An empirical study into the satisfaction level of travelers to Bangladesh

Abu Zafar Md Shaleh & Syed Reza

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Bachelor`s in Service Business Management

Thesis

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The aim of this study was to diagnose the service quality and price perception of Biman Bangladesh Airlines passengers and to analyze the effects of price and service quality on customer satisfaction.

The study is based on the AIRQUAL model which shows the dimensions and how these dimensions are related to customer satisfaction. Price theory is also used to examine the influence or price on satisfaction, and satisfaction theory shows the relationship between satisfaction and customer loyalty.

Survey data was collected from 60 passengers who travelled on Biman Airlines in Bangladesh in the preceding year. The purpose of collecting data was to test seven hypothesized relationships among airline tangibles, terminal tangibles, personnel, empathy, image, price, customer satisfaction and customer loyalty. To test the conceptual model, a structural equation model (SEM) has been used and evaluated by R studio 3.5.3 with lavaan package.

The findings of the study show that price and AIRQUAL dimensions have a positive and direct relationship with customer satisfaction. It is also found that customer satisfaction is important to explain behavioural intentions such as customer loyalty. Satisfied customers tend to be with the airlines and dissatisfied customer change the airlines.

The results indicate that Biman Bangladesh airline needs to put their emphasis on maintaining high levels in the dimensions measured in AIRQUAL and price so that they can make the customer satisfied, and as a result ensure customer loyalty. Biman needs to invest more in its personnel so that they can provide a better service. It would also be advisable to buy more modern aircraft so that they can operate to more destinations.

Keywords: Service quality, Customer satisfaction, Customer loyalty, Biman Bangladesh airline, SEM.

Contents

1 Introduction

Nowadays the business environment becomes more competitive especially in the airline industry due to the technological advancement as a result customer expectations and demands are also changing which is the biggest challenge for airlines to meet up those expectations (Ali et al., 2015). Airlines need to tackle this situation by measuring, maintaining and providing higher customer satisfaction with better service quality and need to achieve the desired expectations of customers (Park et al.,2005). Authors have been chosen to study about to measure customer satisfaction because Bangladesh is a densely populated country where there are more travelers and no one has studied their satisfaction. In addition, studying Service Business Management, Will also help us to understand the service quality impact on the customer. This study will not only helpful for the travelers of Bangladesh but also for the Biman Bangladesh authority.

1.1 Purpose of the thesis

The main aim of the study is to conduct a customer research where it going to identify which factors are affecting travelers to towards customer satisfaction. The study will find out that either customer is loyal or not to the airline. This study believes that there is a positive relationship between price and service quality model with customer satisfaction. For this reason, we have proposed a conceptual model which will solve the stated problem form Biman Bangladesh.

The study is going to investigate the research question: 'What are the factors affecting the customer satisfaction level evidence from travellers of Bangladesh?'

The study is important because this study will contribute to the literature of the aviation industry and specifically in Bangladesh aviation that how price and service quality (AIRQUAL) are influencing customer satisfaction and what could be possible consequence such as customer loyalty. Study output can give information which will help airline authority to make their service better. This study is not only necessary but also fruitful and relevant as it scrutinizes service quality in Bangladesh which has not studied more before and identify other possible determinants of service quality which has an impact on customer satisfaction and impacts of customer satisfaction. Besides these, researches will get new ideas to do further study.

1.2   Construction of the thesis

The study requires quantitative method which will help to gather information about the traveler's preferences and will provide insight information that which factors need to be upgraded to make travelers satisfied. Due to the Corona virus it is not possible to conduct random quantitative study, so we have to choose convenient sampling method for collecting data. Questionnaire will be made based on the literature. After collecting the data, we will do our analysis where we will use different statistical analysis to test the hypotheses.

1.3   Framework of the thesis

To make this paper easy for the readers, this study is divided among six chapters. It starts with an introduction where it shows the main purpose of the study, research question and the how this study is going to conduct. After introduction thesis moves to the theoretical perspective where it demonstrates the key theories and propose hypothesizes. After covering all the necessary theories, the study introduces the methodology where it depicts which methods have been used to conduct the study and which analysis have been used. Moving to the next is the analysis where the study shows the survey results. Then thesis moves to the discussion of the analysis. The last part of the thesis is to conclude the study and show the practical and theoretical implementation, contribution and limitation of the study. Framework of the study is given below:

- Introduction
- Theoretical Prespective
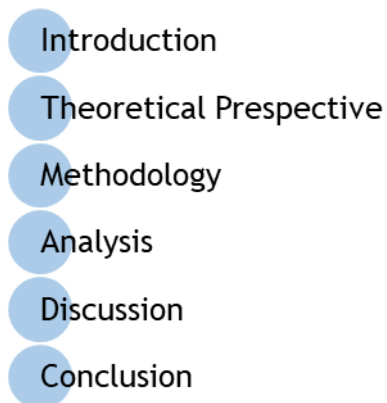- Methodology
- Analysis
- Discussion
- Conclusion

Figure 1: Structure of the thesis.

2   Literature review

In the literature review we will primarily focus on service quality because the thesis is output is based on service quality. As the main target of the research is to find out what is wrong in facility services and how to improve those in the airline industry. Then we will depict the

customer satisfaction theories. Customer satisfaction theory will help us to find all the existing problems in airbuses as well as in terminals and also help us to find a way to solve those problems. Also, show how customer satisfaction theory is related to service quality theories. We will make hypothesises based on literature.

2.1 Customer satisfaction

Customer satisfaction could be a measurement that determines what quantity satisfied or surpass customer expectations. Cardozo (1965) considers that satisfaction is the result of expectation, while the expectation is partly derived from previous experience. Oliver (1980) holds the idea that satisfaction is a temporary and emotional reaction of consumers to matters. Customer satisfaction is defined as a measurement that determines how happy customers are with a firm's product, service and capabilities. Customer satisfaction is also one of the hot topics in marketing for all time because it plays a vital role in achieving organizational goal and it is not only measured performance but also quantify the quality of organization (Munusamy and Chelliah, 2011).

Satisfaction is a kind of cognitive appraisal process in the comparison between the actual product performance and the previous expectation by customers (Westbrook, 1981). Churchill & Superenant (1982) consider that satisfaction of customers is a result of the purchase and use, which is produced by the comparison of the remuneration of expected results and the investment cost by buyers. Consumers will use emotional statements to express the positive or negative emotion on the usage of products, thereby affecting their satisfaction (Cadotte, Woodruff & Jenkins, 1987). Customer satisfaction is determined by the gap between the services that customers get and the expected services (Parasurman, Zeithaml & Berry, 1985). If a firm's product or services meet customer's expectation customer gets satisfied on the other hand, if it's below customer expectation customer will be dissatisfied. Nowadays it is very much important to know customer satisfaction level almost in every kind of business. This measurement process help business to grow further and improve their delivered product or service quality. Hill and Alexander (2006) mentioned that nowadays, firms of all types and sizes have started to give more emphasize on customer satisfaction because they have realized that to get new customer is costly than to keep existing customers.

Most of the time, Customer has their sets of expectation for the product or service and these expectations become the standard before purchasing. Once the product or service is used, the outcomes or perceptions are compared to pre-purchase expectations. Consumer generated content contains a variety of media forms and types (Gretzel, 2006). Customer satisfaction of airline passengers can be measured by employees of airline, technical and physical resources, aircraft, food and other passengers (Gronroos, 1984). Archana and Subha (2012) added the list of the drivers of customer satisfaction in airline industry, where customer satis-

faction is carried by out by multidimensional service quality such as pre-flight services, in-flight services, baggage handling, in-flight digital services, and post-flight services.

If a customer gets satisfied repurchasing can occur and they also recommend others. The repurchasing intention is that consumers willingly buy the service online, physical channel and they also recommend others about the service (Kim et al., 2016).

Customer satisfaction can be measured by several factors of service quality: employees of the airline, technical and physical resources, aircraft, food and other passengers, pre-flight services, in-flight services, baggage handling, in-flight digital services and post-flight services. Airlines enjoy more satisfied customers and consequently, more passengers when they deliver more quality services than airlines with dissatisfied customers (Gronroos, 1984; Archana & Subha, 2012; Khan & Khan, 2013).

2.2 Service quality

In the recent past, service quality has gotten attention in the field of marketing and business development for doing research (Farooq et al., 2018). Zeithaml et al. (2009) defined service quality as the judgement of consumer´s regarding the superiority of a product or service in a holistic view. Parasuraman et al. (1988) defined service quality is a function which determine the gaps between the customer's service expectations and perceptions of the delivered service. From the definitions we can see that expected service and perceived service are the two factors which can influence service quality. Parasuraman et al. (1985) also mentioned that when customers meet the expected service as perceived then they become satisfied and when service exceed expected service then customer become delighted.

Airlines need to improve their service quality continuously to fulfill the customer's needs and desires to make customer happy. Service quality could be a competitive advantage by creating and maintaining service quality. By improving service quality, an airline could be beneficial in such a ways: creating and developing a relationship with customer, repurchase activities will increase, customer become loyal and they will spread positive word-of-mouth to others and they will become an advocate of the airline which is a free marketing for airline (Park et al., 2005). Hussain et al. (2015) reveled the cost incurred for maintaining and upgrading service quality that should be considered as an investment rather than an expense to an organization.

Suhartanto and Noor (2012) depict that the Nordic approach and the American approach are the two approaches to measure service quality. According to Nordic approach, there are two types of quality consists: technical and functional quality in service quality and in the American approach service quality consists of five components: reliability, responsiveness, empathy, assurance and tangibles components these are familiar with SERVQUAL dimensions (Su-

hartanto and Noor, 2012). Technical quality is an interaction between buyer and seller where the customer gets technical the outcome from the service delivery (Lau, Akbar, and Fie, 2005). Functional quality is the interaction between employees and customers where there is an influence of other customers and customer himself participate in the process (Grönroos, 1984). Both approaches are not superior but SURVQUAL approach is widely accepted and has been questioned by many scholars (Cronin and Taylor, 1992; Culiberg and Rojsek, 2010). Park et al. (2005) also argued along with Culiberg and Rojsek (2010) that it is not possible to measure all the dimensions of the service industry especially the airline industry with these five components (reliability, responsiveness, empathy, assurance, and tangibles).This approach makes the comparison between perceived service quality and excepted service quality (Cronin and Taylor, 1992; Buttle, 1996). Park et al. (2005) opposed that this approach cannot measure some of the airline activities: online ticketing, check-in, luggage allowance, boarding service and on-board facilities.

AIRQUAL model has developed by Bari et al. (2001) to overcome those problem mentioned by Park et al. (2005) and other researchers. AIRQUAL model has five factors which we will see below. AIRQUAL model has been presented by EKIZ et al. (2006) on perceptions of service quality in North Cyprus National Airline, Nadiri et al. (2008) also validated AIRQUAL scale by using it to assess the impact of airline service quality on customer loyalty of North Cyprus Airlines, later on, followed by Ali et al. (2015) used it for assessing service quality in Pakistan International Airlines.

Five dimensions of AIRQUAL is described as follows:

Airline tangible is the first dimension of AIRQUAL model, and it is acknowledged by the condition of airplane which includes quality of interior and exterior equipment, meal service, seats and cleanliness (Ali et al., 2015). It is mainly emphasizing on the tangible elements which are associated with the service quality of an airline. It can be said that when the services of airline tangibles are better than it is expected to have a higher satisfaction (Farooq et al., 2018).Saha and Theingi (2009) examined the relationship between customer satisfaction and service quality, and they found a very strong relationship among them. From here we can generate hypothesis as:

H_1:Airline tangibles have direct influence on customer satisfaction.

Terminal tangibles are the services that can be found at a terminal (Ekiz et al., 2006). According to Farooq et al. (2018), terminal tangibles have the ability to build an image for the airline. As terminal tangible and customer satisfaction is not dependent on each other, but they have relationship due to the using same airport can be used by other airlines and their passengers will get the same facilities. From here, we can make assumption that customer satisfaction would be higher when quality of terminal tangibles would be better. So, we can propose a hypothesis:

H$_2$: Terminal tangibles have direct influence on customer satisfaction.

Personnel services are the services which is provided by the airline's staff and cabin crews (Ekiz et al., 2006). Personnel play a vital role in service quality as they are the one who have contact with the passengers (Babbar & Koufteros, 2008). Here is a difference to other AIRQUAL dimension that personnel are directly involve with the passengers and personnel's behavior influence the level of satisfaction and perception of the service (ibid.).Personnel service work as a trigger of customer's perception of service quality where perception level is depends on skills, nature and attribute of the employees (ibid.). Personnel factors work as how the employees are treating/ giving services to the customers (Farooq et al., 2018). Personnel is an important factor and it has a significant impact on customer satisfaction (Ali et al., 2015). We can propose a hypothesis as follows:

H$_3$: Personnel have direct influence on customer satisfaction.

Farooq et al. (2018), empathy can be treated as a vital factor in the model of service quality and it plays an important role not only in airline industry but also in any other industries. In the airline industry empathy could be defined as spontaneous hassle-free service which includes luggage handling, well-mannered ticketing service and compensation (Ekiz et al., 2006). To provide better quality service, company need to understand the customers' needs and concern for their well-being (Babbar & Koufteros, 2008).

There is a secret that the benefit of emotional intelligence and empathy in airline business and it has direct effect in customer satisfaction (Farooq et al., 2018). From here we can propose a hypothesis is:

H$_4$: There is a positive relationship between empathy and customer satisfaction.

Last but not the least dimension of AIRQUAL is image. Image is the perception of airline overall, value for money; promotional offers and reputation (Ekiz et al., 2006). While passenger evaluating the service quality of airline at that time image play a vital role. According to Grönroos (1984) positive image has the ability to increase level of service quality by reducing the negative experience that passenger face. Airlines care about their image, goodwill because they have found that image have direct relationship with customer satisfaction. From here we can propose a hypothesis:

H$_5$: Image have direct influence on customer satisfaction.

2.3 Price

As we know that price is one of the components of the marketing mix and price is also a critical topic for the airline. Price is defined as what customers actually pay in exchange for the benefits accruing from a product or service (Lovelock & Wirtz, 2007). According to Zeithaml (1988) price has both monetary and non-monetary characteristics. Monetary characteristic is what customer pay to get the product or service and non-monetary could be how a customer perceives the value of the price.

In the past, price used to be same for the same route when there was not any regulation of price in the airline industry. Now the situation has been changed many airline companies have started to make pricing strategy (Siriwardena and Silva, 2017). According to Boin et. al. (2017) beside core ticket price, the airline has a good strategy to generate revenue apart from checked baggage, onboard food, premium seat selection, and extra legroom. The airline also earns from seasonal pricing, when there is a demand for a particular season then the airline can charge a high price, this is another way to generate revenue (Siriwardena and Silva, 2017). The airline industry also uses market segmentation; vacationers, business travellers and group operators to maximize their profit like other industries (De Pew and Stripling, 2003). Price is associated with the service and passengers are also sensitive regarding service. If there is a little or no difference between the services offered in the airline industry, a customer may just choose the cheapest airline (Lovelock & Wirtz, 2007). Lower price than competitors can attract more customers and may stimulate demand in the off-peak period.

Price is also associated with customer satisfaction, after buying service customer measure the satisfaction by comparing to other services. When a customer receives good service according to the price then customer tends to build a relationship to the airline so that customer becomes ready to buy the service at buyer's asking price. When a customer does not receive a good service from the airline then the customer is not coming to fly with the same airline, perhaps customer will change airline (Low et al., 2013). Form here we can propose another hypothesis:

H_6: Price have direct influence on customer satisfaction.

2.4 Customer loyalty

A few years ago, companies used to focus on brand loyalty on tangible goods which had been changed over the year. (Tucker, 1964; Day, 1969). Loyalty term can be defined as when customer purchase necessary staff from a particular company or brand again, it is kind of behavioural choice to buy from there (Cunningham., 1956). Some famous brand has their unique product or service quality and preferred price or market influence customers and it has strong conviction to keep the promises of the customer to buy again and to prefer the

product or service over other product or service (Oliver, 1999). Oliver (1999) opposed to the customer loyalty definition and mentioned that definition of customer loyalty would be appropriate when awareness, adoption and behavioral intention. Zeithaml et al. (1996) also argued that price sensitivity and price-increase tolerance is a big factor which is missing in previous research. Satisfaction could be a vital and positive term to attain customer loyalty.

Satisfaction could be a vital and positive term to attain customer loyalty. When the customer is satisfied with the product/service then customers have the tendency to stay with the product or service as a result this relationship continuous and satisfied customer becomes the loyal customers (Heitmann et al., 2007).

Customer satisfaction demonstrated that customer satisfaction has a direct relationship with customer loyalty. This relationship influences by some factors of the customer which are a wide range of product or services, age of the customers and income of the customers (Homburg & Gierin, 2000). Many scholars (Zeithaml, 2000; Blomer et al., 1998; Reichheld, 1996; Reichheld & Sasser, 1990) have identified that customer buy the product or services from a certain company or brand when customers have a good feeling about the product or services from here we can say that loyal customer is profitable to the company.

There is a theory of Hirschman's (1970) named exit-voice theory which has been developed to identity the relationship between customer satisfaction and customer loyalty. The basic theory is that each customer has two options when customer is not satisfied with the product or service then customer exits the product or service that means customer is not going to use it any more or customer raise voice it means customer makes a complain regarding product or services. On the other hand, when customer is satisfied with the product then customer consume the product or service again and become a loyal customer (Bloemer and Odekerken-Schroder, 2002). It can be hypothesized that customer satisfaction has a positive correlation with customer loyalty.

H_7: Customer satisfaction have direct influence on customer loyalty.

Based on our research question and hypotheses we can propose a research model:
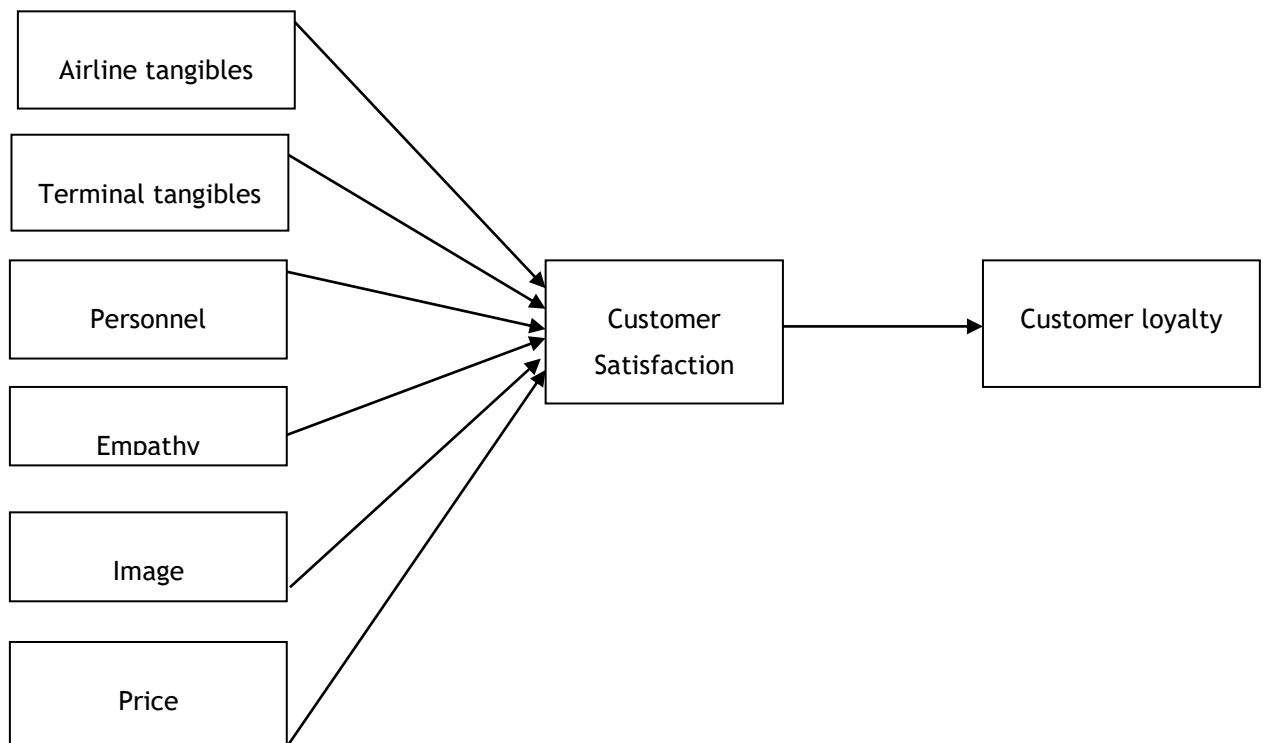

Figure 2: Conceptual research model.

Our conceptual research model is divided into three parts, in the first stage we have all of the independent variable such as airline tangibles, terminal tangibles, personnel, empathy, image and price. Next come to the second part where we have mediating variable which is customer satisfaction. In the last part we have customer loyalty. We are trying to see the effect of all the independent variable on customer satisfaction and want to see the either customer satisfaction can have an output namely customer loyalty.

3   Methodology

This chapter is going to demonstrate the how this study is going to use methodological approach. This chapter will also depict the research method in details and what type of statistical elements are going to use for analyzing data.

3.1   Research Design

Research design as "organizing research activity, including the collection of data, in ways that are most likely to achieve the research aims" (Easterby-Smith et al.,2012).Descriptive

research design is applicable in this study, because the study seeks to describe meaningful observations of market phenomena (Malhotra and Birks, 2006). One research question and seven hypotheses are going to examine by this study. Descriptive research design is the procedure to collect data through questionnaire and it is generally used for collecting quantitative data from a large sample (Malhotra and Birks, 2006).

We have conducted a survey in Dhaka, Bangladesh. The sample has been measured and reveal the relationship between the independent and intervening variables and will depict the outcome of the intervening variable The survey also includes six control variables: Age, gender, education, travel for, travel with, and nationality.

3.2 Questionnaire development

The questionnaire is the main instrument of data collection.

We have developed a questionnaire with the aid of literature and based on the described hypothesis. We have followed the suggestion of Zikmund (2000) that the identity of the respondent will be anonymous. Respondent's opinion about the statement that how strongly they agree or disagree has been measured by using Likert scale. The questionnaire has been developed by focusing on customer travel experience from the very beginning of the journey such as from the airport. The questionnaire is divided into basic three parts where the first part summarized the intention of the research and researcher information and affiliation of researchers. Then all the 56 question was structured in 11 categories about the experience of travel conducted on service quality including experience in airport and in the aircraft.

In this study, we have used the Likert scale to make it easy for respondents to answer in a short time, every question is designed according to the respondent's nearest expectation, experiences, and importance about service quality. Respondents are asked to circle the most appropriate experience. The Likert scale is used to get the respondent's opinion about statement that how strongly they agree or disagree. Satisfaction level is structured as, a lot lower than expected =1, Lower than expected=2, Expected=3, Better than expected=4, A lot better than expected= 5.

3.3 Data Collection and sample collection

The main reason for this research is to collect information about the satisfaction level of passengers of Biman Bangladesh Airlines and to analyze the relationship among service quality, price and customer satisfaction. Probability and non-probability sampling are the two kinds of sampling design (Malhotra, 2008; Sekaran, 2003). Probability sampling make sure that population are taken from the known place and non-probability sampling ensure that the population have no clue of being selected as a participants of the study (Sekaran, 2003).

We can distinguish this collection process between probability sampling and non-probability sampling, where probability sampling has a stronger credibility in general (Easterby-Smith et al., 2012). However, in this study, it would have been impossible to know who has travelled by Biman Bangladesh Airline in past one year. We had no other choice without choosing a non-probability convenient sample. For collecting data, we have used non-probability: convenient sampling to test the hypotheses.

We have constructed a questionnaire with a tool called Google forms. This tool was convenient to use, and we were able to follow respondent's participation as they were completed. We ensured respondents that survey was anonymous, and the result should not be used other than this study.

We have contacted a renowned travel agent in the beginning and asked them to help us. Travel agent had found approximately 100 travelers who had travelled by Biman Bangladesh Airline from their database. We have collected approximately 38 respondents from that travel agent within 7 days then data collection had stopped totally. Then, we have sent questionnaires to our friend and relatives by e-mail and through other social media and requested them to fill up if they have had travel experience in Biman Bangladesh Airlines within the past one year. We also have requested them to share and invite their friends and acquaintances to participate. This result refers to a snowball sampling effect; where you start with one who meets the criteria for inclusion and this person name others who also are qualified (Easterby-Smith et al., 2012).The survey was distributed to the internet, to get a larger sample and to get a faster respondents rate (Jacobsen, 2011). We got 60 respondents in total whereas 38 from the travel agent and 22from friends and acquaintances.

3.4   Measure

The measure of AIRQUAL is taken from several authors (Ekiz et al., 2006; Nadiri et al., 2008; Ali et al., 2015 and Simsek and Deirbag, 2017). We have used Likert scale to measure collected data from respondent's satisfaction level. In this survey gender, education, travel for, and travel with, can be treated as a control variable.

There are in total of 56 questions in the questionnaire in 11category which is based on AIRQUAL. All categories are described below:

3.4.1   Airline tangibles

Airline tangibles include airbuses interior design, inside facilities such as air-conditioning, comfortable seats, cleanness of seats and toilets, delivered catering services etc. Airline tangibles is a measure of overall facilities or product served to customers. To measure, airline tangibles we asked five questions which are based on Ekiz et al. (2006):

'Aircrafts are clean'

'Aircrafts are modern looking'

'Aircraft's toilets are clean'

'Aircraft's seats are clean'

'Quality of air-conditioning in the aircraft is good enough'

3.4.2   Terminal tangibles

Terminal tangibles cover all the facilities available in the terminal. We have considered the above-mentioned facts as our measurement question in terminal tangible. To measure terminal tangibles concept is taken from Nadiri et al. (2008) we have structured six important questions:

'Airport toilets are clean'

'Number of shops in airport is enough for my need'

'Air-conditioning in airport is effective'

'Sign system in airport is noticeable'

'Availability of trolleys in airport is enough'

'I feel comfort of waiting in hall of the airport'

3.4.3   Personnel

Personnel services are measured by the quality of delivered services of airline staff and cabin crews. Personnel services including airline staff and cabin crew's skill and professionalism regarding their duty and customer services. Here we measure personnel with four important items based on Ali et al. (2015):

'Airline employees' general attitude is good'

'Flight attendants are well-dressed'

'Personnel show personnel care equally to everyone'

'Personnel are aware of their duties'

3.4.4   Empathy

Empathy is considered as the airline company's ability to communicate with their customer with individualized attention. Five items have been borrowed from Şimşek, and Demirbağ (2017):

'Airline maintains punctuality of departures and arrivals'

'Number of flights is enough to satisfy passengers demand'

'Compensation schemes in case of loss or hazard is effective'

'Services regarding entertainment is enough'

'Quality of online services is secure'

3.4.5 Image

Image can be defined as the overall reputation of the airline. Company image can affect customer perception in many ways. Here we have taken four items from Ekiz et al. (2006) and respondents gave answers to those:

'Airline offers low-price ticket regularly'

'Ticket pricing is consistent with given service'

'Airline company has a good reputation'

'Promotion offerings are very much attracting to me'

3.4.6 Price

Price is the monetary value of the product or service that exchanged between customers and service provider. Price can be measured with four items which are borrowed and altered from Riandarini et al. (2015) and Saha and Theingi (2009), Johnson et al. (2001) :

'Price of air ticket is reasonable'

'Discounted price is useful to me'

'I feel there is fairness of price according to service delivery'

'My expectations are fulfilled according to the price'

3.4.7 Customer satisfaction

Customer satisfaction is a consumer's fulfillment response. Customer satisfaction is measured with four items which are borrowed from Leong et al. (2015) and Ekiz et al. (2006) and asked respondents five statements:

'I am satisfied with my decision to use this airline'

'My choice to fly with this airline was a good one'

'I chose the right airline for traveling'

'I have enjoyed travelling with this airline'

'My satisfaction with the airline has increased'

3.5   Reliability and validity

Reliability and validity are crucial aspects in research practice and everyone who is engaged in survey work must be familiar with these criteria. These terms are not always readily distinguished; some degree of overlap seems almost inevitable and they are, in any case, interconnected (Chisnall, 1997). Reliability refers the consistency of a measure. Systemic sources of error do not have an adverse impact on reliability because they affect the measurement in a consistent way and do not lead to inconsistency (Malhotra, 2010). Reliability is the degree to which measures are free from random error and, therefore, provide consistent data (Mc Daniel and Gates, 2004). Error-free measurement is always acceptable as a correct measure. Test-retest, the use of equivalent forms, and internal consistency are three widely used paths of access reliability.

The validity of a scale may be defined as the extent to which differences in observed scale scores reflect true differences among the characteristics being measured, rather than systematic or random error. Thus, a measuring device is valid only if differences in scores reflect true differences in the characteristics being measured rather than systematic or random error (Malhotra, 2010). Validity addresses the issue of whether what the researcher was trying to measure was actually measured. To measure the credibility of research, we need to examine the validity and reliability of latent variables so that the study can get error free influence results (Wong, 2013). Validity is the extent to which any measuring instrument measures what it is supposed to be measured in quantitative research (Thatcher, 2010). Validity consists: internal validity and external validity (Easterby-Smith et al., 2015). Internal validity means that the research can be replicated (Willis, 2007). In our study, we generated hypotheses and explain the relationship with theory. As we have conducted the survey fully online, but we had done the pre-test with selected respondents. We also depict the logic behind our research model and also provide justify the hypothesis.

In our study we also cover the external validity by collecting data from the convenience sample and respondents belong to Biman Bangladesh Airline travelers. As the survey conducted online, all the respondent participation was without any interruption and unbiased.

A confirmatory factor analysis (CFA) is used to access the measurement model and to examine the reliability and construct validity (Ali et al., 2015). Ahmad et al. (2016) mentioned that 'Construct validity is achieved when the fitness Indexes achieve the level of acceptance'. Where fitness indexes are chi-square (x2) /degree of freedom (d.f), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI) and, root mean square of approximation (RMSEA). Discriminant validity will be accepted when the square root of the AVE values of each latent variable is higher than the correlation between the latent variables (Fornell and Larcker, 1981). Accord-

ing to Hair et al. (2010) the factor loadings are supposed to be the value of 0.50 when factor loadings are equal to 0.7 then it could be considered as a good indicator. AVE is acceptable when it is 0.5. There is an exceptional rule that if a variable's AVE is less than 0.4, we can accept it if that variable's composite reliability is higher than 0.6 (Fornell and Larcker, 1981). According to Ahmad et al. (2016) the aim of the construct reliability is to measure reliability and internal consistency of the measured variables representing a latent construct. Construct reliability will be achieved when composite reliability (CR) would be higher than 0.6.

3.6   Data analysis

We have collected data through google form. All the collected data were analyzed using SmartPLS version 3 for pre-testing and used R studio 3.5.3 with lavaan package for the final analysis. The reason to use this software, because it considers the causal relationship among latent constructs and takes account measurements errors in the structural model (Hair et al., 2017). In our study validity and reliability test have been performed and analyzed by the method of using hypothesis.

4   Analysis

This chapter will demonstrate the analysis of the survey where the study will show some charts for presenting demographic information of the participants. This study requires confirmatory factor analysis (CFA), which has been used to measure and to validate the unidimensional, reliability, construct validity and discriminant validity. CFA is also used for measuring the dimension of AIRQUAL (airline tangibles, terminal tangibles, personnel, empathy and image) customer satisfaction and customer loyalty. Structural equation modelling (SEM) has been used to test the hypothesises. Data has been analysed by R studio 3.5.3 with Lavaan package.

Background information.

Gender:

60 responses

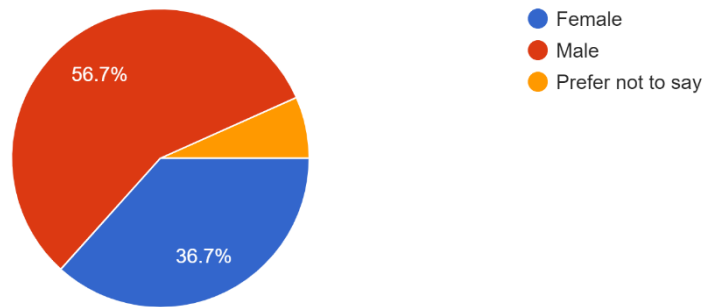
Legend:
- Female
- Male
- Prefer not to say

56.7%

36.7%

Figure 3: Gender

The figure illustrates that majority of the participants were male. In this study 60 participants participant where 34 was male and female participant is 36.7% which means the number of female participants was 22. There are 4 persons who do not want to reveal their gender and their percentage is 6.7%.

Now the study will move towards the education of the respondents.
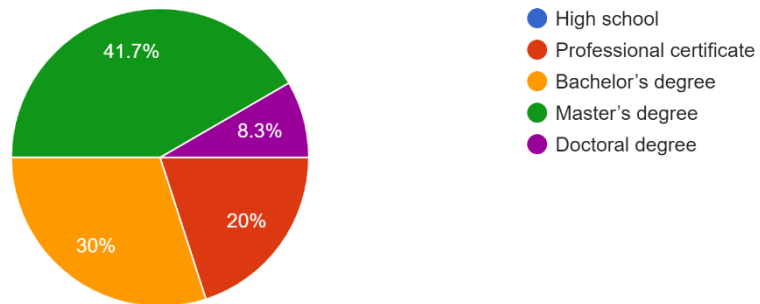
Education:

60 responses

Legend:
- High school
- Professional certificate
- Bachelor's degree
- Master's degree
- Doctoral degree

41.7%

8.3%

20%

30%

Figure 4:Education

The pie chart depicts that majority of the respondents are master's degree holder and their percentage are 41.7%. 30% respondents have bachelor degree which counts 18 respondents whereas 12 respondents have professional education. Last but not least we have received responses from the doctoral degree holders and their percentage is 8.3%.

Next information is the age of the respondents.
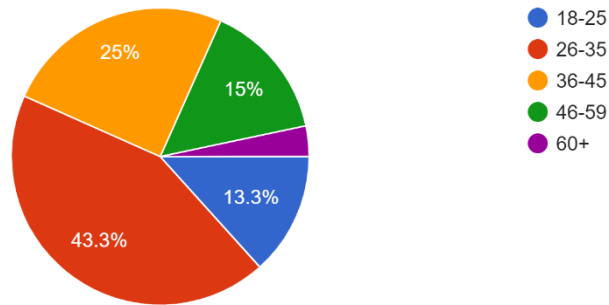
Age:

60 responses

Figure 5:Age

The pie chart is telling us about the age of the respondents. Majority of the participant's age is between 26 to 35 which is 43.3%. The second-largest group of age is 36-45 which is followed by 25%. Mid age people between 46-59 is the third largest group with15% and the youth people (18-25) is the fourth major participants where their percentage is 13.3. Only 3.3% per cent of people belong to older age (60+).

Now the purpose of the using airline is going to revel.

Travel for:

60 responses
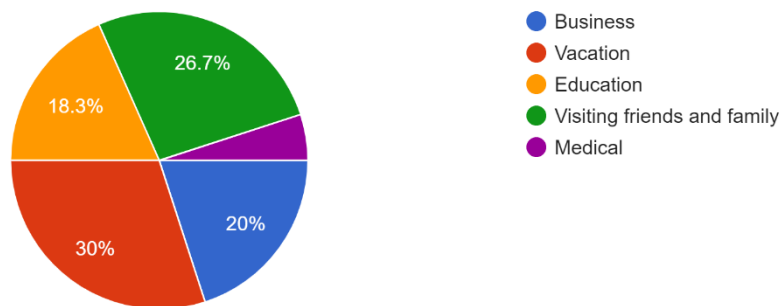
Figure 6: travel purpose

30% of participants are travelling for a vacation to different destinations, this is the majority group. 26.7% participants use airline for visiting friends and family. Participants use airline for the business purpose which is 20%, they travel to a various destination for doing business. For the education purpose 18.3% participants use Biman airlines. 3% of participants travel for medication.

Now the chart will tell with whom participants are travelling.

Travel with:

60 responses

Figure 7: Travel with

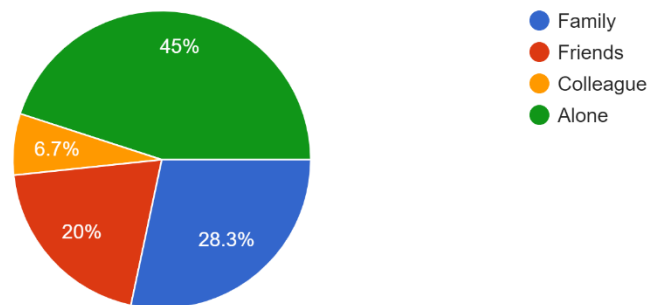For the chart, it can be said that 45%people love to travel alone which is the 27 respondents among 60. There is 20% respondents who are travelling with their family and 20% of respondents are travelling with their friends. Rest of the 6.7%respondents travel with their colleague. Now study will revel the nationality of the respondents.
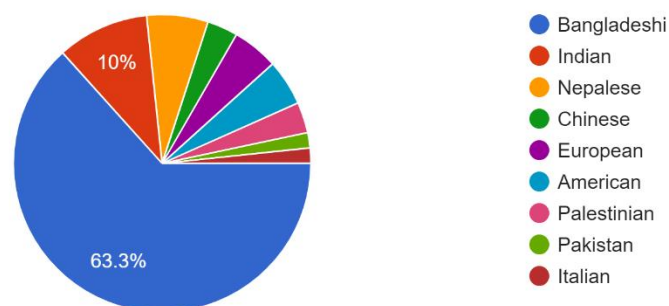
Nationality:

60 responses

Figure 8: Nationality

The survey is able to collect a diverse nationality. It is obvious that the majority would be Bangladeshi as this study is conducted in Dhaka, Bangladesh where the percentage is 63.3. 10% participant is Indian who is our neighbour. Nepalese also use this airline for the travelling purpose where their percentage is 6.7. Among 60 respondents there are 5% of respondents who are American and European. Survey has found that there is 2 Chinese and 2 Palestinian where their percentage is 3.3. Only 1 participant is found in the survey who are from Pakistan and Italy. These people have been using Biman airline for the business, tourism and education purposes.

We have asked respondents about their expectations before travelling with Biman and try to know what their perception about the aspects of Biman. From figure 8 we can say that majority of the respondents have an average expectation of the aircraft which means not so good

not so bad, the same perception about the airport services and hassle-free service. Respondents have a good perception of the airline services which means they believe they will get the service properly. Respondents have kind of negative expectations of the image of the airline and the price of the airline.
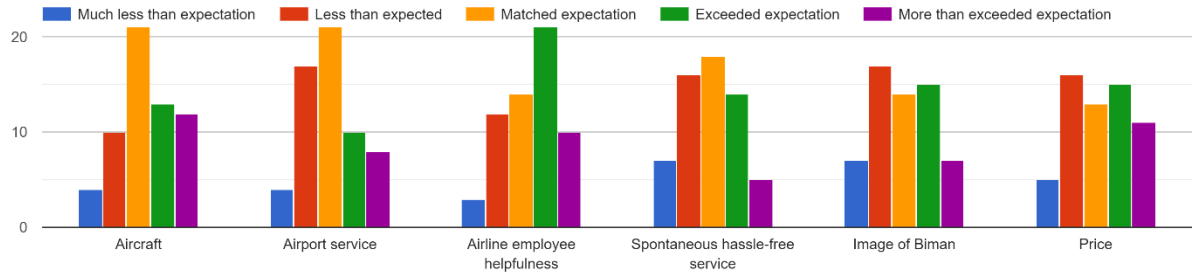

Figure 9: Expectations of aspects

At the end of the questionnaire, we asked them whether their expectation was matched after travelling or not. Figure 9 tells us that respondent expectation after travelling, the expectation of the aircraft is changed and they are delighted with the aircraft. Their expectation matched about the airport and hassle-free services that they found both services are average. Respondents expectations do not matched with the airline employee helpfulness, which means they have got less service what they have thought. After travelling with Biman, they have changed their perception about the Image which means Biman has average image. According to the price, they have not got the service so that they have a negative perception about price.
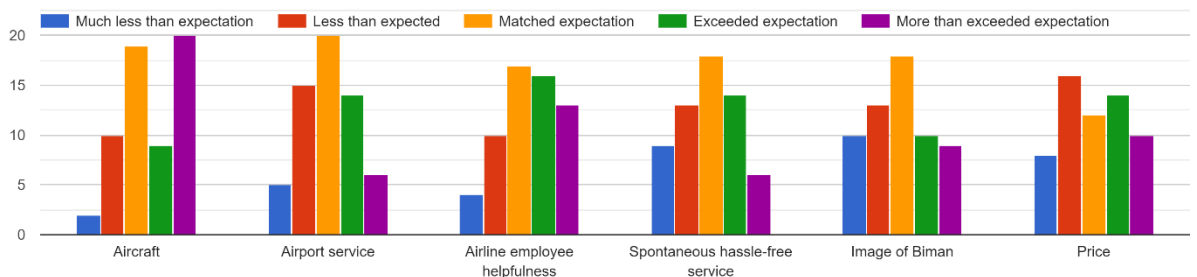
Figure 10: Aspects match expectations.

We can see that either their expectation matched or not after having experience of Biman. Before travelling, majority of the respondents have an average image about aircraft but after having experience it has been changed and respondents have a good perception noW about the aircraft now. Airport service's expectation remains the same that is average service is given to passengers. Respondents assume that they will get more service from the airline employee but they have received less than expected so they think that it is also an average service. Respondents perception has not been changed for hassle-free service and for price.

Respondents have a negative perception of the image of Biman, but after getting the service they think now that Biman has moderate image.

This study also has an aim to find out who is more satisfied with airline services. We have seen in figure 2 where our majority respondents are male, now we are going to see whether male or female are more satisfied. We have analyzed independent variable which is gender with the dependent variable (customer satisfaction) where we have found that p-value of the male is 4.25 which is higher than 0.05 and on the other hand p-value of the female with satisfaction is 0.004 is less than 0.05 (Table 2) that means we can say that female are more satisfied than male.

Table 1: ANOVA analysis for gender satisfaction level

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	15.54654	1	15.547	8.537	0.005	3.968
Within Groups	136.5833	75	1.821			
Total	152.1299	76				
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	94.19326	1	94.193	63.447	4.250	3.945
Within Groups	136.5833	92	1.485			
Total	230.7766	93				

Measure validation

The initial measurement model did not show a satisfactory fit (chi-square (x2) = 1406.259, degree of freedom (d.f) = 601, p =.00, CFI = 0.797, TFI = 0.775 and RMSEA = 0.149).According to Hair et al. (2010) model would be satisfied when the value of CFI and TFI is equal to 0.90 or greater than 0.90. However, modification indexes and standardised residuals indicated that a more parsimonious model could be achieved (Anderson and Gerbing, 1988).

To achieve the satisfactory we have to deduct those measures which have poor factor loadings. One measure is removed from airline personnel which is 'Airline employees' general attitude is good'. 'Airlines offer low-price ticket regularly' is deducted from the image of the airline. One more item is reduced from the price that is 'Price of air ticket is reasonable'.

Two items have been removed from the airline tangibles such as 'Aircrafts are clean' and 'Plane seats are clean'. Two items deducted from empathy, they are: 'Airlines maintain

punctuality of departures and arrivals' and 'Quality of online services is secure'. There are two items which have been removed from customer satisfaction, they are: 'I am satisfied with my decision to use this airline' and 'I enjoyed travelling with this airline'. Two more items also deleted from customer loyalty, those are: 'I am intended to continue being a client of the airline for a long time to come' and 'Switch to a competitor if you have experienced a problem with this airline service'.

Three items have been deducted from terminal tangibles, they are: 'Airport toilets are clean', 'Sign system in airport is noticeable' and 'I feel comfort of waiting in hall of the airport'.

After removing the above-mentioned measures from the factor analysis, I conducted a new and accepted value which is given in Table 2. Beside factor analysis, we will see also composite reliability and average variance extracted (AVE).

Table 2: Standardized factor loadings of constructs and indicators.

Constructs and indicators	Factor loading	CR/AVE
Airline tangibles:		0.95/0.86
Aircrafts are modern looking.	0.93	
Plane toilets are clean.	0.93	
Quality of air-conditioning in the planes is good enough.	0.92	
Terminal tangibles:		091/0.77
Number of shops in airport is enough for my need.	0.96	
Air-conditioning in airport is effective.	0.93	
Availability of trolleys in airport is enough.	0.73	
Personnel:		0.95/0.85
Flight attendants are well-dressed.	0.86	

Personnel show personnel care equally to everyone.	0.95	
Personnel are Aware of their duties.	0.96	
Empathy:		0.92/0.79
Number of flights is enough to satisfy passengers' demands.	0.91	
Compensation schemes in case of loss or hazard is effective.	0.86	
Services regarding entertainment is enough.	0.90	
Image:		0.89/0.74
Ticket price is consistent with given service.	0.84	
Airline company has a good reputation.	0.85	
Promotion offerings are very much attracting to me.	0.89	
Price:		0.95/0.86
Discounted price is useful to me.	0.92	
I feel there is fairness of price according to service delivery.	0.90	
My expectations are fulfilled according to price.	0.96	
Customer satisfaction:		0.94/0.84
My choice to fly with this airline was a nice one.	0.91	
I chose the right airline.	0.94	
My satisfaction with the airline has increased.	0.91	
Customer loyalty:		0.95/0.86
To me, the airline clearly can provide the best	0.92	

services.	
Consider this airline your first choice to buy services.	0.95
Continue to do business with this airline if its prices increase somewhat.	0.92

Notes: x2 = 364.454 (df. = 224, p = .00), CFI = 0.935, TLI= 0.92, RMSEA = 0.103

From Table 2 we can understand that this model is improved and satisfy the fit measures. The fit of the re-specified model improved to chi-square (x2) = 364.454 (degree of freedom (df) = 224, p = .00), CFI = 0.935, TLI = 0.92, root mean square of approximation (RMSEA) = 0.103. CFI and TLI are above the recommended level of 0.90 (Bollen, 1989). RMSEA is 0.103 which indicates that the model is mediocre fit, according to MacCallum et al. (1996) RMSEA is between 0.08 to 0.10 is mediocre fit and below 0.08 is a good fit.

We have also calculated the reliability of two measures. Table 2 depicts that composite reliabilities are 0.89 or above which is satisfy the recommendation level (0.60) suggested by Ahmad et al. (2016) and AVE lies between 0.74 to 0.86, we can accept AVE, because AVE values are above 0.60 (Fornell and Larcker, 1981).All of the items factor loadings lies between 0.73 to 0.96.

Construct validity can be achieved when the fit of the model is above the recommendation values where x2/d.f is 1.62 which is less than 5, CFI is 0.935 and TLI is 0.92 both are above 0.90 and RMSEA is 0.103. It can be said that construct validity is achieved in all aspects.

Convergent validity can be achieved when the value of AVE would be higher than or equals to 0.5 (Ahmad et al. 2016). From our analysis, we can see that all of the value of AVE is higher than 0.50 which means it satisfies the convergent validity criteria.

According to Ahmad et al. (2016) when measurement model would be free from each other and there would not be redundant then discriminant validity can be achieved. Fornell and Larcker (1981) explained that the square root of the AVE value of each latent variable supposed to be higher than the correlation between the latent variables. Bold value in table 3 represents the square root of AVE and other values are considered as the correlation value. Discriminant validity can be achieved when the bold value would be higher than the other values in rows and columns (Safiih and Azreen, 2016). We can see that empathy- image and image-price are facing a problem where their value is slightly more than the bold value.

Table 3: Discriminant validity.

	1	2	3	4	5	6	7	8
1.Airline tangibles	**0.95**							
2.Terminal tangibles	0.77	**0.91**						
3.Personnel	0.85	0.88	**0.95**					
4.Empathy	0.85	0.87	0.93	**0.93**				
5.Image	0.86	0.88	0.91	0.93	**0.91**			
6. Price	0.80	0.86	0.87	0.89	0.93	**0.95**		
7. Customer satisfaction	0.90	0.82	0.89	0.90	0.90	0.89	**0.95**	
8. Customer loyalty	0.90	0.80	0.85	0.89	0.89	0.86	0.94	**0.96**

Construct reliability can be achieved when the composite reliability (CR) is higher than 0.6 and it need to be achieved in every measurement (Ahmad et al. 2016). CR measures the internal consistency of the model when CR is higher than 0.6 then the reliability is also higher. from table 2 we have found that CR values are lies between 0.89 to 0.95 which means it satisfies the construct validity. Our model satisfies the construct reliability, construct validity, convergent validity and discriminant validity (partially).

Structural equation model.

Structural equation model (SEM) is used to test the hypotheses and also to measure the parameters. We have used a structural model of service quality, price, customer satisfaction and customer loyalty. Beside testing hypothesis, SEM is also used for evaluating whether dimensions of AIRQUAL and price have a significant influence on customer satisfaction and the consequence.

The goodness-of-fit tests for the structural models are satisfactory ($x2 = 426.262$, d.f. = 245, p. = 0.00, CFI = 0.917, TLI = 0.907, RMSEA = 0.111). The outcomes illustrate that the model is acceptable which is determined by the goodness of the fit measures. We can see that CFI is 0.917 which higher than 0.90 and TFI is 0.907 which is greater than 0.90, RMSEA is higher than 0.08 which means it is acceptable, but the model is mediocre.

Table 4: Standardised structural parameter estimates.

Concepts	Customer satisfaction	Customer loyalty
Airline tangibles	0.948 (0.00*)	

Terminal tangibles	0.871(0.00*)	
Personnel	0.932 (0.00*)	
Empathy	0.965 (0.00*)	
Image	0.979 (0.00*)	
Price	0.938 (0.00*)	
Customer satisfaction		0.990 (0.00*)
Goodness-of-fit		
x2 (df)	426.262 (245)	
p-value	0.00	
CFI	0.917	
TLI	0.907	
RMSEA	0.115	

Note: *p<0.00

Hypothesis 1 states that airline tangibles have direct influence on customer satisfaction and the hypothesis is approved by data (ß=0.948, p≤0.000). Hypothesis 2 is terminal tangibles have direct influence on customer satisfaction. The hypothesis is accepted by the data (ß=0.871, p≤0.000). Hypothesis 3 depicts personnel have direct influence on customer satisfaction. This hypothesis is approved by the data (ß=0.932, p≤0.000). Hypothesis 4 demonstrates empathy have direct influence on customer satisfaction and this hypothesis is also supported by the data (ß=0.965, p≤0.000). Hypothesis 5 demonstrates image have direct influence on customer satisfaction. The hypothesis is supported by the data (ß=0.979, p=≤0.000). Hypothesis 6 shows that price have direct influence on customer satisfaction. The hypothesis is supported by the data (ß=0.938, p≤0.000). Hypothesis 7 predicts that customer satisfaction have direct influence on customer loyalty. The hypothesis is supported by the data (ß=0.990, p≤0.000).
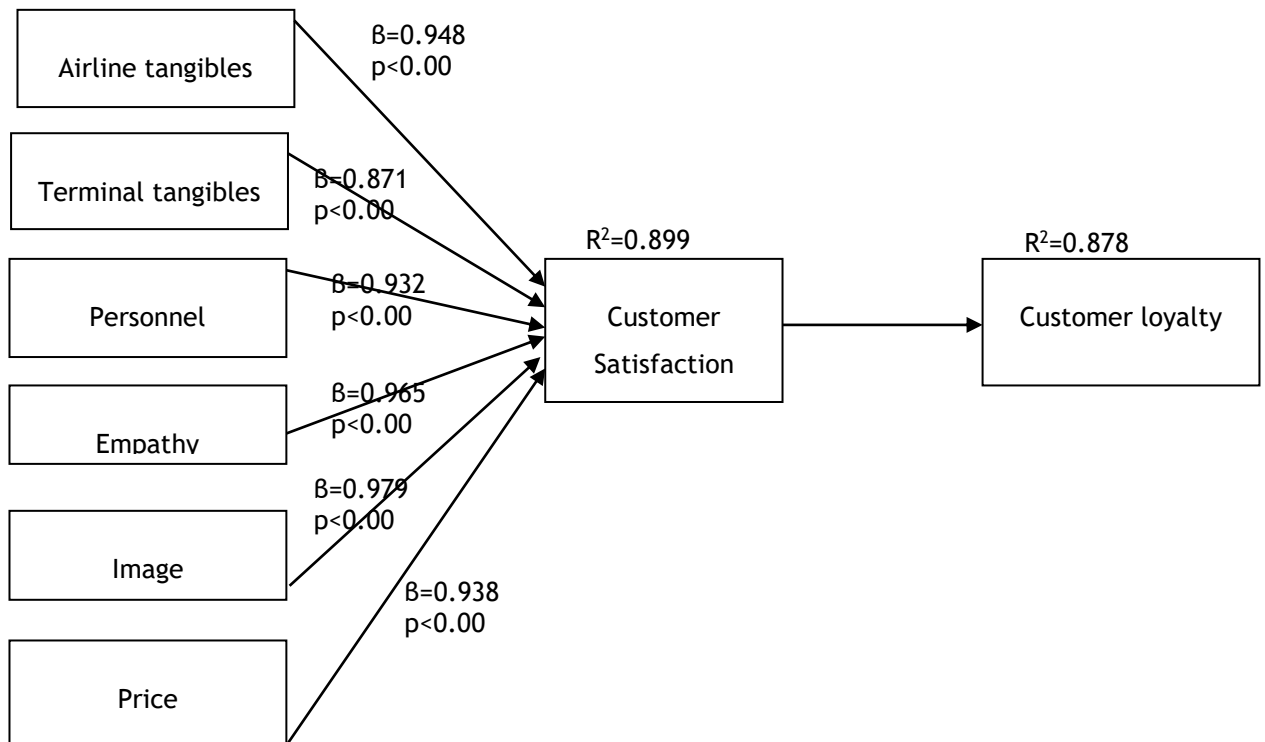
Figure 11: SEM analysis results.

To conclude the SEM model from figure 11 we can see that there is standardized path coefficient (ß) and p value which is explained the model by R^2. Model depicts that 89.9% of the variance in customer satisfaction is demonstrated by airline tangibles, personnel, empathy, image, price and brand image which are independent variables while customer satisfaction accounts for 87.8% of customer loyalty variance.

5   Discussion

In this study we have examined the effects of AIRQUAL dimensions (airline tangibles, personnel, empathy and image) and price on customer satisfaction. We have tried to find out either is there any outcome of customer satisfaction. Besides these, we have also analysed the demographic variables and which type of customers are more satisfied.

In our study we have found out that 43% of the respondents' age is between 26 to 35. In other studies, we have found that majority of the respondents 21 to 30 (Ali et al. 2005) and Nadiri et al. (2008) found that most of the respondents' age is between 18-27.

This study is examining the effects of AIRQUAL model (and brand image and price on customer satisfaction. Also finding out the consequences of being satisfied where it could lead to customer loyalty, word-of-mouth, repurchase intension and habit.

63.3% of respondents are Bangladeshi, the study has been conducted in Dhaka, Bangladesh so that the majority is the locals. Ekiz et al. (2006) mentioned in their study that 72.2% of respondents are Turkish as the study was conducted in North Cyprus. From here we can see that local people are participating in the survey.

We have also analysed which customer group by gender is satisfied with the airline services. Our analysis shows that female is satisfied more than the male participants.

Our study supports that the dimensions of AIRQUAL have a significant impact on customer satisfaction. The customer becomes satisfied when they see the aircraft is new and modern, seats and toilets are clean. Airlines authority needs to maintain a clean, modern aircraft which will increase the comfort level of the customer. Airlines need to maintain their aircraft, if necessary then they need to repair or fix the problem. Saha and Theingi (2009) support our analysis and they have pointed out that airline tangibles are responsible for customer satisfaction and also to increase the reputation of the company.

Terminal tangibles have a strong relationship with customer satisfaction. The airport is an important factor for customer satisfaction because before going to the aircraft customers go through the all the formalities and they need to wait, check luggage, and use the toilet in the airport. There are so many aspects that airport authority needs to take care properly to maintain a satisfied customer level. Nadiri et al. (2008) supports this relationship and mentioned that passenger's satisfaction is increased by the quality of the terminal tangibility and it has a strong influence on passenger's satisfaction.

In the study, personnel are found to have a significant direct impact on customer satisfaction. Personnel is the one who has direct contact with the passengers so that passengers have an expectation that personnel would be well dressed up, well-mannered and can provide adequate information. Şimşek and Demirbağ (2017) mentioned that passengers would like to see the good-looking and kind personnel and the quality of the personnel appearance also increase customer satisfaction. Leong et al. (2015) added more on this relationship that airline companies invest money in education for their personnel so that they can provide better service to the passengers.

We have found that empathy has a direct impact on customer satisfaction. Passengers will be more satisfied when there will be enough flights to more destinations, flights will not be delayed or cancelled and if there is a flight delay, cancel then airlines need to pay compensation. Ali et al. (2015), Naridi et al. (2008) and Ekiz et al. (2006) support this relationship. Naridi et al. (2008) mentioned that personal empathy has a positive influence on the service quality of Cyprus National Airline.

The study observes that image has significant relationship with customer satisfaction. Airlines need to promote promotional and to keep consistency in the price. Ekiz et al. (2006) mentioned to increase customer satisfaction, airline companies need to achieve the consistency of price and sometimes need to provide low price ticket.

Price is considered an important factor for customer satisfaction and it has strong relationship with customer satisfaction. Our result is also supported by Riandarini et al. (2015) where they have found that price has a strong connection with the customer satisfaction. Airlines need to provide affordable price so that they can get new customer and keep the customer.

Our study mentions that customer satisfaction has direct influence on customer loyalty. This relationship is supported by Naridi et al. (2008), Saha and Theingi (2009) and Nadiri et al. (2008) mentioned that it is good for the company to have a loyal customer so that that they can bring more profit. Airline companies need to measure their loyal customer by having a small survey or taking feedback from the passengers while they are travelling which will help them to retain existing customer and to make them loyal.

6   Conclusion and implications

The aim of the study is to investigate how price and dimensions of AIRQUAL are influencing customer satisfaction and the study also focus on the outcome of customer satisfaction which is customer loyalty. According to Ekiz et al. (2006), in the developing countries service quality is one of the most important sectors. Nowadays the airline industry becomes challenging due to the change in customer demands and companies are trying to meet the demands of the customers. However, technology is helping airline industry a lot so that they can provide modern facilities to the customer to make satisfied. The key to success for the airline companies is to provide high-quality service and maintain the quality to make the customer satisfied otherwise dissatisfaction can bring failure in the airline business (Ekiz et al., 2006).

This study provides the answer to the research question, which is airline tangibles, terminal tangibles, empathy, personnel, image and price have a strong influence on customer satisfaction and as a result, the output of customer satisfaction is customer loyalty. All of the hypotheses support the study. Our study findings satisfy the findings of the prior studies (Ekiz et al., 2006; Nadiri et al., 2008; Ali et al., 2015 and Simsek and Deirbag, 2017) that service quality acts as a significant factor of the customer satisfaction and both quality and satisfaction enhance the behaviour intention which is loyalty.

The study also indicates the gender group who are satisfied more. This could be the target group for Biman. As female are more satisfied to male then Biman can need to take care to keep them satisfied and also need to take initiative to enhance their loyalty. When they are travelling with family or with friends they can motivate, spread positive things of Biman so that other people will be influenced to use Biman. Biman Bangladesh airlines know that it is easy to retain an existing customer rather than getting a new customer. When customers are loyal then they have less tendency to go to other airlines and those loyal customers will bring more customer and they will make a repurchase.

Implications

There are some important implications for the authority of the Biman Bangladesh Airlines which is taken from the finding of the study. To enhance the safety of the passengers' author-ity, need to give importance to the physical equipment such as aircraft's exterior and interior and cleanliness of the aircraft. Authority also needs to ensure the maintenance of the aircraft so that flight can be scheduled properly. The airline can invest more on the employees so that they get more training and can provide service with empathy. Biman also needs to invest more in digital and physical marketing so that they can get more customer and can be ahead of the competition. The airline also needs to focus on retaining more customer, Biman can conduct a small survey, telephone interview or face-to-face interview to find out the area of improvement. As there are many aircraft is joining the airlines so they need to extant their route. Biman can try to get a route to central Europe, America, Australia and Canada because so many Bangladeshi lives abroad so it would be easy to get more customer. Biman and air-port authority can also work in the beautification, modernization, safety and cleanliness of the airport so that passengers can feel comfortable.

There is also the contribution of the study where previous studies (Ali et al., 2015; Farooq et al., 2018; Nadiri et., 2008 and Şimşek and Demirbağ 2017) only focus on the AIRQUAL model, but in our study, we have used price variable along with the AIRQUAL model. Our study also points out the consequence of customer satisfaction, when the passenger is satisfied then they have a tendency to become loyal. This is the only study which has been conducted on customer satisfaction of Biman in Bangladesh, there is not any other study so this study can contribute to the literature of the aviation industry in Bangladesh. This study also contributes to the statistical analysis technique, where we have used R studio to analyse SEM whereas most of the studies measured SEM by SPSS, LISERAL and SmartPls.

Limitations and further research

There are few limitations have been found in the study. Firstly, the sample size is small, and it could be better if the sample size would be larger. Secondly, the study may not be general-ized with other geographical regions because the study is conducted in a developing nation.

Thirdly, this study does not consider other factors such as safety, technology, other factors which can influence satisfaction. These gaps can be used in future studies where future research could consider other factors which influence satisfaction and will bring out more consequences other than customer loyalty. Another study could be done to compare Biman and with other airlines to see which airline customers are satisfied. The airport is an important factor for customer satisfaction for all airlines so there could be a study based on the airport services so that authority can know which area they need to improve.

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Figures

Tables

Appendix : Questionnaire

A SURVEY OF CUSTOMER SATISFACTION AMONG BIMAN BD AIRLINE TRAVELLERS

Dear Respondent,

We are conducting a survey for bachelor thesis at Laurea University of Applied Sciences, Finland. The aim of the research is to examine the effects of AIRQUAL dimension and price over customer satisfaction and the outcomes consumer behaviour.For collecting data, we would like to request for your assistance to respond to this questionnaire and it might take 5-7 minutes. All your information will be confidential, and your participation will remain strictly anonymous.

Please contact us for further questions: abu.md.shaleh@student.laurea.fi, syed.reza@student.laurea.fi

Thnak you for giving your valuable time and wish you a pleasant flight.

Best Regards,

Abu   Zafar   Md   Shaleh
Syed Reza

1.Gender:
- o   Female
- o   Male
- o   Prefer not to say
- o   Other:

2.Education:
- o   High school
- o   Professional certificate
- o   Bachelor's degree
- o   Master's degree
- o   Doctoral degree
- o   Other:

3.Age:
- o   18-25
- o   26-35
- o   36-45
- o   46-59
- o   60+

4.Travel for:
- o   **Business**
- o   **Vacation**
- o   **Education**
- o   **Visiting friends and family**
- o   **Medical**
- o   **Other:**

5.Travel with:
- o   **Family**
- o   **Friends**
- o   **Colleague**
- o   **Alone**
- o   **Other:**

6.Nationality:
- o   **Bangladeshi**
- o   **Indian**
- o   **Nepalese**
- o   **Chinese**
- o   **European**
- o   **American**
- o   **Other:**

Please rate about your expectations of following aspects.

Particulars	Much less than expectation	Less than expected	Matched expectation	Exceeded expectation	More than exceeded expectation

1	Aircraft					
2	Airport service					
3	Airline employee helpfulness					
4	Spontaneous hassle-free service					
5	Image of Biman					
6	Price					

To what extent do you agree with the following statements?

	Statements:	A lot lower than ex-pected	Lower than ex-pected	ex-pected	Agree better than ex-pected	A lot better than ex-pected
	My Satisfaction with Airline tangibles.					
1	Aircrafts are clean.					
2	Aircrafts are modern looking.					
3	Plane toilets are clean.					
4	Plane seats are clean.					
5	Quality of air-conditioning in the planes is good enough.					
	My Satisfaction with terminal tangibles.					
6	Airport toilets are clean.					
7	Number of shops in airport is enough for my need.					
8	Air-conditioning in airport is effective.					
9	Sign system in airport is noticeable.					

10	Availability of trolleys in airport is enough.					
11	I feel comfort of waiting in hall of the airport.					
My Satisfaction with airline personnel.						
12	Airline employees' general attitude is good.					
13	Flight attendants are well-dressed.					
14	Personnel show personnel care equally to everyone.					
15	Personnel are Aware of their duties.					
My Satisfaction with the empathy of airline						
16	Airlines maintain punctuality of departures and arrivals.					
17	Number of flights is enough to satisfy passengers' demands.					
18	Compensation schemes in case of loss or hazard is effective.					
19	Services regarding entertainment is enough.					
20	Quality of online services is secure.					
My Satisfaction with the image of airline						
21	Airlines offer low-price ticket regularly.					
22	Ticket price is consistent with given service.					
23	Airline company has a good reputation.					

24	Promotion offerings are very much attracting to me.					
Customer satisfaction						
25	I am satisfied with my decision to use this airline.					
26	My choice to fly with this airline was a nice one.					
27	I chose the right airline					
28	I enjoyed travelling with this airline.					
29	My satisfaction with the airline has increased.					
Customer loyalty						
30	To me, the airline clearly can provide the best services.					
31	Consider this airline your first choice to buy services.					
32	I am intended to continue being a client of the airline for a long time to come.					
33	Continue to do business with this airline if its prices increase somewhat.					
34	Switch to a competitor if you have experienced a problem with this airline service.					
My Satisfaction with the price of airline						
35	Price of air ticket is reasonable.					
36	Discounted price is useful to me.					

37	I feel there is fairness of price according to service delivery.					
38	My expectations are fulfilled according to price.					

Please rate how well following aspects match your expectations.

	Particulars	Much less than expectation	Less than expected	Matched expectation	Exceeded expectation	More than exceeded expectation
1	Aircraft					
2	Airport service					
3	Airline employee helpfulness					
4	Spontaneous hassle-free service					
5	Image of Biman					
6	Price					