

**SERVICE QUALITY AND CUSTOMER SATISFACTION AT KENYA
AIRWAYS LTD**

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D61/70781/2009

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**A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF DEGREE OF
MASTER OF BUSINESS ADMINISTRATION (MBA), SCHOOL OF BUSINESS,
UNIVERSITY OF NAIROBI**

NOVEMBER, 2012

DEDICATION

This project is a special dedication to my dear wife Jacqueline my only daughter Jael Mercy and two sons, Joshua and Benjamin. Without their patience, support and encouragement it would have been impossible to complete this course.

ACKNOWLEDGEMENTS

I am indebted to the living God who gave me the energy and resources for the entire course. I acknowledge the professional guidance and support that came from my supervisors, Ombati O Thomas and Tom Kongere. Their commitment and guidance was quite outstanding.

My thanks to my friends and colleagues Nancy Kahuha, Robert Kamau, Robert Bosire, Robert Mgendi, Nickson Omollo, Mageto Joash among many others for their support. My brother dear brother Jerry Nyaega needs special mention because he proved to be a special pillar. To all, may God always cause your stars to stand out.

DECLARATION

I the undersigned declare that this is my original work and has not been published or presented for examination in any other University or Institution to the best of my knowledge.

Signed 

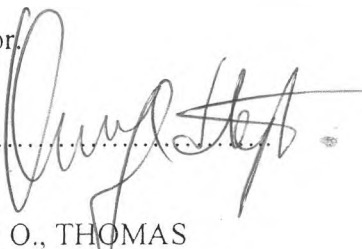
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ABSTRACT

Both descriptive and inferential statistics were used to analyze the study findings for the 63(63%) of the respondents that gave their responses. Descriptive analysis involved use of measures such as means, standard deviations, and variance. Inferential statistics included both reliability testing of the study parameters as well as tests conducted to investigate multivariate relationships between the major study variables. In the reliability testing, The Bartlett's test of sphericity and KMO parameters were used. The indicators used to quantify the major variables yielded a KMO value of 0.558, indicating that extracted parameters would account for satisfactory variance in the major variable being measured. It was therefore adequate to conduct factor analysis.

A total of 22 indicators were reduced by factor analysis to 7. All the extracted factors had Eigen values >1 and combined factor loadings of more than 70%. Tests for multicollinearity among the indicators were also conducted and they revealed r-square (r^2) values of < 0.49 , meaning insignificant interrelationships. Consequently, multicollinearity was not of concern and the indicators used were satisfactorily independent.

This study concluded that the major determinants of service quality among airline passengers were; luggage handling, assurance and responsiveness, which had the top 3 factor loading scores.

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CHAPTER ONE: INTRODUCTION

1.1 Background of the study

The fierceness and turbulent nature of the modern day international business environment is radically shaping the nature of business thought in the corporate scene. Organizations are increasingly directing more resources to research on systems and processes that will increase efficiency, save on costs generate more revenue streams retain customers, and ward off competition in order to remain profitable. Companies traditionally operating in local business environments must shape up their paradigm to new trends in globalization, competition and the ever changing customer expectations. Customer focus is emerging as the key to sustained competitive advantage in both the production and service industry (Porter and Kramer, 2011). A common phenomena with customers is that once they are not satisfied with a service is that they walk away and often without any complaint, hint or warning. Such customers stop doing business with the offending company which in effect put greater financial stress on the companies.

Consumers of services are becoming increasingly critical of the quality of service they experience (Albrecht et al, 1985) and this dictates that organizations must incorporate the customer in operational decision making processes. Changing customer demands and competition are forcing firms to cut loose from traditional customer satisfaction paradigms, to adopt proactive strategies aimed at taking the lead in market place. One of such strategies is the concept of quality. According to Berry et al (1988), service quality has become a great differentiator and the most powerful competitive weapon amongst leading service organizations. Cronin and Taylor (1992) argue that improving service

quality is an important strategy that service providers should use for differentiation and effective market positioning. Research shows that more than 40% of customers walk away never to return because of poor service quality than because of price.(Harvard, 2009)

Service quality should correspond to customer expectations and satisfy their needs requirements. The degree of excellence or inferiority according to the consumer defines service quality. Gourdin (1988) categorized airline service quality into three dimensions namely price, safety and timeliness. Ostrowski O'Brien and Gordon (1993) considered timeliness food, beverage food and seat comfort as determinants of service quality. The most comprehensive and widely used model was proposed by Parasuraman, Zeithamal and (Berry 1985, 1989) which considers tangibles, reliability, responsiveness empathy and assurance.

The role of quality has "changed from an order winner to a qualifier" (Hill, 2000). Order winners are the attributes of a product that are important to the customer which result in customer satisfaction and long-term relationships. Order qualifiers are attributes which when absent result in a product being removed from consideration. Consumers use order winners as a criteria for selecting a service from competitors in same service. It is therefore important that companies which aspire to be competitive pursue quality operational strategies that will put them in the league of order qualifiers. To qualify as order winners, organizations must however to be better than their competitors in their competitive capabilities. Various approaches are used by companies to achieve this

competitiveness, which may include bench marking, total quality management (TQM), quality assurance, six sigma and (ISO) international standards organization certifications. The significance and role of quality may not be under estimated given the attraction and prominence it has been given at national, regional and international levels. Principal objectives of these bodies are to study, analyze and create systems for improved customer satisfaction, through quality standards.

1.1.1 The nature of airline service quality

Air transport as a means of communication has steadily been on an upward trend since the Second World War. International Air Transport Association (IATA) in March 2010 reported that passenger demand on average grew by 10.3%, while cargo demand grew by 28.1%. IATA has a registered membership of 230 airlines which account for 93% of world air traffic volume.

Increased competition decreasing profit margins, increased fuel prices and globalization of business coupled with open sky policies have brought about hyper competition in the aviation industry. Airlines have got to deal with market segments that are increasingly conscious of quality and value for their money. Survival in the business is increasingly becoming dependent on airlines that are keen on improving their operational competitive advantage in quality, cost, reliability, flexibility and speed.

Service quality and customer satisfaction programs are major issues of concern at corporate and operational management concerns. Airlines are devoting more resources to programs aimed at improving customer satisfaction and retention by way of developing

operational strategies aimed at strengthening their key competitive priorities (quality, cost, reliability, flexibility and speed).

The contents of service quality may be different in different industries. According to the IATA (International Air Transportation Association), service items for airlines include seat reservation, selling ticket, airport check-in, cabin service, baggage delivery and the subsequent services after arriving at destinations. In general, from a passenger's perspective, the service items of airline should include flight frequency, flight safety, cabin food and beverage, seating, flight on schedule. On the other hand, from an operator's perspective, the airline industry generally pays more attention to safety, comfort, convenience, accuracy, and hospitality, (Chen & Liu, 2002).

There are many possible quality aspects that could influence the airline consumer perception of quality at different times in the consumption process. Generally, an airline passenger is concerned with two basic aspects of the airline service which are schedule and price offerings. There are other secondary, but important, aspects that a consumer may consider in the ultimate choice of an airline. The basic factors can be used to explain a large majority of consumer use of airline services. Once the basic concerns are met, the larger, more complex set of concerns begin to dominate the consumer's perception regarding quality of and satisfaction with a particular service experience and ultimately, the choice of a particular airline. Factors such as safety, comfortable seats, in-flight amenities such as food and beverages, attitude of the ground and flight crew, on-time performance of the flights, assurance that bags arrive with the passengers, crowded conditions of the flight, overbooking, and frequent flyer programs are important to

consumers. Changing planes, flight scheduling, ticket prices, in-flight service, employee attitudes, facilities and ticketing procedures are also key factors in determining how airline service quality is evaluated and can influence a traveler's choice of an airline (Lu and Tsai, 2002).

1.1.2 Kenya airways

The Kenya Airways limited is the largest airline in Kenya. The airline has been in operation for over three decades having been founded in 1977. The airline is a public private partnership company with KLM being the largest shareholder (26%), followed by the Kenyan government which has a holding of 23%. The rest of the shares are held by the public through the Nairobi stock exchange. The airline operates a total of 32 planes of which 25 are Boeing models, while 5 are Embracer models. The airline flies to a total of 53 destinations, 43 of them in Africa and the rest to Europe and Asia.

The combined work force at the airline comprises slightly more than 4,800. Annual passenger- kilometers in the period ending October 2011 stood at more 3.6 million, representing a total increase of slightly more than three thousand passengers over the same period the previous year. The airline mission statement indicates that the airline seeks to achieve world class status by consistently pursuing highest standards of safety, customer satisfaction, and quality considerations (Kenya airways website 2011).

This study therefore seeks to find out how the airline is performing on these dimensions of quality and customer satisfaction. The study will also seek to establish the factors that are viewed as that most important in service quality.

1.2 Statement of the Problem

The Kenya Airways vision is to consistently be a safe and profitable airline that guarantees world class service. The underlying themes in the vision statement capture the company's commitment to overcome challenges facing the aviation industry and meet world class status in customer service. While security maybe the prime concern of any user of airline services, passengers are keen on the quality of customer service they receive from airlines. The international civil aviation authority reveals that African airlines perform poorly on both safety and customer service quality.

Profitability is a function of several factors but it is definite that no organization can remain profitable without customers. Various strategies have been used to attract and retain customers. These approaches include expansion strategies, marketing partnerships and flyer programs. Whatever strategy that is employed profitability will remain a mirage if the quality of service does not meet the expected service quality perceptions of the customers.

Customer service quality is a key differentiator and major source of competitiveness in the modern business environment. Corporations having strong brand names, reputation for quality and world class services/products are facing even greater competition around the world today. No matter the kind of strategy, brand reputation or processes, no organization can succeed if it is not vigilant about service quality. The cost of poor service quality is suicidal to any organization; more so in the airline industry where world class players invest very heavily to be the best in class always .The consequence of poor service quality is operating below capacity as customers shun poor services. The cost of

flying empty seats in a highly competitive environment has led to grounding of many airlines as profits can only be made by operating at optimum capacity. This can be attributed to poor service quality.

Recent developments in the airline industry make it mandatory for Kenya airways to consider service quality as a key priority in their operations. The American department of transport in June 2011 drafted what was termed as passenger protection bill. The bill proposed some minimum acceptable standards of airline service quality as a means of protecting passengers from rogue airline operators (ATW Daily New, 2011). It is most likely that the entire world aviation community will institutionalize the same. Airlines should therefore set their own quality service standards that will exceed the regulations.

Kalthom et.al (2007) did a study on Malaysian airlines to determine if their Performance was at par with the expectations of their customers in terms of overall satisfaction and loyalty. The findings revealed that empathy, tangibles and assurance attributes were perceived as most significant amongst passengers in service quality considerations. Kamal et al (2006) examined the level of satisfaction in IAA airlines to determine the level of customer satisfaction. Somwang (2008) in his study examined the passengers' views and perceptions on service quality in low cost carriers. The findings revealed that the perceptions of Thai low cost carriers were higher than expected. Fareena et al (2003), sought to examine consumer expectations and perceptions in airline industry in an international environment. Koech (2002) studied the relationship between job design and employee satisfaction at Kenya Airways, while Masinde(1995) researched the pre and post employee satisfaction levels at Kenya Airways. His findings revealed that there was

a significant improvement in employee satisfaction levels after privatization.

Chemayiek(2005) studied the impact of consumer's perception on corporate rebranding.

There is no study that has been done in service quality at Kenya Airways. This therefore leaves a research gap that needs to be filled. This study therefore seeks to fill this gap.

This study is undertaken with the objective of answering the following questions;

What are the key determinants of customer satisfaction at Kenya airways?

Investigate how perceived service quality impact on customer satisfaction at Kenya Airways?

1.3 Objectives of the Study

The objectives of this study include:

- i. To determine the key determinants of customer satisfaction for passengers at Kenya Airways
- ii. To investigate how perceived service quality impacts on customer satisfaction.

1.4 Importance of the Study

The importance of this research study will be three fold. It is intended that the findings from this study will generate knowledge for the academic community. The gaps that will be identified from the study will create room for further research in service quality, and customer satisfaction in the airline industry.

It is also envisaged that airline and key players in the aviation industry will gain a better understanding of passengers and their expectations in terms of service quality. This will

lead to the appreciation of the role of service quality in increasing customer satisfaction and loyalty.

To Government and policy, the study findings will be relevant in equipping policy makers and regulators in the aviation industry with information that will empower them to be in a position to integrate industry stakeholders' in areas relating to service quality considerations in policy formulation.

CHAPTER TWO: LITERATURE REVIEW

2.1 The concept of Quality

The beginning of the 20th century marked the inclusion of “processes” in quality practices. Juran (1988) noted that Walter Shewhart a statistician working for Bell Laboratories, introduced control charts as a means of monitoring and controlling quality, making quality relevant not only for the finished product but for the processes that created it. W.E. Deming pioneered the use of statistical quality control procedures in the Japanese economy to aid recovery after the Second World War. Other notable contributors to quality include Feigenbaum (1999) who published the Total Quality Control hand book, Juran (1988) and Crosby (1984) the author of Quality is Free.

Different authors have attempted to define quality in different ways. Some prominent definitions include ‘conformance to requirements’ (Crosby, 1984), Juran (1988) defined quality as ‘fitness for use. Eiglier and Langeard(1987) defined quality as ‘One that satisfies the customer’. Bateson and Hoffman (1999) defined services as deeds , efforts or performance, whilst Regan (1963) saw services as activities, benefits or satisfactions offered in connection with the sale of goods. Quality has been defined from different dimensions and perspectives. Deming (1986) defines quality as a predictable degree of uniformity and dependability, at low cost and suited to the market.

According to Johnston (1995) amongst the most pressing issues in services research is the identification of the determinants of service quality. This should be a central concern for service management academics and practitioners, as the identification of the

determinants of service quality is necessary in order to be able to specify measure, control and improve customer perceived service quality

Quality can be viewed as the perception of customers relative to offerings of competitors in terms of elements or measures which are important to them. According to Juran(1988) measures important to customers can be classified as; product conformance to requirements, Image and service. According to Taguchi quality is the loss imparted to society from the time a product is shipped to the time it is disposed of (Roy, 2008). Kano identifies three categories or types of quality; the “must” requirements- Basic, Performance requirements- performance and Nice to have- Exciter (Ulman, 2002)

According to the Japanese production philosophy, quality implies ‘zero defects’ in the firm’s offerings. Initial efforts in defining and measuring service quality emanated largely from the goods sector, research work in the area of service quality was laid down in the mid-eighties by Parasuraman, Zeithaml and Berry (1985). These were amongst the pioneer researchers to point out that the concept of quality prevalent in the goods sector is not extendable to the services sector. They noted that services were intangible and needed a distinct framework for evaluation as opposed to goods sector where tangible cues exist to enable consumers evaluate product quality. Quality in the services context falls in the realm of experience and credence, properties which are complex to measure and evaluate objectively (Parasuraman, Zeithaml and Berry, 1985; Zeithaml and Bitner, 2001). The contributions made by Parasuraman, Zeithaml and Berry (1988) in their studies on service quality have continued to shape the direction of research in the services sector. The researchers defined service quality as a global judgment, or attitude, relating to the



superiority of the service. Views and research studies done by other scholars include Gronroos (1982) and Smith and Houston (1982), Parasuraman, Zeithaml and Berry (1985, 1988) who conceptualized service quality as the difference between consumer perceptions and expectations which is the outcome interaction and experience with the service

2.1.1 Satisfaction measurement

Satisfaction is a psychological constructs that for the basis upon which for the evaluation of the quality of a product or serviced. Today, customer focus and satisfaction is a driving force for many companies and organizations. Measuring customer satisfaction provides an indication on how an organization is performing or providing products or services. Customer satisfaction is generally understood as the satisfaction that a customer feels when comparing his preliminary expectations with the actual quality of the service or product acquired. In other words, customers are typically concerned with the value and quality of the product or service they receive. In addition, customers generally want the best possible product or service for a low cost. The perception of the best product or service and lowest price can, however, vary significantly by customer segment or industry. In order to obtain an overall picture of customer perception, a company or organization needs to measure the customer (Czarnecki, 1998).

Organizations mostly employ external agencies to listen to their customers and provide dedicated feedback to them. These feedbacks needs to be sophisticated and in structured format so that conclusive results could be fetched out. Face to face meetings and complaint or appreciation letter engages immediate issues. The feedback received in this

is not uniformed as different types of customers are addressed with different domains of questions. This hinders the analysis process to be performed accurately and consistently. Hence the best way is to implement a proper survey which consists of uniformed questionnaire to get customer feedback from well segmented customers. The design of the prepared questionnaire is an important aspect and should enclose all the essential factors of business. The questions asked should be in a way that the customer is encouraged to respond in an obvious way. These feedback received by the organizations can be treated as one of the best way to measure customer satisfaction. Czepiel and Gilmore (1987).

2.1.2 Service quality and customer satisfaction

Customer Satisfaction is an important link between purchase and consumption. Customer brand loyalty is based on the satisfaction achieved after the purchase of a product or service (Surprenant and Churchill, 1982). According to the customer satisfaction model developed by Oliver (1980) when customers compare their perceptions of actual products/services performance with the expectations, the feelings of satisfaction arise which may lead to repeat purchase. Satisfaction from service quality according to Gronroos (1984) is usually evaluated in terms of technical quality and functional quality. This happens when customers do not have much information about the technical aspects of a service. Under such circumstances functional quality becomes the major factor from which customers base perceptions of service quality (Donabedian 1980, 1982). Service quality may also be defined as customer perception of how well a service meets or exceeds their expectations (Czepiel 1990). Service quality can be measured in terms of

customer perception, customer expectation, satisfaction and attitude. Sachdev and Verma (2004) indicate that the evaluation of service quality leads to customer satisfaction. Rust and Oliver (1994) in their research study observed that satisfaction was a customer fulfillment response, an evaluation on both customer emotion and customer response to a service.

2.1.3 Service quality in the airline industry

Flight safety, good appearance of flight crew and offering highest possible quality services to customers 24 hours a day are the most important airline service quality factors in the eyes of Iranian customers. The possibility of checking flight schedules through telephone has been noted as the least important service quality factor by respondents (Gaddene et al., 2009). Gustafsson et al. (1999) in their study noted that many airline companies have lost track of the true needs of their passengers and are trapped in outdated views of what airline services are all about. In a highly competitive environment, where all airlines have comparable fares and matching frequent flyer programs, airline's competitive advantages lie in the service quality perceived by customers (Chang and Yeh, 2002). Perceived quality is a prerequisite for customer satisfaction (Parasuraman et al., 1988). Therefore, the delivery of high quality service becomes a marketing requirement as competitive pressures increase on air carriers. Continuing to provide high quality service would help airlines acquire and retain customer loyalty (Ostrowski et al., 1993).

The current majority of quality ratings (customers' perceptions of quality of services) available rely on subjective surveys of customer opinions that are infrequently done

(Gursoy et al., 2005). Traditionally, customer service analysis has been carried out by dividing the overall service into various service elements, conducting a survey among the customers, and measuring the importance of the service elements to the customers as well as the performance of the company (Huiskonen and Pirttila, 1998). It is a commonly used measure of customers' preference. Based on its analysis, customer service strategies are designed. With no exception in the airline industry, to deliver better passenger service, airlines need to understand passengers' need and expectations (Aksoy et al, 2003).

2.2 Dimensions of service quality

Technical, functional, and reputational quality are attributes that customers consider as being important in the evaluation of quality according to Gronoos (1994). On the other hand Lehtinen and Lehtinen (1982) consider interactive, physical, and corporate quality as the basis for customer evaluation of the expected quality while Hedvall and Paltschik (1989) focus on willingness and ability to serve and the physical and psychological access to the service. In conceptualizing the basic service quality model, Parasuraman et al. (1985) identified 10 key determinants of service quality as perceived by the service provider and the consumer. Reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding, knowing the customer, and tangibility to formulate a service quality framework,

The research studies conducted by Parasuraman et al. (1988) identified ten dimensions associated with service quality. The dimensions were later reduced to five dimensions.

The dimensions identified include reliability, assurance, tangibles, empathy and responsiveness (Zeithaml et al., 2006; Parasuraman et al., 1988), and are discussed briefly below.

Reliability refers to the extent to which the service provider (the dealership) delivers on the promises made to the customer (O'Neill and Palmer, 2003). Dealerships are known to contact the customer, promising that the vehicle will be ready for collection at a specific time. Reliability is regarded as the most important dimension of service quality (Zeithaml et al., 2006).

Assurance is the degree of confidence and trust that the provider of service is able to engender in the customer, based on the interactions between the parties (Zeithaml et al., 2006; O'Neill and Palmer, 2003).

Tangibles can be defined as measure of satisfaction identified with the physical cues that are part of the service delivery process (Zeithaml et al., 2006; O'Neill and Palmer, 2003). They are used to communicate to the customer about the service that can be expected. Tangibles can therefore be identified with attractiveness of the process of service delivery. In an airline this can be identified with the general outlook of the cabin crew, the appearance of planes, the neatness and cleanliness of the seats

Empathy refers to the manner of treating customers such that they feel important to the organization, and that their needs are important to the organization, such as that they receive caring, individualized attention (Zeithaml et al., 2006; O'Neill and Palmer, 2003). In the case of an airline this can be seen in the interactions between the organization and the passengers, and the nature of this interaction.

Responsiveness can be defined as the willingness on the part of the service provider to deliver assistance to the customer (Zeithaml et al., 2006; O'Neill and Palmer, 2003). In the case of the airline, this refers to the extent to which employees and staff are willing to assist passengers in making their experience the airline most memorable and enjoyable. This may include but not limited to following up the customer to remind them of changes in schedules if any in good time, assisting with airport transfers and even assisting them with check in process. While service quality has been identified consistently as being relevant in service industries (Kang and James, 2004; Grönroos, 2001; Asubonteng et al., 1996), there is no agreement on the specific dimensions or on the number of dimensions associated with service quality. There is little agreement on the exact nature and content of the dimensions of service quality (Kang, 2006). It has also been suggested that service quality comprises between one and eight dimensions (Chowdhary and Prakash, 2007; O'Neill and Palmer, 2003).

2.3 Measuring Service Quality

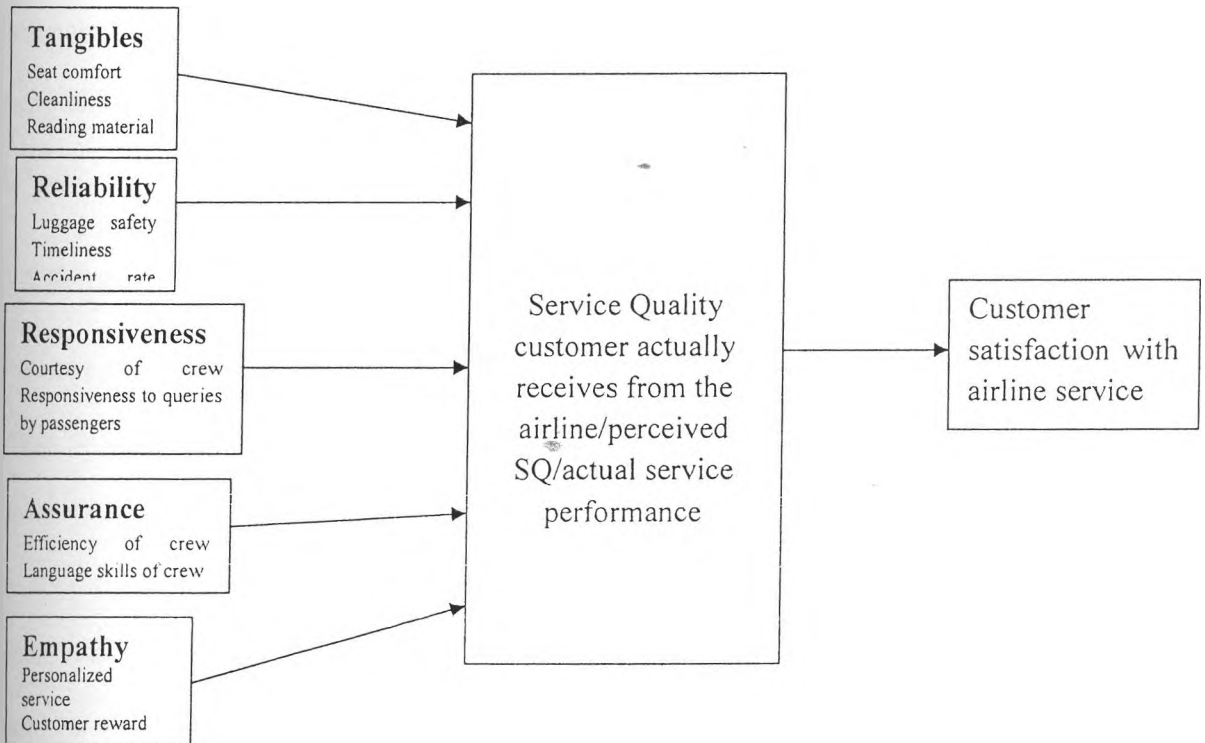
Service quality is a measure of how well the delivered level of service matches customer expectations. When a service delivers a high quality service, it must conform to customer expectations on a consistent basis over time (Lewis and Booms 1983). Gronoos (1982), Lehtinen and Lehtinen (1982) identified three themes in service quality. These themes were; Service quality is more difficult for the consumer to evaluate than goods quality; Service quality perceptions result from a comparison of consumer expectations with

actual service performance; and lastly that quality evaluations are not made solely on the outcome of a service, but also on evaluations of the process of service delivery.

2.3.1 The SERVQUAL model: A brief overview

Service quality measurements have benefitted greatly from studies done by Parasuraman, Zeithaml and Berry (1988) who developed a model and measurement approach which they named SERVQUAL Consisting of 22-items. SERVQUAL was based on the concept that service quality is the difference between consumers' expectations about performance of a general class of service providers and their assessment of the actual performance of a specific firm within that class. The SERVQUAL model will be the theoretical basis upon which this case study will be founded.

Fig 2.4 Study framework



CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

This section presents the research methodology. It describes the research design, the selection of the case, and research instruments. Data collection procedures and data analysis techniques are also presented.

3.1 Research design

This study adopted a case study design approach. A case study often involves the collection of data through multiple sources such as verbal reports, personal interviews and observation as primary data sources. Secondary data for case studies is collected through published reports such as financial reports, budget operating statements and market competition reports among others (Bonoma 1985). A case study allows for an intensive investigation into an object, individual, group, organization or culture with many dimensions (Selltiz et al., 1976). Case studies are appropriate when the researcher has little control over events and when the focus is a real-life context (yin, 1994).

3.2 Selection of the case

Passengers who had used Kenya airways in the recent last six months leading to this study were used as respondents in this study. From experience, it was presumed that passengers can be able to vividly recollect their service quality events within six months. A sample of 100 respondents was used for this study. This sample size was determined using the Yamane (1965) formula, shown below where N is the annual passenger turnover of Kenya airways and e is the error term of 0.1, and a p value of 0.5 is assumed.

$$n = \frac{N}{1 + N(e)^2}$$
$$= \frac{3,600,000}{1 + 3,600,000 \times (0.1)^2} = 99$$

3.3 Data collection

The study adopted both primary and secondary data. A structured questionnaire was used to solicit for information from customers. The research made use of a self-completion questionnaire with open and closed ended questions. A 5-point likert scale was used in the research instrument to enable the researcher measure the perceptions and expectations of passengers so as to determine their satisfaction levels. The questionnaires were administered through drop and pick method. The researcher used references from ticket sales agents to randomly locate and select customers.

3.4 Data Analysis

A statistical package for social sciences (SPSS) was used for this purpose. Factor analysis was used to determine the relative importance of factors viewed as most important to customers in their choice of an airline. Descriptive statistics was used to establish the means, frequencies and to determine the weights and distributions of the various attributes that constitute service quality and customer satisfaction. The analyzed data was presented using tables.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

The research study sought to find out the impact of service quality on customer satisfaction at the Kenya Airways (KQ). A sample size of one hundred respondents, who are regular fliers and who have used KQ a significant number of times was used in this study. Out of a total of 100 questionnaires that were issued, 63 usable questionnaires were recovered and used in this analysis, indicating a response rate of 63%. According to Mugenda and Mugenda (2003), a response rate of 50% is adequate for analysis and reporting. The response rate achieved was therefore considered adequate for answering the questions raised under the research study.

4.2 Demographic profile of respondents

4.2.1 The gender of the respondents

The gender of the respondents was important to the researcher since the research was keen on getting views of each gender. The respondents were therefore required to indicate what their gender was. The findings of the research study were presented as shown in table 4.2.1 below.

Table 4.2.1 Respondents Gender

| Gender | Frequency | Percent |
|---------------|------------------|----------------|
| Male | 33 | 52.4 |
| Female | 30 | 47.6 |
| Total | 63 | 100.0 |

Source: Researcher, 2012

The findings from the research study revealed that the majority of the respondents 33(52.4%) were of the male gender while 30(47.6%) were of the female gender. The research study revealed that the difference was marginal; hence it is safe to conclude that the findings presented reflected a balanced view of both genders. On the other hand, these findings may suggest that slightly more males travel by air compared to females. This could stem from the societal trends, mostly in Africa, where more men are economically more empowered compared to their female counterparts.

4.2.2 Age of the respondents

The researcher sought to find out from the respondents what their ages were. This was necessary because the researcher wanted to have a better understanding of the respondents being dealt with since satisfaction and expectation are on dependent among other things the age of an individual. The findings are presented in table 4.2.2 as shown.

Table 4.2.2 Age of respondents

| Age | Frequency | Percent |
|----------|-----------|---------|
| Below 18 | 1 | 1.6 |
| 19-30 | 15 | 23.8 |
| 31-40 | 18 | 28.6 |
| 41-50 | 17 | 27.0 |
| 51-60 | 5 | 7.9 |
| Over 60 | 7 | 11.1 |
| Total | 63 | 100.0 |

Source: Researcher, 2012

The findings from the research study revealed that the majority of the respondents 18(28.6%) were of the 31 – 40 age bracket, followed by 41 – 50 (27%) and 19 – 30 (23.8%). The below 18 years and the over 60 years age groups were outliers with 1.6% and 11.1% respectively. The 31 – 40 and 41 – 50 years age brackets represent the working and active economic group of a population, as most workers in Kenya retire after age 50. This seems to be validated in this study, as it is these age brackets that have a majority of air travelers. In this case, ability to travel by air reflects on an individual's economic status.

4.2.3 Frequency of using the airline in the last one year.

The frequency or the number of times the respondents had used the airline in the last one year was important to this study. This was necessary because respondents who are frequent travelers using air transport are much better placed to give opinions that can be relied upon compared to respondents that hardly air transport as a means of travel. The respondents were therefore required to indicate the number of times they had used the airline in the last one year. The frequency was considered as an important parameter

because experience is a reflection of the respondent's level of exposure and awareness.

The findings were presented in table 4.2.3 as shown below.

Table 4.2.3. The frequency of travelling by air the airline in past one year.

| Number of times | Frequency | Percentage |
|-----------------|-----------|------------|
| 1-3 | 35 | 55.6 |
| 4-5 | 24 | 38.1 |
| over 6 times | 4 | 6.3 |
| Total | 63 | 100.0 |

Source; Researcher 2012

The findings revealed that majority of the respondents 35(55.6%) had used airlines 1 – 3 times, followed by 38.1% who had used airlines 4 – 5 times. A minority (6.3%) had used air travel over 6 times. These findings indicate that respondents are adequately experienced on airline travel and so they can be relied upon to give valid responses.

4.2.4 Classification of the class used by the respondent

The researcher sought to find out from the respondents the type of class they frequently used to travel. This was necessary because the researcher wanted to know the kind of class that was prevalent because service offerings vary significantly among various classifications in air travel. The respondents were therefore required to indicate the class that they used frequently when using the airline. The findings were presented in table 4.2.4 as shown below.

Table 4.2.4 Class Used

| Class travelled | frequency | percent |
|-----------------|-----------|---------|
| Economy | 60 | 95.2 |
| Business | 3 | 4.8 |
| Total | 63 | 100.0 |

Source: Researcher, 2012

The findings revealed that the majority of respondents 60(95.2%) travelled by economy class. It can therefore be said that their perceptions on various service quality parameters will be a reflection of the quality of service offered at the economy class of airlines. Considering that the economy class is the lowest level, it is possible that these parameters could have been scored higher if respondents had experience with the business or first class.

4.2.5 Professional status of the respondents

The researcher sought to know from the respondents what best described their professional status or their main occupations. This was necessary because the researcher wanted to establish the nature of their professional backgrounds and what their main reasons for travel would be. The findings were presented in table 4.2.5 as shown below

Table 4.2.5 respondents' occupation

| Profession | frequency | percent |
|--------------------------------|-----------|---------|
| Self employed | 5 | 7.9 |
| Retired | 15 | 23.8 |
| Employee (Govt., NGO, Company) | 35 | 55.6 |
| Student | 6 | 9.5 |
| Others | 2 | 3.2 |
| Total | 63 | 100.0 |

Source: Researcher, 2012

The research findings revealed that the respondents most of the respondents 35(55.6%) were employees of government, NGOs or companies. They were followed by the retired (23.8%), then students (9.5%) and the self-employed (7.9%). These findings seem to suggest that most of those who travel do so out of work requirements. The retired would mostly travel for leisure, and so it can be said that leisure travelers constitute the second largest users of airlines at Kenya Airways, while those travelling to attend learning institutions constitute another proportion of travelers at Kenya Airways.

4.2.6 Purpose for travel

The researcher asked the respondents to indicate the purpose for their travel with KQ in their last journey.

Table 4.2.6 Respondent's purpose of travel

| Purpose of travel | Frequency | Percent |
|---------------------|-----------|---------|
| work related travel | 16 | 25.4 |
| Business related | 21 | 33.3 |
| Tourism | 14 | 22.2 |
| Family related | 10 | 15.9 |
| Others | 2 | 3.2 |
| Total | 63 | 100.0 |

Source: Researcher, 2012

Most respondents 21(33.3%) travelled for business purposes, while 25.4% traveled for work related reasons, 22.2% for tourism, 15.9% for family reasons. These findings seemed to suggest that most people travel for official purposes (business or work) while another significant proportion travel for tourism purposes.

Factor analysis was used to reduce the factors to those that respondents most identified with as measures of service quality. Table's 4.2.7-4.2.10 presents the findings.

Table 4.2.7 KMO and Bartlett's Test

| | | |
|-------------------------------|--|---------|
| | Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .517 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 412.585 |
| | Df | 231 |
| | Sig. | .000 |

The Kaiser-Meyer-Olkin (KMO) test was performed to establish the degree of common variance among the extracted variables and so give an indication of the amount of variance the extracted factors account for in the major variable/construct being measured, which was "what are considered important service quality parameters in airlines by customers".

The KMO score was 0.517, which indicated that the factors extracted account for satisfactory variance in the major variable. Bartlett's Test of Sphericity was also found to be significant with $p < 0.001$. According to Heir et.al (2010), a KMO score > 0.5 is considered adequate. Factor analysis could therefore be appropriately used. The extracted

factors were as presented in tables 4.2.8 – 4.2.10

4.2.7 Extracted communalities for perceived satisfaction with airline passenger services.

A total of 22 parameters were presented to respondents and the respondents were required to rate their importance as customer satisfaction attributes using a scale of 5 to 1 where 5 was very important and 1 least important. The proportion of variance for each of the parameters that were used to measure service quality was determined using principal component analysis. Table 4.2.8 presents the parameters and their extracted variances.

Table 4.2.8 Communalities

| Factors | Initial | Extraction |
|---|---------|------------|
| B1(Friendly website) | 1.000 | .667 |
| B2 (Phone booking status updates) | 1.000 | .724 |
| B3 (Variety of foods on offer) | 1.000 | .761 |
| B4 (Crew communicate in more than one language) | 1.000 | .618 |
| B5 (Price of air ticket) | 1.000 | .670 |
| B6 (Ability to connect to other flights) | 1.000 | .751 |
| B7 (On board entertainment) | 1.000 | .734 |
| B8 (Availability of alcohol) | 1.000 | .700 |
| B10 (Departure times for flights) | 1.000 | .699 |
| B11 (Destination weather briefing) | 1.000 | .775 |
| B12 (On-board assistance to disabled persons) | 1.000 | .934 |
| B13 (Food quality) | 1.000 | .751 |
| B14 (Food quantity) | 1.000 | .719 |
| B15 (Food variety) | 1.000 | .841 |
| B16 (Hand luggage compartment) | 1.000 | .694 |
| B17 (Luggage safety) | 1.000 | .446 |
| B18 (Courteous staff) | 1.000 | .707 |
| B19 (Airline safety and accident record) | 1.000 | .833 |
| B20 (Crew uniform color) | 1.000 | .628 |
| B21 (Ability to reserve seats) | 1.000 | .735 |
| B22 (Online check in services) | 1.000 | .652 |

Source: Researcher, 2012

As shown in table 4.2.8, the majority of the factors that were extracted shared a >0.7 proportion of variance with the rest of the factors under consideration. The least factor extracted had a communality score of 0.446. This communality represented the safety of luggage. (B17). The highest factor score was 0.934 (B12) the factor under consideration in this construct relates to how the elderly, the aged and the disabled were treated through boarding and in flight. This factor B12 shared the highest variance with the rest of the factors and was therefore most responsible for the variability in the major study variable/construct “what are important service quality parameters to airline passengers”.

4.2.8 Extracted factors on perceived customer satisfaction.

The researcher was interested in knowing the dimensionality of the factors the parameters that had presented to the respondents. A factor rotation method was used and the criteria for inclusion was Eigen values that were greater than one (Appendix VI). A total of 8 factors were thus extracted, and these accounted for most variability in the main study construct/variable. This agrees with the literature review where service quality is thought to comprise between 1(one) and 8(eight) dimensions (Chowdhary and Prakash, 2007; O’Neill and Palmer). The researchers had observed that there is no perfect agreement on the number of service quality dimensions associated with service quality. Table 4.2.9 shows the extracted factors and their variance contributions.

Table 4.2.9 Total Variance Explained

| Component | Rotation Sums of Squared Loadings | | |
|-----------|-----------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % |
| 1 | 2.299 | 10.450 | 10.450 |
| 2 | 2.254 | 10.244 | 20.695 |
| 3 | 1.966 | 8.938 | 29.633 |
| 4 | 1.932 | 8.781 | 38.414 |
| 5 | 1.845 | 8.386 | 46.800 |
| 6 | 1.792 | 8.146 | 54.946 |
| 7 | 1.578 | 7.173 | 62.119 |
| 8 | 1.566 | 7.120 | 69.239 |

Extraction Method: Principal Component Analysis.

A total of 8 factors were extracted. Tables 4.2.8 - 4.2.9 and appendix VI present these factors. The criteria for extraction was Eigen values >1 as can be seen in appendix VI. Each of the extracted factors shares a proportion $\geq 7.12\%$ of its variance with the rest of the factors. This shows that the factors extracted accounted for highly significant variability in the behavior of the major variable/construct which was the importance respondents, in this case, airline passengers attach to service quality parameters of airlines. Cumulatively, the extracted factors account for 69.239% of the variability in the main construct as summarized in table 4.2.10.

The extracted factors were in order; B2 (ability of airline to communicate to passengers by phone their booking status), B3 (variety of foods offered in flight), B11 (briefing about weather in arrival destination), B12 (on-board assistance to disabled passengers), B13 (food quality), B15 (food variety), B16 (available hand luggage compartment) and

B21 (Ability to reserve seats at time of booking). This is to say that to the passengers, quality service in an airline should include; confirmation of booking status by phone, variety of foods served in flight, briefing on weather conditions prevailing at the destination, compassion by airline crew toward any disabled persons on-board, good food quality, availing space in the plane that is adequate to fit a hand luggage, and the ability of the passengers to reserve seats. The researcher noted that passengers travelling as groups will be satisfied if they were able to book seats where they would seat next to each other .this also applied to couples and family members.

Correlation Matrices

The correlation test was performed on the factors to establish whether multi-collinearity was of concern. This was to determine the reliability of the multi-item scale representing the factors used to test the main study variable of what airline customers would consider important service quality parameters. The results are presented in appendix 3. They indicate that multicollinearity is not of concern hence the indicators used to measure the constructs are reliable. All correlations yielded values < 0.5 , indicating independence between the factors.

4.3 Customer satisfaction at Kenya Airways

The respondents were required to indicate the level of satisfaction and customer experience using a total of 22 parameters. These factors were subjected to both descriptive and factor analysis. This was done to enable the researcher determine the extent to which the customers were satisfied with the service quality of the airline.

Table 4.3.1 Descriptive analysis

| Parameter | Mean | Std. Deviation |
|---|--------|----------------|
| C19 passengers with specific needs are well attended to | 4.3333 | .67202 |
| C20 Passengers were kept informed about services during the flight | 4.0794 | .70257 |
| C17 The crew was prompt to attend to passenger needs on boarding | 4.0476 | .79166 |
| C11 Friendliness of ground crew assisting with boarding procedures | 3.7937 | .76535 |
| C3 The neatness of toilets | 3.7143 | 3.77782 |
| C22 When flights are cancelled passengers are well taken care of | 3.6825 | .56298 |
| C18 The crew responded promptly to passenger needs during flight | 3.6190 | .81178 |
| C12 Friendliness of ground crew assisting with boarding procedures | 3.6032 | .83356 |
| C21 Response to customer requests or complains are well attended to | 3.5397 | .69155 |
| C2 attitude of cabin crew | 3.5079 | .85898 |
| C16 Crew seemed competent to handle unforeseen emergence cases | 3.4762 | .75897 |
| C6 Attractiveness of the utensils used on board | 3.3492 | .69928 |
| C1 neatness and appearance of staff dressing | 3.3016 | 1.01019 |
| C4 quantity of meals offered during the flight is sufficient | 3.2063 | .62627 |
| C9 The design of seats and the available leg room | 3.1746 | .70801 |
| C13 Luggage was well handled through the flight handling | 3.1587 | .48214 |
| C15 The crew handling luggage can be trusted to keep the luggage | 3.1111 | .74295 |
| C5 Design of toilets is modern and spacious | 2.9524 | .72798 |
| C7 Blankets issued on board for warming | 2.9365 | .71556 |
| C14 Crew seemed to know their customers by names | 2.6984 | .79585 |
| C10 Friendliness of crew handling luggage during check in process | 2.6349 | 1.00485 |
| C8 Check in system equipment are visually appealing | 2.5397 | 1.08992 |
| Valid N (listwise) | | |

The research study revealed that there were three main parameters that passengers were most satisfied with as passenger with Kenya airways. These parameters were C19 (the aged and disabled were well attended), C20 (the passengers were well informed about such services such as food in good time) and C17 (during boarding process passengers

were promptly attended). These parameters had mean scores of 4.33, 4.0, and 4.05 respectively. The scores obtained showed that the level of satisfaction with these parameters was high. What is evident from this research study is that passengers were keen to note how the elderly and people with special needs are attended to and if well treated the result was a high level of satisfaction.

The parameters that scored least in satisfaction and therefore a source of concern since they erode the competitiveness of the airline were five. These factors were C5 (design of toilets and their cleanliness), C7 (design of seats and seat comfort), C14 (personalized passenger service-knowing passengers by names) and C10 (the quality of check in facilities). These parameters had mean ratings of 2.95, 2.94 and 2.70, 2.63 and 2.54 respectively, which implied that customer satisfaction levels were less than moderate. From content analysis some passengers complained of being forced to stand in long queues as they waited to be checked in. The seats used where available did not meet the expectations of passengers. This revealed that the level of satisfaction with check in services was moderate.

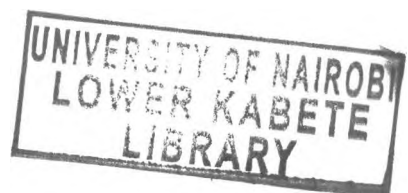
Majority of the parameters under this construct had mean scores that ranged between 3.11 for C 15(crew can be trusted to handle luggage well and C22 (passengers needs and concerns are adequately taken care off when flights are cancelled) 3.79. The respondents felt short changed whenever their flights were cancelled for reasons beyond management control. This is based on their expectations on compensation for time lost, alternative accommodation provided and the manner in which they were treated. The respondents

indicated that they were not happy with not being told about flight cancellations in good time.

Other parameters that scored means ranging between 3.5 and 3.9 making them rank between moderate satisfaction and high satisfaction were C2 (attitude of staff on board), C21 (response to customer requests), C12 (flight delays), 3.60, C18 (prompt attendance to passenger needs), and C3 (neatness of toilets), 3.71, respectively. The research study also revealed that cabin crew staff were not enthusiastic in attending to the respondents and thus was responsible for moderate satisfaction to the respondents. This validates claims of prevailing unsatisfactory terms of employment by KQ staff that has led to industrial disputes as reported in various media.

4.3.1 Factor analysis of satisfaction measures

Further analysis was conducted to classify the various parameters of customer satisfaction that were used in this stud. The Bartlett's test of sphericity performed on these factors indicates that they are adequate for analysis. These factors had a KMO of 0.558 indicating that they were reliable for analysis as shown in appendix IV (a). Seven categories of components were extracted using principal component analysis under the varimax with Kaiser Normalization rotation method. The rotation converged in 21 iterations as shown in appendix IV (b). These factors had a combined factor loading of 72.57 % as shown in appendix V.



The researcher wanted to reduce the dimensionality of the factors under the study in order to have a better and clearer view of the underlying patterns. The table4.3.2 shows the extracted values of the component matrix and the seven components that were extracted.

Table 4.3.2 factor loading for perceived service quality

| Parameter | Factor loading | Combined factor loading |
|---|----------------|-------------------------|
| TANGIBLES | | |
| C4 Quantity of meals | 0.49 | 1.833 |
| C5 Design of toilets and bathrooms | 0.852 | |
| C15 luggage handling | 0.541 | |
| LUGGAGE HANDLING AND TIMELINESS. | | |
| C16Emergence handling | 0.541 | 2.816 |
| C17promptness of crew response at boarding | 0.647 | |
| C6utensils used are clean | 0.541 | |
| C10 how luggage is handled by ground crew. | 0.329 | |
| C11 friendliness of ground crew at boarding | 0.758 | |
| Tangibles And Responsiveness | | |
| C7 Blankest issued on board | 0.581 | 1.516 |
| C14crew kept proper records | 0.691 | |
| C2 attitude of staff (cabin crew) | 0.244 | |
| Responsiveness | | |
| C13 luggage handling through the flight | 0.836 | 2.268 |
| C16 handling of emergency by crew | 0.401 | |
| C21response to customer requests | 0.187 | |
| C1staff neatness and appearance | 0.097 | |
| C9 seats design | 0.747 | |
| Assurance | | |
| C22 communication handling | 0.776 | 2.764 |
| C18 promptness of service by crew | 0.614 | |
| C8 user friendliness of facilities | 0.614 | |
| C12flight delays and timeliness | 0.760 | |
| ASSURANCE | | |
| C20 communicating to staff about services e.g. snacks | 0.834 | 1.633 |
| C3 neatness of toilets | 0.507 | |
| C19handling special cases | 0.292 | |
| TANGIBLES | | |
| C8 appealing check in facilities | 0.461 | 0.461 |

The factor loadings obtained from the research study revealed the checking in process accounted for the highest variance in customer satisfaction. The parameters that were

considered under this category were included the promptness of ground crew in assisting passengers with the boarding procedures including weighing their luggage and how friendly they were in dealing with extra weight. The tone for the journey can be said to be set by the manner in which the boarding process was done. The first impression created by the airline crew therefore is very important as parameters under this construct had a combined loading of 3.28 the highest amongst the factors. The friendliness of the ground crew was considered as the most critical component of customer satisfaction at the boarding stage with a loading of 0.758 which was the highest under this construct.

The promptness of the ground crew in responding to passenger's queries and assisting with boarding procedures in a quick and timely manner was the next important parameter under this construct with a loading 0.647. Luggage handling was also captured under this construct in relation customer satisfaction. The loading for this construct was 0.329. Other factors were emergence handling and cleanliness of utensils.

Another component extracted had the parameters C22 (cancelled flights and how customers are treated), C18 (response of crew to passenger requests), C8 (check in equipments and facilities) and C12 (keeping of time). These factors had loadings of 0.776, 0.614, 0.760 and 0.614 respectively. The Cumulative factor loading was 2.764.

4.4 Discussion

The main aim of this research study was to find out what the key determinants of perceived service quality in the airline industry and the impact of service quality at Kenya

airways. The literature review extensively covered areas that have been researched on and some of the findings. Out of the literature review a study frame work comprising of five main areas was developed. The main areas covered under this study were tangibles, reliability, responsiveness assurance and empathy.

The researcher was able to collect views from 63 respondents who had used KQ in the past one year and therefore capable of giving credible responses. The difference in the number of respondents from each gender was not significant. The findings revealed that in general Passengers are concerned with luggage handling and timeliness of the airline which was found to be moderate. The research study also revealed that where as there were no reported cases of luggage theft or loss, the passengers were not happy with having to wait for too long to get their cargo/luggage on their arrival destinations. This finding agrees with the literature review where research findings point out to luggage handling as a source of concern to customers. The dimensionality of the extracted factors revealed that timeliness and luggage handling are in most important the component contributing to customer dissatisfaction. This may be explained by the fact that passengers spend time waiting for and checking in their luggage. There were complaints about luggage compartment which respondents felt was not adequate for their hand luggage.

From the research findings it was clear that the manner in the KQ limited handled its communication with, how fast the crew were able to respond to customers and flight delays was the next most important service quality dimension as rated by the respondents. This agrees with the reviewed ,these factors can be classified under responsiveness which

can be defined as the willingness on the part of the service provider to deliver assistance to the customer.

The research study also revealed that there were areas in the airline where the respondents rated the quality of service as below moderate. Parameters were the check in system (2.54), friendliness of crew handling luggage at check in 2.63, knowing customers by name (2.70), blankets issued to customers (2.94), and the design of toilets. Passengers complained that the blankets issued to them during were either dirty or unsuitable.

The best rated attributes were those relating to empathy where the respondents indicated that passengers with special need were well taken care of (4.33). The airline also did well in informing customers about the scheduled time for food and arrival times. The attendance given to passengers at boarding was also noted to prompt, with a performance mean index of (4.04).

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

A study was carried to establish the impact of service quality on customer satisfaction at Kenya Airways limited using servqual theoretical framework. Primary data was collected using a questionnaire which was administered to passengers who had used the airline in the past six months. The assumption was that in the given time, the experiences the respondents had were still fresh in their memories.

The response rate from the research study was 63% and this was considered adequate. From the demographic profile of the respondents, it was clear that there were no significant differences in proportional presentation meaning that view collected are representative for all ages.

The respondents were 52.4% male and 47.6% female with slightly more than 95% of the respondents having used the economy class. It is therefore right to assume that the views expressed will mirror the actual level of service quality mainly applicable to but not limited to economy class.

The majority of the respondents 55% were working class and made journey related to their work. It was assumed that the respondents were well informed about quality trends in the industry and would their responses reliable.

The study revealed that among the key determinants of customer satisfaction with passengers using an were luggage security and safety , proper communication with

customers to update them on status of their flights, provision of food variety and ability of the airline communicate to passengers about the weather on arrival destinations.

Weather conditions prevailing at the destination, compassion by airline crew toward any disabled persons on-board was particularly noted to increase significantly the level of customer satisfaction. It was also noted that passengers would were concerned about rude cabin crew and unclean toilets.

5.2 Conclusion

Kenya airways are reputed to be the fastest growing air transport company. To remain competitive the airline need to focus on its operational strategies that so as t reduce cost but at the same time increase service quality. Strategies such as capacity sharing can be used to cater for delayed flights occasioned by under bookings. This will minimize cases of planes flying under capacity. Innovation can be used to increase their communication with passengers.

5.3 Recommendations

The study revealed that workers attitudes and characteristics were of concern to passengers. There were complaints about crew that lacked courtesy and patience in attending to passenger queries. The recruitment processes need to be more stringent in order to attract the right caliber of staff for the industry. In addition, continuous staff training, particularly on customer service issues needs to be considered by management. Furthermore, management should consider additional incentives to workers, to motivate them to excellence in customer service. There is need for the airline to adopt the latest

modes of communication technology to track the feelings of customers and the quality of service they receive. This will necessitate prompt responses and enable Passengers to communicate to the airline in real time concerning their travel and journey. There were complaints about luggage compartment that seriously inconvenienced passengers on long haul flights as they were forced to carry their luggage in their hands. This should be addressed by the airline. The quality and friendly to use website should be addressed as most customers seemed to prefer such to access information about airline services online. The airline can also consider introducing other classes in order to accommodate a wider variety of passenger needs and expectations.

5.4 Suggestions for further research

To enrich the study further, a study can be done to investigate the impact of service quality on passenger satisfaction in the local airline industry. This study can be extended to other modes of transportation, such as trains and buses and ships, which supplement air transport and also sometimes compete with air transport.

5.5 Limitations of the study

The study was limited to the extent might not be representative of the diverse cultural diversity of the nature of the international airline passenger market. Quality perspectives may not be the same. Additional data collection methods such as observation, expert views, focus groups and discussions can be used. More information can be obtained from board meeting minutes.

REFERENCES

- Aksoy, S., Atilgan, E., Akinci, S. (2003), "Airline services marketing by domestic and foreign firms: differences from the customers' viewpoint", *Journal of Air Transport Management*, 9, 343-351.
- Alexandris, K., Dimitriadis, N. and Markata, D. (2002), Can perceptions of service quality predict behavioural intentions? An exploratory study in the hotel sector in Greece.
- Andreassen, T.W. and Olsen, L.L. (2008), "The impact of customers' perception of varying degrees of customer service on commitment and perceived relative attractiveness", *Managing Service Quality*, Vol. 18 No. 4, pp. 309-28.
- Berry, L. (1987), "Big ideas in services marketing", *The Journal of Services Marketing*, 1(1),
- Bitner (1990), "Evaluation service encounters: the effects of physical surroundings and complaint reports", *Journal of Marketing*, Vol. 54 No. 4, pp. 69-82.
- Caruana, A., Money, A.H. & Berthon P.R. (2000), "Service quality and satisfaction, the moderating role of value", *European Journal of Marketing*, 34(11/12), 1338-1352.
- Chen, F. (1992), "Survey of quality in Western Michigan firms", *International Journal of Quality & Reliability Management*, Vol.9, No.9, p.46
- Crosby, P. (1984) *Quality Without Tears: The Art of Hassle-Free Management*. New York:McGraw-Hill,
- Czarnecki, M. (1998) *Managing by Measuring: How to Improve Your Organization's Performance Through Effective Benchmarking*. New York: Amacom. 271 p. ISBN 0-8144-0390-5.
- Czepiel, A.J. & Gilmore, R. (1987), Exploring the Concept of Loyalty in Services. In: J.A.
- Cronin, J J. and Taylor, S. A. (1992), "Measuring Service Quality: A Reexamination and Extension", *Journal of Marketing*, 56 (July) pp.55-68.

- Cronin, J. J Jr. and Steven A. T. (1994), "SERVPERF Versus SERVQUAL: Reconciling Performance-Based and Perceptions-Minus-Expectations Measurement of Service Quality," *Journal of Marketing*, 58(January), pp.125-131.
- Chan, C. C. (2001), A study on the relationship of customer satisfaction and royalty for domestic airlines. Master Thesis, Department of Shipping and Transportation Management, National Taiwan Ocean University, Taiwan.
- Chen, K.R. and Liu, Y.C. (2002), "The study of domestic airline service quality promotion", *Journal of quality*, pp.44-54.
- Conklin, D.W. (2011), "The Global Environment of Business: New Paradigms for International Management", IUP Publications, Hyderabad, India, June, pp.32-43.
- Deming, W. E. (1986) *Out of Crisis*. Cambridge, Mass.: MIT Center for Advanced Engineering Study
- Ettorre, B. (1994), Phenomenal promises that mean business. *Management Review*, 83
- Festinger, L. (1957), *A Theory of Cognitive Dissonance*, Stanford: Stanford University Press. Service Quality and Repeat Usage: A Case of Rising Expectations Page 6 of 7
- Gates, B. (2001), *Business @ the speed of thought*, William H. Gates
- Gronroos, C. (1984), "A service quality model and its marketing implications", *European Journal of marketing*, Vol 18, No 3, pp. 36-44.
- Grönroos, C. (1984), "A service quality model and its marketing implications", *Journal of the Academy of Marketing Science*, 24 (1), Winter, pp.36 – 44.
- Hull, C. L. (1952), *A Behavior System; An Introduction to Behavior Theory Concerning the Individual Organism*, New Haven: Yale University Press.
- Hardie, N. (1998), "The effects of quality management on business performance." *Quality Management Journal*. 5: pp.65-83
- Heir F.J, Black C.W, Babin B.J, Anderson R.E, 'Multivariate Data Analysis' A Global Perspective. Pearson 7th Ed pp 91-151

- Horte, S. A., and Hakan Y. (1997) "The Firm's and Its Customers' Views on Order-Winning Criteria." *International Journal of Operations and Production Management* 17, no. 10: pp.1006–1019.
- Huiskonen, J. and Pirttila, T. (1998) "Sharpening logistics customer service strategy planning by applying Kano's quality element classification", *International Journal of Production Economics*, pp.56-57, 253-260.
- Johnson R. L., Tsiros M. and Lancioni R. A (1995), "Measuring service quality: a systems approach", *J. Services Market.*, 9(5): 6-19.
- Juran, J.M., Gryna, F.M. and Bingham, R. (1975), *Quality Control Textbook*, 3rd edition, McGraw-Hill, New York
- Lehtinen, U. and Lehtinen J. R. (1982), "Service Quality A Study of Quality Dimensions," unpublished working paper, Helsinki: Service Management Institute, Finland.
- Mugenda, O. and Mugenda, A. (2003), *Research Methods Qualitative and Quantitative Approaches*. Nairobi Acts Press
- Newman, K. (2001), "Interrogating SERVQUAL: a critical assessment of service banking quality measurement in a high street retail bank", *International Journal of Banking Marketing*, Vol. 19, No. 3, pp. 126-139.
- Nunally, J.C. and Bernstein, I.H. (1994), *Psychometric Theory*, New York: McGraw-Hill.
- Ostrowski, P. L., O'Brien, T. V. and Gordon, G. L. (1993), "Service quality and customer loyalty in the commercial airline industry", *Journal of Travel Research*, Vol 32, 16-24.
- Parasuraman, A., Zeithaml, V., and Berry, L. L. (1985), "A conceptual model of service quality and its implications for future research" *Journal of Hospitality & Leisure marketing*, Vol. 3, pp.5
- Parasuraman, A., Zeithaml, V., and Berry, L. L. (1988), "Servqual: A multiple-item scale for Measuring customer perception of service quality", *Journal of Retailing*, Vol. 64. No. 1, pp.12-40.

- Parasuraman, A., Zeithaml, V. A. & Berry, L. L. (1985), "A conceptual model of service quality and its implication for future research". *Journal of Marketing*. No.49, pp.41-50.
- Paraskevas, A. (2001), "Internal Service Encounters in Hotels: An empirical study", *International Journal of Contemporary Hospitality Management*, Vol 13 No.6 pp. 285-292
- Porter, M. and Kramer, M. (2011), "How to Fix Capitalism and unleash a new wave of growth, *Harvard Business Review*, January/February
- Porter, L.J. and Rayner, P. (1992), "Quality costing for total quality management", *International Journal of Production Economics*, Vol. 27, p.69
- Roy, R. K. (2008), *A Walk – Through Taguchi Design of Experiment (DOE) Application: Nutek, Inc*
- Saunders, M (2000) *Research methods for business students: Pearson education limited*
- Sekaran, U. (2000) *Research methods for business: A skill building approach. New York: John Wiley & Sons, Inc.*
- Shemwell, D.J., Yavas, U. & Bilgin Z. (1998), "Customer-service provider relationships: an empirical test of a model of service quality, satisfaction and relationship oriented outcome", *International Journal of Service Industry Management*, 9, pp.155-168.
- Sherif, C. W., Muzafer S. and Roger E. N. (1965), *Attitude and Attitude Change: The Social Judgment-Involvement Approach*, Philadelphia: W. B. Saunders.
- Stauss B. (1995), "Internal services: classification and quality management", *International Journal of Service Industry Management*, Vol. 6, No. 2, pp. 62-78
- Sureshchander, G.S., Rajendran, C., & Kamalanabhan, T.J. (2001), "Customer perceptions of Service quality: A critique", *Total Quality Management*, 12 (1), pp.111-125.
- Sureshchandar, G.S., Rajendran, C. & Anantharaman, R. N. (2002), "The relationship between service quality and customer satisfaction – a factor specific approach", *Journal of Services Marketing*, 16(4), pp.363-379.

Tatikonda, L.U. and Tatikonda, R.J. (1996), "Measuring and reporting the cost of quality", *Production and Inventory Management Journal*, Vol.37, p.1

Teas, R.K., (1994), "Expectations, performance evaluation and consumers' perceptions of quality", *Journal of Marketing*, Vol. 58, No. 4, pp. 132-139.

Ullman, D. G., (2002) *The Mechanical Design Process*, New York McGraw-Hill, Inc., U.S.A.

Wong, A & Sohal, A, (2003), "Service quality and customer loyalty perspectives on two levels of retail relationships", *Journal of service marketing*, 17(5), pp.495-513.

Zeithaml, V. A. (1988), "Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence", *Journal of Marketing*, 52, pp.2-22

Online resources

http://www.kenya-airways.com/default_ke.aspx accessed on June 2011

APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

UNIVERSITY OF NAIROBI, SCHOOL OF BUSINESS

DEPARTMENT OF MANAGEMENT SCIENCE

P. O BOX 30197

NAIROBI, KENYA

Dear sir/madam,

REF: MBA PROJECT: TIRIMBA O. MANANI REG NO. D61/70781/09

I am a student of the University of Nairobi pursuing a Masters degree in Business Administration. I am conducting a research on SERVICE QUALITY AND CUSTOMER SATISFACTION AT KENYA AIRWAYS as a partial fulfillment of the requirements of the degree award.

I kindly request that you assist in filling the questionnaire attached by ticking (√) or giving suggestions/comments where applicable in the spaces provided.

Information gathered will be treated with utmost confidentiality and will be used for no other purpose other than the intended.

A copy of the final report containing the study findings will be made available to you upon request. Your participation in this survey is highly appreciated.

Yours sincerely

TIRIMBA O. M.

MBA STUDENT

SUPERVISER

APPENDIX II: QUESTIONNAIRE

Section A

1. What is your gender Male { } female { }
2. What is your age bracket?
 - (a) Below 18 { }
 - (b) 19 – 24 { }
 - (c) 25 – 29 { }
 - (d) 30 – 34 { }
 - (e) 35 – 39 { }
 - (f) 40 – 44 { }
 - (g) 45 – 49 { }
 - (h) 50 – 54 { }
 - (I) 55 and above { }
3. What is your nationality? _____
4. How many times have you travelled by air in the last one year?
 - (a) 1- 3 times
 - (b) 4- 5times
 - (c) 6 or more
5. Please indicate the class you last used in your air travel with Kenya airways
 - (a) Economy { }
 - (b) Business { }
6. Please tick one option from the list below to show what your main occupation.
 - (a) Self-employed/Businessperson { }
 - (b) Retired { }
 - (c) Government/NGO/company employee { }
 - (d) student
 - (e) Others. please specify-----
7. Please tick one option that best describes the purpose for which your last international flight was related to.
 - (a) Work related (NGO, government and company) { }

- (b) Business { }
- (c) Tourism/holiday { }
- (d) Family visits { }
- (e) Others. Specify { }

Section B

This section seeks your opinion on the importance you attach to the following attributes as a passenger on a scale of 1 to 5, where 1 is least important and 5 very important

(5 very important, 4 Important 3 somehow important 2 neutral 1 least important)

| | Attribute/ parameter and relative importance | 5 | 4 | 3 | 2 | 1 |
|----|---|---|---|---|---|---|
| 1 | Friendly website to give information on services and offers by an airline. | | | | | |
| 2 | Ability of the airline to communicate to passengers by phone about status after booking | | | | | |
| 3 | Variety of foods offered during flight | | | | | |
| 4 | Crew that can communicate in more than one language | | | | | |
| 5 | Price of air ticket | | | | | |
| 6 | Ability to connect to other flights | | | | | |
| 7 | On board entertainment (music, videos, magazines) | | | | | |
| 8 | Availability of alcohol on board | | | | | |
| 9 | The timing of departure times for flights | | | | | |
| 10 | The timing of arrival times | | | | | |
| 11 | Briefing about weather at arrival destinations | | | | | |
| 12 | Assistance to disabled persons to board | | | | | |
| 13 | Food quality | | | | | |
| 14 | Food quantity | | | | | |
| 15 | Food variety | | | | | |
| 16 | Hand luggage compartment | | | | | |
| 17 | Luggage safety | | | | | |
| 18 | Courteous staff | | | | | |
| 19 | Safety and accident record of airline | | | | | |
| 20 | Color of uniforms used by flight crew | | | | | |
| 21 | Ability to reserve seats on board at time of booking | | | | | |
| 22 | Online check in services | | | | | |
| 23 | Any other comment | | | | | |

Section C

| Rate your satisfaction using a scale of 1 to 5 by ticking in the columns next to the questions items. 5. very highly satisfied 4. highly satisfied 3. moderate satisfaction 2. neutral or/ no idea/undecided 1. not satisfied | 5 | 4 | 3 | 2 | 1 |
|--|---|---|---|---|---|
| The neatness and appearance of staff dressing | | | | | |
| The attitude of the on board staff to you in the process of your interaction | | | | | |
| The neatness of toilets in your flight? | | | | | |
| quantity of meals offered during the flight is sufficient | | | | | |
| Design of toilets is modern and spacious | | | | | |
| Attractiveness of the utensils used on board. | | | | | |
| Blankets issued on board for warming? | | | | | |
| Check in system equipment are visually appealing | | | | | |
| The design of seats and the available leg room | | | | | |
| Friendliness of crew handling luggage during check in process. | | | | | |
| Friendliness of ground crew assisting with boarding procedures | | | | | |
| Keeping time of schedules / flight was not delayed. | | | | | |
| Luggage was well handled through the flight handling . | | | | | |
| Crew seemed to know their customers by names and kept proper records. | | | | | |
| The crew handling luggage can be trusted to keep the luggage well | | | | | |
| Crew seemed competent to handle unforeseen emergence cases. | | | | | |
| The crew was prompt to attend to passenger needs during boarding process. | | | | | |
| The crew responded promptly to passenger needs during flight. | | | | | |
| Passengers with specific needs e.g. disabilities and the aged are well attended to | | | | | |
| Passengers were kept informed about services during the flight e.g. the time of serving food and snacks well in advance | | | | | |
| Response to customer requests or complains are well attended to | | | | | |
| When flights are cancelled passengers are well taken care of and informed in good time | | | | | |
| Staff are sincere and patient when dealing with passenger's problems | | | | | |
| Chances of flight break/ cancellations are very rare | | | | | |
| The airline has an excellent safety record | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| Do you agree that the Kenya Airways staffs are knowledgeable and skillful in their work? | | | | | |
| Do you agree that the airline's staff have a sincere and responsive attitude in responding to passengers' complaint? | | | | | |
| Employees instill confidence to passengers from check in to disembarking | | | | | |
| The crew is consistently cautious when dealing with Passengers. | | | | | |
| The crew are knowledgeable in answering customer's questions | | | | | |
| Ticket counters provided were sufficient so that queues are not too long, thereby making check- in easy and comfortable | | | | | |
| The flight schedule was convenient | | | | | |
| Infants were well treated | | | | | |
| Flight crews were clearly visible though out the flight to attend to passenger needs. | | | | | |
| The reward system for frequent flyers is friendly | | | | | |
| Kenya Airways has good travel related services e.g. car rentals, hotels, and travel insurance. | | | | | |

APPENDIX III: CORRELATION MATRICES

Correlation Matrix

| | | B1 | B2 | B3 | B4 | B5 | B6 | B7 |
|-----------------|-----|------|------|------|------|------|------|------|
| Sig. (1-tailed) | B1 | | .001 | .433 | .470 | .205 | .017 | .049 |
| | B2 | .001 | | .334 | .416 | .359 | .431 | .355 |
| | B3 | .433 | .334 | | .394 | .032 | .045 | .466 |
| | B4 | .470 | .416 | .394 | | .457 | .328 | .486 |
| | B5 | .205 | .359 | .032 | .457 | | .211 | .074 |
| | B6 | .017 | .431 | .045 | .328 | .211 | | .019 |
| | B7 | .049 | .355 | .466 | .486 | .074 | .019 | |
| | B8 | .102 | .017 | .007 | .051 | .133 | .075 | .200 |
| | B10 | .052 | .103 | .318 | .144 | .442 | .133 | .313 |
| | B11 | .100 | .320 | .006 | .368 | .012 | .148 | .065 |
| | B12 | .427 | .001 | .334 | .028 | .028 | .002 | .409 |
| | B13 | .271 | .025 | .003 | .247 | .043 | .091 | .111 |
| | B14 | .496 | .183 | .496 | .090 | .002 | .144 | .169 |
| | B15 | .019 | .027 | .018 | .056 | .001 | .019 | .323 |
| | B16 | .343 | .456 | .047 | .114 | .005 | .203 | .435 |
| | B17 | .156 | .032 | .337 | .260 | .293 | .191 | .151 |
| | B18 | .460 | .019 | .128 | .113 | .303 | .135 | .397 |
| | B19 | .211 | .389 | .424 | .093 | .239 | .043 | .491 |
| | B20 | .031 | .173 | .256 | .323 | .019 | .116 | .018 |
| | B21 | .118 | .494 | .321 | .001 | .478 | .482 | .000 |
| | B22 | .381 | .398 | .001 | .169 | .421 | .108 | .139 |
| | B23 | .000 | .014 | .239 | .391 | .055 | .060 | .002 |

| | | B8 | B10 | B11 | B12 | B13 | B14 | B15 |
|-----------------|-----|------|------|------|------|------|------|------|
| Sig. (1-tailed) | B1 | .102 | .052 | .100 | .427 | .271 | .496 | .019 |
| | B2 | .017 | .103 | .320 | .001 | .025 | .183 | .027 |
| | B3 | .007 | .318 | .006 | .334 | .003 | .496 | .018 |
| | B4 | .051 | .144 | .368 | .028 | .247 | .090 | .056 |
| | B5 | .133 | .442 | .012 | .028 | .043 | .002 | .001 |
| | B6 | .075 | .133 | .148 | .002 | .091 | .144 | .019 |
| | B7 | .200 | .313 | .065 | .409 | .111 | .169 | .323 |
| | B8 | | .013 | .066 | .081 | .132 | .305 | .001 |
| | B10 | .013 | | .349 | .390 | .370 | .246 | .082 |
| | B11 | .066 | .349 | | .027 | .019 | .009 | .397 |
| | B12 | .081 | .390 | .027 | | .000 | .221 | .352 |
| | B13 | .132 | .370 | .019 | .000 | | .105 | .290 |
| | B14 | .305 | .246 | .009 | .221 | .105 | | .099 |
| | B15 | .001 | .082 | .397 | .352 | .290 | .099 | |
| | B16 | .002 | .271 | .004 | .239 | .232 | .292 | .138 |
| | B17 | .478 | .024 | .416 | .307 | .287 | .460 | .269 |
| | B18 | .117 | .192 | .228 | .136 | .138 | .410 | .195 |
| | B19 | .066 | .335 | .074 | .000 | .063 | .282 | .116 |
| | B20 | .495 | .171 | .372 | .167 | .492 | .033 | .358 |
| | B21 | .015 | .474 | .369 | .007 | .482 | .424 | .399 |
| | B22 | .279 | .453 | .016 | .245 | .024 | .436 | .044 |
| | B23 | .285 | .253 | .039 | .302 | .270 | .468 | .279 |

| | | B16 | B17 | B18 | B19 | B20 | B21 |
|-----------------|-----|------|------|------|------|------|------|
| Sig. (1-tailed) | B1 | .343 | .156 | .460 | .211 | .031 | .118 |
| | B2 | .456 | .032 | .019 | .389 | .173 | .494 |
| | B3 | .047 | .337 | .128 | .424 | .256 | .321 |
| | B4 | .114 | .260 | .113 | .093 | .323 | .001 |
| | B5 | .005 | .293 | .303 | .239 | .019 | .478 |
| | B6 | .203 | .191 | .135 | .043 | .116 | .482 |
| | B7 | .435 | .151 | .397 | .491 | .018 | .000 |
| | B8 | .002 | .478 | .117 | .066 | .495 | .015 |
| | B10 | .271 | .024 | .192 | .335 | .171 | .474 |
| | B11 | .004 | .416 | .228 | .074 | .372 | .369 |
| | B12 | .239 | .307 | .136 | .000 | .167 | .007 |
| | B13 | .232 | .287 | .138 | .063 | .492 | .482 |
| | B14 | .292 | .460 | .410 | .282 | .033 | .424 |
| | B15 | .138 | .269 | .195 | .116 | .358 | .399 |
| | B16 | | .360 | .439 | .481 | .217 | .269 |
| | B17 | .360 | | .038 | .336 | .210 | .338 |
| | B18 | .439 | .038 | | .104 | .212 | .251 |
| | B19 | .481 | .336 | .104 | | .171 | .017 |
| | B20 | .217 | .210 | .212 | .171 | | .113 |
| | B21 | .269 | .338 | .251 | .017 | .113 | |
| | B22 | .167 | .290 | .118 | .480 | .364 | .097 |
| | B23 | .206 | .178 | .341 | .261 | .255 | .001 |

| | | B22 | B23 |
|-----------------|-----|------|------|
| Sig. (1-tailed) | B1 | .381 | .000 |
| | B2 | .398 | .014 |
| | B3 | .001 | .239 |
| | B4 | .169 | .391 |
| | B5 | .421 | .055 |
| | B6 | .108 | .060 |
| | B7 | .139 | .002 |
| | B8 | .279 | .285 |
| | B10 | .453 | .253 |
| | B11 | .016 | .039 |
| | B12 | .245 | .302 |
| | B13 | .024 | .270 |
| | B14 | .436 | .468 |
| | B15 | .044 | .279 |
| | B16 | .167 | .206 |
| | B17 | .290 | .178 |
| | B18 | .118 | .341 |
| | B19 | .480 | .261 |
| | B20 | .364 | .255 |
| | B21 | .097 | .001 |
| | B22 | | .406 |
| | B23 | .406 | |

APPENDIX IV: KMO test for sampling adequacy .

KMO and Bartlett's Test

| | | |
|--|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .558 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 638.242 |
| | df | 231 |
| | Sig. | .000 |

APPEX NDIX V: Factor Extractions

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 3.312 | 15.053 | 15.053 | 3.312 | 15.053 | 15.053 | 2.842 | 12.920 | 12.920 |
| 2 | 3.021 | 13.733 | 28.786 | 3.021 | 13.733 | 28.786 | 2.650 | 12.044 | 24.964 |
| 3 | 2.726 | 12.389 | 41.174 | 2.726 | 12.389 | 41.174 | 2.518 | 11.447 | 36.411 |
| 4 | 2.366 | 10.754 | 51.928 | 2.366 | 10.754 | 51.928 | 2.325 | 10.567 | 46.978 |
| 5 | 1.758 | 7.991 | 59.919 | 1.758 | 7.991 | 59.919 | 2.265 | 10.297 | 57.275 |
| 6 | 1.615 | 7.340 | 67.260 | 1.615 | 7.340 | 67.260 | 1.708 | 7.762 | 65.037 |
| 7 | 1.169 | 5.314 | 72.574 | 1.169 | 5.314 | 72.574 | 1.658 | 7.537 | 72.574 |
| 8 | 1.000 | 4.545 | 77.119 | | | | | | |
| 9 | .802 | 3.645 | 80.764 | | | | | | |
| 10 | .738 | 3.354 | 84.118 | | | | | | |
| 11 | .587 | 2.666 | 86.784 | | | | | | |
| 12 | .487 | 2.214 | 88.998 | | | | | | |
| 13 | .458 | 2.082 | 91.080 | | | | | | |
| 14 | .403 | 1.833 | 92.913 | | | | | | |
| 15 | .342 | 1.556 | 94.469 | | | | | | |
| 16 | .295 | 1.341 | 95.810 | | | | | | |
| 17 | .218 | .992 | 96.802 | | | | | | |
| 18 | .180 | .816 | 97.618 | | | | | | |
| 19 | .162 | .736 | 98.354 | | | | | | |
| 20 | .154 | .698 | 99.052 | | | | | | |
| 21 | .114 | .516 | 99.568 | | | | | | |
| 22 | .095 | .432 | 100.000 | | | | | | |

Extraction Method: Principal Component Analysis.

Source ;Researcher 2012