Significance of research problem

Air transport is important to the nation as it plays a vital role in the economic development of the country. Generally, an aviation industry is the center of globalization for other industries [5]. It can therefore be said that an aviation industry is necessary for a developing country and as such Bhutan must focus on its airline industry. The tourism sector in Bhutan is one important industry depends heavily on the availability of air travel, as it is one of the major contributors to the country's Gross Domestic Product (GDP) and is the largest convertible currency earner.

The interest of researchers into service quality and satisfaction in the airline industry has been growing, as providing quality of service is essential for airlines to survive in this highly competitive world according to [1]. Many researchers have attempted to examine the impact of service quality on customer satisfaction and

customer loyalty in the airline industry. Previous studies [1, 3, 6, 7] demonstrated that service quality affects customer satisfaction and customer loyalty in the airline industry. However, to the best knowledge of author, there is no previous research carried out on the Bhutanese airline industry specifically which is the inspiration for this study.

### **5. Objectives of the study**

The main objective of this study was to examine the influence of passenger perceived service quality on passenger satisfaction and loyalty. More specifically it intends to fulfil three objectives:

1. To examine the effect of passenger perceived service quality on passenger satisfaction
2. To analyze the impact of passenger satisfaction on loyalty
3. To assess the effect of passenger perceived service quality on loyalty

### **6. Literature review and hypotheses**

Service has become very crucial in all business industries due to globalization brought about particularly by the development of the IT industry and communication services. However, service is not bound only to service based businesses such as banks, telecommunications, hotels, restaurants and beauty salons; it is also important as a strategic tool in all companies' efforts in gaining competitive advantage [4]. In this study, service quality is comprised of Parasuraman, Zeithaml & Berry [8] five dimensions of SERVQUAL i.e. tangibles, reliability, responsiveness, assurance and empathy.

According to Geraldine & U [9], measuring of service quality provides three beneficial outcomes: (a) ability to compare before and after changes, (b) the location of quality related problems and (c) the establishment of clear standards for service delivery. Chang & Yeh [10] stated that a theoretical service quality model is applied on the airline milieu. In addition to SERVQUAL related studies, many scholars have measured airline service quality through various quality dimensions such as the processing of luggage, seat cleanliness, the check-in process, the convenience of transit, timeliness, and handling of customer complaints as standards of service quality. This study also adopts similar quality dimensions to form 22 items of SERVQUAL questionnaires.

Service quality can be defined as a consumer's overall impression of the relative efficiency of the organization and its services. However, understanding exactly what customers expect is the most difficult step in defining and delivering high-quality service [1]. Although price is another way of attracting customers, some airlines tend to focus on service quality. Service-based companies are compelled by their nature to provide excellent service in order to prosper in an increasingly competitive domestic and global marketplace, i.e. there is no "tangible" product to equate otherwise to "quality" [11]. Passenger perceived service quality can be defined as a customer's belief or opinion about the services provided to them. It is the comparison between their prior expectations and the real performance of the services, based on their experiences.

Customer satisfaction is the overall customer attitude towards a service provider. It is an emotional reaction to the difference between what customers anticipate and what they actually receive as the fulfilment of their needs, goals or desires [12]. Oliver [13] defined satisfaction as "a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectations". Drawing on these references, passenger satisfaction can be defined as being all about fulfilling the expectations of the customers. Where the service provider is able to fulfil or exceed the customers' expectations the customer will feel satisfied.

Cronin & Taylor [14] identified customer loyalty as the customer's attitudinal component representing notions such as repurchase intention or purchasing additional products or services from the same company, willingness to recommend the company to others and the demonstration of their commitment to the company by exhibiting resistance to switching to another competitor. It can be concluded that customer loyalty expresses an intended behavior related to the product or service or to the company [15]. In other word, loyalty is simply as a customer's positive attitudes or feelings towards the service provider. Satisfied customers develop a positive feeling that they want to use the service of the same company again in the future. Furthermore, they encourage others to use the services from that particular service provider.

### **7. Effect of passengers perceived service quality on passenger satisfaction**

It is important for service companies to know the effect of service quality and satisfaction, and must monitor service quality and satisfaction to study the behavioral intentions of their customers. In a global climate of downturn and high running costs it is essential for airlines to provide their key customers, the passengers, with high quality service in order to yield satisfaction [6].

In order to keep their customers, airlines must become increasingly sophisticated about understanding their customers' expectations in an effort to maintain the quality of service their passengers demand [16]. It is observed that customer satisfaction has become a key intermediary objective in service operations due to the benefits it brings to organizations [17].

Therefore, for the purpose of this study the first research question / hypothesis is:

H1 – Passenger perceived service quality has a positive and significant effect on passenger satisfaction

### 8. Effect of passenger satisfaction on loyalty

Butcher, Sparks & Callaghan [18] have shown that the quality of service affects the tendency to purchase again as a result of increased satisfaction that creates loyalty. A study by Mohsan, Nawaz, Khan, Shaukat & Aslam [19] demonstrated that customer satisfaction is positively correlated with customer loyalty. It has become crucial that airline companies really need to focus on the needs and demands of their customers to survive and to compete successfully in today's dynamic corporate environment. Fornell [20] also found that high customer satisfaction would result in increased loyalty for the firm and that customers would be less prone to overtures from competition. Mahmud, Jusoff & Hadijah [7] identified that customer satisfaction gives significant positive impact on customer loyalty.

However, Degirmenci, Basligil, Bolat & Ozdemir [21] stated that airline companies have only recently realized the importance of satisfied customers to find a place for themselves in this competitive world and have initiated many projects to measure service quality and satisfy the customer by improving service quality.

Therefore, the second research question / hypotheses for this study is:

H2 – Passenger satisfaction has a positive and significant effect on loyalty

### 9. Effect of passenger perceived service quality on loyalty

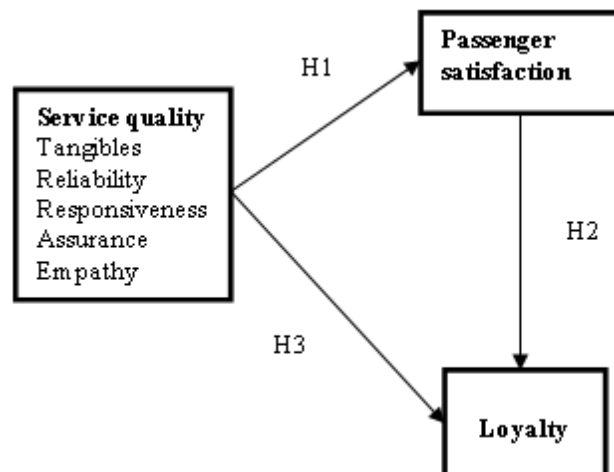
Loyalty is the feelings and attitudes of customers towards the services provided by a service organization and which form the perception of quality of the services. Ostrowski, Brien & Gordon [22] observed that when all airline companies have comparable fares and matching frequent flyer programs, the company with better perceived service will draw passengers from other carriers. Wong & Sohal [23] identified a positive relationship between service quality and customer loyalty. It was further supported in the study of Mahmud, Jusoff & Hadijah [7] that the quality of service has a significant and positive effect on customer loyalty.

Hence, the third research question/hypotheses guiding this study is:

H3 – Passenger perceived service quality has a positive significant effect on loyalty

### 10. Conceptual framework

Figure1 indicates the conceptual framework of this study which is drawn from the review of literature related to the study. It gives a clearer picture of the variables influencing passenger satisfaction and loyalty in the airline industry based on the five dimension of SERVQUAL.



#### The five dimensions of SERVQUAL

Parasuraman, Zeithaml & Berry [8] defined each dimension as below:

**Tangibles:** These are the physical aspects of service delivery; physical facilities, equipment, appearance of personnel, and communication materials.

**Reliability:** The service provider's ability to perform the promised service dependably and accurately. Customers expect reliable service delivery and that the service is delivered on time, in the same manner, and without errors every time.

**Responsiveness:** provider's willingness to help customers and provide prompt service. For example, keeping customers waiting may create unnecessary negative perceptions of quality. The ability to recover quickly can still leave customers with positive perceptions of service quality.

**Assurance:** Knowledge and courtesy of employees and their ability to inspire trust and confidence.

**Empathy:** Caring, individualized attention the firm provides its customers. This includes the approachability and sensitivity of service employees.

The definition of Parasuraman, Zeithaml & Berry [8] is used in this study.

## **6. Research methodology**

### **A. Population and sampling**

The sample identified in this study was drawn from a population size of 189,265 which was the average of total passengers carried by the Drukair in each of the three years 2011, 2012 and 2013 (statistic report collected from Drukair, 2014). Drukair carried 166,264 passengers in 2011, 193,405 in 2012 and 208,125 in 2013. Since Krejcie & Morgan's table (Krejcie & Morgan 1970) is widely used for determining sample size for a given population, this study used their table for determining sample size. The sample size calculated was 384 which was rounded up to 400 to allow some statistical error. It has been found that sample sizes larger than 30 and less than 500 are appropriate for most research [24, 25]. For the purpose of this study, Drukair's business class travelers were excluded since it covers only 13.56% of the seats and the level of service provided for different classes would be different.

### **B. Data gathering**

A structured questionnaire with 5 point Likert scales with anchors "strongly disagree" to "strongly agree" was used in this study. Since 5 point Likert scales are widely used, especially in a business context, this researcher felt that it was appropriate to use the same tactic for this study. The questionnaire consisted of two parts. The first part was designed to collect respondents' demographic information such as gender, age, Bhutanese national or international passenger, income level, purpose of travel and frequencies of travel within the previous six months. The second part was to examine the customers' perception of service quality, customer satisfaction and customer loyalty. To validate the questionnaire a pilot test was carried out on a convenient sample of thirty passengers of Drukair and the collected data was used refine the survey instrument. In the questionnaire, apart from the general information, all variables are measured by using 5 point Likert scales.

The data was collected by randomly distributing the questionnaire to the passengers who were waiting for their flight at the departure lounge at Paro International Airport. To motivate the respondents, along each questionnaire, a ball pen was distributed as a takeaway souvenir.

### **C. Reliability and validity**

The reliability of data was tested by using Cronbach's alpha value in which the alpha value was 0.911, which was higher than the minimum reliable level of 0.60 showing that items used in the survey instrument are internally consistent and reasonably free from measurement error. Cronbach's alpha coefficient over 0.6 is adequate for basic research [26]. The pilot study provided the opportunity to make minor changes as necessary in order to ensure that the respondents fully understood the questions and required responses. Moreover, the items to measure the variables were adopted from previous studies [1, 3, 27-29] (see appendix I).

### **D. Data analysis**

After collecting the data, a statistical package for social sciences (SPSS, 17 versions) was used for analyzing the data. Firstly, the descriptive statistics were analyzed for the demographic profile of the passengers, their perception towards the service quality of Drukair, their satisfaction level and their loyalty to Drukair. Secondly, in line with what previous scholars have used in similar empirical studies [3, 9, 17, 19, 30], regression analysis was performed to test the hypotheses.

## **7. Results and Discussion**

### **A. Demographic Analysis**

The gender distribution of the respondents was 54.5% were female and 45.5% were male. Of the 382 respondents, 67% were foreigners and 33% were Bhutanese. Most of the respondents were between the age group of 20-30 and 31-40 years. The percentage of respondents in particular occupation categories were government employee (22%), private employee (16%), student (17.3%), corporate employee (13.4%), business people (14.4%), housewife (6.3%), other (10.7%). The monthly income levels of the foreign respondents were between USD\$1,000 - USD\$2,999 and of Bhutanese respondents was between Nu.10,000 – Nu.29,999 (USD\$165 - USD\$500 equivalent). 62.3% of the respondents indicated the purpose of their current trip as being on holiday. 62% stated that they flew with Drukair at least once in last six months. (See table 1 for demographic profile)

**Table 1 Demographic profile**

	Frequency	%
<b>Gender:</b>		
Male	175	45.5
Female	208	54.5
<b>Age:</b>		
20 – 30	107	28
31 – 40	115	30.1
41 – 50	79	20.7
51 and above	81	21.2
<b>Foreigner /Bhutanese:</b>		
Foreigner	256	67
Bhutanese	126	33
<b>Occupation:</b>		
Student	66	17.3
Corporate employee	51	13.4
Government employee	84	22
Private employee	61	16
Housewife	24	6.3
Businessmen	55	14.4
Others	41	10.7
<b>Income of foreigner:</b>		
\$ 1,000 - \$ 2,999	85	22.3
\$ 3,000 - \$ 4,999	59	15.4
\$ 5,000 - \$ 6,999	24	6.3
\$ 7,000 - \$ 8,999	9	2.4
More than \$ 9,000	48	12.6
<b>Income of Bhutanese:</b>		
*Nu 10,000 – Nu 29,999	55	14.4
Nu 30,000 – Nu 49,999	12	3.1
Nu 50,000 – Nu 69,999	4	1
Nu 70,000 – Nu 89,999	3	0.8
More than Nu 90,000	7	1.8
<b>Purpose:</b>		
Business	32	8.4
Holiday	238	62.3
Visit friends and family	20	5.2
Others	92	24.1
<b>Frequency of travel in last six months:</b>		
One time	237	62
Two times	41	10.7
Three times	10	2.6
Four times	8	2.1
Haven't travelled	86	22.5

\*NU= Ngultrum (Bhutanese currency)

### **B. Descriptive Analysis**

In general, the respondents were satisfied with the service quality. However, there are few attributes (i.e. inflight entertainment services, airline website updating and efficiency of handling delayed flight) that they neither disagree nor agree. Furthermore, respondents were least satisfied with the attributes like convenience of flight schedule, cleanliness of toilets, promptness of responding to complaints, understanding passengers' specific needs and valuing customers' comments.

Respondents were most satisfied with the attributes employees' appearance of neat and tidy, safety, employees' willingness to help, language skills of the employees and kindness and politeness of the employees. Among the five dimensions of the SERVQUAL, respondents were most satisfied with assurance and reliability was rated the least satisfactory. (see table 2 for mean rating)

**Table 2 Mean ratings of the variables**

Factors	Mean	$\sigma$
<b>Service quality:</b>	3.63	<b>0.57</b>
Tangibles	3.64	0.61
Reliability	3.6	0.64
Responsiveness	3.62	0.68
Assurance	3.68	0.67
Empathy	3.61	0.77
<b>Passenger satisfaction</b>	3.6	<b>0.7</b>
<b>Passenger loyalty</b>	3.85	<b>0.77</b>

Note: The mean scores are interpreted as 1.00 – 1.80 = strongly disagree, 1.81 – 2.60= disagree, 2.61 – 3.40 = neither disagree nor agree, 3.41 – 4.20 = agree, 4.21 – 5.00 = strongly agree

### C. Hypotheses Results

#### H1 – Passenger perceived service quality has a significant effect on passenger satisfaction

The respondents were asked to indicate the degree of their agreement or disagreement with each item that measured the service quality on a five point likert scale. The result revealed that service quality had a significant effect on customer satisfaction i.e.  $p < 0.001$  and  $r^2 = 0.621$  (see table 3). Therefore, it can be concluded that passenger perceived service quality has a positive significant effect on passenger satisfaction. This is in line with prior studies [3, 31, 32] which found that service quality and customer satisfaction are positively related. The finding of this study implies that, if airline companies wish to achieve higher passenger satisfaction levels, they should deliver higher levels of the service quality. Improvement in service quality would lead higher satisfaction level of the passengers.

**Table 3 Regression of service quality on satisfaction**

Regression of service quality on satisfaction	Variable	R square	Sig
	Service quality	0.621	0.000

#### H2 – Passenger satisfaction significantly effect on loyalty

The results from table 4 show that passenger satisfaction has a significant effect on loyalty at  $p < 0.001$  and  $r^2 = 0.594$ . Therefore, this study concluded that passenger satisfaction has a positive effect on loyalty. This hypothesis is strengthened by previous studies [3, 7, 19, 33] where it was found that customer satisfaction influences customer loyalty. It highlights that satisfying customer will create or build loyalty meaning that airline companies must focus on service quality to satisfy customers in building customer loyalty. Customer loyalty can be generated by improving customer satisfaction and providing high product/service value [34]. Therefore, this study recommends more focus on delivering a high quality of service in the airline industry, as the service quality is the most effective means of achieving customer satisfaction and loyalty.

**Table 4 Regression of satisfaction on loyalty**

Regression of satisfaction on loyalty	Variable	R square	Sig
	Customer satisfaction	0.594	0.000

Coinciding with the findings in the study of Mahmud, Jusoff & Hadijah [7], it is found that passenger satisfaction is a much stronger driver in influencing loyalty than the service quality; though both the variables i.e. service quality and passenger satisfaction, have positive influence on loyalty. Likewise, it is identified that service quality is much more related to passenger satisfaction than to loyalty. In addition, it was found that passenger satisfaction mediates between the relationship of service quality and loyalty matching with the findings in the study of Namukasa [3]. Baron and Kenny's [35] three conditions for mediation were used to test the mediating effect of passenger satisfaction: (a) in the first condition, the independent variable must affect the mediator; (b) the independent variable affect the dependent variable in the second condition; (c) third condition, the mediator must affect the dependent variable. Perfect mediation holds if the independent variable has no effect when the mediator is controlled [35]. In this study, passenger satisfaction mediates partially as independent variable affects the dependent variable when the mediator is controlled with  $p < 0.001$  and  $r^2 = 0.616$  (see table 5).

**Table 5 Multiple regression result (Unstandardized coefficient B)**

Independent variables	B
Service quality	0.327*
Satisfaction	0.642*
R square	0.616

\*Level of significant at  $p < 0.001$ , Dependent variable: Loyalty

### H3 – Passenger perceived service quality has a significant effect on loyalty

Regression analysis was conducted to confirm the hypothesis and the result was  $p < 0.001$  and  $r^2 = 0.489$  (see table 6). It can therefore be considered that passenger perceived service quality positively and significantly influences loyalty. This matches with the findings of Wong & Sohail [23] who confirmed that there is positive relationship between the service quality and customer loyalty. It is proved that passenger perceived service quality has a significantly effect on loyalty and this shows that airlines must focus on their quality of service to build customer loyalty.

**Table 6 Regression of service quality on loyalty**

Regression of service quality on loyalty	Variable	R square	Sig
	Service quality	0.489	0.000

## 8. Conclusion

Generally, the findings of this study coincided with previous studies i.e. service quality provided by airlines has a significant impact on passenger satisfaction and loyalty. Among the five SERVQUAL dimensions, passengers were most satisfied with the ‘assurance’ with ‘reliability’ being the least. Under the ‘tangibles’, passengers perception of in-flight entertainment services was low. Among the five items under ‘reliability’, airline website updating had the lowest level of satisfaction in passenger perception and a convenient flight schedule was the second lowest. Under the ‘responsibility’, efficiency of handling delayed flights was the lowest and promptness of responding to complaints was the second lowest. Understanding passengers’ specific needs was the lowest and giving individual attention to passengers is the second lowest perceived under the 5<sup>th</sup> dimension ‘empathy’.

Passengers were most satisfied with employee’s appearance of neatness and tidiness, kindness and willingness to help. Further, passengers were more satisfied with safety, the image of the organization and the language skills of the employees. Out of 382 respondents, 72% agreed that Drukair provides quality service, and they were satisfied. Furthermore, 77% of respondents agreed to be loyal customers in that they were willing to recommend Drukair to others and to say positive things about Drukair.

## 9. Recommendations

### A. Recommendations to the practitioner or related industry

Based on the results of this study, several recommendations are made for practitioners and related industries. Firstly, Drukair should improve in-flight entertainment facilities, and they also need to have a more convenient flight schedule. Furthermore, Drukair’s web site needs to be improved since the web site is the most crucial tool in this competitive business world, usually being the customers’ first point of contact with the company; the web site is the first place that tourists look for information about the airline or other necessary information.

Since passengers’ had a low perception of the promptness of responding to complaints and the efficiency of handling delayed flights, Drukair should improve in those areas. Valuing the customers’ comments is another important feature to satisfy the customer. In the past, most marketing activities were to attract new customers but in today’s highly competitive world maintaining existing customers is becoming more important. Based on different market segments, using different marketing methods is recommended. For example, social media such as Facebook, Twitter etc. for young generations and news channels, newspapers etc. for older customers to reach target market at low cost. As the demographic results showed that most of the travelers are in the age group 31-40, with travelers aged 20-30 being the second highest, this indicates that most of the travelers are the younger generation.

Although, younger and older generation spend roughly the same amount of time online, younger generation are more likely to use the Internet as a platform to broadcast their thoughts and experiences. It is now generally understood that young customers are more engaged in activities such as rating the products/services and uploading videos, images and blog entries to the web or social media. Prior to 2000, markets had to advertise through multiple TV channels, but in the contemporary globalized environment, it has become important to do marketing in social media and listen to the comments of the customers for improvement.

Secondly, most of the respondents were foreigners and it is an opportunity for other related industries such as the hospitality industry, handicraft shops etc. to analyze the characteristics and consumption habits of foreigners. In addition, loyalty programs or frequent flyer rewards are key marketing instruments that many firms are using and it is suggested that service providers must have such strategies.

Finally, Drukair must continue maintaining the image of the company and keeping safety as the top priority since respondents were most satisfied with those features. At the same time, the company must try to understand the customers as they are becoming more knowledgeable and more demanding.

### B. Recommendation for future research

Since this study was focused on one airline, further research focusing on both the airlines that comprise Bhutan’s airline industry would help better understand the situation of the airline industry in Bhutan. Additionally, the current study was limited in the context of airline services for passengers on international

flights and studies to test how domestic passengers perceive the service quality of Drukair is identified as one possible future research topics.

Furthermore, due to time constraints, this research included only the three variables; service quality, satisfaction, and loyalty. The author recommends including other factors such as airfare/price and employee satisfaction in future research. Drukair being the government owned airline, further research on the impact of government rules & regulations and their control on customer satisfaction and onward effect on loyalty is suggested.

#### **10. Limitations**

This study has some limitations that may require future research to address. Firstly, this study focused on one airline due to time constraints. Data was collected from the passengers of international flights only and passengers of domestic flights were not included for this study. Furthermore, the respondents were only economy class travelers as the services provided to business class is normally different from the economy class. Additionally, passengers younger than 20 years old were excluded.

#### **Reference**

- [1] R. Archana and M. V. Subha, "A study on service quality and passenger satisfaction on Indian Airlines," *International Journal of Multidisciplinary Research*, vol. 2, pp. 50-63, 2012.
- [2] R. T. Rust, A. J. Zahorik, and T. L. Keiningham, "Return on quality (ROQ): Making service quality financially accountable," *Journal of Marketing*, vol. 59, p. 58, 1995.
- [3] J. Namukasa, "The influence of airline service quality on passenger satisfaction and loyalty The case of Uganda airline industry," *TQM Journal*, vol. 25, pp. 520-532, 2013.
- [4] B. Angelova and J. Zekiri, "Measuring Customer Satisfaction with Service Quality Using American Customer Satisfaction Model (ACSI Model)," *International Journal of Academic Research in Business and Social Sciences*, vol. 1, pp. 232-258, 2011.
- [5] D. Suhartanto and A. A. Noor, "Customer satisfaction in the airline industry: The role of service quality and price," *Asia Tourism Forum Conference*, pp. 1-9, 2012.
- [6] H. S. Khraim, "Airline Image and Service Quality Effects on Traveling Customers' Behavioral Intentions in Jordan," *European Journal of Business and Management*, vol. 5, pp. 20-33, 2013.
- [7] A. Mahmud, k. Jusoff, and S. Hadijah, "The Effect of Service Quality and Price on Satisfaction and Loyalty of Customer of Commercial Flight Service Industry," *World Applied Sciences Journal*, vol. 23, pp. 354-359, 2013.
- [8] A. Parasuraman, V. A. Zeithaml, and L. L. Berry, "SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality," *Journal of Retailing*, vol. 64, pp. 12-40, Spring88 1988.
- [9] O. Geraldine and C. D. U, "Effects of airline service quality on airline image and passengers' loyalty: Findings from Arik Air Nigeria passengers," *Journal of Hospitality and Management Tourism*, vol. 4, pp. 19-28, 2013.
- [10] Y.-H. Chang and C.-H. Yeh, "A survey analysis of service quality for domestic airlines," *European Journal of Operational Research*, vol. 139, pp. 166-177, 2002.
- [11] M. M. Bozorgi, "Measuring Service Quality in the Airline Using SERVQUAL Model (Case of IAA)," Master's thesis, pp. 1-119, 2007.
- [12] O. C. Hansemark and M. Albinsson, "Customer satisfaction and retention: the experiecnes of individual employees," *Managing Service Quality*, vol. 14, pp. 40-57, 2004.
- [13] R. L. Oliver, "Measurement and Evaluation of Satisfaction Processes in Retail Settings," *Journal of Retailing*, vol. 57, p. 25, Fall81 1981.
- [14] J. J. Cronin and S. A. Taylor, "Measuring Service Quality: A Reexamination and Extension," *Journal of Marketing*, vol. 56, pp. 55-68, 1992.
- [15] M. M. Akbar and N. Parvez, "Impact of service quality, trust, and customer satisfaction on customers loyalty," *ABAC Journal*, vol. 29, pp. 24-38, 2009.
- [16] A. Caruana, "Service loyalty: The effects of service quality and the mediating role of customer satisfaction," *European Journal of Marketing*, vol. 36, p. 811, 2002.
- [17] C. Ranaweera and J. Prabhu, "On the relative importance of customer satisfaction and trust as determinants of customer retention and positive word of mouth," *Journal of Targeting, Measurement & Analysis for Marketing*, vol. 12, pp. 82-90, 2003.
- [18] K. Butcher, B. Sparks, and F. O'Callaghan, "Evaluative and relational influences on service loyalty," *International Journal of Service Industry Management*, vol. 12, pp. 310-327, 2001.
- [19] F. Mohsan, M. M. Nawaz, M. S. Khan, Z. Shaukat, and N. Aslam, "Impact of Customer Satisfaction on Customer Loyalty and Intentions to Switch: Evidence from Banking Sector of Pakistan," *International Journal of Business and Social Science*, vol. 2, pp. 263-270, 2011.
- [20] C. Fornell, "A National CustomerSatisfaction Barometer: The Swedish Experience," *Journal of Marketing*, vol. 56, pp. 6-12, 1992.
- [21] E. Degirmenci, H. Basligil, A. Bolat, and Y. Ozdemir, "Customer Satisfaction Measurement in Airline Services Using Servqual," vol. 1, p. 294, 2012.
- [22] P. L. Ostrowski, T. V. O'Brien, and G. L. Gordon, "Service quality and customer loyalty in the commercial airline industry," *Journal of Travel Research*, vol. 32, pp. 16-28, 1993.
- [23] A. Wong and A. Sohal, "Service quality and customer loyalty perspectives on two levels of retail relationships," *Journal of Services Marketing*, vol. 17, pp. 495-513, 2003.
- [24] J. T. Roscoe, "Fundamental Research Statistics for the Behavioral Sciences, 2th ed., Holt, Rinehart & Winston, New York, NY.," 1975.
- [25] U. Sekaran, "Research Methods for Business: A Skill-Building Approach, 4th ed., John Wiley & Sons, Inc, New York, NY.," 2003.



- [26] J. Hair, W. C. Black, B. J. Babin, R. E. Anderson, and R. Tatham, "Multivariate Data Analysis, Pearson Education, New York, NY,." 2006.
- [27] K. M. Elliott and D. W. Roach, "Service quality in the airline industry: are carriers getting an unbiased evaluation from consumers?," *Journal of Professional Services Marketing*, vol. 9, pp. 71-82., 1993.
- [28] F. Pakdil and Ö. Aydın, "Expectations and perceptions in airline services: An analysis using weighted SERVQUAL scores," *Journal of Air Transport Management*, vol. 13, pp. 229-237, 2007.
- [29] J.-W. Park, R. Robertson, and C.-L. Wu, "The effect of airline service quality on passengers' behavioural intentions: a Korean case study," *Journal of Air Transport Management*, vol. 10, pp. 435-439, 2004.
- [30] L. Shukla, "A Case Study on Customer Acquisition and Retention on the Airline Service Industry," *OSR Journal of Business and Management (IOSR-JBM)*, vol. 9, pp. PP 15-33, 2013.
- [31] G. S. Sureshchandar, C. Rajendran, and R. N. Anantharaman, "The relationship between service quality and customer satisfaction – a factor specific approach," *Journal of Services Marketing*, vol. 16, pp. 363 - 379, 2002.
- [32] J. Manusamy, S. Chelliah, and S. Pandian, "Customer satisfaction delivery in airline industry in Malaysia: a case of low cost carrier," *Australian Journal of Basic and Applied sciences*, vol. 5, pp. 718-123, 2011.
- [33] R. T. Rust and A. J. Zahorik, "Customer satisfaction, customer retention, and market share," *Journal of Retailing*, vol. 69, pp. 193-215, 1993.
- [34] Z. Yang and R. T. Peterson, "Customer perceived value, satisfaction, and loyalty: the role of switching costs," *Psychology & Marketing*, vol. 21, pp. 799-822, 2004.
- [35] R. M. Baron and D. A. Kenny, "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations," *Journal of Personality and Social Psychology*, vol. 51, pp. 1173-1182, 1986.

### Appendix I

#### Variable measurement

Factors	Items	Adapted from
<b>Tangibles</b>	-The aircraft has clean and comfortable seats -Employees of this airline appear neat and tidy -The airline provides quality food and beverage -Cleanliness of toilets -This airline have in-flight entertainment service (newspapers and magazines)	Park, Robertson & Wu (2004); Pakdil& Aydın (2007); Archana & Subha (2012); Namukasa (2013)
<b>Reliability</b>	-Convenient flight schedule -On-time performance -Safety -Clean and comfortable interior/ seats -Updating airline website	Pakdil& Aydın (2007); Park, Robertson & Wu (2004); Namukasa (2013)
<b>Responsiveness</b>	-Handling of delayed flight -Efficient check in / baggage handling services -Employee's willingness to help -Employees' speed handling request/ complaint -Quality of the reservation services	Archana & Subha (2012); Park, Robertson & Wu (2004); Pakdil& Aydın (2007)
<b>Assurance</b>	-Image of the airline company -Knowledge of employee -Language skills of employee	Elliott & Roach (1993); Namukasa (2013); Park, Robertson & Wu (2004)
<b>Empathy</b>	-Employees' behavior to delayed passenger -Individual attention to passengers -Understanding of passengers' specific needs -Courtesy of employees	Pakdil& Aydın (2007); Park, Robertson & Wu (2004)
<b>Customer satisfaction</b>	-My choice to use this airline was wise one -I think that I did the right thing when I decided to use this airline -The in-flight services that this airline offers are worth what I pay for -This airline values customer's comments	Park, Robertson & Wu (2004); Namukasa (2013)
<b>Customer loyalty</b>	-Would like to use this airline again in the future -I would recommend this airline to other people -If I am asked, I would say good things about this airline	Park, Robertson & Wu (2004)