THE UNIVERSITY OF TURKISH AERONAUTICAL ASSOCIATION
INSTITUTE OF ENGINEERING MANAGEMENT

AIRLINE OPERATION PERFORMANCE: THE RELATION WITH DISTINCTIVE SERVICE AND QUALITY OF SERVICE

Master Thesis

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Engineering Management Department

Master Thesis Program

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Approval of the thesis

AIRLINE OPERATION PERFORMANCE: THE RELATION WITH DISTINCTIVE SERVICE AND QUALITY OF SERVICE

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I hereby declare that all the information in this study I presented as my Master's Thesis, called "Airline Operation Performance: the Relation with Distinctive Service and Quality of Service." has been presented in accordance with the academic rules and ethical conduct. I also declare and certify on my honor that I have fully cited and referenced all the sources I made use of in this present study.

Date: 03/05/2018

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Fadel-Allah M. Elmabrouk Alsanosi

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The extreme competition situation within the transport area pushes business into different pursuits. It is important to determine the reason for the preference for air transportation and measure the performance of the operator by showing how the service provided.

The purpose of this work is to study the relationship between the service quality and distinctive service of air transport operations, and the impact of these two on performance of the air transport operation. In accordance with that; a survey was directed on the airline operation customers.

The result given by customers for distinctive service and service quality was divided into dimensions by exploratory factor analysis and the business performance factors were examined. In the results of working; it has been found that there is a positive relationship between service quality and distinctive service, and distinctive service provision and service quality have a positive effect on the performance of airline operation.

Keywords: Airline Transport, Service Quality, Distinctive Services, Business Performance.

ÖZET

HAVAYOLU İŞLETIM PERFORMANSI: AYRICALIKLI HIZMET VE HIZMET KALITESI ARASINDAKI İLIŞKI

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Taşımacılık alanındaki aşırı rekabetçi durum, bu iş sahasını farklı arayışlara itmektedir. Hava taşımacılığı seçiminin nedeninin belirlenmesi bağlamında servis sağlayıcının performansının ölçülmesi ve verilen hizmetin niteliğinin gösterilmesi çok önemlidir.

Bu çalışmanın ana amacı, hizmet kalitesi ile hava taşımacılığı operasyonlarının kendine özgü hizmeti arasındaki ilişkiyi ve bu ikisinin hava taşımacılığı operasyonlarının performansı üzerindeki etkisini incelemektir. Bu amaç doğrultusunda, havayolu operasyonları müşterilerine yönelik bir anket uygulaması yapılmıştır.

Müşterilerden alınan bildirimler doğrultusunda, ayırt edici hizmet ve hizmet kalitesiyle ilgili veriler açıklayıcı faktör analizleri ile boyutlandırılmış ve sınıflandırılmış veriler iş performansı faktörleri bağlamında incelenmiştir. Çalışma sonucunda hizmet kalitesi ile ayırt edici hizmet arasında pozitif yönlü bir ilişki olduğu ve ayırt edici hizmet sunumunun ve hizmet kalitesinin, havayolu işletmelerinin performansı üzerinde olumlu bir etkiye sahip olduğu sonucuna varılmıştır.

Anahtar Kelimeler: Havayolu Taşımacılığı, Hizmet Kalitesi, Ayırt edici Hizmetler, İş Performansı. .

CHAPTER ONE

1. INTRODUCTION

Air transport in Libya was established through full national institutions in the beginning of the sixties. The first national air transport establishment in Libya was established by: (Libyan Airlines) under Law No. 21 of 1963 dated 02/10/1963 with a capital of two million pounds. The establishment of the airline company of the Kingdom of Libya was an important start in entering the world of the air transport industry as well as other countries that entered the industry in the early years of the nineteenth century.

The government began to focus on the development of the Libyan Arab Airlines Corporation by supplying it with modern Boeing 727-727 aircraft. The contract for the purchase of the first two B727-224 Standers was signed in 1971 and contained in the same year and recorded in the Civil Aviation Register 5A-DAH and 5A-DAI. These aircraft entered air transport services along with other Carville aircraft. In April 1973, the administration of the Libyan Arab Airlines witnessed dramatic developments as a result of the procedures related to the introduction of what was called at that time by the administration, where the popularity of the management of polytheism A number of popular committees in short periods, some of which did not exceed seventy-two hours.

Rapidly liberalized air transport since 2003 in Libya, has made expectations that has developed over many and domestic passenger transport in the square have changed travel habits of passengers by pulling down the incoming competition and innovation in the ticket price and airline to use their business more advantageous compared to other transport modes.

We refer to the service provided to passengers by air transport as transportation service. Quality of service provided in transportation service; the passenger can use the telephone, computer and internet channel to get the ticket, the ticket for the flight to the airport, the boarding card and baggage tag, the boarding gate for the flight, the passenger on board the aircraft, the services provided during the flight,

are measured by effective problem-solving methods if there is a problem with it. Services provided before. During and after flight are standard services that all airlines must provide. Airline operators prefer airline companies by evaluating the diverse and fascinating performance of services provided by passenger airline companies.

The main reasons people travel by air are speed, comfort and safety. However, when the performances developed to expand the customer portfolio between the airlines companies are examined, it is noteworthy that the services given are important and the most significant ones are the distinctive services. Because the common characteristic of air transport is the speed and safety standards that the legal regulations must obey; has become the standard values of airline operations. For this reason, airline enterprises that wish to grow in the airline market and get a bigger share from the pastry have to offer more discriminating service to the consumers in order to be better in the service area.

The financial values used in the performance evaluations of airlines are no longer able to fully explain their operating performance. For this reason, the impact effects of the distinctive services provided by the airline operation and the service quality on the airline operation performance were investigated. Distinctive services created in an original structure have been affected by airline operational performance. In addition, correlation analysis between distinctive services and service quality is expected to be significant in this issue.

In the first part of this study, information about distinctive services and service quality received. In the second part, performance and airline business models were examined. In the third part, the aim of study, hypothesis and the part of the method where the model takes place, and finally in the fourth part the analysis of the data, discussions, conclusions and suggestions are shared.

1.1. Problem Description

The high direct and indirect costs in Air business cause ticket soaring prices for domestic and international passenger transport. Full-service and low-cost airline

operators are undergoing differentiation in service delivery processes in some markets throughout the country, lowering ticket prices; but these airline operators were withdrawn from some markets because the seat capacity of the aircraft was higher than the passenger demand. For this reason, regional air logistics operations have been developed with a narrower body and fewer seat capacities.

The demand for air transport of the provinces where population density is weak and where population density is high is formed on a daily basis. Customers prefer airline logistics because they are regarded as safer, punctual, shorter, and more comfortable to travel than road or rail travel. The quality of service and distinctive service provision of the services provided by the developed regional airline business model to the customers is the problem of this study.

1.2. The Importance of Research

The intense competitive environment within the transportation sector pushes business into different pursuits, business need to increase their success and know the customer's market well in order to be able to exist in the future, and be able to meet the needs and desires of their customers.

Many airline companies in the sector operate in a comfortable, reliable, speedy, technology and comfortable structure with similar features. These are adequate solutions for passengers and are not sufficient conditions to contribute to the maintenance of operations for the airline operator. Airline operators need to be able to exist on the market according to the aircraft's capacity and income account. Non-financial distinctive service delivery and quality of service measures are designed to continue this success. The key to these criteria in the survey is to measure the performance of regional air transport by showing how perceived by passengers the service provided by the operator of transporting narrow-gauge aircraft between regions.

1.3. Purpose of the Research

The main purpose of this study is to measure the impact of airline operation's distinctive services and service quality on airline performance.

In addition to this basic objective, the relationship between performance of service quality sub-dimensions and service quality of distinctive services will be determined.

1.4. Benefits of the Research

The aviation sector, which is regulated by laws, regulations, guidelines and the general public, has made it possible for international aviation organizations to make more objective assessments of the developments in the standards and standards of the information technology that we have brought about.

- It is expected that this worker's main advantage for the Libyan Airlines operator is to improve the standard of services provided by passengers based on performance-oriented information and to develop and change through performance-oriented marketing efforts.
- It is also thought that this study will be beneficial in terms of giving an opinion to new entrepreneurs who want to do Regional Air Carriage.
- It is expected that academicians, practitioners, researchers and others related to the subject will benefit from the results of this research and contribute to the literature.

1.5. Hypothesis of the Research

The main hypothesis is:

H1: Distinctive service delivery components have statistically significant impact on the performance of regional air transport.

H2: Service quality components have statistically significant impact on the performance of regional air transport.

H3: There is statistically significant relationship between distinctive services and service quality.

1.6. Limitations of the Study

The research is limited to passengers traveling from Benina International Airport in 2017. Permission was issued by the Head Office of the State Airports Authority of Benghazi in order to implement the survey. This study will be undertaken through a questionnaire survey to investigate the effect of Libyan Airlines' distinctive service delivery and service quality on business performance.

CHAPTER TWO

2. LITERATURE REVIEW

2.1. Service Concept

Service is an action or activity that is offered to satisfy consumers' wishes as a service or simply as an intangible service. It is a different kind of service that cannot be touched by hand, and therefore the production and presentation of the service differs according to other goods (Goldstein, 2002).

According to Saha (2009), the service is an invisible service, in the most basic sense. If the service is not completely tangible, the consumer can make changes directly to the producer, cannot be transported, stored, and almost immediately degraded. Conceptualization of services as a service is often difficult; the reason is that services are introduced, bought and consumed at the same time. The nature of the services depends on the service elements that cannot be separated from each other; they usually involve consuming customers at high rates and no transfer of ownership to the customer takes place (Saha, 2009).

According to Sultan (2000), it is called "non-tangible means" to satisfy human needs. Service is generally defined as an intangible marketing component that cannot be perceived by sensory organs but can be felt by consumers. Services are not always presented theoretically to the customer, but sometimes they can be supplied with a concrete service. With the increasing and diversifying of customer expectations, the emerging technologies in interaction with the end result, besides the concrete goods, the service offerings mainly started to gain intensity in the markets (Sultan, 2000).

For example, when a consumer buys a car, he purchases physical transport and purchases comfort, prestige and after-sales guarantees and services. As can be seen in this example, many concrete services reach the buyers together with the services. A set of items that indicate that the service and service are interrelated and in which services only the intangible service is formed is formed as above.

2.2. Service Features

The basic features of the service can be listed under 5 headings. (Ebrahimi, 2013)These are;

- Being intangible
- No Homogeneity
- Ownership
- Same And Production and Consumption
- Non-stocking

2.2.1. Service as an intangible feature

One of the most basic features that distinguishes services from goods is that services are intangible. The fundamental outcome of distracted or immunity in terms of services is the inability of consumers to perceive services with the sense organs. The small, non-tangible and invisible nature of service is the actions taken to meet human needs.

2.2.2. Non-homogeneity

It is also expressed as non-homogeneity in some sources. What's means is that the standardization of services is extremely difficult. That is, the performance of services varies from service to service, from customer to customer and from day to day. For example, they are not exactly the same on intercity bus journeys carried out by the same travel company.

Clients often perceive the service provided and the service provided as equivalent. The performances of staff working in service enterprises can vary from day to day or even hours to hours. One of the reasons for the variability of the service offered is the different expectations and experiences of the customers. For this reason, it can be stated that the variable services offered are a result of the interaction between people.

2.2.3. Ownership

The related service is not changed by the sale of the service. In other words, transportation service is purchased in transportation service. Vehicles used in the related transportation are not purchased. The biggest difference that arises between service and service is the lack of consumer ownership of the service. Where services are bought by the consumer, the consumer owns the property, while in services this is not the case.

The differences between the qualities of services and physical goods are listed in the table below (Aksoy, 2003).

Table 1 Differences between Service and Physical Services (Aksoy, 2003)

Physical Goods	Services
Touchable. Production and distribution are separated from consumption. It's something. (The object) The basic value is produced in the factory. Clients do not usually participate in the production process. Storable. Ownership can be transferred.	It is intangible. It is not homogenous. Production and consumption are simultaneous processes. It is an activity or process. The basic value is generated in buyer and seller interaction. Customers participate in production. Cannot be stored. Ownership cannot be transferred.

2.2.4. Production and consumption at the same time

The inefficiency feature explains the inability of the service to be created (produced) and offered / utilized (consumed) and that the consumer cannot be separated from the service production process. Simultaneous production and consumption of services prevents the stocking of services. The fact that services are not stockpile prevents the implementation of the strategy, which is an intensive security task, against changes in demand for services. According to Park, production and consumption are the same as consumption of the service. The service is actually produced and consumed, and this feature results in its not being stocked at the same time. According to Park (2006), For example, dinner service is produced and consumed at the same time (Park, 2006).

2.2.5. Non-stocking

Non-stocking is another concept of unsteadiness, refers to the inability to stock, store, return and resell services. Empty seats on a plane, empty rooms in a hotel mean lost capacity. This capacity, which cannot be used at a certain time, cannot be held for later use or sale. Due to the inability to stock the services, there is a missed opportunity when the current capacity is not used. Some of the services that are offered on-time increase the vulnerability significantly because the demand is not stable. The need to consume seasonal demand for services, so that, customers change according to the results of shaping within hours or even days depending on the days of the week. Park (2006) needs to take more precautions regarding the planning of the service and the instability and irregularity of the managers according to the said results. After being made ready for presentation, services that cannot be sold are losing their economic value and it is not possible to cover these economic losses. For example, tourism operators use capacities that are out of season during symposiums and seminars and similar activities. Airline companies are reducing ticket prices for idle periods. For example, say that if the number of seats of a plane is 100 at any one time, it is not possible to stock 40 seats when the number of full seats is 60 when that flight time arrives (Park, 2006).

2.3. Distinctive Services

It emerges with services that have the distinctive feature that organizations' services offer success (Coombs, 2000). The distinctive services to be emphasized in this study are:

- Are suitable ticket prices offered?
- Are transport services to nearby cities provided?
- Are transportation services within the city provided?
- Are campaigns and discounts offered?
- Is check in permitted after late arrival to at the airport?
- Is company employees good in communication and problems solving?

2.3.1. Ticket prices

Passengers traveling by air are sensitive to ticket prices. Because the price of tickets can go up to almost half of consumers' monthly income. These passengers and other high income passengers are sensitive to ticket prices when traveling by air. Low cost carriers are established to meet the expectations of low-income passengers and compete with air carriers that provide full service in many countries around the world. However, low-cost carriers avoid catering to reduce unit costs. However, the airline management drawn from the catering service negatively affects this situation in culturally socially worthy communities. Consumers are willing to travel on the plane when they are traveling at the appropriate time with the appropriate ticket price.

In order to be able to travel, customers firstly consider airlines' prices as well as their suitability for the recipe. In particular, customers who do not have previous flight experience try to estimate at the price they will perceive. A low-cost airline operator is often the preferred airline operator. In this respect, price is an important factor in providing customer value. However, in the provision of customer value, while price is a value for some customers, different values for some customers are value and the price can remain in the second plan (Abdullah, 2012).

The important factor is in the customer satisfaction of the ticket prices, less effort to reach the ticket and short time spent, the image of the airline, the relationship between the customer and the staff before and after the flight, and the effectiveness of communication channels.

2.3.2. Planning the destination to go to nearby city

The primary goal of customers who prefer air transport is to reach the city they plan to travel in the shortest time possible. They are doing research among airlines. If airline operators are organizing a city tour to be traveled by the consumers, firstly the fare of the passenger service, by checking the ticket. But travel is not always arranged for all cities. Because of this, passengers prefer airlines that fly to airports near the city they are going to.

The two major developments of Libya were almost entirely connected to Tripoli and Benghazi, which are two locomotive cities, and the other cities by air. However, air transport is not sufficient because there is no regional air transport between cities with an average size and small cities and large cities. Despite the fact that there are airports in the relevant cities, potential customers are not able to benefit from intercity air transport services because there are no operations with aircraft sized appropriately for students and airports in the region.

2.3.3. In-Town service

Transportation between the city center and the airport is usually provided by taxi service, with the daily passenger capacity being low. However, a few airlines take business travelers from the city center and bring them to the airport. This situation plays an important role in airline preference because it removes the anxiety and the risk of flight abduction.

2.3.4. Campaigns and discounts

It is one of the most important factors for travelers to travel by air. However, it is important for the quality of the service that the airline has given from the campaigns and discounts of the passenger airlines that have good income.

The relatively low income and ticket prices have measured that passengers have a positive influence on airline preference. So when making a ticket, a certain part of the passengers take care of the campaigns and discounts applied on the ticket. Campaigns and discounts in all airline companies operating in 2009 played a positive role in the customer's ticket preference.

2.3.5. Check in after late arrival

Airline operators close their check-in counters for a certain period of time to ensure that their operations are completed on time. However, the passengers' access to the airport, especially in urban traffic, they may arrive at the airport late for some reason. As described to the domestic flights passengers they must check in two hours before departure time of the flight, which protects the airline's operations

against complaints from passengers. By this rule some airline carriers can earn the loyalty of their passengers.

2.3.6. Communication and problem solving

Communication is the transmission of information, ideas, feelings, skills, etc. using icons. With communication; interaction and information flows between people, businesses, public institutions and communities.

Communication in airline companies is a very large feature and a must for customer satisfaction. Since passengers are beginning to think about traveling, they are exchanging information with many organizational channels of the airline. This information starts with the internet, by phone and by agents, to purchase tickets for shopping. The communication continues when the ticket is received by the passenger service personnel in the contour. The orientation to the boarding hall continues, including on boarding and after-flight processes (Ray, 1999).

Any problem that arises in the airline business processes can be solved only by establishing a good communication plane. Businesses that solve problems with an effective approach provide customer loyalty.

2.4. Service Quality

2.4.1. Quality of service concept

It is an uncertain and complicated field in terms of quality comprehension, implementation and supervision in service enterprises. The performance of services from the object is so poor that it is difficult for the business to establish standards of service that consistently provide the same quality.

The concept of quality of service has become an important issue in the field of service marketing because it is one of the most important factors affecting consumer satisfaction and future behavior together with improvements in service sector. Today, this concept is regarded as one of the most important features that provide benefits in the process of developing and maintaining efficient and successful

relationships in different marketing areas. Providing quality service in the competitive nature of today's world is a key point in maintaining the existence and success of the enterprises. Gupta listed the benefits of service quality as follows (Gupta, 2005):

- Satisfied and cooperative consumers and employees
- Cross-selling opportunities
- Positive oral communication
- New customers to the business
- Developing customer relationships
- Increased sales and market share
- Emerging business image
- Describe the benefits of reduced costs and increased profit margins and operational financial performance.

The quality of service is an emotional response in a similar way to a conclusion or a judgment or a conclusion about the superiority of the goods or services concerned on the basis of a rational evaluation of the characteristics or characteristics of a goods or services.

There are different definitions of what the service quality is and what it is. The satisfaction of customer needs, desires and expectations is considered as quality. On the other hand, instead of the concept of quality of service, using perceived service concept is evaluated more accurately. The perceived quality is considered as the difference in performance between expectations (Gupta, 2005).

Zeithaml, Parasuraman, and Berry (1996) have determined that the only criterion for measuring service quality is the suitability of the offered service to the quality of the consumer, that is, the definition of service quality is determined by the consumer (Zeithaml et al., 1996).

Quality of service can be expressed in the form of behavior, is related to satisfaction, but not exactly equal to it, defined as the approximation of performance expectations.

2.4.2. Dimensions of service quality

There are different views on how to assess the quality of service. However, the difference between these views is perceived not as an inconsistency but as a wealth and a different consideration. It is important to distinguish the quality of service into its various components in order to understand and manage service quality. Thus, it may be possible to make this phenomenon more concrete. Abdullah (2012) classified the dimensions of service quality under two headings.

- The dimensions of quality explained by Christian Grönroos (1984).
- Dimensions of Service Quality as explained by Zeithaml, Parasuraman, and Berry (1996).

2.4.2.1. Quality Dimensions Explained by Christian Grönroos

According to Christian Grönroos (1984), there are basically two dimensions related to the perceived form of the quality of a service by its customers (Caruana, 2000):

Technical or outcome dimension: technical quality is related to the customers who have left the customer interaction when they are finished: i.e. what the customer actually is getting from the service related to the service.

An airline passenger will be transported from one place to another, the customer of a company consultant will have a new organizational scheme, the services of a factory will be delivered to customers from the warehouse or will be provided by the manufacturer's technical service. The results of such activities of the service organization are part of the customer's quality experience. What they have achieved as a result of customer interactions with the service organization is important to the customers and their quality appraisal. However, this quality is only one dimension and it tells you what the customer is up to when the production process is over or after the salesperson and customer interaction ends. Generally, but not always, the technical dimension of the qualification can be measured more objectively by the customer. This is a technical solution to the problem of the customer.

Functional or process-related dimension: is the process of delivering a functional quality service or service. As the service is being delivered, the client interacts with the employees of the company. When a guest promises to make a reservation, the door attendant first pays and is escorted to the reception desk, accompanied by the attendant to the room after registration by the employee. If functional quality is not to the liking, a high-quality room will not come up above the previous dissatisfaction of the customer.

Aksoy (2003) functional quality refers to how the customer obtains service and how he / she lives the concurrent production and consumption process, and the functional quality dimension cannot be objectively evaluated as technical quality. Accessibility to a company employee, for example; the appearance and behavior of the box office officer, cabin attendant, travel agency representatives, passenger service officers; the manner in which they perform their duties, what they say and how they do it will also affect the client's view of service (Aksoy, 2003).

Grönroos' Two-Dimensional Perceived Quality of Service Model: The original quality-of-service model developed by Grönroos in 1984 (1984) as a result of evaluating the perceived service quality between the perceived service and the expected service is shown in figure 1. The expected quality has improved the perceived quality of service model by collecting the quality of the Grönroos service in two dimensions as perceived by the customers (Caruana, 2000).

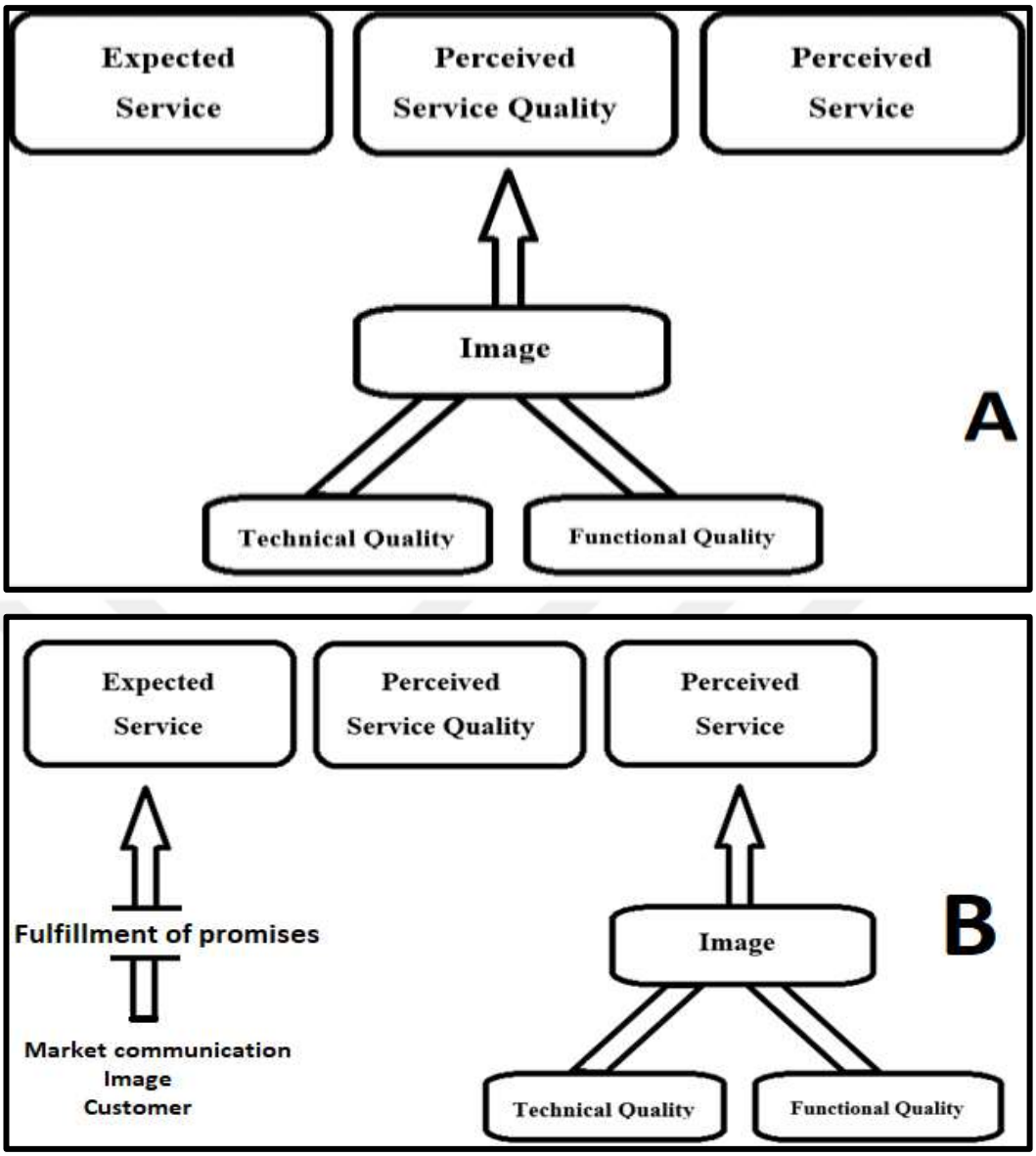

Figure 1 Grönroos is Under Sensible Quality of Service Model Raising under Two Dimensions (Grönroos, 1984):

The expectations of the customers who receive the service may vary depending on the structure of the society in which the customer lives, the economic situation of the customer and the goals of the customer. The quality perceived by the model appears in Figure 1-A when the quality meets the expectations of the customers. If customer expectations are unrealistic, the perceived quality of service will be low. Expected quality as seen in Figure 1-B; mouth communication is a function of factors such as communication, business image, customer needs, marketing communication.

Satisfying the functions of expected service quality by the service will determine the perceived service quality. In other words, if the expectations of the customer are high and the service does not meet these expectations, dissatisfaction will occur in the customer. However, if the business offers a service on the customer's expectation or expectation, the customer satisfaction is achieved and the perceived service quality is high (Caruana, 2000).

2.4.2.2. Dimensions of Service Quality Described by Zeithaml, Parasuraman and Berry (1996)

Zeithaml et al. (1996) have argued that service quality is the five main dimensions that can be generalized for different markets. These five key dimensions were derived using ten service components. Five dimensions; Reliability, Responsiveness, Trust, Sensitivity and Physical characteristics. Ten service components are listed below (Zeithaml et al., 1996):

Reliability: This concept of consistency in the promise of the company.

Provisioning: Employees are willing and able to provide services, and they will provide services on time. For example; to do fast mail transactions, to answer without waiting for the caller, to quickly set up a customer appointment.

Competence: It is meant to have the skills and knowledge necessary to provide the service. For example; the knowledge and skill of the staff who provide the service, the knowledge and skill of the operational support staff, and the ability to conduct research (Zeithaml et al., 1996).

Access (Accessibility): Accessibility and easy communication. For example; easy access to the service by phone (lines not busy and not waiting too long to reach service), service times are convenient, service facilities are in convenient locations.

Respect (Courtesy): The person in communication with the customer means being polite, being polite, respectful and being friendly. It also includes the kindness of the staff who first meet the customer and the call staff who is on the

phone. For example, employees who are in close contact are clean and tidy, as well as the interest of customers.

Communication: Employees are informed on a level that customers can understand and listen to customers. It means that employees communicate with each other according to the intensity of the language they speak. For example, use a more advanced language for an educated client. It is also necessary to give trust about the solution of the customer problem, explain the costs of the service and explain the service.

Reputation: Integrity refers to conviction, credibility, and the ability to look and feel with the client's eye. The concepts that contribute to the firm's reputation are; the company's name, reputation, and difficult sales methods.

Security: Hazard, risk and suspicion do not allow the occurrence of faults. Physical security, (for example, do I get attacked in the cash machine?). Financial security (for example, does the firm know where the client's stock certificate is?). Do others know the privacy (the confidentiality of customer information) ie the transactions between the customer and the company?

Understanding and Customer Recognition: means making an effort to understand the needs of the customer. To learn the specific needs of the customer, to show interest to the individual customer, to improve the service by recognizing the customers continuously.

Physical Assets: Physical characteristics of the service; physical facilities, external appearance of the personnel, vehicles and equipment used in the service presentation, instantaneous physical presentation of the document showing the plastic credit card or bank account statement given by the bank to the customer, other customers in the service facilities.

- Zeithaml, Parasuraman and Berry explained by Service Quality Gap Model (Zeithaml et al., 1996).

According to this model, service quality occurs as a result of comparing the performance of the service perception with the expectations of the customer. The result of this comparison, i.e. difference / gap, indicates the service quality perceived by the customer. There are elements that form the client's service expectations. These; past experiences, personal needs, mouth-to-mouth communication. Another factor is that the firm transmits messages to the customer through various channels. These; advertising, salespeople, public relations, etc. there are five gaps in perceiving customers' quality of service according to this model:

Gap 1: Differences in Management Perception with Customer Expectations: In this range, we reach the result that the managers of the business do not fully understand the expectations of the client.

In such a case, there is a difference between customer expectations and management's perceptions. This problem stems from the lack of concrete quality standards clearly defined for the service.

As you can see in Figure 2, the elements that make up the client's expectations, some of which are created by company advertisements, with information from the website (via external communication). In addition, the expectations of the customer from the experience of the customer; friends, relatives and friends will learn from the information learned. Therefore, it is important to manage customer expectations. Because if the customer's expectation about the service quality of the airline is high, the customer will perceive the performance of the operator negatively in the face of several negativity.

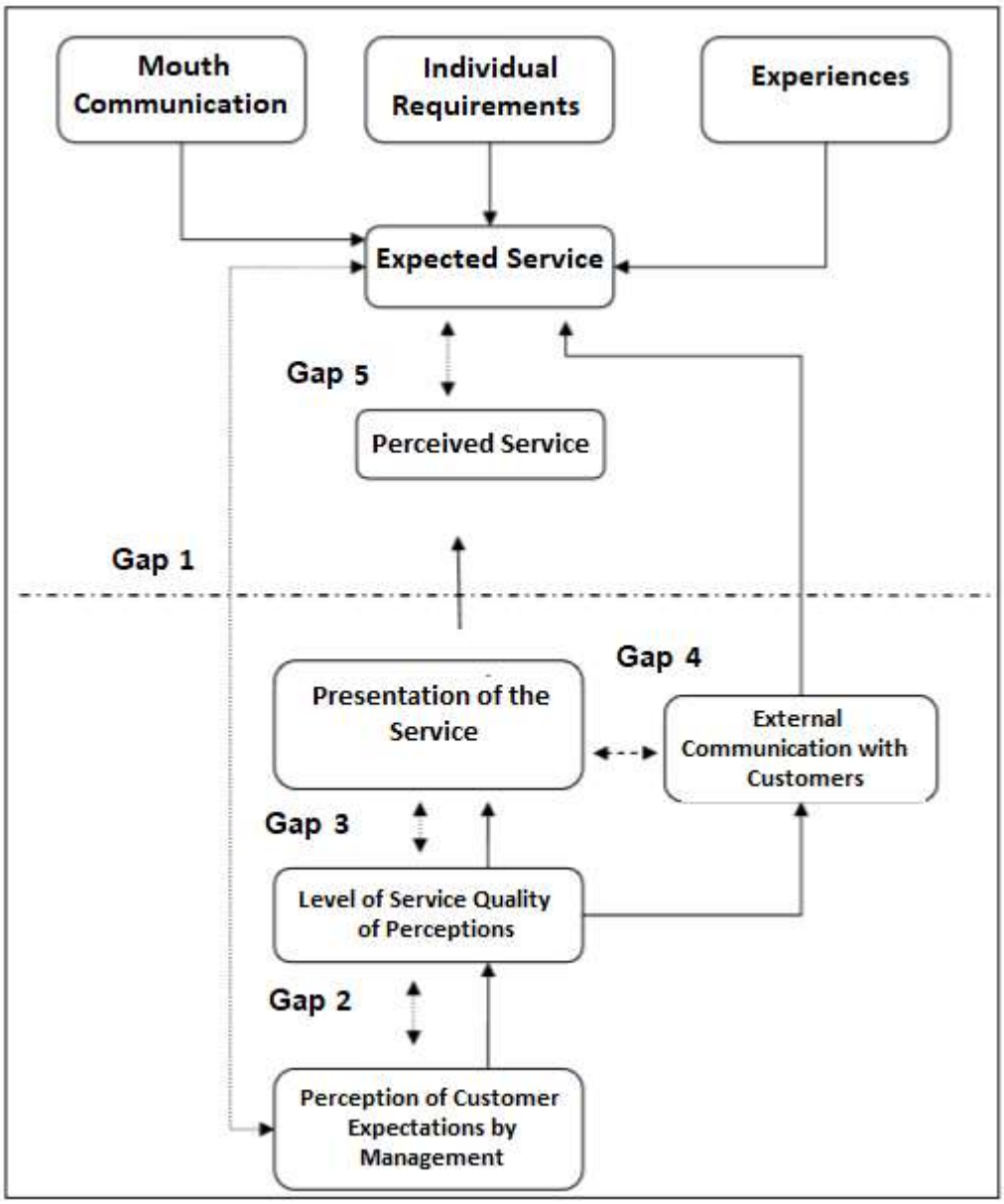

Figure 2 Quality of Service Model (Zeithaml et al., 1996)

Gap 2: Management Perception - Quality of Service Specs Gap: This is because Management understands the perception of customer expectations and does not fully reflect the level and design of the right service quality. The quality of service here consists of Gap 2.

Businesses have an important place in the process in which they fail to determine service specifications due to untrained service workers or fluctuating demand structures, or to fail to fulfill their commitment to service quality.

In order to survive this gap, customer service expectations should be translated into service standards for numerical or qualitative service purposes.

Gap 3: Characteristics of Quality of Service - Service Presentation Opportunity: Determining the level of services to be done correctly and the quality of the services to be done correctly does not mean that the services are offered with high performance. The reason is that a certain quality of service performance level does not occur as the employees who work in an enterprise fulfill the customer expectations differently in the service delivery process. This is an opening that will affect the quality of the service quality and service delivery realized from the client's point of view.

Gap 4: Gap Between Service Delivery and External Communication: Ads and other communication channels broadcast by the firm through media channels affect customer expectations. Any communication method that will increase the expectations of the customer will reveal the expectation of the performance of the service when the customer faces the service and the actual service delivery will result in the insufficient quality of service by the customer. This will lead to the gap between external communication and service delivery. In order to remove this gap, the customer needs to be presented in harmony with the level of service and information communicated in the means of communication.

Gap 5: Perceived service gap with expected service: Focus group work with customers suggests that the creation of high service quality depends on meeting or exceeding customer expectations.

A woman joining the meeting is a service that goes beyond the expectation of the customer, telling the repairer how to repair it when the repairer is not just repairing the same problem while explaining the situation. Such service offerings are decisive factors in service quality.

In 1988, the Zeithaml et al. (1996) worked on the gap model, revealing the SERVQUAL model. SERVQUAL scale, a service of a wide range of work carried out with the participation of different enterprises' customers and managers, has

reduced the number of service quality dimensions to five dimensions from ten dimensions.

The most useful model for measuring service quality is the SERVQUAL model. Model marketing research has many areas and uses, especially with the following issues identified:

- Determination of customer quality expectations for data and evaluations for market segments
- With the application of quality panels, continuous testing of service quality and documentation of perceived quality changes
- In the framework of competition research, it is necessary to investigate the customers of the operator,
- In comparing the quality of service of different branches or franchisees connected to an establishment and operating within the same design framework.

Physical characteristics, reliability, responsiveness were preserved among the ten dimensions on the new scale, dimensions excluding trust and sensitivity were included in the scale. The five dimensions of the SERVQUAL scale are briefly described below:

- **Physical Properties:** Physical possibilities, equipment, appearance of working personnel.
- **Reliability:** The ability to deliver the promised service reliably and adequately.
- **Provisioning:** Customer wants to help and fulfillment of service on time.
- **Trust:** Employees' ability to create information, courtesy and trust.
- **Sensitivity:** giving importance to the customer and showing individual interest to the customer.

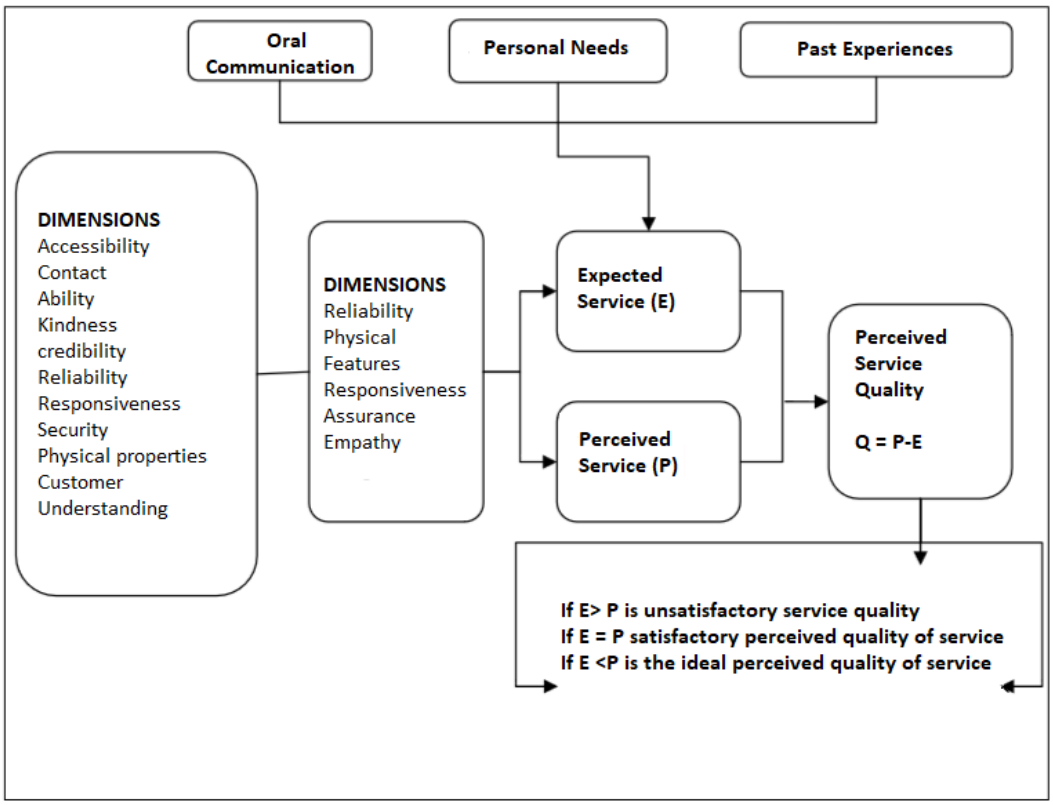

Figure 3 SERVQUAL Dimensions of Service Quality Perceived (Zeithaml et al., 1996)

Figure 3 shows that the expected service quality is not based solely on verbal communication, personal needs and past experiences; at the same time, the customer's perception of service. When assessed in general, the perceived quality of service is formed by the difference between the client's expectations of service and perceptions of these services. That is, SERVQUAL Score: Detection Proposition score - Expect Proposal Score.

The extent of the U field can be cited for various reasons, as the SERVQUAL scale is often the subject of research. The fact that the method is simple to understand, together with the low cost of information about the valuable service quality to the enterprises, is why these scales have been used for years.

However, Cronin and Taylor (1994) suggested using only perceived service scales from the expected service and perceived service scales prepared on the SERVQUAL scale. Because the perceived service, i.e. performance, is being measured, it is suggested that in the questionnaire questions answered by the

customer, the performance, i.e. the perceived service, is measured by considering the expectations. Because of this, Cronin and Taylor proposed SERVPERF.

Researchers have developed the SERVPERF model, which does not include the measurement of expectation and claims to have superior qualities of SERVQUAL. This model uses a total of twenty two expressions in the same five dimensions as SERVQUAL to measure the quality of service, and the measurement is performed with the aid of a seven-point ruler. Some writers' criticism supports SERVPERF that expectation in the related article should not be taken into account in service quality measurement.

Cronin and Taylor (1994) stated that SERVQUAL model is neglected in service satisfaction. In this context, the concept of customer satisfaction and service quality is considered as a different concept in the SERVPERF model and suggests that re-purchasing behavior is influenced by customer satisfaction rather than quality of service, contradicting the claim that repurchase behavior is affected by service quality.

2.5. Previous Studies of the Relation between Distinctive Services and Quality of Service in Airline Sector

Park's (2006), Korea (Korean and Asiana Airlines) and Australia (Qantas) three airline operators, which provide full international travel service, are the passengers most concerned with airline preference; flight service, booking service, airport service, reliability, personnel behavior, flight suitability, price, perceived value, customer satisfaction, airline image and overall service quality (Park, 2006).

Nadiri (2008) conducted a survey of 583 questionnaires on North Cyprus Turkish Airlines customers. The most important factors affecting the airline customer's re-purchase decision were tested on the aircraft's physical elements and positive experience (rumors) for the airline (Nadiri, 2008).

Abdullah et al. (2012) concluded that the airline had to fulfill its pre-determined services and that the physical appearance, equipment and personnel

looks important. They also came to the conclusion that employees' loyalty to customers and their information in service processes was the way to gain customer trust (Abdullah et al., 2012).

Çelikol et al. (2012) asked the customers 16 questions to determine the factors that cause customers to prefer the airline they use. Reliability and good service, expertise and flexibility, advantage and convenience. When these three factors are evaluated, it can be said that preference is determined and customer-oriented thinking is primarily security, service quality and advantages. The preferred reasons for preferring airlines are Çelikol et al. safety, good and quality service, advantage, comfort and comfort (Çelikol et al., 2012).

Yang et al. (2012) have indicated that in Low Cost airlines customers are the quality of service, which is the most important effect in airline choice, that is, service quality. In particular, reliability, physical characteristics, responsiveness and trust have been shown to be important to other service offerings without being tied to the low ticket price offered by the airline while affecting the preferences of the customers. In addition, the value perceived by the customers according to their experience, i.e. the service given for the ticket fee, is satisfied by the customer (Yang et al., 2012).

Jiang (2013) said that Jetstar, which operates between Asia and Oceania in its study, and Malaysia-flagged Airasia X airlines do not differ in terms of quality of service and that passengers are the most important thing to consider in airline preference. And reliability factors are at the forefront (Jiang, 2013).

Pekkaya (2013) Dimensions of customers perceived by service quality according to their work with Atatürk Airport with 8 different airline operations and 410 passengers; reliability, trust and competence, as physical possibilities; but the quality of service in the dimensions of responsiveness and sensitivity is relatively low (Pekkaya, 2013).

Suki (2014) conducted a survey of 300 airline customers in Malaysia, examining the physical aspects of the aircraft, physical characteristics of the airport

and sensitivity, which determine the service quality of the airline, and measuring the airline's offer to other customers if the customer is satisfied with the services. It has been determined that the airline passengers are given priority in selecting the carrier to provide transportation to the airport and inner city areas covering a part of their travels, and the timely take-off and landing performance, that is, the departure and landing (Suki, 2014).

2.6. Performance, Operating Performance of Air Transport

2.6.1. Performance concept

In today's world, where transportation is easy and fast, businesses that operate their operations in an intense competitive environment, have to plan and implement their activities so that they can reach their goals and ensure business continuity and control the outcomes and operational processes of the operational processes. In this, it is necessary to evaluate the operating performance according to the determined performance dimensions. Performance metrics are just a tool on the road to business purposes. The priority of the enterprises is to operate in the direction of the establishment objectives. Performance metrics are also an important tool in reaching business goals (Zhang, 2010).

2.6.2. Performance definition and dimensions

When we look at the Libyan version of the performance concept, it means "business success" and the level of achievement in any business. Performance; is a quantity and quality indication of the level to which an individual, a particular group or organization, can reach the target aimed at doing a job. In general, performance can be expressed as the identification and evaluation of what is achieved as a result of a purposeful and planned activity (Thomas, 2006).

There are different definitions of performance in the scientific literature. Some of these are:

Performance is measured by the inputs used in the production of outputs and outputs without achieving the specified objectives; at the level of reaching a

specified goal; is defined as the efficiency and effectiveness of a purposeful activity. Performance is a multidimensional concept that defines the degree to which an entity achieves its goals, or, alternatively, the level of reaching its goals (Barbot, 2008).

Performance is a concept that can be used for different purposes for employees or bodies. Doing a job has the power to affect the capacity, durability, etc. the concept of performance used to express different situations can be defined as an indication of how close the results are to the generally determined level. Business performance provides data on the objectives of the business study indicators, the industry average, or the degree to which they achieve objectively defined ratios or values (Prozzi, 2002).

Performance according to another definition; if any firm is expressed as the achievement grade or results that it has achieved in the specified time interval, while in another definition; is defined as the quantitative or qualitative expression of the results of the worker, the organization or the firm that has undertaken any activity from the work aimed at the intended target (Frese, 2008).

Operators' perception of performance changes day by day with constant improvement. In this process of development and change, performance studies have emerged that have lost importance and have been re-created and given more importance. In short, this development can be achieved in the lowest possible cost, with the highest production and high profit, from traditional performance perception, as the satisfaction of today's free market conditions, the satisfaction of the customers, to multi-dimensional performance metrics created by weighting very different measures (Rauch, 2009).

Carey has created seven dimensions by examining the possibilities of what the dimensions of performance concept should be (Prozzi, 2002):

- Effectiveness
- Utilizing Yield and Input
- Productivity

- Quality
- Innovation
- Quality of working life
- Profitability and compliance with budget

Effectiveness: A performance indicator that allows the operator to evaluate what has been achieved as a result of the activities carried out in order to achieve the objectives they are seeking. The effectiveness, expressed as the level of achievement of the objectives, is an important indicator that makes it possible for the operator to make a comparison between what they intend to achieve and what they do. The main purpose is to determine how much deviation of actual activities from planned activities. Taking remedial measures, by providing feedback on the result of the assessment, has a great influence on the success of the operator (Prozzi, 2002).

Whether or not the objectives selected and the work done are appropriate and correct is an indication of whether these tasks are carried out in a timely and accurate quality and in the desired quantity. The quality here is determined by the benefit from the product or service. For example, the satisfaction of customer expectations can be expressed as a contribution to the goals and objectives of the operator.

Utilizing yield and inputs: It is a performance dimension that indicates how much the operator benefits from or is using the production resources within the process of producing a product or service. These dimension indicators fulfill the task of responding "how are we now?" and "how can we be better?" within the performance improvement process (Prozzi, 2002).

Productivity: The productivity of the National Productivity Center (MPM) is defined as a coefficient obtained by proportioning the resources used to realize this production to the products and services produced at the end of a given period of a production or service process. This rate, shown as output / input, is seen as the definition of "productivity" in western sources. Carey defines productivity in two different ways. The first is defined as a rational way of life aimed at realizing the

right jobs in the right way and with economic work. On the other hand, in the methods applied in the current production process, all the changes in the input quantity, production capacity and output mix are indicative of the output / input relations. It does not meet the same conceptual meaning as the concept of efficient quality. In other words, the increase in productivity cannot guarantee that the quality of the products will increase (Prozzi, 2002).

Quality: It is a business performance dimension that provides efficient use of inputs, makes usage of products and services convenient and dominates the appropriate production and service understanding according to customer needs. When quality is considered in this conceptual framework, it will make a great contribution to business performance. These contributions need to be measured and the developments provided in this area should be known. For these reasons it is necessary to consider quality as a dimension of operational performance (Ebrahimi, 2013).

Innovation: The creativity in products, services and behaviors is to produce a better and more functional result. Fundamentally dimensions of innovation, creativity, change, development, risk taking, freedom, flexibility and entrepreneurship. Innovation and Invention concepts should not be confused with each other here. In essence, the existing service is attracted to the level that can be noticed by the customers. Carey innovations have been studied at four levels. Product and service innovations (creating a new satisfaction or a new need), Innovation in production process or production methods (innovations that simplify business methods, reduce costs to improve quality), Usage innovations (use existing technology for a new service, new for old services finding areas of use), market innovations (market innovations in socio-cultural and demographic changes) (Prozzi, 2002).

Quality of the working life: The quality of the working life is defined as the quality of the working life of the organization, which is against the systematic phenomena of wage, physical working conditions, organizational culture, leadership, business union environment, communication, independence, knowledge and skill development, business integration, recognition appreciation and planning,

behavior, and thoughts. There is a very complex relationship between the quality of working life and business performance. Because, while working, individuals carry out their work by transferring their personality traits, their aims and expectations. Organizational management, on the other hand, needs to maintain operational processes by meeting employee expectations, objectives and personality traits as much as possible. In these processes, business performance will increase if employees' goals, objectives and expectations are combined with company goals and targets in a common market.

Profitability and appropriateness to budget: Taking profit or profitability as a performance dimension is a matter that is criticized by researchers. The idea that it cannot be taken as a performance indicator in the long run but can be used as a short-term indicator is widespread. Conceptually, profit is a result relation between total incomes and total costs. Profitability is the expression of a ratio found by dividing periodic profit by sales. Compliance with the budget is considered as a performance criterion in public organizations. Conceptually, the smaller the difference between the planned values and the realized values, the higher the performance of the organization in terms of fitness for the budget.

2.6.3. Performance measurement and its importance

The most important way of accessing information is measured. Technical measurement; is the process of finding symbols that represent the visible properties of objects, events, and results. It should be possible to obtain comprehensive interpretations and information by using mathematical and statistical methods in measurement.

Measuring is always asymmetry in businesses as we have in everyday life. Measurements are made in large, small, private, public, profit-oriented or not all businesses. The data are collected, processed and used as information (Borman, 2001).

Businesses have measurement methods related to performance measures. Taking these methods into consideration, the following items can be used for performance measurement (Neely, 1995).

- Internal customer satisfaction
- Service quality,
- Customer satisfaction and
- Strategic business performance.

The information provided by the measurements is the means to direct and manage the behaviors of the managers and all employees. This information collected for business performance provides information on where the managing business is.

The importance of performance measurement (and inspection) at the enterprise level can be summarized as follows:

- To create and maintain an understanding of performance and productivity within the organization for the continuity of the business,
- To improve the control of performance management,
- To increase management's planning ability.
- To determine the current and potential problems of the operator early and determine the areas requiring improvement,
- To evaluate the result of the activities performed and to transmit the related information to all levels,
- Encouraging the managers and employees,

The purpose of performance measurement; whether the systems constituting the inputs, the people and the processes they perform are compared with the defined criteria so that the system is under control and if not under control the level and causes of the deviations. As a result of these determined levels and reasons, measures should be taken at each stage until the individual performance and process performance are planned, directed, motivated and evaluated to improve the performance of the organization (Dutta, 2008).

2.6.4. Performance measurement system

A performance measurement system is an information gathering system that is used to make decisions within an organization, to implement and coordinate those decisions, and finally to determine the suitability of implementation results for strategic purposes. Performance measurement systems; it is a dynamic system that enables a common work in a true sense, exchange of information, sharing of responsibilities in terms of mistakes and successes, and education and development (Dutta, 2008).

According to Solomons, the first step in structuring performance measurement systems in enterprises is to set clear, measurable, and achievable goals in the principal work areas of the business. The work to be done by setting targets for all employees in the business will be implemented and measured according to these targets. In order for the objectives set by the employer to move forward, employees should participate in the activities from the top management to the bottom runner. The stated objectives should include the mission of the company, objectives and action plans should be linked to organizational planning. This process should be developed on an annual basis as part of the activity budget and prepared for each department (Dutta, 2008).

In order to evaluate the performances of the enterprises, it is necessary to establish the long-term goals and to determine the targets of each organ and the employees of the business. In such a performance study, employees and managers in the business should be directed to the targets by operating in a business association. As a result of this business alliance, employees work in harmony by turning the goals of the organs and the goals of the individuals into the goals of the business.

For these reasons, managers at the first level should give priority to the information available in the job descriptions to ensure that these goals are achieved. In order to effectively configure the performance measurement system, the operating objectives must have the following characteristics (Simons, 2000):

- Consistency; the objectives should be consistent with the values of the business and the departmental and organizational goals.
- Openness and precision; the objectives should be clear and well defined.
- Challenge; Goals should promote high performance standards and development.
- Measurable; the objectives should be in the form of quantitative performance measures or associated quantitatively.
- Accessible; Business objectives should be within the capabilities of employees. The limitations that affect the capacity of the individual must be taken into account in order to achieve the goals. These limitations can be resource deficiencies (money, time, tools, support of other people, etc.), lack of experience or training, and external factors outside the control of individuals.
- Accepted; the target should be adopted by managers and employees.
- Associated with Time; Targets must be reached within a defined time limit.
- Focus on teamwork; Goals should also give importance to teamwork as well as individual success.

Systems used by companies to measure their performance and their performance in performance metrics are examined under two headings: financial performance metrics and non-financial performance metrics.

2.6.4.1. Financial performance measurement

Financial performance has been and continues to be used frequently in performance measurement since the past. Financial performance shows how an entity uses its assets to generate income and cash. Financial performance is one of the information managers need to achieve their organizational goals. The well-being of an enterprise's financial performance not only provides flexibility to develop a long-term vision, but it also increases the reputation of the business. Financial performance measures are used for continuous improvement. The numerical values that measure the activity of the inputs are the financial performance measures. For example, measures such as cash flow, added value per

worker, and sales of services per direct labor are examples of financial performance measures (Ittner, 2003).

Since the accounts used in the financial measures are simple to understand and interpret, it is considered that these indicators are sufficient for evaluating success. However, the reports on the four main sections of the business are concerned with reporting how effectively the finance, production, management and marketing departments use inputs.

Kaplan ranked financial performance criteria in the following headings (Kaplan, 2001).

Financial Statement Analysis: At the end of an operating period, an entity presents the entity's financial statements and supplementary tables showing the financial status of the entity and its operating results. The Parties analyze this information provided by the entity and make estimates of the comments and the future and financial condition of the business. The analyzed tools are; table analysis, trend analysis and ratio analysis.

Economic Added Value: Not considering the cost of capital in the calculation of traditional financial performance criteria can lead to wrong financial decisions. Taking into account the cost of capital, taking into account the cost of capital, the Economic Value Added (EVA), which measures the net operating profit after tax, and the investment needed to obtain this profit and the investment cost (weighted average cost of capital) . EVA is an accounting-based method for periodically measuring the activity and financial performance, while EVA calculations utilize variables not included in accounting reports as well as accounting data. EVA is also guiding the decisions of many companies from setting company goals to determining the employer's fees (Kaplan, 2001).

Residual Revenue: A valuation developed based on financial information and is the value found after deducting the capital cost from the profit. So;

Residual Value: Previous profit of the obtained tax - (Expected minimum profit ratio * Investments)

2.6.4.2. Non-financial performance measurement

Businesses that are aware of this situation, even though they are working profit-oriented, are beginning to turn to different products and services that are researching and becoming more conscious of the people, but also the human resources, information, knowledge, customer relations, social networks, it began to take into account similar intellectual assets. In other words, with the transition to the information economy, financial performance measures have become insufficient and have started to be used with non-financial criteria together with financial criteria. Financial metrics have been criticized for lack of retrospective information, failure to provide information about the future of the business, and failure to provide a long-term perspective. Non-financial performance measures are long-term focused and provide information about the future performance of the business95. In order to meet the future goals of the business, it is necessary for the customer to focus on the strategic aspects of customer orientation, the development of internal activities in the direction of the expectations of customers and shareholders and the balancing and integration between organizational dimensions based on non-financial indicators such as human, system and in- is a dynamic performance measurement system or management technique that aims to provide feedback and make the strategy applicable (Chatterji, 2006).

Non-financial performance criteria will be listed in titles only as they are reviewed under the heading "Definition and dimensions of performance"

- Effectiveness
- Utilizing Yield and Input
- Productivity
- Quality
- Innovation
- Quality of working life
- Profitability and suitability to budget

2.6.5. Performance studies

Staughton (2005) stated that an effective performance management practice is crucial in increasing workplace motivation, in meeting the need for continuing education, creating strengths and weaknesses, in an environment where constant change is experienced (Staughton, 2005).

Assaf (2011) conducted research on customer service, productivity and efficient use of capital and resources in order to enable businesses to gain competitive advantage in the benchmarking based on performance measurement. According to the research, there are five dimensions in performance measurement. These; productivity, efficiency, quality, effectiveness and innovation (Assaf, 2011).

Barros (2009) discusses the variables, the factors that may influence these variables and the relationships between them, by considering the main purpose of this study as a whole with different aspects of business performance. The measurement of business performance is often used as profitability but is insufficient by itself. Firms have to evaluate performance in many dimensions. Profitability, productivity, the stock market profitability and growth are the indicators that can be used to multi-dimensionally evaluate the operating performance. Because these are the basic and indispensable targets of business. It is possible to mention it is necessary to reveal the relationship of these factors to control, management and performance for good performance (Barros, 2009).

Schefczyk (1993) studied three, four and five star hotels in Antalya and four and five star holiday villages and conducted face-to-face surveys with the managers of these enterprises. In this study, we used multiple regression analysis to measure the effect of organizational service orientation on business performance. In the study, there was a positive and significant correlation between organizational service orientation levels of hospitality enterprises and business performance. It has also been found that the accommodation operations affect the operating performance of applications related to organizational service orientation (Schefczyk, 1993).

Lazzarini (2007) used mathematical models to measure the impact of performance management activities on organizational performance in manufacturing firms in order to investigate the effects of logistic activities on organizational performance. As a result, the increase in logistics efficiency and performance has revealed the expectation of increase in the overall performance levels of the management of production enterprises (Lazzarini, 2007).

Hansen (2012) has sought to answer whether the innovations in hotel enterprises affect the business performance in their study in Antalya province. As a result of the research, it was determined that the managers have positive perceptions about innovativeness and operational performance. It is also evident that the opinions of managers at the same time on innovations carried out in their own businesses are also positive, and that the relationship between these positive perceptions, innovation and business performance is reflected in the same way (Hansen, 2012).

Wang (2000) conducted questionnaires with 76 pharmaceutical companies operating in Istanbul to determine the effect of market orientation on business performance, the effect of quality orientation on business performance and the impact of quality orientation on market orientation. According to the findings obtained during the implementation phase of the research, it is observed that the positive effect of market orientation and quality orientation on business performance is positive effect of quality orientation on market orientation (Wang, 2000).

Fernando (2012) analyzed 209 questionnaires on the effects of internal marketing techniques on operational performance. In this study, a meaningful and positive relationship between senior management and operational performance, a meaningful and positive relationship between strategic awards and operational performance, a meaningful and positive relationship between internal communication and operational performance, a meaningful and positive relationship between training and development and operational performance relationship, seeking a meaningful and positive relationship between empowerment

and operational performance. The results show that internal marketing has a positive and significant effect on airline operational performance (Fernando, 2012).

Michel (2012) conducted a survey in Albania by interviewing the customers of wholesale and retail companies (204 companies) in this study. In order to test the hypothesis of the relationship between observed and latent variables, we used the structural statistical model, which is a comprehensive statistical approach, and tested the variables. Reliability and validity tests gave satisfactory results according to the data. As a result, the relationship between customer loyalty, loyalty and firm performance of the quality of logistics services has been determined. According to these associations, logistics services should be based on the expectations and needs of the companies, while these services should also be provided on a level consistent with the operation, high quality productive and at a level that will increase the productivity of the company. Customer loyalty, as well as long-term business, effort and money spending, also leads to the presence of new customers and customer loyalty (Michel, 2012).

Ismail (2014) has done a part of this study in the sectors of transportation, wholesale / distribution, retail, banking, hospitality, healthcare, information technology, education and professional services using 190 people with an e-mail survey. Participants in the survey are the employees who work at the relevant level at the manager level. In his study, he investigated the relationship between service quality practices of enterprises in the service sector and business performance, and between the low cost service practices of enterprises and business performance. However, it has investigated the moderate effect of firms' quality of service on the technological intensity on business performance and the moderate effect of firms on technological intensity on low cost service applications and business performance. According to findings, the relationship was found between firms' service quality practices and low cost service practices and business performance (Ismail, 2014).

Jenatabadi (2014) conducted this research on 214 airline companies and used a structural equation model to measure the financial and non-financial performance of airline companies. The positive relationship of the economic

situation (inflation, GNP, human development index) with the dynamics of internal operational (number of flights, mileage, advertisement), performance (occupancy rate, profit, market share and return per kilometer) as well as internal operations were related to performance It was investigated. In addition, the relationship between the economic situation and performance of the moderator variable internal operational activities has been investigated. Findings suggest that economic conditions have a significant impact on the internal operational activities of the airline. In other words, this effect is stronger than the effect of economic conditions on performance (Jenatabadi, 2014).

Tiernan et. al. (2008) conducted study to measure the service quality performance of airline alliances on major carriers in the Americas and Europe. The criteria that the US Department of Transportation specifies for service quality on time performance, overselling, lost baggage, and customer complaints. The criteria that the European Air Transport Association has determined for its members' quality of service are; (punctual departure and landing), flight cancellations, lost baggage statistics. Taking this data into consideration, it plays a key role in comparing the performance of airline companies operating in the US and EU. The analysis shows that airline companies operating in international alliances have no difference in terms of service quality. Despite small differences when evaluated on an annual basis, the similarities are noteworthy in general. However, other service attributes have been measured and the result of the performance of airline alliances has been met (Tiernan et. al., 2008).

Rhoades (2008) concluded that this study was based on the key criteria set by Air Travel Consumer Report to determine airline service quality performance over the past two decades, namely customer complaints, flight problems, ticketing, remittances, charges, customer service, boarding (non-acceptance of flight) and missing baggage. The above criteria have an effect on the total quality ratios. The customer satisfaction of the criteria affecting these ratios, i.e. the non-satisfaction of the customer with the negativity, increases the quality performance of the airline operation. The main reason for this is the reduction in the intensity of economic air traffic and airport traffic (Rhoades, 2008).

At this point, we can conclude from all these studies that it is inevitable to have the necessary and sufficient knowledge and skills about performance management principles and processes. Also the importance of productivity and total quality understanding in production and innovation in line with customer expectancy is that the company image will increase the performance of the company in terms of competition and customer satisfaction. In addition, the number of factors affecting these objectives of business, size, innovation, quality, financial structure of the company, luck, management skill, since these factors directly or indirectly affect the performance of firms.

On the other hand we can see that the accommodation operations affect the operating performance of applications related to organizational service orientation. And increasing logistics performance is effective in ensuring high efficiency, lower cost, good relationships with suppliers, high customer satisfaction, quality service, delivery time efficiency, fast material movements and low inventory levels. And a meaningful and positive relationship has been found between innovation and business performance.

Some studies showed that the positive effect of market orientation and quality orientation on business performance is positive effect of quality orientation on market orientation. However, there is a strong relationship between technological intensity of service quality practices and business performance, and a relationship between low cost service practices and business performance

Creating low cost value compared to the expectations of customers and businesses will increase the performance level of the logistics service. Even more important is that economic conditions have a direct and indirect effect on performance, but the indirect effect is directly influenced. However, strategic awards and internal communication did not measure the impact on airline operation performance. It also showed that during the economic downturn, airline operators reduce flight tariffs and improve their timely arrival performance, as well as customer complaints, lost baggage and denied boarding problems.

2.6.6. Airline business models

Before we move to airline business models, we need to define the concept of air transport:

It's a method of transportation by which passengers, mail, and cargo are delivered by air. The chief advantage of this method is the considerable amount of time saved because of the high speed of the flight. The embodiment refers to the airline transport as a passenger, freight and postal transport, with or without tariffs, for commercial purposes (Whyte, 2016).

They will be shaped according to the objectives stated in the establishment of the enterprises established for air transport. The airline operator is being set up to carry passengers or to carry goods. Or both the passengers and the passengers will carry it. As a result of the decisions made by the administrators in the establishment process of the airline operation, airline executives will create the fleet and will frame the standards of the service standards to be provided to the passengers during the transportation process. If the business wants to provide services in this market, the business will complete its researches to the expectations of the market and form a business model.

Regarding this issue, the Libyan Airlines official stated that they did not have much choice in terms of positioning because they addressed a local market. Despite the continued activity in an international market, the airline business models that can be made have only a few options, Demsey (1997) said:

- Being a national airline (flag carrier)
- Making scheduled flights,
- Charter airlines serve tour operators and
- Being a low cost airline

According to the regulation:

- Tariffs Flights
- Non Tariffs Flights
- Regional air transport

- Air taxis,
- Cargo transportation is processed under the headings.

According to the Libyan Aviation Sector Regulations, there are conditions such as the number of seats of aircraft, the number of fewest aircraft, the amount of collateral they will give, the age limit for the receivables and the minimum capital per aircraft. The following table is mentioned (Maatugh, 2016):

Table 2 Business Profiles

Type of Operation	Aircraft Seat Number	Minimum Number of Aircraft	Coverage ($)	Aircraft Age Limit	Minimum Capital Per Plane
Tariff	100+	5	3	15	5 m $
Without tariff	100+	3	1.5	15	5 m $
Local	20 - 100	2	0.5	No	0.5 m $
Air Taxi	Less than 19	1	No	No	0,2≤S<2 m $
Freight Transportation	-	2	0,025/ton<1 m $	No	0.5 m $

The traditional airline model is an airline business model, whose flights are made at a specific tariff and which have expensive processes and systems such as in-cabin service, fleet and flight nets. Traditional airlines are national flag carriers whose state is wholly or partly owned. Conventional flag carriers serve with a fleet of short and long range aircraft types. Conventional airline companies, which tend to have a large flight network, usually serve with a hub and spoke network structure. In the collect-and-distribute network, a central airport (hub) is selected and surrounding airports (spokes) connected to the central airport are selected. The passengers who are transported from the surrounding airports to the central airport are then distributed to the surrounding airports they want to go to. Thanks to the collective-distribution network structure, traditional airline companies are spreading their activities over a wider area.

The traditional airline business model is also referred to as tariffed airline business model or flag carrier airline business model.

It is the airlines that provide transportation services on the basis of the transportation of passengers and cargoes by airplanes and certain routes, depending on a certain plan, time and tariff. The services provided by these airline carriers are more favorable. For example, passenger classes and catering services on airplanes are shaped according to the wishes of passengers. In other words, First Class Passengers and Business Class Passengers are performing their services by distinctive Economy Class (Zhang, 2010).

CHAPTER THREE

3. METHODOLOGY

Research methodology is the roadmap to gathering necessary data and analyses for achieving the research objectives.

3.1. The Research Model and Hypotheses

Zeithaml et. al. (1996) contended that service quality is the five basic dimensions that can be generalized for different markets. These five basic dimensions are derived using the sub-service dimension component. Five dimensions; reliability, responsiveness, trust, sensitivity and physical assets. This five-dimensional scale is referred to as the SERVQUAL scale. Basically, the level of service quality is measured by taking the differences between the service expectation of the customers and the perception of the service.

However, Cronin and Taylor (1994) suggested using only perceived service scales from the expected service and perceived service scales developed on the SERVQUAL scale. Because the perceived service, i.e. performance, is being measured, it is suggested that in the questionnaire questions answered by the customer, the performance, i.e. the perceived service, is calculated by considering the expectations. For this reason, Cronin and Taylor recommend the SERVPERF measure.

From these previous studies and studies we presented in Sec. 2.5 and the literature review, we can conclude the demonstrated model of the research. The demonstrated model drawn in Figure 4 was suggested to measure the impact of distinctive service provision and service quality on airline operational performance of airline operations and to measure the relationship between distinctive service offerings and service quality.

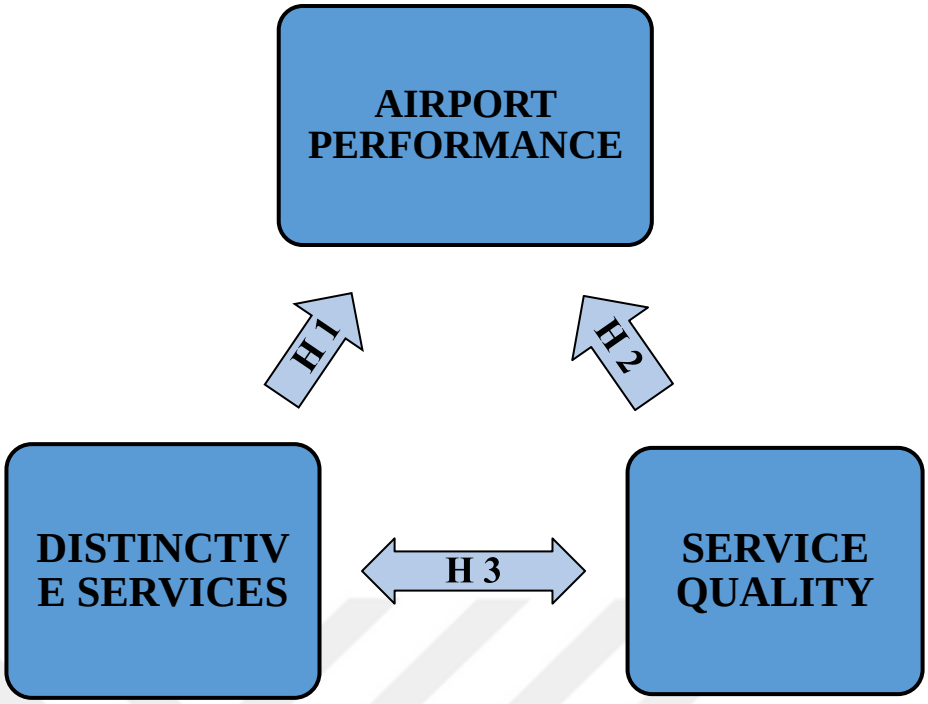

Figure 4Demonstrated Model of the research

The hypotheses of the research can be listed as follows:

- H1: Distinctive service delivery components have statistically significant impact on the performance of regional air transport.
    - **H1a:** Distinctive service components have significant positive effect on airline operations performance.
    - **H1b:** Distinctive service components have significant positive effect on airport operations performance.
    - **H1c:** Distinctive service components have significant positive effect on airline innovation performance.
    - **H1d:** Distinctive service components have significant positive effect on airline service performance.

- **H2:** Quality service components have statistically significant impact on the performance of regional air transport.
    - **H2a**: Quality service components have significant positive effect on airline operations performance.
    - **H2b**: Quality service components have significant positive effect on airport operations performance.

- **H2c**: Quality service components have significant positive effect on airline innovation performance.
- **H2d**: Quality service components have significant positive effect on airline service performance.

- **H3:** There is statistically significant relationship between distinctive services and service quality.

3.2. Population and Sampling

This study on Libyan Airlines management was conducted on the passengers traveling from the Benina International Airport to determine the influence of the performance of the services provided by the Libyan Airlines according to their distinctive characteristics and quality of services. A face-to-face survey has been made with passengers traveling during the period concerned with the airline concerned. The researcher used systematic random sampling method, during 20 days in two months (1 day after 2 days) for gathering data of passengers traveling.

The field survey was undertaken from 1st Sep. 2017 to 30th Oct. 2017. It estimates that around 1750 passengers traveled daily to these two destinations by airline these days. Statistical calculations of sample size of 384 persons, representing a 100,000 population at a 5% level of significance, was determined (Krejcie and Morgan, 1970).

3.2.1. Calculation of the sample size

The sample size was determined by a sample size calculation according to Krejcie –Morgan (1970). In the majority of quantitative studies, 95% confidence interval and significance level of 5% was used.

$$n = \frac{\frac{\mathrm{Z}\alpha}{2} NP(P-1)}{d^2(N-1) + \frac{\mathrm{Z}\alpha}{2(1-P)}} \cong 414^{1}$$

n= (1.96*1750*0.5*0.5)/((0.025)^2*(1750-1)+1.96*(1-0.5)) ≅414

Where:

- n: Sample size calculation
- N: Population size study
- Zα/2: at α=0.05=1.96
- Prevalence of airlines knowledge, P= 50%=0.5
- d: The error rate allowed=2.5%=0.025.

In our study of about 414 individuals was conducted taking into account the margin of error. Only 400 were received while the valid questionnaires were 390 out of the received questionnaires, which was a good proportion and accurate sample representation.

3.3. Data Gathering and Measures

Collecting data for our study was through questionnaires. Questionnaire has been a popular method in the social sciences. In this method the same questions is given for data gathering. This study includes a sizeable population and voluminous data; therefore, the questionnaire was a modified from Parasuraman et al. (1988) by writing down all questions and issues which had resulted from the literature review.

Developing the SERVQUAL scale, for gathering data from five different service categories, even though these categories represent a broad range of services, SERVQUAL's five dimensions and 22 item scales drawn from those industries are difficult to apply to airlines. This is because the SERVQUAL instrument does not address other important aspects of airline service. The researcher had modified the

[1] Equation of Krejcie –Morgan and It is known as the American Partnership for Education.

items of this scale to address different aspects of airline service. The questionnaire (see Appendix A. p: 84) is divided into four broad parts:

Section I is for respondent‘s background information, Section II represents distinctive service in 6 statements, Section III represents the SERVPERF scale, which was used to assess the performance of service quality. This scale consists of 5 dimensions and 22 questions used in the SERVQUAL scale.

Finally Section IV represents performance of regional air transport in 30 statements. Likert Scale (1: Absolutely not agree, 5: Absolutely agree) was used in Section II, Section III and Section IV concerns with this survey.

CHAPTER FOUR

4. DATA ANALYSIS AND FINDINGS

4.1. Findings Related to Socio-Demographic Characteristics of Participants

Introducing the background of respondents is very important to make the readers understand the respondents based on their personal information such as gender, age, education level, monthly income, travel reason and occupation. This information has been shown in the following table to create better understanding of their background. Table 3 summarizes these characteristics.

Table 3 Findings of participants' socio-demographic characteristics

Gender	Frequency (F)	Percent (%)
Female	169	43.3
Male	221	56.7
Total	390	100

Age	Frequency (F)	Percent (%)
18-25	99	25.4
26-35	119	30.5
36-45	95	24.4
46-55	53	13.6
56 and over	24	6.2
Total	390	100

Professions	Frequency (F)	Percent (%)
Officer / Worker	150	38.5
Retired	36	9.2
Self-employed	71	18.2
Student	58	14.9
Other	72	18.5
Missing Value	3	0.8
Total	390	100

Income in LYD	Frequency (F)	Percent (%)
2000 And Down	159	40.8
2001-3000	94	24.1
3001-4000	70	17.9
4001-5000	37	9.5
5000 And Above	30	7.7
Total	390	100

Education	Frequency (F)	Percent (%)
Graduated from university	63	16.2
License / Associate	185	47.4
High school	109	27.9
Elementary / Middle School	29	7.4
No Education	3	0. 8
Missing Value	1	0.3
Total	390	100

Travel Reason	Frequency (F)	Percent (%)
Holiday	120	30.8
Education	46	11.8
Business trip	92	23.6
Family Relatives Visit	90	23.1
Health	29	7.4
Other	11	2.8
Missing Value	2	0.5
Total	390	100

Table 3 shows that the distribution of the passengers participating in the survey is analyzed by gender that 43.3% of the passengers are from the female, while 56.7% of the passengers are from the male. This reflects that the respondents who participated in the questionnaire survey are from male, it means that more than half of the passengers are from the male

Table states that 25.4% passengers, who participated were between 18 and 25 years, followed by 30.5% aged between 26 and 35 years, whereas 24.4% of passengers were between 36-45 years, followed by a bout of 13.6% were between 46 and 55 years and the last class 6.2% of 56+ years. Therefore, the majority of respondents aged between 26 and 35 (30.5%) having a high percentage in this survey. This reflects the finding that the age distribution of the sample consisting of 390 passengers representing the universe is parallel to the general passenger distribution.

Educational qualification is an important indicator about respondent‘s background. Therefore, the last educational degree of the sample groups is presented in the above table. It is seen that 47.4% are undergraduate and associate,

27.9% are in high school, 16.2% are graduated from university, 7.4% are in primary and secondary schools, it can also see that there is no educational status (Missing value, 0.3%). The researcher believes that participation of such well qualified respondents has enhanced the objectivity and reliability of the study findings.

In the survey conducted (Table 3), the monthly income of passengers was determined. The monthly income level of these passengers is examined, it can be seen that 40.8% for 2000 LYD and below who participated in this survey, 24.1% for between 2001-3000 LYD, 17.9% for between 3001-4000 LYD, 9.5% and 7.7% of 4001-5000 and 5000 LYD and above respectively. This means that passengers have 2000 LYD and below income was travels more than the others.

It can be seen from the above table that the passengers participating in the survey is examined according to the travel reasons, it is seen that 30.8% of them are holiday, 23.6% are business trips, and 23.1% are family relative visits, 11.8% and 2.8% traveled for other reasons (Missing value, 0.5%). This might perhaps be happening because in Libya, people are travelling for holiday more than other travel, which consists with the universe is parallel to the general passenger distribution.

Finally, it is important to mention that occupational information from the above table. It can be seen that 38.5% of civil servants and workers, who participated in this survey, followed by 18.2% of self-employed persons, 14.9% of students, of about 9.2% of retirees and 18.5% of other people were observed. In this line, the researcher feels that civil servants and workers are travelling more than the others.

4.2. Reliability and Factor Analysis Related to Variables

The questionnaire (see Appendix A) is divided into four sections: Section 1 as described above (background of respondents), section 2 represents one dimension called distinctive service in 6 items, section 3 has 22 items measure perceived service\quality questions in five dimensions, and section 4 represents 30 items measure operation performance.

In the scope of the study, explanatory factor analysis was performed on the data gathered from the sample collection to determine the distinction between service delivery, service quality and airline operation performance scales and the relation of scale items to relevant factors.

In the case of questionnaire survey, the success largely depends on the quality of questionnaire itself. Reliability refers to the degree to which an instrument or technique generates the same results each time it is used, and therefore the degree to which the result is reliable. The researcher has decided to use the coefficient alpha score or Cronbach Alpha Coefficient to measure the reliability of the survey questionnaire. Coefficient Alpha was used to test the reliability of the scales in this study. This coefficient, which takes a value between 0 and 1, is called the Alpha (α) coefficient. Depending on the alpha (α) coefficient, the reliability of the scale is calculated as follows:

$$\alpha = \left(\frac{k}{k-1}\right)\left(1-\frac{\sum_{i=1}^{k}\sigma_i^{\,2}}{\sigma_t^{\,2}}\right)$$

k: Numbers of the items;

σ_i^2: Variation of grades on items;

σ_t^2: Total degree of variation in the questionnaire survey.

4.2.1. Results of descriptive factor analysis for distinctive service presentation

The following table (Table 4) gives information about two hypotheses of factor analysis. From the following table, we find out that sample sufficiency index KMO by Kaiser-Meyer-Olkin, which compares the sizes of the observed correlation coefficients to the sizes of the partial correlation coefficients for the sum of analysis variables is 85.3%, and it is reliable because it overcomes 70% by far. In addition, supposition test of sphericity by the Bartlett test is rejected on a level of statistical significance p-value(Sig.) p <0.01 for Approximation Chi-Square = 889.703. Consequently, the coefficients are not all zero, so that the second acceptance of

factor analysis is satisfied. As a result, both acceptances for the conduct of factor analysis are satisfied and we can proceed to it.

Table 4 also presents the components and the factor loadings produced after Principal Components Analysis. More specifically, based on passengers attitudes as presented by the factor analysis, items 1, 2, 3, 4, 5 and 6 particularly with high loadings (0.821, 0.794, 0.564, 0.823, 0.695,0.775) load mainly on the first axis-factor F1 with average score 3.075, which explains, following Varimax rotation, 56.422% of the total dispersion. Factor F1 represents distinctive service in relation to 'Campaign and discounts' and 'Ticket price is reasonable' and 'Planning to go to a nearby city' and 'Communication and problem solving'and 'Admission to the flight after the check-in closes'. Finally, last on the significance scale for this factor lays 'Providing city service'. It is important to mention that all the above items 1, 2, 3, 4, 5 and 6, without exception appear with high loadings on the factor axis-factor, have the Pearson correlation coefficient from good to high and this result to problem non existence in reliability. Reliability of the first factor is α=0.842, which is particularly satisfactory.

Table 4 Explanatory Factor Analysis for Distinctive Service Presentation

Variables	Factor
1. Are suitable ticket prices offered?	0.821
2. Are transport services to nearby cities provided?	0.794
3. Are transportation services within the city provided?	0.564
4. Are campaigns and discounts offered?	0.823
5. Is check in permitted after late arrival to at the airport?	0.695
6. Is company employees good in communication and problems solving?	0.775
Bartlett's Test of Sphericity: 889.703 (p<0.01)	
KMO Value: .853	
Explanation Rate of Variance:	F1: 56.422
Cronbach's Alpha:	F1: 0.842
Average Value:	F1: 3.075

4.2.2. Explanatory factor analysis results of service quality scale

According to the analysis (Table 5), arise 5 uncorrelated factors, which explain the 76.596% percentage of the whole inertia of data and are described

separately afterwards. The coefficient of internal consistency (reliability) Crobach's is statistically significant and equals to 90.0% for the total number of questions. The Kaiser-Meyer-Olkin sampling adequacy criterion was found to be KMO=0.944, which indicates that reliable. Moreover, supposition test of sphericity by the Bartlett test approximation Chi-Square=7319.055. Consequently, the coefficients are not all zero, so that the second acceptance of factor analysis is satisfied. As a result, both acceptances for the conduct of factor analysis are satisfied and we can proceed to it. In addition this scale (SERVQUAL / SERVPERF) is used in the literature, which comes from 5 dimensions.

Table 5 Explanatory Factor Analysis Results of Service Quality Scale

Variables		**Factor Load**				
RELIABILITY	5-If the airline has promised to do something at a certain time, it will do it on time.	.815				
	6-The company is understanding and trustworthy when the problems happened to the customers of airline operation.	.843				
	7- Airline operation is reliable.	.755				
	8- Airline management fulfills its promises on time.	.803				
	9- Records of airline operation are kept properly and accurately.	.728			`	
SENSITIVITY	18-The airline executives showed individual interest in me.		.784			
	19-Airline employees have a personal interest in the customers.		.809			
	20-Airline management employees are aware of the needs of customers.		.727			
	21-The airline has deliberately implemented the best service for the customer.		.674			
	22-There is a time period for airline operations to allocate to all customers.		.722			

PHYSICAL CHARACTERISTICS	1- The airline has modern equipment.			.727		
	2- The operating environment of airline operation is visually striking.			.816		
	3- The personnel of airline operation are well dressed and elegant.			.776		
	4- Physical appearance of the airline operation is related to the service they provide.			.716		
TRUST	14- You can rely on the employees of airline operations.				.724	
	15- You feel confident in the operations of airline operations with its employees.				.754	
	16- Employees of airline operations are dignified.				.616	
	17-Employees of airline operations receive adequate support from their companies to do their jobs well.				.549	
RESPONSIVENESS	10- Airline employees say when service will be done.					.687
	11- Employees of airline operation provide fast and accurate service to their customers.					.744
	12-Employees of airline operations are always willing to help the customer.					.631
	13-It is not a problem that the airline does not respond to the requests of the customer if the airline is busy.					.477

Bartlett's Test of Sphericity: 7319.055 (p<0.01)					
KMO Value: .944					
Explanation Rate of Variance:	F1: 20.274	F2: 18.357	F3: 15.005	F4: 12.394	F5: 10.566
Cronbach's Alpha:	F1: .932	F2: .919	F3: .879	F4: .891	F5: .863
Average Value	F1: 3.366	F2: 3.587	F3: 3.742	F4: 3.724	F5: 3.503

From Table 5 it can also be seen that the reliability coefficient (Crobach's α) is statistically significant and equals to 93.2%, 91.9%, 87.9%, 89.1% and 86.3% for the 1st, 2nd,3rd, 4th and 5th factorial axis correspondingly.

Table 5 also presents the components and the factor loadings produced after Principal Components Analysis. More specifically, based on SERVQUAL / SERVPERF scale as presented by the factor analysis, questions 5, 6, 7, 8 and 9 particularly with high loadings (0.815, 0.843, 0.755, 0.803, 0.728) load mainly on the first axis-factor F1 with average score 3.366, which explains, following Varimax rotation, 20.274% of the total dispersion. The first factor (F1) consists of the statements of Reliability, so all the items 5, 6, 7, 8 and 9, without exception appear to have high loadings on the first axis-factor, have the Pearson correlation coefficient from good to high and this result to problem non-existence in reliability. The reliability of the first factor is α =0.932, which is satisfactory.

Questions 18, 19, 20, 21 and 22 particularly with high loadings (0.784, 0.809, 0.727, 0.674, 0.722) on the second factor (F2) with average score 3.587, which explains 18.357% of the total dispersion. The second factor consists of the statements of Sensitivity, so all the items 18, 19, 20, 21 and 22, without exception appear to have high loadings on the second axis-factor, have the Pearson correlation coefficient from good to high and this result to problem non-existence in reliability. The reliability of the second factor is α =0.919, which is satisfactory.

Questions 1, 2, 3, and 4 particularly with high loadings (0.727, 0.816, 0.776, 0.716) on the third factor (F3) with average score 3.742, which explains 15.005% of the total dispersion. The third factor (F3) consists of the statements of Physical Characteristics, so all the items 1, 2, 3, and 4, without exception appear to have either high or low loadings on the third axis-factor, have the Pearson correlation coefficient from good to high and this results to problem non-existence in reliability. The reliability of the third factor is α =0.879, which is satisfactory.

Questions 14, 15, 16 and 17, particularly with high loadings (0.724, 0.754, 0.616, and 0.549) are on the fourth factor (F4) with average score 3.724, which explains 12.394% of the total dispersion. The fourth factor (F4) highlights value of Trust. It is important to stress that the items 14, 15, 16, 17 and appear to have high loading on the fourth factor-axis as well as high correlation coefficient Pearson with the sum of the rest variables that remain in the scale and this results to problem non-

existence in reliability, and ascertains their remains in the scale. The reliability of the fourth factor is α=0.891, which is satisfactory.

The fifth and final factor (F5) with average score 3.503, which explains 10.566% of the total data inactivity quite high loadings, is constructed and interpreted by questions 10, 11, 12 and 13. The fifth factor consists of the statements of Responsiveness that concerning of service quality. It is important to give emphasis that the items 10, 11, 12 and 13 appear high loading on the fifth factor-axis as well as high correlation coefficient Pearson with the sum of the rest variables that remain in the scale, and this ascertains their remains in the scale. The reliability of the fourth factor is a=0.863, which is satisfactory.

Finally, the principal factor analysis totally arise five factor-composite variables, which are named: Reliability, Sensitivity, Touch-ability (physical evidence), Trust and Responsiveness. Therefore, a model of five factors is created after the examination of the validity and reliability of the initial passengers attitudes toward SERVQUAL/SERVPERF with high loadings as shown above.

4.2.3. Explanatory factor analysis results of the airline performance scale

According to the analysis (Table 6), arise 4 uncorrelated factors of 25 items out of 30 items of airline performance scale, which explain the 74.49% percentage of the whole inertia of data and are described separately afterwards. The coefficient of internal consistency (reliability) Crobach's a is statistically significant and equals to 92.8% for the total number of questions. The Kaiser-Meyer-Olkin sampling adequacy criterion was found to be KMO=0.953, which indicates that reliable. Furthermore, supposition test of sphericity by the Bartlett test approximation Chi-Square=9197.819. Consequently, the coefficients are not all zero, so that the second acceptance of factor analysis is satisfied. As a result, both acceptances for the conduct of factor analysis are satisfied and we can proceed to it.

Table 6 shows that the reliability coefficient is statistically significant and equals to 94.9%, 90.2%, 91.5% and 94.6% for the 1st, 2nd,3rd and 4th factorial axis correspondingly. Table 6 also demonstrates the components and the factor loadings

produced after Principal Components Analysis. In this study, the Airline Performance Scale were used, this tool consisted 25 items referring to four different aspects, the left five items were excluded, because have low loadings (<0.35), thus those subscales are the results of the explanatory factor analysis.

Table 6 Explanatory Factor Analysis Results of the Airline Performance Scale

D.	Variables	Factor Load			
Airline Operation	12. Cabin air conditioning was sufficient.	.678			
	13. The seats in the air were clean.	.753			
	14- Toilets and sink were clean.	.776			
	15- The cabin crew was a professional at work.	.805			
	16- The cabin crew was kind and helpful.	.824			
	17- I was able to reach the cabin crew when needed during the flight.	.799			
	18- Cabin crew and pilots informed the necessary information.	.703			
	19- Catering services were sufficient in terms of quantity and variety.	.556			
	20- I took my baggage in a short time after I showed up.	.558			
Airport Operation	3- Waiting time in check-in queue was not long.		.677		
	4- Check-in staff business information was sufficient.		.722		
	6- At check-in, there was sufficient information about hand luggage.		.705		
	7- After boarding the boarding gate has enough service.		.780		
	8- During the boarding, I was comfortably admitted to the flight.		.716		
	9- The orientation service was sufficient during boarding.		.677		
Airline Innovation	21- Airline management is innovating in its fleet.			.703	
	22- The airline has made a discount and promotion in the last year.			.786	
	23- Airline operators often seek and implement new applications.			.838	
	24- It gives importantance to innovation in passenger services.			.785	
	25- Airline management is innovative in opening new lines according to others.			.749	
Airline	26- I paid money for the service I got.				.698
	27- The overall performance of the airline operation today was very good.				.750

	28- The airline management showed the performance of the departure and arrival on time just in time.				.695
	29- I prefer the same airline on my next trip based on my experience of flying.				.761
	30- Based on my flight experience, I would recommend the airline to family, relatives, friends and friends.				.768

Bartlett's Test of Sphericity: 9197.819 (p<.000)				
KMO Value: .953				
Explanation Rate of Variance:	F1: 24.050	F2: 16.944	F3:16.685	F4: 16.430
Cronbach's Alpha:	F1: .949	F2: .902	F3: .915	F4: .946
Average Value	F1: 3.954	F2: 3.685	F3: 3.182	F4: 3.591

Table 6 also shows the components and the factor loadings produced after Principal Components Analysis. More specifically, based on performance scale as presented by the factor analysis, questions 12, 13, 14, 15, 16, 17, 18, 19 and 20 particularly with highest loading 0.824 for statement ' The cabin crew was kind and helpful' and lowest loading 0.556 for statement 'Catering services were sufficient in terms of quantity and variety' load mainly on the first axis-factor F1 with average score 3.954, which explains, following Varimax rotation, 24.050% of the total dispersion. The first factor (F1) consists of 9 statements of Airline Operation, so all the items 12, 13, 14, 15, 16, 17, 18, 19 and 20, without exception appear to have high loadings on the first axis-factor, have the Pearson correlation coefficient from good to high and this result to problem non-existence in reliability. The reliability of the first factor is α =0.949, which is satisfactory.

Questions 3, 4, 6, 7, 8 and 9 particularly with highest loadings 0.780 for statement 'After boarding the boarding gate was enough service' and lowest loading 0.677 for two statements 'Waiting time in check-in queue was not long' and 'The orientation service was sufficient during boarding' on the second factor (F2) with average score 3.685, which explains 16.944% of the total dispersion. The second factor consists of 6 statements of Airport Operation, so all the items 3, 4, 6, 7, 8 and 9, without exception appear to have high loadings on the second axis-factor, have the Pearson correlation coefficient from good to high and this result to problem

non-existence in reliability. The reliability of the second factor is α =0.902, which is satisfactory.

Questions 21, 22, 23, 24 and 25 particularly with highest loading 0.838 for statement ‘Airline operators often seek and implement new applications’ and lowest loading 0.703 for statement ‘Airline management is innovating in its fleet’ on the third factor (F3) with average score 3.182, which explains 16.685% of the total dispersion. The third factor (F3) consists of the statements of Airline Innovation, so all the items 21, 22, 23, 24 and 25, without exception appear to have either high or low loadings on the third axis-factor, have the Pearson correlation coefficient from good to high and this results to problem non-existence in reliability. The reliability of the third factor is α =0.915, which is satisfactory.

Questions 26, 27, 28, 29 and 30, particularly with highest loading 0.768 for statement ‘Based on my flight experience, I would recommend the airline to family, relatives, friends and friends’ and lowest loading 0.695 for statement ‘The airline management showed the performance of the departure and arrival on time just in time’ on the fourth factor (F4) with average score 3.591, which explains 16.430% of the total dispersion. The fourth factor (F4) consists of the statements of Airline Service, so all the items 26, 27, 28, 29 and 30, without exception appear to have either high or low loadings on the third axis-factor, have the Pearson correlation coefficient from good to high and this results to problem non-existence in reliability. The reliability of the third factor is α =0.946, which is satisfactory.

4.3. Findings of Regression Analysis for the Impact of Distinctive Services and Quality of Service on Airline Operations Performance Components

In this section, we will use regression analysis. Where regression analysis is used to identify the relationship between a dependent variable and one or more independent variable(s). More specifically, multiple regressions are used to see an effect of the relationship between distinctive services as independent variable or quality of services as independent variables and airline operations performance components as dependent variable.

4.3.1. Findings of Regression Analysis for the Impact of Distinctive Services on Airline Operations Performance

In this study an impact of airline distinctive service presentation dimension consists six items on airline operation performance factors is found directly. Multiple regression is used based on a number of assumptions that include:

- Data are at the interval or ratio level.
- The relationship between the independent and dependent variables is linear.
- Scores should be normally distributed and vary about equally (homoscedasticity).
- Independent variables should not correlate highly with each other (otherwise, they may simply be two measures of the same thing).
- There is sufficient sample size.

Table 7 shows the strength of the model, that is, how well all of the variables together of distinctive service components predict the airline operations performance. In this case, the adjusted R2 = 0.517 which explains the amount of variance in the model. In this table also shows that F is 95.349 with $p < 0.01$, which indicating that the model can be used. Since our model explains 51.7% of the variance Airline Operations Performance, the combination of predictor variables of distinctive services is very useful in predicting or explaining airline operations

performance. But which variables are the strongest predictors? Which are significant predictors?

This table reports the beta values, so we looking at β, the t-test and significance level indicate that only Planning to go to a nearby city and Providing city service are non-statistically significant predictors of airline operations performance since the p-value is p>0.05. Ticket price is reasonable, Campaign and discounts, Admission to the flight after the check-in closes (flexibility) and Communication and problem solving are statistically significant predictors of airline operations performance since the p-value is p<0.05.

The Durbin–Watson statistic is of about 2.506, which is above the acceptable limit of (2) for the DW statistic. Therefore, from this table, it is obvious that distinctive service has statistically significant effect relationship with airline operations performance, so we accept the sub-hypothesis H1a that 'Distinctive service delivery components have statistical significant impact on the airline operations performance'.

Table 7 Findings of Regression Analysis for the Impact of distinctive service on airline operations performance

Dependent variable: Airline Operations Performance							
Independent variables:	**Adj.R^2**	**F**	**Constant (β_0)**	**β**	**t**	**p**	**DW**
Are suitable ticket prices offered?	0.517	95.349**	1.255	.351	5.215	.000**	2.506
Are transport services to nearby cities provided?				.086	1.045	.215	
Are transportation services within the city provided?				.064	1.005	.319	
Are campaigns and discounts offered?				.513	7.354	.000**	
Is check in permitted after late arrival to at the airport?				.435	6.923	.000**	
Is company employees good in communication and problems solving?				.324	4.225	.000**	

**p<0.01

4.3.2. Findings of Regression Analysis for the Impact of Distinctive Services on Airport Operations Performance

Table 8 shows a statistically significant relationship was found between the Distinctive Service Presentation and the Airport Operation Performance, it was found that the model was significant (F: 97.251, $p < 0.01$). The explanatory power of the model is 0.535. In other words, there is an increase in the provision of distinctive service components according to this positive effect will increase the airport operation performance, and the model explains 53.5% of the change in airport operation performance.

This table shows the beta values, so we looking at β, the t-test and significance level indicate that only Providing city service is non-statistically significant predictor of airport operations performance since the p-value is $p>0.05$. Ticket price is reasonable, Planning to go to a nearby city, Campaign and discounts, Admission to the flight after the check-in closes (flexibility) and Communication and problem solving are statistically significant predictors of airline operations performance since the p-value is $p<0.05$.

The Durbin–Watson statistic is of about 2.773, which is a good value of the DW statistic. Therefore, from this table, it is obvious that distinctive service has statistically significant effect relationship with airport operations performance, so we accept the sub-hypothesis H1b that ‘Distinctive service delivery components have statistical significant impact on the airport operations performance’.

Table 8 Findings of Regression Analysis for the Impact of distinctive service on airport operations performance

Dependent variable: Airport Operations Performance							
Independent variables:	**Adj.R^2**	**F**	**Constant (β_0)**	**β**	**t**	**p**	**DW**
Are suitable ticket prices offered?	0.535	97.251**	2.453	.451	6.763	.000**	2.773
Are transport services to nearby cities provided?				.258	2.514	.015*	
Are transportation services within the city provided?				.035	1.329	.427	
Are campaigns and discounts offered?				.636	8.135	.000**	
Is check in permitted after late arrival to at the airport?				.482	6.826	.000**	
Is company employees good in communication and problems solving?				.279	3.024	.011*	

*p<0.05 **p<0.01

4.3.3. Findings of Regression Analysis for the Impact of Distinctive Services on Airline Innovation Performance

Table 9 shows a statistically significant relationship was found between the Distinctive Service Presentation and the Airline Innovation Performance, it was found that the model was significant (F: 107.591, p <0.01). The explanatory power of the model is 0.586. In other words, there is an increase in the provision of distinctive service according to this positive effect will increase the airline innovation performance, and the model explains 58.6% of the change in airline innovation performance.

This table shows the beta values, so we looking at β, the t-test and significance level indicate that all components of distinctive service are all statistically significant predictor of airline innovation performance, since the p-value is p<0.05.

The Durbin–Watson statistic is of about 2.711, which is a good value of the DW statistic. Therefore, from this table, it is obvious that distinctive service has statistically significant effect relationship with airline innovation performance, so we accept the sub-hypothesis H1c that 'Distinctive service delivery components have statistical significant impact on the airline innovation performance'.

Table 9 Findings of Regression Analysis for the Impact of distinctive service components on Airline Innovation Performance

Dependent variable: Airline Innovation Performance							
Independent variables:	**Adj.R^2**	**F**	**Constant (β_0)**	**β**	**t**	**p**	**DW**
Are suitable ticket prices offered?	0.586	107.591**	1.947	.295	2.837	.017*	2.711
Are transport services to nearby cities provided?				.350	3.971	.009**	
Are transportation services within the city provided?				.312	2.681	.010*	
Are campaigns and discounts offered?				.537	7.102	.000**	
Is check in permitted after late arrival to at the airport?				.401	5.927	.000**	
Is company employees good in communication and problems solving?				.284	2.529	.023*	

*p<0.05 **p<0.01

4.3.4. Findings of Regression Analysis for the Impact of Distinctive Services on Airline service Performance

Table 10 shows a statistically significant relationship was found between the Distinctive Service Presentation and the Airline service Performance, it was found that the model was significant (F: 118.019, p <0.01). The explanatory power of the model is 0.606. In other words, there is an increase in the provision of distinctive service components according to this positive effect will increase the airline service performance, and the model explains 60.6% of the change in airline service performance.

This table shows the beta values, so we looking at β, the t-test and significance level indicate that all components of distinctive service are all statistically significant predictor of airline service performance, since the p-value is $p<0.05$.

The Durbin–Watson statistic is of about 2.524, which is a good value of the DW statistic. Therefore, from this table, it is obvious that distinctive service has statistically significant effect relationship with airline service performance, so we accept the sub-hypothesis H1d that 'Distinctive service delivery components have statistical significant impact on the airline service performance'.

Table 10 Findings of Regression Analysis for the Impact of distinctive service components on Airline Service Performance

Dependent variable: Airline Service Performance							
Independent variables:	**Adj.R^2**	**F**	**Constant (β_0)**	**β**	**t**	**p**	**DW**
Are suitable ticket prices offered?	0.606	118.019**	2.584	.295	2.837	.004**	2.524
Are transport services to nearby cities provided?				.350	3.971	.021*	
Are transportation services within the city provided?				.312	2.681	.010*	
Are campaigns and discounts offered?				.537	7.102	.000**	
Is check in permitted after late arrival to at the airport?				.401	5.927	.000**	
Is company employees good in communication and problems solving?				.284	2.529	.005*	

*p<0.05 **p<0.01

4.3.5. Findings of Regression Analysis for the Impact of Service Quality on Airline Operations Performance

In this study, multiple regression is used to find the relationship between several independent or predictor variables and a dependent or criterion variable.

Table 11 shows the strength of the model, that is, how well all of the variables together of quality services components predict the airline operations performance. In this case, the adjusted $R^2 = 0.595$ which explains the amount of variance in the model. In this table also shows that F is 108.349 with $p < 0.05$, which indicating that the model was important. Since our model explains 59.5% of the variance Airline Operations Performance, the combination of predictor variables of quality services is very useful in predicting or explaining airline operations performance. But which variables are the strongest predictors? Which are significant predictors? This table reports the beta values, so we looking at β, the t-test and significance level indicate that only Reliability, Trust and Responsiveness statistically significant predictors of airline operations performance since the p-value is $p<0.05$. Sensitivity and Physical Characteristics not associated with airline operations performance.

Table 11 Findings of Regression Analysis for the Impact of quality services on ailine operations performance

Dependent variable: *Airline Operations Performance*							
Independent variables:	**Adj.R^2**	**F**	**Constant (β_0)**	**β**	**t**	**p**	**DW**
Reliability	0.595	108.349**	0.655	.259	5.215	.000**	2.513
Sensitivity				.086	1.785	.075	
Physical Characteristics				.064	1.154	.249	
Trust				.262	2.354	.000**	
Responsiveness				.235	1.903	.000**	

**p<0.01

We can conclude the following in considering airline operations performance:

- Reliability, trust and responsiveness are important factors in determining airline operations performance in this study.
- Sensitivity and Physical Characteristics make no difference in airline operations performance in this survey.
- About of 40% of the variance (differences between passengers) is not accounted for by our model.

The Durbin–Watson statistic is of about 2.513, which is a good value of the DW statistic. Therefore, from these results, we accept the sub-hypothesis **H2a** that 'Service quality components have statistical significant impact on airline operations performance'.

4.3.6. Findings of Regression Analysis for the Impact of Service Quality on Airport Operations Performance

Table 12 shows the strength of the model, that is, how well all of the variables together of quality services components predict the airport operations performance. In this case, the adjusted $R^2 = 0.550$ which explains the amount of variance in the model. In this table also shows that F is 106.121 with $p < 0.01$, which indicating that the model was important. Since our model explains 55.0% of the variance Airport Operations Performance, the combination of predictor variables of quality services is very useful in predicting or explaining airport operations performance. But which variables are the strongest predictors? Which are significant predictors? The task is the same as before to illustrate the beta values, so we looking at β, the t-test and significance level indicate that only Reliability (β:0.280, p:0.000), Sensitivity (β:0.156, p:0.003) and Trust (β:0.264, p:0.000) statistically significant predictors of airport operations performance since the p-value is $p<0.05$. Physical Characteristics (β:0.065, p:0.210) and Responsiveness (β:0.084, p:0.149) not associated with airport operations performance.

We can conclude the following in considering airport operations performance:

- Reliability, sensitivity and trust are important factors in determining airport operations performance in this study.
- Physical Characteristics and responsiveness make no difference in airport operations performance in this survey.
- About of 45% of the variance (differences between passengers) is not accounted for by our model.

The Durbin–Watson statistic is of about 2.041, which is a good value of the DW statistic. Therefore, from these results, we accept the sub-hypothesis **H2b** that 'Service quality components have statistical significant impact on airport operations performance'.

Table 12 Findings of Regression Analysis for the Impact of quality services on airport operations performance

Dependent variable: *Airport Operations Performance*							
Independent variables:	**Adj.R^2**	**F**	**Constant (β_0)**	**β**	**t**	**p**	**DW**
Reliability	0.550	96.121**	0.660	.280	5.562	.000**	2.041
Sensitivity				.156	2.955	.003**	
Physical Characteristics				.065	1.126	.210	
Trust				.264	4.237	.000**	
Responsiveness				.084	1.447	.149	

**p<0.01

4.3.7. Findings of Regression Analysis for the Impact of Service Quality on Airline Innovation Performance

Table 13 shows the strength of the model, that is, how well all of the variables together of quality services components predict the air innovation operations performance. In this case, the adjusted R^2 = 0.455 which explains the amount of variance in the model. Looking at the table that F is 66.035 with p < 0.01, which indicating that the model was important. Since our model explains 45.5% of the variance Airline Innovation Performance, the combination of predictor variables of quality services is very useful in predicting or explaining airline innovation performance. But which variables are the strongest predictors? Which are significant predictors? Here, it is useful to look at the beta values, so β values, the t-test and significance level indicate that only Reliability (β:0.207, p:0.000), Sensitivity (β:0.252, p:0.003) and Responsiveness (β:0.181, p:0.003) statistically significant predictors of airline innovation performance since the p-value is p<0.01. Physical Characteristics (β:0.071, p:0.195) and Trust (β:0.027, p:0.685) not associated with airline innovation performance.

We can conclude the following in considering airline innovation performance:

- Reliability, sensitivity and responsiveness are important factors in determining airline innovation performance in this study.
- Physical Characteristics and trust make no difference in airline innovation performance in this survey.
- About of 55% of the variance (differences between passengers) is not accounted for by our model.

The Durbin–Watson statistic is of about 2.127, which is a good value of the DW statistic. Therefore, from these results, we accept the sub-hypothesis **H2c** that 'Service quality components have statistical significant impact on airline innovation performance'.

Table 13 Findings of Regression Analysis for the Impact of quality services on Airline Innovation Performance

Dependent variable: *Airline Innovation Performance*							
Independent variables:	**Adj.R^2**	**F**	**Constant (β_0)**	**β**	**t**	**p**	**DW**
Reliability	0.455	66.035**	0.577	.207	3.886	.000**	2.127
Sensitivity				.252	4.508	.000**	
Physical Characteristics				.071	1.299	.195	
Trust				.027	.406	.685	
Responsiveness				.181	2.959	.003**	

**p<0.01

4.3.8. Findings of Regression Analysis for the Impact of Service Quality on Airline Service Performance

Table 14 shows the strength of the model, that is, how well all of the variables together of quality services components predict the airline service performance. In this case, the adjusted $R^2 = 0.629$ which explains the amount of variance in the model. Looking at the table that F is 132.755 with $p < 0.01$, which indicating that the model was very important. Since our model explains 62.9% of the variance Airline service Performance, the combination of predictor variables of quality services is very useful in predicting or explaining airline service performance. But which variables are the strongest predictors? Which are significant predictors? Here, it is useful to look at the beta values, so β values, the

t-test and significance level indicate that Reliability (β:0.153, p:0.008), Sensitivity (β:0.312, p:0.000), Physical Characteristics (β:0.153, p:0.008), Trust (β:183, p:0.008) and Responsiveness (β:0.285, p:0.000), statistically significant predictors of airline service performance since the p-value is $p<0.05$.
We can conclude the following in considering airline service performance:

- All components of quality services are important factors in determining airline service performance in this study.
- About of 37% of the variance (differences between passengers) is not accounted for by our model.

The Durbin–Watson statistic is of about 3.022, which is a good value of the DW statistic. Therefore, from these results, we accept the sub-hypothesis **H2d** that 'Service quality components have a statistically significant impact on airline service performance'.

Table 14 Findings of Regression Analysis for the Impact of quality services on Airline service Performance

Dependent variable: *Airline service Performance*							
Independent variables:	**Adj.R^2**	**F**	**Constant (β_0)**	**β**	**t**	**p**	**DW**
Reliability	0.629	132.755**	-0.396	.182	3.270	.001**	3.022
Sensitivity				.312	5.326	.000**	
Physical Characteristics				.153	2.667	.008**	
Trust				.183	2.652	.008**	
Responsiveness				.285	4.442	.000**	

**p<0.01

4.3.9. Finding of Correlation analysis of perceived quality of service by distinctive services

Correlation Analysis is a statistical method used to test the linear relationship between two variables or the relationship of one variable to two or more variables, if any, and measure the degree of this relationship.

In order to make a correlation analysis, both variables must be continuous and nominally distributed. If there is a linear relationship as a result of the correlation analysis, it is calculated by the correlation coefficient of this relation. The correlation coefficient is indicated by 'r' and values between -1 and +1 are obtained. The Pearson correlation coefficient is used to measure the strength of relationships of two continuous variables.

Accordingly, Table 9 shows that the relationship between distinctive services and service quality perceptions is analyzed by Pearson Correlation Analysis. From this table it can be seen that the results showed a little below moderate positive correlation between distinctive service provision and subscales of physical characteristics (0.342**), with highly significant at 0.01 significance level. The table also indicates the average answers of the distinctive services for passengers coming with a degree of compatibility little above the general average (3.0) with (Mean=3.0752, SD=0.905), whereas the answers for passengers coming with a degree of compatibility higher than the general average with (mean value=3.742 and SD=0.885) for the physical characteristics.

Table 9 shows the relationship between distinctive services and reliability of service quality perceptions. From this table, it is obvious that distinctive services has a statistically significant correlation with reliability (0.596**) at 0.01 significance level. The table also indicates the average answers of the reliability for passengers coming with a degree of compatibility above the general average (3.0) with (Mean=3.366, SD=0.983).

Table 9 illustrates correlation values between distinctive services and responsiveness of service quality perceptions. Interestingly, there was a moderate correlation between distinctive services and responsiveness r=0.511** at p <0.01with mean value 3.503 and SD of about 0.948. Also, there was a slight correlation between distinctive services and trust with significant effect between distinctive services and trust(r=0.425* at p<0.01) with mean value 3.724 and SD of about 0.926. Moreover, the correlation between distinctive services and sensitivity have almost slight correlation r = 0.433* at p<0.01. The table also indicates the

average answers of the sensitivity for passengers coming with a degree of compatibility above the general average (3.0) with (Mean=3.587, SD=0.998).

Here, the analyze relationship among service quality perceptions, where table 9 shows existence of a relationship for each other.

Table 15 Correlation Analysis of Service Quality with Distinctive Service Features

		Mean	SD	1	2	3	4	5	6
1	**Distinctive Service Features**	3.075	.905	1					
2	**Physical Characteristics**	3.742	.885	.342	1				
3	**Reliability**	3.366	.983	.596	.551	1			
4	**Responsiveness**	3.503	.948	.511	.573	.736	1		
5	**Trust**	3.724	.926	.425	.682	.646	.712	1	
6	**Sensitivity**	3.587	.998	.433	.637	.593	.679	.756	1

This can be explained that the relationship between distinctive services and service quality get a good airline operations. Therefore, From these results, we accept the hypothesis H3 that ‘There is a statistically significant relationship between distinctive services and service quality’.

4.4. Discussion

In this study, the relationship between the qualitative service provided by the airline to the passengers and the regression relation to the airline performance of the standard services and the correlation relation between the distinctive services and the service quality were investigated. The findings of the research are shown below.

In this study, regression analysis was conducted to analyze participants' "Airline Business Performance" thinking. According to the analysis results, distinctive service delivery and service quality have a direct effect on airline performance. Accordingly, it can be argued that the increases in the provision of

distinctive services provided by the Libyan Airlines will increase airline performance in the positive effect.

When the regression analysis tables were examined, it was observed that there was a positive effect on the "Airline Performance of the Distinctive Service Delivery" factors. According to this effect, customers can improve the performance of the Libyan Airlines by enhancing the performance of the Libyan Airlines, as opposed to other services provided by other airlines. The result of Pekkaya's (2013) study that ticket prices are important in preference is the result of this study. In this respect, the price element is important in evaluating the performance of the customers. However, in performance measurement, different elements are valued for some customers and the price can remain on the second plan. Celikol et al. (2012) airline passengers prefer to take advantage of the advantage factor, and it is observed that a similar result has been achieved with the title of promotions and discounts in the distinctive service delivery study. The result of this study is similar to the results of Ostrowski's (1993) study, which shows that the flight schedule is an important factor in airline preference. (Ostrowski, 1993). In Borman's (1989) study, a different and distinctive service style and the level of relationship with the customer were found as the main factors determining the performance of the operator. The communication and flexibility elements of discriminating service provision are parallel to this study. The results of the distinctive service offerings are in line with the appropriateness of the ticket prices, the arrangement of the cruise lines to be traveled, communication, flexibility and campaigns and discounts affecting the airline performance. (Chenet, 2000)

When the regression analysis tables are examined, it is observed that "Quality of Service has a positive effect on the factors of airline performance". According to this effect, it is observed that when the quality of the services provided by Libyan Airlines is increased for the customers, it can increase the operational performance of the airline. In Suki's (2014) study, customers satisfied with the service quality reached the result that the airline proposed another customer. This study has shown similar results with our performance measurement, Airline Service Performance. In Jiang's (2013) study, it was concluded that the dimension of service quality is the dimension of "security" which is the most important element for the customer.

Compared with the results of this study, Airline Operation Dimension, and Airport Operation Dimension show similar results. The results of Abdullah et al. (2012), the fulfillment of the service promise on time, and the fact that the physical factors provided by the airline and the safety of the employees are important, have been reached as a result of airline operation performance parallel to Airline Operation Performance and Airline Service Performance.

In Yang's (2012) study 199, airline operators stated that they would provide safe travel to passengers by improving their physical facilities, catering presentations, fleet and their flight numbers in order to increase the quality of service. Despite the fact that the airplanes operated by the Libyan Airlines are favored by the passengers, the airplane is seen to be innovating, the Airline Innovation Performance, which they expect to see increases in aircraft numbers and flights. In Nadiri's (2008) study of 200 airlines, the most important factors affecting the purchase decision of the airline customers are the physical possibilities of the plane and the positive experiences (rumors) for the airline. In Park's (2007) 201 study, factors that passengers consider most when making an airline choice are; flight service, booking service, airport service, reliability, personnel behavior, flight suitability, price, perceived value, customer satisfaction, airline image and overall service quality. We can say that these results are parallel to the performance evaluation that we have done so that the airline's physical appearance, reliability, sensitivity, trust and responsiveness factors are improving airline operation performance.

A positive correlation was found between Pearson's correlation analysis and discriminant service delivery and service quality perception in the study. According to this relationship, it can be said that airline operations will increase the quality of the services provided by the airline to provide distinctive service, and this increase may indirectly affect the airline performance positively. In the literature, there have been no studies on distinctive services, but there are various studies on service quality and organizational performance.

CHAPTER FIVE

5. CONCLUSIONS AND RECOMMENDATIONS

It is not enough to determine the performance of our service enterprises by financial criteria alone. It is now well known by businesses that it is possible to meet customer expectations and even overcome the precondition that leads to operational success. Airline companies with a large number of customers with different demographic characteristics can achieve success by offering different services from other airlines' services and by increasing the quality of service with these services.

In the study conducted, the characteristics of distinctive services, service quality and performance of the operator were examined. As distinctive service features; ticket fare, availability of city or nearby city tariff plan, city shuttle service, campaigns and discounts, acceptance of flights after check-in and communication and problem solving were taken as basis. In service quality; reliability, susceptibility, touch-ability (physical evidence), trust and responsiveness. As operational performance; airport operation performance, airline operation performance, innovation performance and service performance sub-dimensions.

After the validity and reliability tests, the following findings were obtained:

It has been observed that the distinctive service delivery has a direct impact on the sub-dimensions of airline performance.

Direct effects of service quality sub-dimensions on airline performance were observed. These; the direct impact of physical service delivery on airline operation performance and service performance has been measured. The reliability sub-dimension measures the direct impact on airport operational performance, airline innovation performance and service performance. The emotion sub-dimension is measured by direct air impact on the airline and service performance. The trust sub-dimension has been measured on the airport operation performance, on the airline operation performance and on the service performance. Finally, it is measured that

the sensitivity sub-dimension has a direct effect on the airline performance sub-dimensions.

A statistically significant relationship was found between discrimination service provision and service quality.

The H1 hypothesis was accepted according to sub-hypothesis because the results of the analysis of the performance of Airline Operations show that distinctive service delivery affects the airline performance directly and positively. Accordingly, it can be argued that increases in the number of distinctive service offerings offered by the Libyan Airlines will increase airline operating performance in the positive direction.

The H2 hypothesis is accepted according to sub-hypothesis of the service quality scale analysis results used to measure airline performance. That is, the services provided by airline operators to the passengers before, during and after flight increase airline performance positively. From the service quality dimensions, physical characteristics, reliability and sensitivity factors are measured to have a positive effect on airline operation performance. Reliability, trust and sensitivity factors are measured to have a positive effect on airport operation performance. Reliability, responsiveness and sensitivity are measured to have a positive effect on airline innovation performance. It is observed that all dimensions of service quality have a direct and positive effect on airline service performance. The H2 hypothesis is accepted.

H3 hypothesis is accepted because positive correlation between service quality and qualitative service delivery is detected. The Libyan Airlines will also improve the quality of service when it improves disparate service offerings to passengers.

Proposals to airline management employees and researchers participating in production in the sector are:

1. It is suggested that the airline can improve its business performance by studying the sub-dimensions of service quality.
2. It is proposed that airlines can improve their marketing methods for distinctive service offerings.
3. It is suggested that researchers will lead their future work and value their work.
4. Further research is needed to conduct studies on the performance of the enterprise in different airports and to provide a comparative value.
5. Consumers' evaluations are measured in different seasons and further research can be repeated to determine whether there is a seasonal difference.
6. In further research distinguished service delivery studies can be done on carriers in countries that adopt the regional airline business model in air transport.

As a result, it is thought that theoretical models and institutional practices evaluated within the scope of this study can be a productive resource for researchers who want to increase their academic knowledge because it is a new applied approach in evaluating performance in academic literature. It can also create a resource for business executives how to improve the performance of the airline.

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APPENDIX A

SECTION 1

1. Gender	□ Male	□ Female
2. Age	□ 18-25 □ 36-45 □ 55 and above	□ 26-35 □ 46-55
3. Education Level	□ Graduated from Univ. □ High school □ None	□ License □ Primary school
4. Monthly Personal Income In LYD	□ 2000 LYD and below □ 3001 - 4000 LYD	□ 2001 - 3000 LYD □ 4001 - 5000 LYD
5. Travel Reason	□ Holiday □ Education □ Business trip	□ Family-Relative Visit □ Health □ Other
6. Occupation	□ Officer / Worker □ Retired □ Other	□ Self-employed □ Student

SECTION 2

Please read each of the following statements carefully and then place an "X" over the number that best describes the extent to which the statement applies to you. Use the guide below to choose the most appropriate number.

Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
(1)	(2)	(3)	(4)	(5)

(1 indicates the lowest score, 5 represents the most points.)

1- Are suitable ticket prices offered?	(1)	(2)	(3)	(4)	(5)
2- Are transport services to nearby cities provided?	(1)	(2)	(3)	(4)	(5)
3- Are transportation services within the city provided?	(1)	(2)	(3)	(4)	(5)
4- Are campaigns and discounts offered?	(1)	(2)	(3)	(4)	(5)
5- Is check in permitted after late arrival to at the airport?	(1)	(2)	(3)	(4)	(5)
6- Is company employees good in communication and problems solving?	(1)	(2)	(3)	(4)	(5)

SECTION 3

PHYSICAL CHARACTERISTICS

1. The airline operator has modern equipment.	(1)	(2)	(3)	(4)	(5)
2. The operating environment of airline operation is visually striking.	(1)	(2)	(3)	(4)	(5)
3. The personnel of the airline operation are well dressed and elegant.	(1)	(2)	(3)	(4)	(5)
4. The physical image of airline operation relates to the service they provide.	(1)	(2)	(3)	(4)	(5)

RELIABILITY

5. If the airline has promised to do something at a certain time, it will do it on time.	(1)	(2)	(3)	(4)	(5)
6. The company is understanding and trustworthy when the problems of the customers of the airline operate.	(1)	(2)	(3)	(4)	(5)

7. Airline business is trustworthy.	(1)	(2)	(3)	(4)	(5)
8. Airline management fulfills its services on time.	(1)	(2)	(3)	(4)	(5)
9. Records of airline operation are kept properly and accurately.	(1)	(2)	(3)	(4)	(5)
RESPONSIVENESS					
10. Airline employees tell when the service will be carried out.	(1)	(2)	(3)	(4)	(5)
11. Employees of airline operations provide fast and accurate service to their customers.	(1)	(2)	(3)	(4)	(5)
12. Employees of airline operations are always willing to help the customer.	(1)	(2)	(3)	(4)	(5)
13. It does not matter if the airline does not respond to the requests of the client if the employee is busy.	(1)	(2)	(3)	(4)	(5)
TRUST					
14. You can rely on the employees of airline operations.	(1)	(2)	(3)	(4)	(5)
15. You feel confident in the operations of airline operations with its employees.	(1)	(2)	(3)	(4)	(5)
16. Employees of airline operations are dignified.	(1)	(2)	(3)	(4)	(5)
17. Employees of airline operations receive adequate support from their companies to do their jobs well.	(1)	(2)	(3)	(4)	(5)
SENSITIVITY					
18. Airline employees showed me individual interest.	(1)	(2)	(3)	(4)	(5)
19. Airline employees have a personal interest in the customers.	(1)	(2)	(3)	(4)	(5)
20. Airline employees are aware of the needs of customers.	(1)	(2)	(3)	(4)	(5)

21. The airline has deliberately provided the best service for the customer.	(1)	(2)	(3)	(4)	(5)
22. Airline operation has a time slot for all customers.	(1)	(2)	(3)	(4)	(5)

SECTION 4

1. Buying tickets, checking in, choosing seats was easy and fast.	(1)	(2)	(3)	(4)	(5)
2. The waiting time for security at the airport entrance was not long.	(1)	(2)	(3)	(4)	(5)
3. The waiting time on the check-in queue was not long.	(1)	(2)	(3)	(4)	(5)
4. Check-in staff's job information was sufficient.	(1)	(2)	(3)	(4)	(5)
5. The check-in staff was kind and helpful.	(1)	(2)	(3)	(4)	(5)
6. During check-in, there was adequate information on hand luggage.	(1)	(2)	(3)	(4)	(5)
7. After getting the boarding pass, a service to boarding the door was sufficient.	(1)	(2)	(3)	(4)	(5)
8. During the boarding, I was comfortable with the flight.	(1)	(2)	(3)	(4)	(5)
9. Orientation service was sufficient during boarding.	(1)	(2)	(3)	(4)	(5)
10. The flight was in full time.	(1)	(2)	(3)	(4)	(5)
11. The flight was provided with necessary information and quick solution about the cause of the danger.	(1)	(2)	(3)	(4)	(5)
12. Cabin air conditioning was sufficient.	(1)	(2)	(3)	(4)	(5)
13. The seats in the air were clean.	(1)	(2)	(3)	(4)	(5)
14. Toilets and sink were clean.	(1)	(2)	(3)	(4)	(5)
15. He was a professional at the cabin crew.	(1)	(2)	(3)	(4)	(5)
16. The cabin crew was kind and helpful.	(1)	(2)	(3)	(4)	(5)
17. I was able to reach the cabin crew when needed during the flight.	(1)	(2)	(3)	(4)	(5)

18. The cabin crew and pilots informed the necessary information.	(1)	(2)	(3)	(4)	(5)
19. Catering services were sufficient in terms of quantity and variety.	(1)	(2)	(3)	(4)	(5)
20. I took my baggage in a short time after the flight.	(1)	(2)	(3)	(4)	(5)
21. Airline management is innovating in its fleet.	(1)	(2)	(3)	(4)	(5)
22. The airline has made a discount and promotion in the last year.	(1)	(2)	(3)	(4)	(5)
23. Airline operators frequently search for new applications and apply them.	(1)	(2)	(3)	(4)	(5)
24. Give importance to innovation in services provided to passengers.	(1)	(2)	(3)	(4)	(5)
25. Airline management is innovative in opening new lines compared to others.	(1)	(2)	(3)	(4)	(5)
26. I paid for the money I paid for the ticket.	(1)	(2)	(3)	(4)	(5)
27. The overall performance of the airline operation today was very good.	(1)	(2)	(3)	(4)	(5)
28. The Airline Administration showed performance on time of arrival and departure on time.	(1)	(2)	(3)	(4)	(5)
29. Based on my flight experience, I prefer the same airline on my next trip.	(1)	(2)	(3)	(4)	(5)
30. Based on my flight experience, I would recommend the airline to family, relatives, friends and friends.	(1)	(2)	(3)	(4)	(5)

CURRICULUM VITAE

PERSONAL INFORMATION

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Undergraduate: High Institute for Building Professions Skills - Breaga,
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