SERVICE QUALITY AND CUSTOMER SATISFACTION AMONG DOMESTIC AIR PASSENGERS IN NIGERIA

MUSA KASUWAR KUKA GAMBO
Kano State Polytechnic, Kano State, Nigeria
E-mail: gambokk@gmail.com

—Abstract—

This study examines the relationship between airlines service quality and customer satisfaction among domestic air passengers in Nigeria. The study applied quantitative approach through a cross-sectional survey using a close-ended self-completion questionnaire. The questionnaire was designed based on a modified SERVQUAL model containing five service quality dimensions namely check-in process, in-flight services, reliability, responsiveness and baggage handling services. A five-point Likert scale was used with following options; much better than expected, better than expected, just as expected, worse than expected and much worse than expected, with five different scores assigned in descending order from 5 to 1 respectively. A sample of 400 respondents was selected using a stratified random sampling techniques. The copies of questionnaire were administered to the respondents at the departure lounge of Lagos, Abuja and Kano airports in Nigeria respectively. The findings reveal that there is no significant relationship between check-in process and customer satisfaction among domestic airlines in Nigeria. However, the study established that there is a significant relationship between the four service quality attributes (in-flight services, reliability, responsiveness and baggage handling services) and customer satisfaction. Consequently, it is recommended that domestic airlines should introduce continuous training on good customer relations, remaining responsive and proactive as well as ensuring on-time departure and arrival, while maintaining safety and well-being of the passengers. The study also suggests that airlines should consider forming strategic flight alliance domestically in order to provide for flights availability and adequate market coverage in an attempt to enhance service reliability.

Key Words: Service quality, customer satisfaction, airline passengers, Nigerian Aviation Industry.

JEL Classification: B16, D14
1. INTRODUCTION

To achieve a high level of customer satisfaction, excellent service quality should be delivered by airlines. This is because service quality is normally considered as an antecedent of customer satisfaction (Cronin, Brady & Hult, 2000; Cronin & Taylor, 1992). Service quality and customer satisfaction are, therefore, key to the success and survival of any service organization (Adeola and Adebiyi, 2014). One of the means of competition among airlines is efficient service quality delivery (Haryono, Suharyono, Achmadfauzi and Suyudi, 2015). In 1963, the Nigerian Federal Government established Nigeria Airways as the national carrier which operated successfully for over two decades. However, at some point, the airline faced several problems and operational shortcomings which made the government to deregulate the aviation sector in 1985. This deregulation allows private airlines into scheduled domestic air services in Nigeria to replace the moribund national carrier. Presently, there are a number of scheduled passenger Airlines operating in Nigeria. They include; Aero Contractors, Azman Air, Arik Air, Dana Air, Discovery Air, FirstNation Airways, Med-View Airline and Overland Airways (Aviation in Nigeria, 2015).

Various studies have discovered that air travellers lament poor customer service by Nigerian airlines (Chikwendu, Ezem and Ezenwa, 2012; Balogun, Ben, Olusola and Oseghale, 2012; Lawan, 2012; Dike, 2013; Adeola & Adebiyi, 2014). The findings reveal that most passengers condemned the airline operators for persistent flight delays, missing luggage, poor customer service by front desk officers of airlines, among others. Thus, Airline company managers in Nigeria are under increasing pressure to demonstrate that their services are superb and customer-focused. Therefore, the researcher attempts to examine the nature of relationship between airlines service quality and customer satisfaction among domestic airline passengers in Nigeria. Consequently, the main objective of the study is to determine the relationship between airlines service quality and customer satisfaction among domestic air passengers in Nigeria.

2. LITERATURE REVIEW

2.1 Service Quality and Customer Satisfaction

Service quality is generally viewed as a multidimensional concept because customers evaluate a variety of dimensions on a company’s products or services. Service quality is the result of the comparison that customers make between their expectations about a service and their perceptions of the actual service
performance (Zeithmal, 1988; Gronroos, 1988; Parasuraman, Zeithaml and Berry 1985, 1988; Mersha, 1992). Customer satisfaction, on the other hand, is defined as an emotional feeling by the consumers after experiencing a certain service which in turn leads to an individual overall attitude towards purchasing of service (Oliver, 1981). It is a person’s feelings of pleasure or disappointment resulting from comparing a product’s perceived performance or outcome with their expectations (Kotler & Keller, 2009). Satisfaction is the consumer’s fulfillment response. It is a judgment that a product or service feature, or the product of service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over-fulfillment (Oliver, 1997).

2.2 Relationship between Service Quality and Customer Satisfaction

Cronin and Taylor (1992) found empirical support for the idea that perceived service quality led to satisfaction and argued that service quality is actually an antecedent of consumer satisfaction (Cronin, Brady, & Hult, 2000; Anderson, Fornell & Lehman, 1994). Customer satisfaction is often seen as a multidimensional construct along the same dimensions that constitute service quality (Sureshchandar, Rajendran & Anantharaman, 2002). Despite strong correlations between service quality and customer satisfaction, the two constructs are in fact different from the customer’s point of view (Baker, 2013). Brady and Cronin (2001) try to clarify the specification and nature of the service quality and satisfaction constructs and found empirical support for the conceptualization that service quality was an antecedent of the super ordinate satisfaction construct.

In the aviation industry, Huang (2009) states that service quality affects customer satisfaction, and that customer satisfaction affects customer behavior, including repurchase intention and word of mouth. Similarly, Yunus, Jamil and Rashid (2013) argue that the quality of service delivery by airlines has a significant effect on customer satisfaction, which in turn, significantly affect customer loyalty. These findings corroborate Retnaningsih (2013) submission. Furthermore, Chou, Liu, Hung, Yih, and Han (2011) evaluate airline service quality in a Taiwanese airline and found that reliability and assurance are the first important dimensions, responsiveness is the second, empathy the third followed by tangibles and flight pattern. Other dimensions of airline services include safety, customer complaint handling, courtesy of crew, on-time departure and arrival, comfort and cleanliness of seats, flexibility, friendliness and honesty (Hynes & Dredge, 1998). In addition, Wang, Shu, Lin and Tseng (2011) examine nine evaluation criteria of service
quality in the airline companies and found that passengers are more concern with comfort, internal decoration and the services of airline companies.

3. RESEARCH METHODOLOGY

3.1 Research Design
Quantitative research method was adopted in this study. This is because of the need to allow for numerical representation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect (Jia, Cheae, Pei and Yam, 2012). In addition, this study uses non-experimental design. Researchers using non-experimental design do not have control over the independent (predicting) variables that determine their effects on the dependent (criterion) variable as well as the environments that they study. Furthermore, survey method is adopted for the purpose of this research. This is because of its cost-effective manner (Vanderstoep and Johnston, 2009).

3.2 Study Population
The population of the study consists of all domestic air passengers in Nigeria, precisely those that have travelled by air in the last one year. This constitutes the sampling frame for the study and it emanated from the data obtained online from Federal Airports Authority of Nigeria (FAAN) on Domestic Passenger movement Statistics, 2013. Based on this statistics, the total domestic air passenger traffic for 2013 was 14,277,410 (NBS, 2014).

3.3 Sampling Technique
A proportionate stratified random sampling was used for the study. According to Ross (2005), variables used to stratify populations in education research include location, size, age, sex, grade level, and socio-economic status. Three airports at Lagos, Abuja and Kano were selected because they are the key ones based on domestic passenger traffic. Also, only those within the age group of 18 years and above were selected. This is based on the researcher’s believe that this age group is matured enough to express their views openly. When computed, the total sample size for the study was 400 respondents.

3.4 Research Instruments
Many scholars measure airline service quality using various quality dimensions. Nevertheless, quality dimensions used in evaluating airline services vary
Extensively (Pakdila & Aydin, 2007), and that there exists multiple dimensions within the service quality construct (Ansari & Qadri, 2014). Consequently, a modified SERVQUAL model was adopted in this paper which consists of five dimensions namely the check-in process, in-flight services, reliability, responsiveness and baggage handling services.

Research questionnaire was the main instrument employed for this study. The questionnaire contains four sections. Section one and two elicit data on the demographic variables and flight behaviour of the respondents. Section three lists the five service quality attributes where respondents were asked to evaluate each service attribute using a five-point Likert scale with following options; much better than expected, better than expected, just as expected, worse than expected and much worse than expected, with five different scores assigned in descending order i.e 5, 4, 3, 2 and 1 respectively. Lastly, section four assesses customers overall satisfaction with the services of domestic Airlines in Nigeria using a five-point Likert scale ranging from delighted (5) to highly dissatisfied (1).

The scales used to measure each service quality dimensions were adapted from work of Parasuraman et al. (1988), for the two constructs of reliability and responsiveness; Archana and Subha (2012), for in-flight services; Huang (2009), for check-in process and baggage handling services. While the scale for customer satisfaction, the dependent variable, were adopted from the work of Angelova and Zekiri (2011) and Jia, et.al, (2012). Generally, service quality was measured using 25 items and satisfaction was measured by 10 items thereby producing a 35 item instrument for the study.

According to Seth and Deshmukh (2005), the service quality is a function of perception and expectations and can be modeled as:

\[ SQ = \sum_{j=1}^{k} (P_{ij} - E_{ij}) \]

where:
- \( SQ \) = Overall service quality; \( k \) \( \frac{1}{4} \) number of attributes.
- \( P_{ij} \) = Performance perception of stimulus i with respect to attribute j.
- \( E_{ij} \) = Service quality expectation for attribute j that is the relevant norm for stimulus i.

This equation is applied to measure and compute the overall Gap analysis that is the difference between customer perceptions and expectations.
3.6 Test of Reliability of the Constructs

The researcher used Cronbach’s Alpha to check the consistency of the intended measure. As shown in Table 1 below, the Cronbach’s Alpha coefficients for most of the constructs in the pilot study had an acceptable level of internal consistency based on the suggestion of Nunnally and Bernstein (1994). In fact, Hair et al. (2010) point out that 0.6 is the minimum acceptable level of Cronbach’s Alpha for any construct to acquire an adequate reliability. Consequently, the entire construct have adequate reliability.

Table 1: Reliability of constructs

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Items</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check in Process</td>
<td>5</td>
<td>.808</td>
</tr>
<tr>
<td>In Flight Services</td>
<td>5</td>
<td>.822</td>
</tr>
<tr>
<td>Reliability</td>
<td>5</td>
<td>.898</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>5</td>
<td>.795</td>
</tr>
<tr>
<td>Baggage Handling</td>
<td>5</td>
<td>.713</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>10</td>
<td>.686</td>
</tr>
</tbody>
</table>

Similarly, the study adopted the content validity to test the validity of the measurements (Kerlinger and Lee, 2000; Leary, 2004; Nunnally and Bernstein, 1994; Huck, 2004).

3.7 Administration of Instrument

The researcher collected the data by administering the questionnaire to a cross section of selected respondents. A cross-sectional study is known for its cost effectiveness and timeliness (Mugo, 2012, Marczyk, et. al., 2005). Three (3) research assistants were trained and used for this purpose. Respondents were selected based on their willingness to participate in the survey, being 18 years and above as well as having travelled by air at least once in the last one year. A total of 400 copies of questionnaire were distributed to the selected sample at each of the three airports. Respondents were approached at the waiting lounge before departure.
Figure 1. Conceptual Framework

The model above illustrates the proposed conceptual framework that serves as the basis for this study. It is used to focus on the relationship among the five independent variables which consist of check-in process, in-flight services, reliability, responsiveness and baggage handling services towards customer satisfaction.

3.8 Formulation of Hypothesis

The following hypotheses were postulated for the study.

H₁ - There is significant relationship between check-in process and customer satisfaction in the services of domestic airlines in Nigeria.

H₂ - There is significant relationship between in-flight services and customer satisfaction in the operation of domestic airlines in Nigeria.

H₃ - There is significant relationship between the reliability of airlines services and customer satisfaction in the operation of domestic airlines in Nigeria.

H₄ - There is significant relationship between airline service responsiveness and customer satisfaction in the services of domestic airlines in Nigeria.

H₅ - There is significant relationship between baggage handling services and customer satisfaction in the operation of domestic airlines in Nigeria.
4. DATA ANALYSIS

4.1 Data Analysis Techniques

The Statistical Package for Social Science (SPSS 16.0) software was used to analyse the data using multiple regressions analysis. The regression model was employed in testing the hypotheses.

The fundamental assumptions of normality, linearity, multicollinearity and homoscedasticity, for regression analysis were carefully examined to ensure that none of the assumption is violated in this study, thus, making the conduct of multiple regression analysis appropriate. Similarly, $R^2$ model was examined to determine the overall prediction of the independent variables to the dependent variable. In the same vein, to test for the relative contribution of each independent variable to the dependent variable, the t value should be 1.96 and above for the hypotheses to be supported and the significance value should be 0.050 and below for the hypotheses to be accepted (Shehu, 2014; Hair, et.al. 2010; Pallant, 2001).

4.2 Data Analysis

A total of 400 copies of questionnaire were distributed to the selected respondents Lagos, Abuja and Kano airports respectively. Table 2 shows the response rate for each airport involved in the study.

<table>
<thead>
<tr>
<th>Airport</th>
<th>Number Distributed</th>
<th>Number Collected and Completed</th>
<th>Percentage of total completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagos</td>
<td>212</td>
<td>206</td>
<td>53.37</td>
</tr>
<tr>
<td>Abuja</td>
<td>176</td>
<td>168</td>
<td>43.52</td>
</tr>
<tr>
<td>Kano</td>
<td>12</td>
<td>12</td>
<td>3.11</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
<td>386</td>
<td>100</td>
</tr>
</tbody>
</table>

Of the 400 copies of questionnaire circulated, a total of 386 copies were duly completed and returned, representing a response rate of 96.5%. The distribution was done in proportion to the sample size as indicated in the table.

4.3 Direct: Multiple Regression Analysis and Hypotheses Test

Multiple regression analysis was conducted to determine the relationship between the dependent variable (satisfaction) and independent variables (check-in process, in-flight services, airline reliability, staff responsiveness and baggage handling). The results show the overall relationship between the predictors and the
dependent variable ($R^2$) to be 0.345 with $F$ value = 37.717. Therefore, the predictors accounted for approximately 35% of the variance in the customer satisfaction at 0.05 significance level. Based on the Cohen’s (1988) classifications, the value of $R^2$ is significantly substantial. The significant $F$-test shows that the relationship (37.717, $p<0.001$) signifies the overall significant prediction of independent variables to the dependent variable.

Table 3: Multiple Regression Results Between Check-in Process, In-flight Services, Reliability, Responsiveness, Baggage Handling Services and Customer Satisfaction

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Variables</th>
<th>Unstandardized Coefficients</th>
<th>t-value</th>
<th>p-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Check in Process</td>
<td>.009</td>
<td>.035</td>
<td>.248</td>
<td>.804</td>
</tr>
<tr>
<td>H2</td>
<td>In Flight Services</td>
<td>.226</td>
<td>.037</td>
<td>6.179</td>
<td>.000</td>
</tr>
<tr>
<td>H3</td>
<td>Reliability</td>
<td>.132</td>
<td>.035</td>
<td>3.782</td>
<td>.000</td>
</tr>
<tr>
<td>H4</td>
<td>Responsiveness</td>
<td>.105</td>
<td>.033</td>
<td>3.202</td>
<td>.001</td>
</tr>
<tr>
<td>H5</td>
<td>Baggage Handling</td>
<td>.359</td>
<td>.038</td>
<td>9.496</td>
<td>.000</td>
</tr>
</tbody>
</table>

$F$ value 37.717
$F$ Sig. .000
$R^2$ 0.345
Dependent Variable: Customer Satisfaction
Note: *: $p<0.05$; **: $p<0.01$; ***: $p<0.001$

Table 3 shows the results of the multiple regression analysis. It shows that out of the five predicting variables, check-in process is the only variable that failed to predict the criterion with the $p<.804$), therefore, it has no significant relationship with customer satisfaction. Conversely, the remaining four independent variables (in-flight, reliability, responsiveness and baggage handling services) are found to have significant relationship with customer satisfaction; in-flight services ($p<.000$), reliability ($p<.000$), responsiveness ($p<.001$) and baggage handling services ($p<.000$). Therefore, to test the hypotheses, the P value has to be lower than 0.05 i.e. $p<0.05$ at 95% significance (Torres-Reyna, 2014). Consequently, four hypotheses were accepted (H2, H3, H4 and H5), while one hypothesis (H1) was rejected as a result of having no significant relationship with customer satisfaction.

4.4 Results and Discussion

The result shows that check-in process has no significant relationship with customer satisfaction among domestic airline passengers in Nigeria. Consequently, it can be inferred that passengers’ satisfaction cannot be increased...
by improving the check-in process. This finding contradicts that of Manusamy, Chelliah and Pandian (2011) and Liou, Tsai, Lin and Tseng (2011). However, it is supported by the findings of Mahato (2012) and Oyewale, Sankaran and Choudhury (2007) who established that there is no significant relationship between check-in process and customer satisfaction.

The results also indicate that there is a significant relationship between in-flight services and customer satisfaction in the operation of domestic airlines in Nigeria. Therefore, an increase in the quality of in-flight services inform of seat comfort, quality food, on-board entertainment and crew empathy, will result to significant increase in passenger satisfaction of airline service quality. This finding supports that of Oyewole, et. al (2007), Jia, et al ., (2012), Manusamy, et. al. (2011) and Mahato (2012). Similarly, Archana and Subha (2012) from their study on service quality and passenger satisfaction in Indian Airlines found out that passengers were satisfied with the quality of services delivered on-board the airplane.

Furthermore, the responsiveness of airlines staff to passengers’ requests has significant and positive relationship with customer satisfaction in the operation of airlines in Nigeria. Consequently, an improvement in airlines’ staff promptness in handling complaints and timely apology or explanation for cancelled or delayed flight, will lead to a corresponding increase in the level of customers satisfaction. This finding is supported by that of (Abdullah, Abd.Manaf and Muhd.Noor, 2007) but contrary to the findings of the study of (Bozorgi, 2006).

Moreover, reliability of flight schedules is positively and significantly related with customer satisfaction in the services of domestic airlines in Nigeria. Therefore, an increase in airlines flight reliability in form of safety and on-time departure and arrival will significantly increase customers’ satisfaction among domestic airline passengers in Nigeria. This finding, however, contradicts that of Bozorgi (2006) and Chikwendu, Ejem and Ezenwa (2012), but is supported by that of Zeithaml, Parasuraman, and Berry(1990); Sultan and Simpson (2000); Cunningham, Young and Lee (2002), who established that reliability is the most valued dimension in assessing service quality.

In addition, the study also reveals that there is significant relationship between baggage handling services and customer satisfaction among domestic airline passengers in Nigeria. This means that efficient baggage handling services will significantly increase customer satisfaction among domestic airlines in Nigeria. This finding is supported by that of Pagani, Abdel Halim, Hassan, and Easa, (2002), as well as the report of (Special Eurobarometer 319, 2009). However, this
finding contradicts that of Atalik (2009) who discovered that passengers were not satisfied with those facilities which they considered as important.

5. CONCLUSION AND RECOMMENDATIONS

The study adopted the service process system of airline service quality delivery; from check-in process to in-flight services on to post-flight services such as on-time arrival, baggage handling system and customer relationship management. Generally, the study has established that airline passengers in Nigeria value in-flight services, reliability of airline services, staff responsiveness and efficient baggage handling services. To this end, it can be inferred that on-time departure and arrival, dependable flight schedule, excellent safety records and provision of acceptable remedies against cancelled/delayed flight play a major role in determining customer satisfactions. In the light of this development, it can be stated that airlines stand to lose their customers if they fail to improve the reliability of their operations. Consequently, it is recommended that domestic airlines should provide continuous training on good customer relations, remain responsive and proactive to their customers demand as well as ensuring on-time departure and arrival in their flight operations. The study also suggests that to improve service reliability airlines should consider forming strategic flight alliance domestically in order to provide for flights availability and adequate market coverage.

5.1 Suggestion for Future Research

This study only covered five constructs that might relate with customer satisfaction. However, the researcher might ignore certain significant factors that play an important role in determining the satisfaction level towards the quality of service delivered by Airlines in Nigeria. Price, flight frequency, flight availability and security are often emphasized by passengers. Thus, these four factors should be examined in future research to obtain in-depth understanding on passengers’ satisfaction level in the operation of airlines in Nigeria.

Moreover, the relationship between service quality and customer satisfaction in services of chartered airlines requires research efforts, especially as the sector has not been covered in this work and other studies so far reviewed. Also, in this study, service quality model is used for passengers flying on domestic routes. The same model could be used to study the satisfaction level of passengers flying with different airlines in Nigeria. It is equally suggested that similar studies should be replicated in the airline using different service quality model such as SERVPERF.
SERVPERVAL, ACSI or Kano’s model, among others as this study adapted the SERVQUAL model.

REFERENCES


Global Journal of Management and Business Research; E-marketing, 14(7), 18-32.


