AFTER SALES SERVICE QUALITY ON CUSTOMER SATISFACTION AND RETENTION AMONG GAME STORE CUSTOMER’S IN KANO STATE, NIGERIA

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ABSTRACT

This research examines the effect of after sales service quality (ASSQ) on customer satisfaction (CS) and customer retention (CR) among Game store customer’s in Kano State, Nigeria. The population was 870 Game store after-sales service (ASS) customers who received after-sales service (ASS) multiple times. Simple random technique was used that allow the researchers to assess their study’s centered participants, and the main tools used for this study were questionnaires. The questionnaire was intended to a Likert scale of 10 points, with the assistance of 3 ASS technician and 3 foremen at Game Store Kano, the information were gathered from 255 ASS customers. The study’s hypothesized model was tested using Structural Equation Modelling (SEM). The research outcomes show that ASSQ has a substantial and positive effect on CS and CR. The outcome also shows that CS has substantial and positive effect on CR. It is suggested that businesses or organizations should explore the most significant dimensions of ASSQ to match the preferences of their customer’s with that the organizations will pays a lot of attention to their esteem customer’s, and it will assist businesses achieve their mission and vision.

Contribution/Originality: This research is one of the very few studies that have studied how the quality of after-sales service that resulted in customer retention has pleased the consumer, and this study filled the exiting gap and contributes to the established body of knowledge as well.

1. INTRODUCTION

Service industries play a major role over economic growth in developing and developed nations. As previous study has shown (Parasuraman et al., 1985; Kotler, 2000; Angelova and Zekiri, 2011) the 21st century is considered influenced by the service industry. In addition, service quality has become a major focus of attention for practitioners, scholars, and managers, over the past centuries due to its major impact on business performance. In the 1980s, therefore, the achievement of quality in products and services became a significant issue. Customers assess service quality by comparing their perceptions of service experience with their expectations of what service performance should be (Gronroos and Christian, 1978). Only concrete products were defined and evaluated by
marketers, whereas service quality was mainly un-researched and undefined (Angelova and Zekiri, 2011). Quality in a service business has become a measure of how well the service supplied meets the expectations of the customer. Companies have discovered that they should pay a great deal of attention to service quality in order to improve earnings and market share. Service quality has become a main strategic factor for businesses to distinguish their products and services from other rivals by using service quality as a method to be evaluated by customers (Angelova and Zekiri, 2011; Javed et al., 2015).

CS was a key notion of today's company operations. Many companies are confronted with their competitors because they shift from a product and sales philosophy to a marketing philosophy, which in turn provides businesses a better opportunity to compete better (Kotler, 2000). It is very probable that customers who are very happy with a business will stay with it. CR optimizes profitability is now commonly accepted company theory; the cost of obtaining fresh customers is greater than the price of maintaining current customers. Consequently, a company's goal is to meet its customers to encourage them to maintain and repeat their purchase of service (Gupta and Rati, 2015). One of the primary variables influencing CR is CS through quality sales and after-sales service (ASS). The general satisfaction of the customer with the organization's services is a function of all the customers' interactions/experiences with that organization. Compared to the service quality, the CS in an organization can happen at various stages, such as satisfaction with the contact individual, satisfaction with the key service and satisfaction with the organization as a whole (Mustofa, 2011; Boafo, 2015). The broad goal of this research is to examine the effect of ASSQ on CS and CR. Some research has been carried out on self-service quality in Nigeria, most of which are well documented in the literature of marketing. These studies include that of Mwegerano et al. (2012); Oko and Onuoha (2013); Ladokun et al. (2013) who used primary data obtained from targeted respondents to examine the relationship between ASSQ and CS. The remaining sections of this study is organized as: literature review, method and material, results and discussion, and finally conclusion and recommendations of the study.

2. LITERATURE REVIEW

ASSQ has been the most debatable subject in the area of marketing and has been directly linked to CS and CR. Several known researchers have carried out numerous research on ASSQ and CS, such as, Bittner (1990); Bolton and Drew (1991); McDougall and Levesque (1994) and more recently, Cronin et al. (2000); Gupta and Rati (2015) identified service quality as a key determinant of CS for a company. They observed that there are many techniques to increase CS. From the finding carried out by Angelova and Zekiri (2011) discovered that the customer perceived service quality was not satisfactory, that expectations were greater than perceptions. The outcome also showed that service was not satisfied with customers. Gupta and Rati (2015) examined the effect on CS of ASS. They concentrated on knowing the dynamics of ASS as well as its effect in the mobile phone sector. The research discovered increased effectiveness in the delivery of ASS to their customers among mobile phone distributors. The ASS effectiveness also had a direct and positive connection with the satisfaction rate of customers. A research by Ladokun et al. (2013) showed that CS and retention were considerably affected by item shipment, installation, and warranty. Another Oko and Onuoha (2013) demonstrates that after-sales services have a positive effect on the perception of quality loyalty by customers. A finding of Boafo (2015) disclosed that sales performance of PHC engines inspired trust and trust. The researches also disclosed that customers were happy with the company's service quality and are of the opinion that the quality of service is the reason why they patronize the products of the firm.

Shaharudin et al. (2009) explore factors influencing CS in Malaysian electronic business market ASS. The results of their research stated that CS and three independent variables (warranty, delivery, and installation) had a strong connection. Another empirical research by Hussain et al. (2011) investigates Pakistan's automotive battery manufacturer's ASSQ. The primary research variables that affect CS are the quality of the product and social responsibility. The findings show that with better service delivery, customer satisfaction improves. In two Indian
companies and one overseas company, Asadollahi et al. (2011) researched service performance and CS in after-sales automotive services. The finding indicates that there is no important distinction between two Indian companies in all dimensions but showed a substantial difference in all dimensions with other international companies. Fazlzadeh et al. (2011) explored the impact of ASS on CS as well as their behavioral intentions. Their research performed home appliances in Iran at big retail chain customers. The research discovered that ASSQ, which in turn impacts behavioral intentions, impacts fulfillment. A research by Shuqin and Gang (2012) examines the connection between the characteristics of ASS in the automotive sector in China. The research discovered that fairness, compassion, reliability, and comfort have a substantial beneficial effect on CS while CS is not significantly affected by responsiveness. Khan (2012) reviews CS and customer loyalty maintenance in Pakistan's telecom sector. Questionnaires were distributed for data collection via electronic mail and self-administered. The research outcomes indicate that CS has a substantial effect on CR, while CR has an insignificant effect on customer loyalty.

Maghsoudlou et al. (2014) are also investigating the role of ASS in CS. The research results discovered that there is a significant positive connection between ASS and CS. Research by Mustofa (2011) show that ASS have a significant impact on CS and loyalty, and ASS has a positive impact on CS and loyalty.

Sattari (2007) argues that the disconfirmation of expectations, value-percept disparity theory and regret theories are relevant to the research of CS on services.

The theories that will guide this study are, therefore, the disconfirmation of expectations and the theory of regret. The concept of disconfirmation or expectations arises from a cognitive assessment process in which pre-purchase "expectations" or previous beliefs about the probability of product-related experiences or results are recovered from memory and compared to cognitions of product-related experiences or results generally measured in consumption of the product.

The outcome of this comparison is a disconfirmation of expectations, ranging from negative (expectations exceed results achieved) to zero (expectations just equivalent results achieved) to favorable (realized results exceed expectations) (Mustofa, 2011). Taylor (1997) established the theory of regrets, which suggests a richer concept of satisfaction that included expectations of un-selected alternative. The theory maintains the paradigm of fundamental expectation disconfirmation as the basis for the theory strategy to regret. Unfortunately, according to the theory, directly affects the choice of customers to buy again. Marketers attempt to reduce adverse product or service emotions by decreasing dissonance after choice and regret (Sattari, 2007).

2.1. Hypotheses

ASSQ's literature demonstrates that satisfied customers have a clear perception of service providers. Research results further suggest that CS fluctuates between the ASSQ and CR (Khan, 2012; Ladokun et al., 2013; Wong et al., 2014). These results are usually compatible with Maghsoudlou et al. (2014); Mishra (2014) and Boafo (2015) studies that conclude that the ASSQ has an impact on CS. CS enhances the CR, adding to customer loyalty in turn. It was hypothesized to assess whether this immediate connection holds:

\[ H_1: \text{There is a substantial effect of ASSQ on CS.} \]

\[ H_2: \text{There is a substantial effect of ASSQ on CR.} \]

\[ H_3: \text{There is a substantial effect of CR on CS.} \]

2.2. Research Model

This research explored three variables that involved CS, CR and ASSQ, and there are based on prior literature (Shaharudrn et al., 2009; Attafar, 2011). Based on the reviewed literature and the three hypotheses as demonstrated, in Figure 1, a research model with three constructs was established.
3. METHOD AND MATERIAL

This study used the research design survey technique. The study participants were 870 game store customers who had more than once ASS. The study used simple random technique, which allows the focused participants to answer the study questionnaire, with the assistance of 3 ASS technicians and 3 Game Store foremen, data was collected from 255 ASS customers through questionnaire of 10-point Likert scale. Krejcie and Morgan (1970) table of sample size determination was used to determine 255 (sample size) focused participants out of the 870 participants. The study's hypothesized model was tested using Structural Equation Modelling (SEM).

3.1. Measures

There are seven measured ASSQ support components that must be supplied as outlined to customers throughout the product's operating life; online service, warranties, maintenance and repair, inspection, documentation, training and spare part supply (Goffin, 1999; Attafar, 2011). CS measurement involves data collection that provides data about how satisfied or unhappy customers are after a service. It is possible to collect and analyze this data in many distinct ways. Many organizations frequently track levels of CS to inspect effectiveness over time and evaluate the impact of service improvement (Mustofa, 2011). CS is evaluated using four main elements such as service delivery, information, timeliness, (sufficient information, accuracy, kept informed), professionalism (skilled employees, fair treatment) (McCarthy et al., 2011). As shown by Shaharudrn et al. (2009) CS measures should be based on the five components (On-time Delivery, Quality, Money, Hospitality Cooperation and Factor Issue). CR was evaluated on the basis of a four-item adjustment of the products from a Ro (2005) these items include tenure duration, discount received, client replacement costs and volume purchase grow (Boafo, 2015).

4. RESULTS AND DISCUSSION

4.1. Measurement Model Assessment

This study's main purpose is to use SEM to examine the effect of ASSQ on CS and CR. The confirmatory factor analysis (CFA), validity and reliability tests were performed before proceeding with the analysis using SEM to make sure that perhaps the data fulfilled the requirements for SEM analysis. A CFA was used to test the connections between the latent constructs (LC) (ASSQ, CS, CR) and the indices in a three-factor assessment. Each item parcel was permitted to load onto its hypothesized factor when operating the CFA and all three variables were presumed to be interrelated. It was not allowed to covariate among the item errors. The assessment led to a $\chi^2$ of 3.26 with 50 degrees of liberty p<0.05. Comparative Fit Index (CFI), Root Mean Square Approximation Error (RMSEA), and Standardized Root Mean Square Residual (SRMR) fit indices have been evaluated in relation to the chi-square model. According to Table 1. The CFA findings indicate that the, GFI = 0.929, AGFI = 0.919, CFI = 0.972, RMSEA = 0.079, as shown in Table 1 the fitness indexes indicate that the measurement model means a satisfactory data fit and the outcome of all fit indexes is an appropriate fit. Overall, the measurement model evaluation outcome showed strong proof of unidimensionality, convergent validity, and
reliability. Based on the outcome the model has sufficient measuring characteristics and can, therefore, carry out further study.

### Table 1. Fitness indexes for the measurement model.

<table>
<thead>
<tr>
<th>Model fit</th>
<th>df</th>
<th>( \chi^2 )</th>
<th>( \chi^2/df )</th>
<th>RMSEA</th>
<th>GFI</th>
<th>CFI</th>
<th>AGFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement model</td>
<td>50</td>
<td>151.309</td>
<td>3.26</td>
<td>0.079</td>
<td>0.929</td>
<td>0.972</td>
<td>0.919</td>
</tr>
</tbody>
</table>

The Average Variance Extracted shows the average proportion of variation explained for a construct by the measuring items. For each construct an AVE > 0.5 is needed (AVE is calculated using the formula provided).

\[
\text{AVE} = \frac{\sum K^2}{n}
\]

\[
K = \text{factor loading of every item and } n = \text{number of items in a model}
\]

Composite Reliability measures the construct's internal consistency. A CR > 0.6 value is needed to attain a construct's composite reliability. (CR is calculated using the formula in question), and the Average Variance Extracted is the average proportion of the variance explained by the construct measurement items. An AVE > 0.5 is needed (AVE is calculated using the formula provided) (Zainudin, 2014).

### Table 2. The CFA results for the measurement model.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Factor loading</th>
<th>Cronbach alpha (Above 0.7)</th>
<th>CR (Above 0.6)</th>
<th>AVE (Above 0.5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>After sales service quality</td>
<td>ASQ1</td>
<td>0.60</td>
<td>0.893</td>
<td>0.904</td>
<td>0.707</td>
</tr>
<tr>
<td></td>
<td>ASQ2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASQ3</td>
<td>0.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASQ4</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASQ5</td>
<td>0.93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASQ6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After sales service quality</td>
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</tr>
<tr>
<td></td>
<td>ASQ2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASQ3</td>
<td>0.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASQ4</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer retention</td>
<td>CR1</td>
<td>0.96</td>
<td>0.946</td>
<td>0.955</td>
<td>0.844</td>
</tr>
<tr>
<td></td>
<td>CR2</td>
<td>0.98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CR3</td>
<td>0.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CR4</td>
<td>0.78</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The findings of the reliability test indicate that all constructs have internal consistencies with Cronbach's Alpha above 0.7 [Table 2]. For each construct, the AVE values were above 0.5 values that Fornell and Larcker (1981) recommend. However, all the constructs had AVE > 0.5 [Table 2] in the current research. Similarly, as Fornell and Larcker (1981) proposed, the findings in Table 2 indicate that the composite reliability (CR) values were all above 0.7. This means that all 12 reflective items are distinct from each other in the measurement model. Discriminant validity has therefore been accomplished.

### Table 3. The discriminant validity index summary.

<table>
<thead>
<tr>
<th>Construct</th>
<th>After sale service quality</th>
<th>Customer satisfaction</th>
<th>Customer retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSQ</td>
<td>0.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS</td>
<td>0.59</td>
<td>0.85</td>
<td>0.92</td>
</tr>
<tr>
<td>CR</td>
<td>0.56</td>
<td>0.45</td>
<td>0.92</td>
</tr>
</tbody>
</table>

AVE's square root is the diagonal values (in bold), while the respective constructs are correlated by other values. The discriminant validity for all constructs is accomplished when a diagonal value (in bold) is higher than...
that of the values in its column and row. Referring to Table 3 it can also be found that the discriminant validity is achieved for all three constructs.

![AMOS output showing regression weights](image)

**Figure 2.** The AMOS output showing regression weights.

**Note:** All fitness indexes have reached the required level.

**Table 4.** The regression weights for every path estimate.

<table>
<thead>
<tr>
<th>Hypothesized path</th>
<th>Beta estimate</th>
<th>C.R.</th>
<th>P-value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS &lt;- ASSQ</td>
<td>0.682</td>
<td>6.202</td>
<td>0.001</td>
<td>Significant</td>
</tr>
<tr>
<td>CR &lt;- ASSQ</td>
<td>0.941</td>
<td>8.712</td>
<td>0.001</td>
<td>Significant</td>
</tr>
<tr>
<td>CR &lt;- CS</td>
<td>0.787</td>
<td>4.888</td>
<td>0.001</td>
<td>Significant</td>
</tr>
</tbody>
</table>

**Notes:** *p<0.05, **p<0.01, ***p<0.001.

Hypothesis one investigates the effect of ASSQ on CS. The likelihood of an absolute value of a critical proportion as high as 6.202 is lower than 0.001. In other words, at the stage of 0.001 (two-tailed), the regression weight for ASSQ in CS forecast is considerably distinct from zero. Table 4 shows a favourable (0.682) and substantial (p<0.001) path between ASSQ and CS. In addition, the standardized coefficient of path shows how change in ASSQ relates to change in CS. This implies that if ASSQ increases by each unit; CS would have a shift of 0.682 unit. Therefore, the hypothesis was endorsed. Thus, it can be deduced that ASSQ in Game Store Kano has a substantial effect on CS. This connection has been endorsed by many literature (Shaharudin et al., 2009; Fazlzadeh et al., 2011; Mustofa, 2011; Khan, 2012; Shuqin and Gang, 2012; Maghsoudlou et al., 2014; Wong et al., 2014; Gupta and Rati, 2015). The outcome of this research is contrary to Angelova and Zekiri (2011) study of applying the ACSI model in the Macedonian mobile telecommunications industry in the context of SQ. It was discovered that the customers perceived SQ was not fulfilling, that expectations are greater than perceptions. As a consequence, customers are also not happy with the service.
This study's second hypothesis examines the effect of ASSQ on CR. The likelihood of an absolute value of a critical proportion as high as 8.712 is lower than 0.001. In other words, at the stage of 0.001 (two-tailed), the regression weight for ASSQ in CR forecast is considerably distinct from zero. Table 4 above demonstrates a favourable (0.941) and substantial (p<0.001) path between ASSQ and CR. The outcome shows that the higher the ASSQ, the higher the CR. In addition, the standardized coefficient of path demonstrates how change in ASSQ relates to change in CR. For the path between ASSQ and CS, the standardized coefficient was 0.941, which suggests that ASSQ has a substantial effect on CR. The second hypothesis was therefore endorsed. Thus, it can be found that ASSQ favourably affects CR in Game Store Kano. In this scenario, the hypothesis supports other researches (Oko and Onuoha, 2013; Mishra, 2014; Boafo, 2015).

The third hypothesis of this study determine the effect of CS on CR. The likelihood of an absolute value of a critical proportion as high as 4.888 is lower than 0.001. In other words, at the stage of 0.001 (two-tailed), the regression weight for CS in CR forecast is considerably distinct from zero. Table 4 demonstrates a favourable (0.787) and substantial (p<0.001) path between CS and CR. The outcome shows that the higher the CS, the higher the CR. In addition, the standardized path coefficient indicates how change in CS relates to CR. For the path between CS and CR, the standardized coefficient was 0.941, which suggests that CS has a substantial effect on CR. Therefore, the third hypothesis was endorsed. Thus, it can be deduced that the CS has a substantial effect on CR in Game Store Kano. The study outcome is in line with other researches in same field (Khan, 2012; Ladokun et al., 2013; Boafo, 2015).

5. CONCLUSION & POLICY IMPLICATION

This research examined the effect of ASSQ on CS and CR with special regard to Kano Game Store. This research discovered that CS of ASSQ was significantly independent and joint predictors. The finding also demonstrates that the ASSQ affects CR significantly. The findings of this research also confirm that a key factor influencing CR is CS. It can be concluded on the basis of this study that ASSQ and CS are important variables affecting CR. Customers are shown to rely on the timely delivery of the products, the reaction of the installation to be included in the specification and requirement, and the assurance of good quality products that are guaranteed for a certain period of time. When looking professionally and effectively at all these three variables, CS is of paramount significance in building a profitable connection with the current customer and attracting prospective customers to patronize the products. This link will create a significant loyal customer base that would provide a competitive edge for future survival for the business.

In order to enhance customer service efficiency and effectiveness, it is vital for the business to adopt outstanding ASS management. The business should not delay the declaration of a customer and try to fulfil its obligations by repairing or replacing it with a new item. Such integrated functional activities should be continually enhanced to produce high-quality products and services that, in turn, will contribute to higher CS and trust, and it is also essential that organizations should address customer dissatisfaction in time, quality, and cost by commonly evaluating customer satisfaction. Finally, if all of the above recommendations are handled and taken into account, this will result in positive CR.

5.1. Study Limitation

There is no how a research will be conducted without facing some kind of obstacles. Therefore, this study won’t be an exception, the obstacles this study face are in terms of data collection from respondents, and time constraint while conducting the study because the time of the study was too limited that is why the study scope was limited and other variables are not inculcated in the study that could have add more value to the study.
5.2. Suggestions for Future Researchers

For future studies, this research work indicates several line of achievement. First, future researchers should expand the scope of the study. Secondly, for comparative purposes, future researchers in other areas of Africa, Asia, Europe and other regions in the world should or may conduct the same research. Third, in developing CR model, the determination coefficient measures the percentage of variance in y explained by x is useful for this innovative study. However, potential researchers should begin where the study ends and look for other predictive factors and mediating variable or add moderating variable to the study to enhance the study result.

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REFERENCES


Fornell, C. and D.F. Larcker, 1981. Structural equation models with unobservable variables and measurement error: Algebra and statistics. Journal of Marketing Research: 382-388.


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