

Full Length Research Paper

Evaluation of service quality of Nigerian airline using servqual model.

Chikwendu DU*, Ejem E and Ezenwa A

Department. of Transport Management Technology, Federal University of Technology, Owerri, Nigeria.

Accepted 27 December 2012

The study tries to evaluate the service quality of a Nigerian Airline with objectives to determining what constitutes the service variables in the Nigerian air transport Industry, how satisfied are the passengers with the services of the above mentioned airline and suggest to managers of these airlines on how to improve and promote satisfaction level of passengers. Data was collected from the respondent using a well structured questionnaire to discover the perception of the passengers of the airline under study. The "SERVQUAL" model was utilized to analyze and determine the service quality gaps between the customer's expectation and its perception of the service attributes. It was discovered from the result that aerocotracotors airline exhibited a good service quality in the empathy, responsiveness and the technical dimension of their services but the reliability; tangible dimension needs a lot of improvement and generally a mean score of -5.71 showed a poor service level. On this ground, recommendations were made for airline managers to improve the service that exhibited a below expectation level of service and regular survey of their performance from their customers should be carried out to stay informed with the current needs of its passengers.

Key words: Servqual, Tangibles, reliability, responsiveness, empathy, Technical and assurance.

INTRODUCTION

The Aviation industry can be defined as those activities that are directly related to the transporting of people and goods by air from one location to another (Onyeanu, 2009). Airline industry play a major role in every countries economic activity and it aids in opening up of the countries market to both local and foreign investors (Abeyratner 1998, Samuel, 2006). Globalization has made it even more necessary for everyone to be everywhere at anytime. Over 2.1 billion passengers departed on scheduled journey in 2006 (IATA 2007). Strong economists saw international passenger demand grow by 5.9%. Driving these development are further market liberalization and the availability of more fuel efficient and longer range aircraft that are better able to serve thinner routes.

There is need for airlines to focus on service quality if the airlines aspire to improve on market share and further enhance financial Performance in domestic and

international market Albrecht and Zemke (1995). A necessary corollary is that domestic airlines need to have a valid and reliable measure to better understand the variable likely to have a bearing on the service quality offered by their organization. The research related to service quality and customer satisfaction in the airline industry has been growing in interest because the delivery of high service quality is essential for airlines' survival and competitiveness. A number of researchers have applied service quality related theories and methods in the airline industry. However, most previous airline service studies have relied mainly on customer satisfaction and service quality to describe customer evaluations of services and have focused on the effect of airline service quality at the aggregate construct level. Although examining the effect of individual dimensions of service attributes has potentially great utility for airline managers. The effects of individual dimensions of airline service quality have not been fully investigated in previous airline service studies especially in the Nigerian scene. Since investigating the effects of individual dimensions of airline service quality is an important factor

*Corresponding author. E-mail: dchikwendu@yahoo.com

for airline marketers to develop their marketing strategies, the individual dimensions of airline service quality are considered as an important variable in this paper. Obviously, the Nigerian scene is an important scenario that must be explored in order to ascertain the level of service being rendered to the Nigerian air travelling populace.

This paper aims at identifying what constitute the customer services variables, how satisfied are the passengers with the services of the above mentioned airline and how managers of these airlines improve and promote satisfaction level among the passengers in Nigeria, with a case study of Aerocontractors airline. This will be done by comparing the expectations, perception and the gaps between them using the SERVQUAL scale. Previous airline service studies have often been carried out by several researchers in the international point of view but little or no attention has been focused on the Nigerian situation. In the pursuit of achieving the earlier mentioned objectives the study asked the following questions; what attributes actually constitute customers service variables in the airline industry?, are the passengers of this airline satisfied with the services rendered with consideration to the variables discovered and what are the necessary strategies that airline managers improve on the service quality rendered to their passengers.

LITERATURE REVIEW

This paper proposes a conceptual framework that identifies what constitute the customer services variables and evaluates the level of service rendered by airlines in Nigeria, with a case study of Aerocontractors airline by comparing the expectations, perception and the gaps between them using the SERVQUAL scale. Component of the proposed conceptual framework includes service quality, its attributes and the overall quality of service being offered by the airline to her customers.

Concept of Service quality

Service quality is a consumer's overall impression of relative inferiority/superiority of the organization and its services (Bitner and Hubbert, 1994). The importance of service quality has been widely discussed by researchers. For example, Parasuraman et al. (1991, 1993) argued that delivering high quality in the service industry has been recognized as the most effective means of ensuring that a company's offerings are uniquely positioned in market filled with "lookalike" competitive offerings. Goodman (1989) also asserted that businesses should be concerned with service quality issue because problems with service quality can make customer loyalty decline by 20%. Parasuraman et al. (1988) developed a 22- item instrument representing the five dimensions, called SERVQUAL, for assessing customer perception of service quality in service and

and retailing organizations (Kang and James, 2004). It is based on the premise that customers can evaluate service quality by comparing their perceptions with their expectations of its service. To develop the SERVQUAL scale, data were gathered for five different service categories: appliance repair and maintenance, retail banking, long distance telephone, security, brokerage, and credit cards. Since the development of the SERVQUAL scale, a number of studies have been conducted on service quality using this scale. The SERVQUAL has been used widely to evaluate service quality in various industries. However, several researchers noted limitations of the SERVQUAL and presented modified and alternative methods. Carmen (1990) asserted that it is difficult to use the 22 SERVQUAL items exactly as proposed and some modifications in items or wording were always required. Cronin and Taylor (1992, 1994) argued that there are limitations in the SERVQUAL due to the fact that the disconfirmation paradigm does not perform well statistically and the author presented a performance-based alternative method called the SERVPERF. Since service quality is an important factor for airlines, several researchers have applied service quality related theories and methods in the airline industry (Babakus and Boller 1992 unningham et al., 2002; Chen, 1997; Parasuraman et al., 1994; Ostrowski et al., 1993; Sultan and Simpson, 2000).

Most of the previous airline service studies have used the SERVQUAL method to evaluate service quality. However, the 22- item scale of SERVQUAL representing five dimensions is not appropriate for measuring all aspects of airline service quality due to the characteristics of airline service quality. Airline service quality is different from services in other industries. An airline service comprises tangible and intangible attributes. Airlines carry passengers to the destination using aircraft, and passengers experience diverse intangible services from airlines such as on time performance, in-flight service, service frequency and so on. Shostack (1977) asserted that airline travel is Intangible-dominant. It does not yield physical ownership of a tangible good.

Service quality is a concept that has aroused considerable interest and debate in the research literature because of the difficulties in both defining it and measuring it with no overall consensus emerging on either (Wisniewski, 2001). There are a number of different "definitions" as to what is meant by service quality. One that is commonly used defines service quality as the extent to which a service meets customers' needs or expectations (Dotchin and Oakland, 1994a; Buttle, 1996; Wisniewski and Donnelly, 1996). Service quality can thus be defined as the difference between customer expectations of service and perceived service. If expectations are greater than performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs (Parasuraman et al., 1985, 1986; Lewis and Mitchell, 1990). Always there exists an important question: why should service quality

be measured? Measurement allows for comparison before and after changes, for the location of quality related problems and for the establishment of clear standards for service delivery. Reynoso and Moore (1995) state that, in their experience, the starting point in developing quality in services is analysis and measurement. The SERVQUAL approach, which is studied in this paper, is the most common method for measuring service quality.

Model of Service Quality Gaps

There are seven major gaps in the service quality concept, which are shown in Figures 1 shows that the model is an extension of Parasuraman *et al.* (1985). According to the following explanation (ASI Quality Systems, 1992; Curry, 1999; Luk and Layton, 2002), the three important gaps, which are more associated with the external customers are Gap 1, Gap 5 and Gap 6; since they have a direct relationship with customers.

Gap 1. Customers' expectations versus management perceptions: as a result of the lack of a marketing research orientation, inadequate upward communication and too many layers of management.

Gap 2. Management perceptions versus service specifications: as a result of inadequate commitment to service quality, a perception of unfeasibility, inadequate task standardisation and an absence of goal setting.

Gap 3. Service specifications versus service delivery: as a result of role ambiguity and conflict, poor employee-job fit and poor technology-job fit, inappropriate supervisory control systems, lack of perceived control and lack of teamwork.

Gap 4. Service delivery versus external communication: as a result of inadequate horizontal communications and propensity to over-promise.

Gap 5. The discrepancy between customer expectations and their perceptions of the service delivered: as a result of the influences exerted from the customer side and the shortfalls (gaps) on the part of the service provider. In this case, customer expectations are influenced by the extent of personal needs, word of mouth recommendation and past service experiences.

Gap 6: The discrepancy between customer expectations and employees' perceptions: as a result of the differences in the understanding of customer expectations by front-line service providers.

Gap 7: The discrepancy between employee's perceptions and management perceptions: as a result of the differences in the understanding of customer expectations between managers and service provider (Carman, 1990).

METHODOLOGY

The population of the study in question comprised of all travelling passenger using the aero contractors airline service and a total of

two hundred respondents opinion was sampled in order to avoid the cumbersome nature of trying to gather information from the entire population. In the selection of the sample, a simple random sampling technique was used to get the sample Fourie and Lubbe (2006). This was done to get a total representation of the entire population. Questionnaires were administered to the customers /passengers ready to board and have the feel of services of the airline under study. The aero contractors airline was selected as the study airline because it is one of the most patronized airline operating in Nigeria on both local and international scheduled flights.

The survey was conducted over a period of one week at the Murtala Mohammed International Airport Ikeja Lagos, which is one of the major airports in Nigeria. This airport is considered a centre of consolidation of customers that intend to embark on a journey using the air transport mode. To obtain the data, the SERVQUAL model was modified to reflect airport activities and this further validated the research instrument. The questionnaire was developed to test the ratings of perception and expectations of passengers on the service attributes rendered to them by the airline under study. Having validated the questionnaire, the 22-items scale of the SERVQUAL was increased to capture other attributes of airlines services in its totality. Respondents were required to rate on a five point lickert scale their perception of the attributes for the airline, Iwaarden *et al.* (2003). (Appendix 1 for the attributes and ratings).

RESULTS

The data obtained from the questionnaire were analyzed using descriptive statistical tools to like percentages, piechart, frequency and mean. The "servqual gap model" was used to determine the gaps in the individual attributes. Excel 2007 office suit was also used to determine the demographic characteristics .

A total of 200 questionnaires were distributed to the airline under study (Aero contractors) but 180 questionnaires was returned from the contractors respondents, making it a response rate of about 90%

Gender Category

The proportion of male to female respondents is also presented in order to show that an average 50% to 50% ration of male to female made up the respondents as shown in Figure 2.

Data gathered from the income level indicates that about 5% belong to the income level 1 (₦ 10,000- ₦ 30,000), 25% belong to income level 2 (₦ 30,000- ₦ 60,000), 5% belong to income level 3 (₦ 61,000- ₦ 90,000) 15% belong to income level above and 10% referred to indicate their income level.

Result from the category shows that the major customers of aero contractor airline are the citizen that earn within the income range of (₦ 61,000- ₦ 90,000). Figure 3.

Analysis of Service Quality Gaps.

Determination Of Servqual Score

Mean perception – mean expectation = SERVQUAL

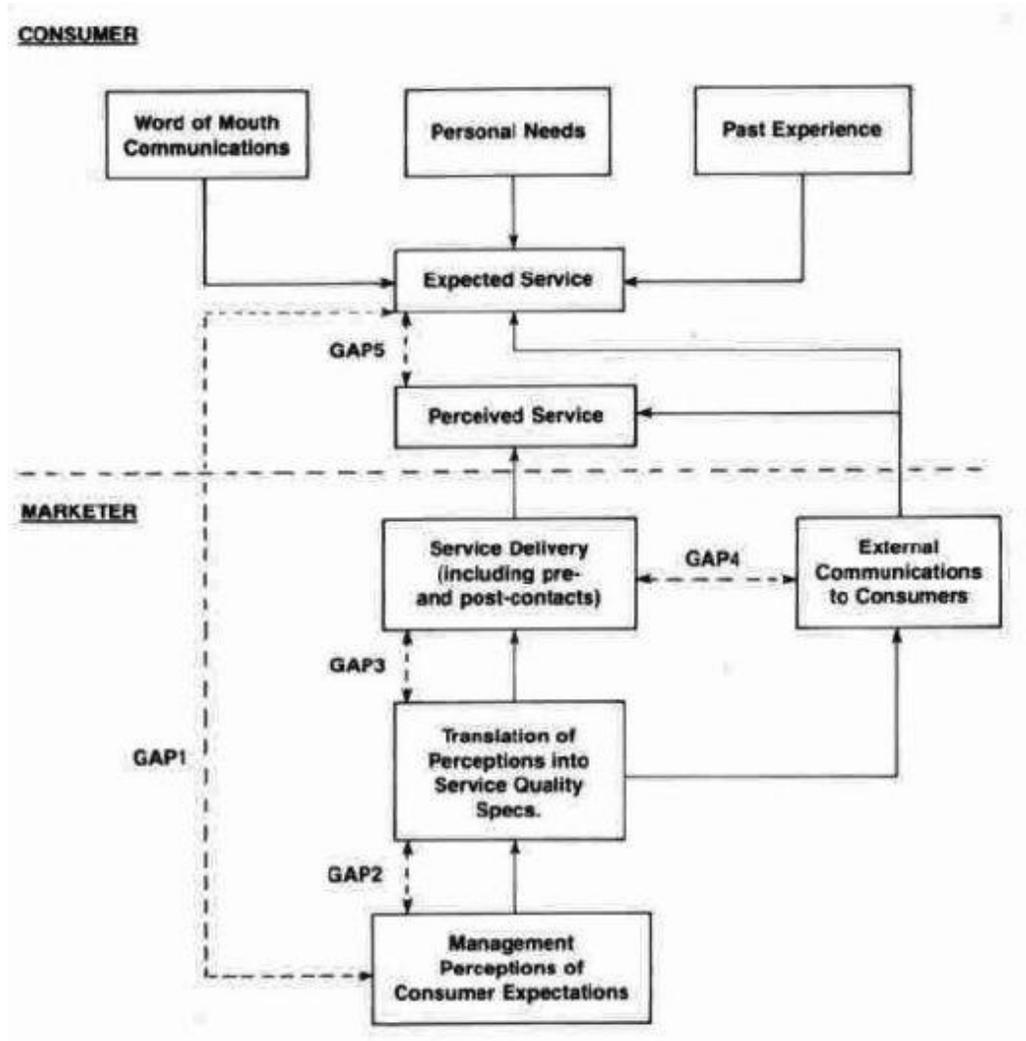


Figure 1. Service quality gap model.

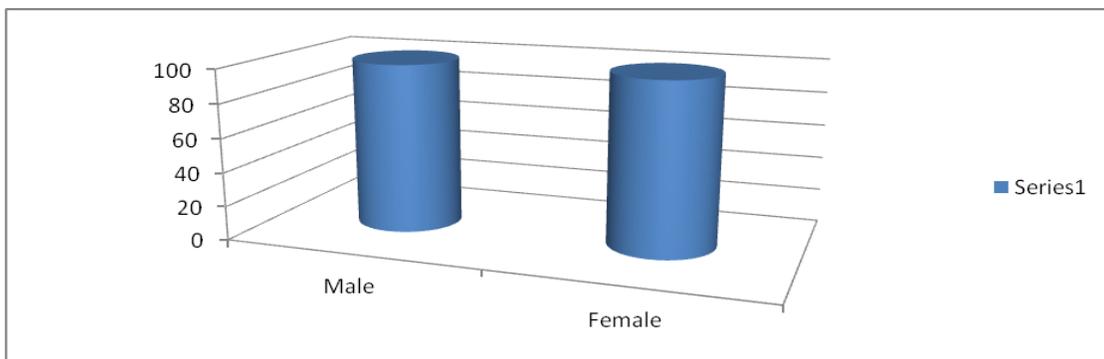


Figure 2. Gender selection. Source field survey (2012).

SCORE], $n=27$, $Q= 1/27\sum P_i - E_i$, $i=1$. Assuming an overall mean expectation level to be (3.0) meaning the

passengers expect a reasonable service from all attribute also indicating their importance.

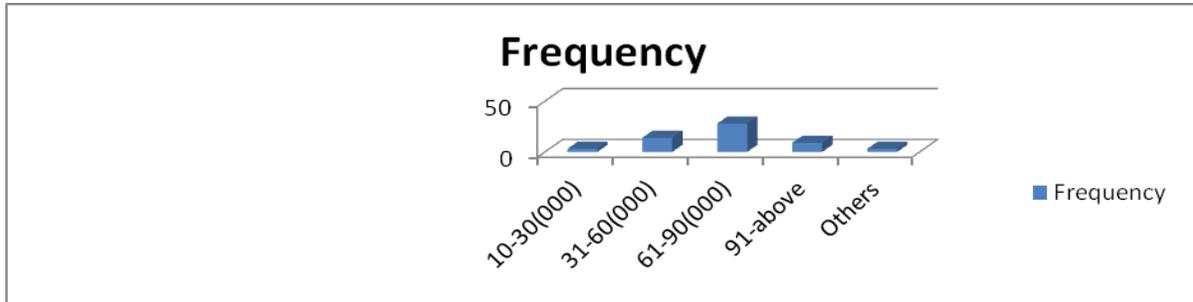


Figure 3. Income category: Source: field survey (2012).

Table 1. Response rate of respondents.

| | AEROCONTRACTORS | |
|--------------|-----------------|-----|
| | Frequency | % |
| Returned | 180 | 90 |
| Non returned | 20 | 10 |
| Total | 200 | 100 |

Source: field Survey (2012).

Criteria for classification

1. Note that any mean dimension value below 3.0 (hypothesized mean) – poor service quality. Also indicated by negative gap score.
2. Mean dimension score above 3.0 – good service quality Also indicated by positive gap score.

Tables 1-3, Shows that the overall satisfaction level of the passengers was poor indicating that the passengers expectation exceeded the perception in most of the service quality attributes in the study.

DISCUSSION

From Table 3, it can be seen that the overall satisfaction level of the passengers was poor with a mean gap score of -5.71 indicating that the passengers expectation exceeded the perception in most of the service quality attributes in the study. However, it can also be seen that all the service attribute under the Tangible dimension showed poor service quality except the appearance and uniform of workers (TAN 1) indicating a positive gap of 0.32 of customers perception exceeding their expectation. Under the Reliability dimension, the airline has “error free records” and a “reliable on-line assistance” but other attribute under this dimension was below expectation. The assurance rendered by the airline was very impressive by having “minimal flight breakdown”, “ensure safety practices and checks”,

“instills customer’s confidence and has a good knowledge of its business”. The responsiveness of the airline was totally poor since all its attributes were below expectation. The airline has a good mileage programme and rewards its frequent flyers. Finally the pilots are very qualified and skilled in their operations.

CONCLUSION

From the summary of the result above, it can be inferred that passengers of ‘Aero contractors’ airline are not satisfied with the quality of services rendered to them by the airline. This can be accounted for by the high level of negative servqual gap scores obtained in the Tangibles, reliability and, responsiveness dimensions although there were some attributes that had a positive gap but the overall mean of the dimension was still negative the assurance, Technical and empathy dimension had a considerable positive gap. The worst service attribute was the capability to report to emergency situation with a servqual score of (-1.37) while best service attribute was the reliable on-line assistance and the pilots technical skill with a score of (+ 0.70) and (+ 0.69) respectively.

RECOMMENDATIONS

Evidence from the study suggest that the airline managers should develop strategies to improve service quality such as meeting passengers’ desired service levels, improving the quality of in-flight meals, visually appealing facilities, hassle free check-in and boarding and so on. These strategies will enhance airline image and result in retaining existing passengers and enticing passengers from other airlines. Domestic airlines should strive to keep a good safety record and an on- time performance in order to attract potential passengers knowing that reliability is one of the most important requirements of airline operations (Ugboma et al., 2004; Robinson, 1999). Airlines that have a short fall in any of their service attribute should increase their level of controlling, commanding, monitoring, and coordinating

Table 2. Summary of means of customer' expectations and gap scores.

| Code | Attribute | Mean perception (P) | Mean expectation (E) | Mean Dev. Gap (P-E) | QUALITY |
|-------------|---|----------------------------|-----------------------------|----------------------------|----------------|
| TAN 1 | Appearance, attitude and uniform of employees | 3.32 | 3.0 | 0.32 | Good service |
| TAN 2 | In flight modern and clean facilities | 2.16 | 3.0 | -0.84 | Poor service |
| TAN 3 | Variety and quality of in-flight meals | 2.04 | 3.0 | -0.96 | Poor service |
| TAN 4 | Hassle free check – in and boarding | 2.23 | 3.0 | -0.77 | Poor service |
| TAN 5 | Efficient baggage handling mechanism | 2.96 | 3.0 | -0.04 | moderate |
| REL 6 | Meet special needs of customers | 2.70 | 3.0 | -0.30 | Poor service |
| REL 7 | Meet time commitments. | 2.70 | 3.0 | -0.30 | Poor service |
| REL 8 | Keep error free records | 3.29 | 3.0 | +0.29 | Good service |
| REL 9 | Efficient check in progress | 2.86 | 3.0 | -0.16 | Poor service |
| REL 10 | Transfer service and efficiency at departure airport | 1.80 | 3.0 | -1.20 | Poor service |
| REL 11 | Reliable on-line assistance | 3.70 | 3.0 | +0.70 | Good service |
| REL 12 | Problems due to critical incidence | 2.84 | 3.0 | -0.17 | Poor service |
| ASS 13 | sincerity and patience in resolving problems | 2.03 | 3.0 | -0.97 | Poor service |
| ASS 14 | Probability of flight break downs | 3.06 | 3.0 | +0.06 | Good service |
| ASS 15 | Safety performance of the airline | 3.25 | 3.0 | +0.06 | Good service |
| ASS 16 | Employees instill confidence to passengers | 3.01 | 3.0 | +0.01 | Good service |
| ASS 17 | Knowledgeable employees to answer customers questions | 3.25 | 3.0 | +0.25 | Good service |
| RES 18 | Prompt attention to passenger specific needs | 2.96 | 3.0 | -0.04 | Poor service |
| RES 19 | Capable to report to emergency situations | 1.63 | 3.0 | -1.37 | Poor service |
| RES 20 | Keep customers informed on- line event occurs | 2.85 | 3.0 | -0.15 | Poor service |
| RES 21 | Capacity to respond to delayed flights | 2.91 | 3.0 | -0.09 | Poor service |
| EMP 22 | care and concern for passengers | 2.24 | 3.0 | -0.76 | Poor service |
| EMP 23 | Having a sound frequent flyer | 2.82 | 3.0 | -0.18 | Poor service |

Table 2. Contd.

| | | | | | |
|--------|---|------|-----|-------|--------------|
| EMP 24 | Having a sound mileage programme | 3.38 | 3.0 | +0.38 | Very good |
| EMP 25 | Having travel related partners, car rental, hotel etc | 3.15 | 3.0 | +0.15 | Good service |
| TEC 26 | Pilots technical skills and knowledge | 3.69 | 3.0 | +0.69 | Very good |

Table 3. Overall level of customer satisfaction.

| Code | Attributes | Mean perception (P) | Mean Expectation (E) | Mean Dev. Gap (P-E) | QUALITY |
|---------|------------|---------------------|----------------------|---------------------|--------------|
| 26 item | Table 2 | 72.83 | 78 | -5.71 | Poor service |

because what is needed is just doing things the right way. Airlines that experience any form of shortfall in the Assurance dimension should engage in the training of their employees to evaluate their performance consistently.

Employees should engage on training courses on a regular basis and should bear in mind that the behaviour of employees is often instrumental in bringing about desired outcome. Management of airlines should provide an informative feedback on the employee's performance using differential rewards and punishment.

To improve on the Empathy, managers should study their target market precisely and recognise the customers demand and how they can be satisfied. Airlines need to form strategic alliances and joint ventures to have other travel related partners for example car rental, hotel accommodation and travel insurance. Though, there may not be need for these related partners to pay them but they help them to expand their market share. The airlines can determine some discount for loyal customers or passengers who use their partner services; this programme has some mutual benefits and increases the satisfaction among the passengers. The managers need to redefine the goals and the objectives and modify the organisational structure, reengineer job design on the necessary specification, likewise training, monitoring, rewarding and punishing the employees. Management need optimize the allocation of its resources by evenly spreading their resources to areas of poor service quality and a withdrawal of little resources from area of very high service quality.

References

Abeyratne R (1998). The Role of Civil Aviation in Securing Peace, 19 Int. J. World Peace 53:2002.
 Albrecht K, Zemke R (1985). Service America!: Warner Books, New York, NY. Higher sores J. Serv. Mark. 14 (3):2000.

Babakus E, Boller G (1992). "An Empirical Assessment of the Servqual Scale". J. Bus. Res. 24(3):253-268.
 Buttle F (1996). "SERVQUAL: Review, critique, and research agenda". Eur. J. Mark. 30(1):8-32.
 Carman J (1990). "Consumer Perceptions of Service Quality: An assessment of the SERVQUAL dimensions". J. Retailing 66(2):27-45.
 Cunningham F, Young C, Lee M (2002). "Cross-cultural perspectives of service quality and risk in air transportation." J. Air Transp. 7(1):3-27.
 Cronin J, Taylor SA (1992). Measuring service quality: A re-examination and extension. J. Mark. 56:55-67.
 Cronin J, Taylor S (1994). "SERVPERF versus SERVQUAL: Reconciling Performance Based and Perceptions minus Expectations Measurement of Service Quality". J. Mark. 58:125-131.
 Fourie C, Lubbe B (2006). "Determinants of selection of full-service airlines and low-cost carriers: A note on Business travellers in South Africa". J. Air Transp. Manag. 12:98-102.
 IATA (2007). International Air transport Association. Annual Report (2007). 63rd Annual General Meeting. Vancouver. Promoting sustainable forest management.
 Kang G, James J (2004). Service quality dimensions: An examination of Gronroos's service quality model. Manag. Serv. Q. 14(4):266-277.
 Luk, Sh.T.K. and Layton, R. (2002), "Perception Gaps in customer expectations: Managers versus service providers and customers", Serv. Indust. J. (22)2: 109-128.
 Parasuraman A, Zeithaml V, Berry L (1988). SERVQUAL: "A multiple-item scale for measuring consumer perceptions of service quality". J. Retailing 64:12-40.
 Parasuraman A, Zeithaml VA, Berry LL (1985). "A conceptual model of service quality and its implication", J. Mark. 49:41-50.
 Parasuraman A, Zeithaml VA, Berry LL (1986). "SERVQUAL: a multiple-item scale for measuring customer perceptions of service quality", Report No. 86-108, Marketing Science Institute, Cambridge, MA.
 Parasuraman A, Zeithaml VA, Berry LL (1991). "Refinement and reassessment of the SERVQUAL scale", J. Retailing 67:420-450.
 Parasuraman A, Zeithaml VA, Berry LL (1993). "Research note: more on improving service quality measurement". J. Retailing, 69(1):140-147.
 Parasuraman A, Zeithaml VA, Berry LL (1994). "Reassessment of expectations as a comparison standard in measuring service quality: implications for future research". J. Mark.58:111-124.
 Reynoso J, Moore B (1995). "Towards the measurement of internal service quality", Int. J. Serv. Indust. Manag. 6(3)64-83.
 Robinson S (1999). "Measuring service quality: current thinking and future requirements", Marketing Intell. Plan.17(1):21-32.
 Ugbona C, Ibe C, Ogwude I (2004). "Service Quality Measurements in Ports of a developing economy: Nigerian Ports survey". Manag

- Serv. Qual. J. 14(6):487-495.
- Van IJ, van der Wiele, T, Ball L, Millen R (2003). "Applying SERVQUAL to web sites: An exploratory study", *Int. J. Qual. Reliability Manag.* 20(8):919-935.
- Wisniewski M (2001). "Using SERVQUAL to assess customer satisfaction with public sector services", *Manag. Serv. Qual.* 11(6):380-388.
- Wisniewski M, Donnelly M (1996). "Measuring service quality in the public sector: the potential for SERVQUAL", *Total Qual. Manag.* 7(4):357-365.
- Zeithaml VA, Parasuraman A, Berry LL (1990). *Delivering quality service; Balancing customer perceptions and expectations*, The Free Press, New York, NY.

APPENDIX 1.

| CODE | ATTRIBUTE |
|-------------|---|
| TAN 1 | Appearance, attitude and uniform of employees |
| TAN 2 | In flight modern and clean facilities |
| TAN 3 | Variety and quality of in flight meals |
| TAN 4 | Hassle free check – in and boarding |
| TAN 5 | Excellent quality and in flight meals |
| TAN 6 | Efficient baggage handling mechanism |
| REL7 | Meet special needs of customers |
| REL 8 | Meet time commitments |
| REL 9 | Keep error records |
| REL 10 | Efficient check in progress |
| REL 11 | Transfer service and efficiency at departure airport |
| REL 12 | Reliable on-line assistance |
| REL 13 | Problems due to critical incidence |
| ASS 14 | Sincerity and patience in resolving problems |
| ASS 15 | Probability of flight break downs. |
| ASS 16 | Safety performance of the airline |
| ASS 17 | Employees instill confidence to passengers |
| ASS 18 | Knowledgeable employees to answer customers questions |
| RES 19 | Prompt attention to passenger specific needs |
| RES 20 | Capable to report to emergency situations |
| RES 21 | Keep customers informed on- line event occurs |
| RES 22 | Capacity to respond to delayed flights |
| EMP 23 | Care and concern for passengers |
| EMP 24 | Having a sound frequent flyer |
| EMP 25 | Having a sound mileage programme |
| EMP 26 | Having travel related partners, car rental, hotel etc |
| TEC 27 | Pilots technical skills and knowledge |

Note that the following dimensions were represented thus: TAN – Tangible, REL- Reliability, ASS- Assurance, RES- Responsiveness, EMP- Empathy, and TEC- Technical.