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The use of after-sales service as a business competitive tool for customer retention and loyalty in crisis situation: A sectoral study of building materials enterprises in Bamenda Metropolis Cameroon

Kriz durumunda müşteriye elde tutma ve sadakat için ticari rekabet aracı olarak satış sonrası hizmetin kullanımı: Bamenda Metropolis Kamerun'daki yapı malzemeleri işletmelerinin sektörel bir çalışması

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ÖZ

Bu çalışmanın amacı Bamenda Metropolis'teki yapı malzemeleri işletmeleri tarafından müşteri sadakati oluşturmak ve COVID 19 karşısında müşteriye elde tutukmak için satış sonrası hizmeti bir ticari rekabet aracı olarak kullanmanın etkinliğinin araştırılmasıdır. Bu çalışmanın varsayımsal ilişkisi şu şekilde oluşturulmuştur: devam eden krizle birlikte satış sonrası hizmetin (garanti, kurulum hizmeti, bakım hizmeti ve teslimat hizmeti) müşteriye elde tutma ve sadakat üzerinde anlamlı bir etkisi mevcut olmayabilir. Belli bir amaç için seçilen 47 işletmeden oluşan bir örneklem için anket araştırması ile hem nitel hem de nicel veriler toplanmış ve analiz edilmiştir. Analiz için tanımlayıcı istatistikler kapsamında ortalama ve standart sapmadan ve regresyon analizinden yararlanıldı. Veri analizinden elde edilen beta katsayılarına dayalı olarak oluşturulan regresyon modeli, $Y = 4.771 + 0.333x_1 + 0.608x_2 + 0.378x_3 + 0.813x_4$ olarak ifade edilmiştir. Bu nedenle çalışmada, teslimat hizmetinin kalitesinin müşteri sadakati ve müşteri sadakati yaratmada ve sağlamada en etkili faktör olduğu sonucuna varılmıştır. Bu nedenle çalışma, bu sektörde faaliyet gösteren yöneticilerin özellikle garanti ve bakım hizmetiyle ilgili olarak hizmetlerinin kalitesini artırmaları konusunda pratik tavsiyeler sunmaktadır. Bu durum, garanti sürelerinin uzatılması ve ayrıca müşteri şikayetleri alındığında onarımlar için hızlı ve zamanında yanıt verilmesi yoluyla sağlanabilir.

ABSTRACT

The purpose of this study was to investigate if the use of after-sales service as a business competitive tool by building materials enterprises in the Bamenda Metropolis to create customer loyalty and ensure retention in the face of COVID 19 has yielded fruits. The hypothetical relationship guiding this study was that with the ongoing crisis after-sales service (warranty, installation service, maintenance service and delivery service) may not significantly influence on customer retention and loyalty. Using the survey research design with a sample of 47 purposefully selected enterprises both qualitative and quantitative data was collected and analyzed. Analysis made use of mean and standard deviation for descriptive statistics and regression analysis for inferential statistics. Based on the beta coefficients from data analysis, the generated study regression model was stated as $Y = 4.771 + 0.333x_1 + 0.608x_2 + 0.378x_3 + 0.813x_4$. The study thus concluded that the quality of the delivery service was the most influencing factor in creating and ensuring customer loyalty and retention. The study thus provides practical advice that managers operating in this sector should step up the quality of their offer especially as concerns warranty, and maintenance service. This may be through increasing warranty periods as well as ensuring quick and timely response for repairs when customers complaints are received.

1. Introduction

The business environment today is highly competitive with focus on satisfying and winning customer loyalty and

retention. To achieve this, organizations are engaging in varied activities to ensure that quality services and products are provided to their customers. After-sales service is one of the main business competitive tools used in the 21st century

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for creating customer retention and loyalty. According to Ladokun, Adeyemo and Ogunleye (2013), after-sales service is the interaction between the customer and the service provider which is continuous post purchase with the objective of helping the customer realize or attain maximum satisfaction from the product.

In Cameroon, there is increasing attention paid by customers to quality construction materials. Unfortunately, the high challenge in determining with certainty the quality of building materials has significantly affected loyalty. Thus companies dealing in construction materials are gradually engaging in after-sales service as a way to win customer loyalty. As observed by Faizan, Nawaz, and Khan(2011), Ibojo, Olawepo, and Akinruwa (2013), Ibojo (2015), repurchase intentions are guaranteed when after-sales service resulted in a satisfied customer.

The advent of COVID 19, coupled with the sociopolitical crisis ongoing since 2016 and its significant negative effects resulted in a more weakened economy, thus reducing the number of construction activities notably in the city of Bamenda. This resulted in fewer customers buying construction materials hence high competition among companies selling building materials to gain the few available customers. In this respect, most companies selling building construction materials were forced to intensify after-sales services in order to win customer loyalty and hence continue to make business gains in the midst of the crisis.

Against this background, this study focuses on examining if the after-sales service approach utilized by building materials enterprises in the Bamenda Metropolis to create customer loyalty and ensure retention in the face of COVID 19 is yielding fruits. To achieve this purpose, this study identified warranty, delivery, installation and repairs as the main after-sales services likely to be provided to customers

2. Literature Review

2.1. After-sales service

After-sales service basically deals with the post purchase interaction between the product seller and the customer (Ladokun et al., 2013). These interactions are governed by an after-sales service contract commonly called warranty. Research upholds that the warranty terms highly affects customers with higher warranty periods and other benefits like delivery, installation and repairs contributing significantly to the qualitative reading given by customers to the after-sales service in at institution (Muhammed, 2011; Ladokun, Adeyemo & Ogunleye, 2013).

Apparently, there is strong evidence suggesting that after-sales service equality is an integral business success factor as it increases and builds customer retention and loyalty, providing an opportunity for a sustainable client based relationship (Kurata & Nam, 2010; Ahn & Sohn, 2009). It can thus be argued that enterprises offering quality after-sales service may easily withstand crisis period. This study

builds on this belief and focuses on examining how the use of after-sales service with the advent of COVID 19 affected business performance through creating and ensuring customer retention at loyalty at various building materials enterprises in the Bamenda Metropolis in Cameroon.

Evidently, after-sales service is the main business competitive tool used to differentiate offers especially where products are physically comparable (Ruben, 2012). The game changer in such situations lies fully on the extent and quality of the after-sales service offered. This has been supported with research works in varied industries (Muhammad, 2019; Alireza, Fatemeh & Pegah, 2011; Shaharudin, Yusuf, Elias & Mangor, 2009). This study focuses on the building materials sector where products are physical comparable and thus uses the Bamenda Metropolis as a case study for analysis to uncover how after-sales services has played on customer retention and loyalty in the face of COVID 19.

Generally, it may be argued on the basis of Cohen, Agrawal and Agrawal, (2006) and Cohen and Whang, (1997) that providing excellent after-sales service may help building materials enterprises in the Bamenda Metropolis to establish sustained relationships with customers hence building loyalty.

In this study, after-sales service is captured through warranty, delivery, and installation and repairs services provided by the building materials enterprises in the Bamenda Metropolis to its customers. The extent and the quality of the service in the customers reading is therefore of central importance in this study.

2.2. Customer Retention and Loyalty

Business growth and success appears to be highly dependent of an organizations' ability to create and ensure customer retention and loyalty. As noted by Nasir, Mushtaq and Rizwan, (2014), through the provision of excellent after-sales service, an enterprise can effectively create, maintain and improve customer loyalty and hence customer retention. For sure, after-sales service in its varied forms remains the game changer as concerns customer retention and loyalty. For example Loomba, (1996) argues that through providing a quick response in the case of a breakdown or even replacing the product can significantly create and ensure customer retention and loyalty.

Given that business growth builds on maintaining customers while at same time attracting new ones, (Murali, Pugazhendhi, & Muralidharan, 2016; Muhammad, 2019). Thus by creating superior value for the customer, long term relationships that enhance customer loyalty can be built. Hence this study argues that through offering quality after-sales services, superior value can be created for customers as hence resulting in high customer retention and loyalty which can be beneficial to an enterprise especially during crisis period.

According to Oliver (1999) loyalty is "an extremely assurance of a liked product, brand, or service to re-purchase, re-patronize, or continuously buy in the future." Building on Oliver (1999) and upholding Shahrouzifard and

Faraji, (2016) argument that, customers are the most valued asset of an organization, this study argues that ensuring customer satisfaction should be at the center of all after-sales service activities. Hence if customer satisfaction is achieved, retention and loyalty will follow suit.

3. Conceptual Framework

Creating loyalty and ensuring customer retention is key to business success. Research upholds that quality after-sales service significantly plays of customer loyalty and retention. Therefore, in crisis situation companies providing quality after-sales service may stand a better chance of surviving. As noted by Wahjudi and Kwanda (2018), through after-sales service, enterprises can obtain valuable information on customer needs which may help them restructure their after-sale activities hence resulting in increased customer satisfaction with the consequent of creating loyalty and increasing customer retention.

However, after-sales service in itself does not necessary translate to creating customer loyalty and ensuring retention. The mediating role of customer satisfaction is the critical success factor necessary to achieve customer loyalty (Gorondutse & Hilman, 2014; Wahjudi & Kwanda, 2018; Lin & Wang 2006; Aktepe, Ersöz, & Toklu, 2015) This implies that customer loyalty and customer retention can only be achieved if the after-sales service was of value added and gave the customer the desired utility.

Apparently, the more a customer is satisfied with after-sales service rendered, the higher the chances that such a customer will be loyal to an enterprise and hence highly retention likelihood for the enterprise. This implies that after-sales service plays on loyalty and customer retention through a customer satisfaction. According to Anderson and Mittal (2000), customer satisfaction has two components - Transaction-specific customer satisfaction which is the evaluation for a specific purchase transaction and Cumulative customer satisfaction which applies to the appraisal based on the total purchase and usage of goods or services over a period of time. The transaction experience in these situations is highly associated to the nature and quality of after-sales service rendered.

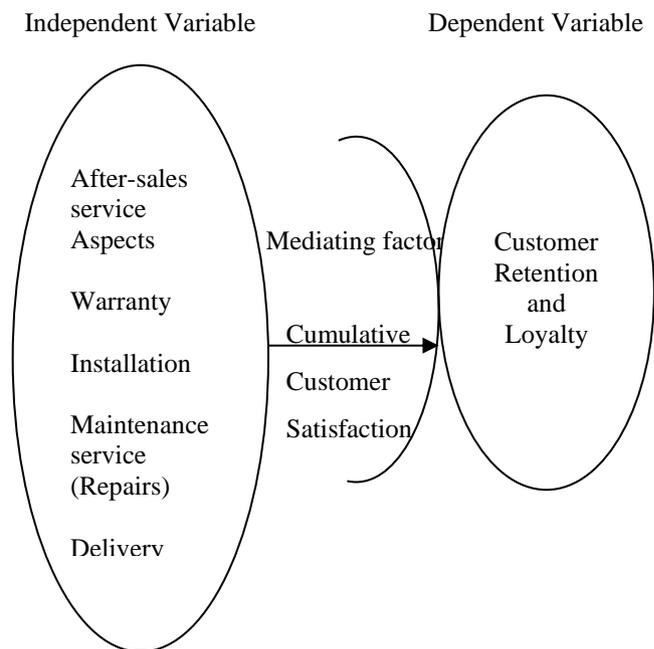
Based on the above review, the hypothetical relationship guiding this study was developed that with the ongoing crisis after-sales service (warranty, installation service, maintenance service and delivery service) may not significantly influence on customer retention and loyalty at the selected building materials enterprises in the Bamenda Metropolis in Cameroon. With this hypothetical assumption, the conceptual framework of the study incorporated cumulative customer satisfaction as the mediating factor and was developed as seen below.

3.1. Significance of the study

Given that literature has focused more on after-sales and customer satisfaction, this study filled a research gap by

focusing on customer loyalty and retention while observing with customer satisfaction as a mediating factor. Further, research works have been focused more on service sectors and foreign based. Thus by conducting this study in the building materials industry in Cameroon, this study bridges an existing gap, thus contributing significantly to the existing body of knowledge on the subject area after-sales service and customer retention and loyalty in the context of the Cameroonian market landscape.

Fig. 1. Conceptual Framework of the study



4. Methodology

This study utilized the survey research design employing both qualitative and quantitative techniques for data collection and analysis. A self-designed questionnaire was used in collecting data from the study participants. The study population covered building materials enterprises in the Bamenda Metropolis in Cameroon. The sample size utilized in this study was 47 enterprises purposefully selected on the basis of presence and size in the Bamenda metropolis.

The questionnaire used for data collection was developed based on scoring system; with respondents given a selection choice per question ranging from 1 to 5 where 1 denoted the smallest score value and 5 denoted the highest score value. Open ended questions were also included in the questionnaire to give respondents the opportunity to express their ideas fully.

The calculated split half reliability coefficient of 0.81 confirmed the reliability of data collection instrument used in this study. Further, the test-re-test method and member checking were used to ensure data reliability and validity. It is worth noting that the study participants willfully accepted

to participate and this apparently resulted in higher reliability and validity of the data.

b_1, b_2, b_3, b_4 = beta coefficients to be determined

Table 1. Descriptive Statistics on Nature of After-Sales Service and Customer Loyalty and Retention

| Measure | N | Min | Max | Mean | StdDev |
|---------------------------------------|----|-----|-----|-------|--------|
| Warranty period given | 47 | 1 | 5 | 3.888 | 1.184 |
| Installation services rendered | 47 | 1 | 5 | 4.043 | 1.061 |
| Maintenance /repairs services offered | 47 | 1 | 5 | 4.106 | 1.075 |
| Delivery services rendered | 47 | 1 | 5 | 3.868 | 1.151 |

Data collection was focused on the main study variables with the independent variable after-sales service captured in this study using warranty, delivery, repairs/maintenance and installation. The dependent variable customer loyalty and retention was captured in terms of the number of repeated purchases and recommendations made to friends.

In each enterprise, questionnaires were administered to 10 customers whose single purchase was valued at least 5million FCFA. This implies that customers whose purchases were below the value 5million FCFA per purchase were eliminated from the study. Data collected from these 10 customers in each enterprise was treated to become the representative information for the enterprise hence each enterprise ended up having one completed questionnaire which was an averaged reading of the responses from all the 10 clients. This approach was used given the challenging situation in the metropolis as construction projects were low. Thus as opposed to other methodologies that make use of individual customers, only customers with high purchases were considered as these were considered as those keeping the enterprises operational in Bamenda despite the challenges. Similarly, each enterprise was treated as a single unit as opposed to other studies where individual customers are individual units.

Data analysis made use of both descriptive and inferential statistics. Descriptive statistic was done using means and standard deviation. Inferential statistics made use of regression analysis as the analytical technique to test the assumed hypothetical relationship. The functional expression guiding analysis was expressed as:

$$Y = f(x_1, x_2, x_3, x_4)$$

On the assumption of linear relationships the explicit regression model for this study was expressed as follows:

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4$$

Where:

Y = customer loyalty and retention

x_1, x_2, x_3, x_4 = warranty, installation, maintenance service (Repairs) and Delivery service respectively.

The apriori anticipation was that x_1, x_2, x_3, x_4 , are expected to have either a positive or negative effect on customer loyalty and retention. The sign of their respective coefficients therefore may be either positive or negative.

5. Results and Discussion

5.1. Descriptive statistics

After-sales service and customer loyalty and retention

In order to establish the qualitative nature of the relationship between after-sales service and customer loyalty and retention, customer perceptions were gathered and analyzed using mean and standard deviation.

Warranty was captured through looking at the length of the warranty period, warranty implementation extent and the time taken to have defected products replaced. Installation was captured through the extent of services rendered in terms of even doing sending technicians to help or in giving technical advice to facilitate the installation process. Maintenance/repairs focused on the length of time it takes for products to be repaired in case the customer complains of a defect as well as the cost borne by the customer. On its part, delivery service was captured through reliability of delivery time and the maximum distance covered by the delivery service. The results were summarized as seen in the table below.

Apparently, customers who have been buying items from the selected building materials enterprises sampled since the advent of COVID 19 have been satisfied with the quality of after-sales service rendered to them by the enterprise.

From Table 1, results indicate that Warranty period given ($\mu=3.888, s=1.184$), Installation services rendered ($\mu=4.043, s=1.061$), Maintenance repairs services offered ($\mu=4.106, s=1.075$), and Delivery services rendered

Table 2. Model Summary

| Model | R | R Square | Adjusted Square | R Std. Error of the Estimate | Change Statistics | | | | |
|-------|-------------------|----------|-----------------|------------------------------|-------------------|----------|-----|-----|---------------|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .857 ^a | .734 | .708 | .861 | .734 | 28.925 | 4 | 42 | .000 |

a. Predictors: (Constant), Delivery Service, Maintenance service, Installation Services, Warranty

($\mu=3.868, s=1.151$), effectively showed customer challenges and contributed in Creating loyalty and ensuring customer retention. This thus positively affected business

performance in the phase of COVID 19 and thus may justify why the operations of the selected big building materials enterprises in the Bamenda metropolis have continued.

Inferential Statistics and Test of Hypothetical Relationship

The hypothetical relationship in this study opined that the independent variable after-sales service captured in this study using warranty, delivery, repairs/maintenance and installation had an effect on the dependent variable customer loyalty and retention captured in terms of the number of repeated purchases and recommendations made to friends. To test this relationship, regression analysis were employed. The model summary is as seen below in Table 2.

From Table 2 above, the coefficient $R = 0.857$ indicates that the study is a good predictor. The findings show that the independent variable captured through Delivery Service, Maintenance service, Installation Services, Warranty,

customer retention at the 47 sampled building materials enterprises in the Bamenda Metropolis, multiple regression analysis was done. Comparisons were made based on the Further, results in Table 4 as well, show a positive relationship existing between installation service and customer retention and loyalty. This is specified by the regression coefficient of 0.608 . This also showed a significant relationship between the variables as shown by a p-value of 0.008 which is less than 0.05 alpha level. Based on this finding the null hypothesis that installation service has no significant influence on customer retention and loyalty of 47 sampled building materials enterprises in the Bamenda metropolis is rejected to the favour of the alternative hypothesis upholding that installation service has a positive and significant influence on customer retention and loyalty at the 47 sampled building materials enterprises in the Bamenda metropolis . These findings align with the view points of Muhammad, (2019), Alireza *et. al.*, (2011) and Shaharudin *et. al.*, (2009).

Concerning the effect of maintenance service and customer retention and loyalty, a positive relationship is observed with regression coefficient value of 0.378 and a p-value of

Table 3. Variance Analysis

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 85.699 | 4 | 21.425 | 28.925 | .000 ^b |
| | Residual | 31.110 | 42 | .741 | | |
| | Total | 116.809 | 46 | | | |

a. Dependent Variable: Customer Retention and Loyalty

b. Predictors: (Constant), Delivery Service, Maintenance service, Installation Services,Warranty

contributed to 70.8% of the variation in customer retention and loyalty. Thus other variables accounted for just 29.2% of the variations.

Variance analysis as can be seen from Table 3 above shows a p value of .000 which is less than the 0.05 alpha level. This implies that the regression model is significant in predicting the relationship between after sales services and Customer Retention and Loyalty. From the F-test table, the tabulated value for $F (5\%, 4,42)$ is 2.594 which was less than 28.925 meaning that the model was statistically significant.

To better capture how the different components of the independent variable contributed to ensuring loyalty and

0.009 which is less than 0.05 alpha level. Based on this, the null hypothesis is rejected thus upholding that Maintenance service has a positive and significant influence on customer retention and loyalty at the 47 sampled building materials enterprises in the Bamenda metropolis.

A positive relationship with regression coefficient of 0.813 and p-value of 0.001 is observed between delivery service and customer retention and loyalty from Table 4. Thus, the null hypothesis that delivery service has no significant influence on customer retention and loyalty of 47 sampled building materials enterprises in the Bamenda metropolis is rejected.

Table 4. Multiple Regression Analysis

| Model | Coefficients (Unstandardized) | | Coefficients (Standardized) | t | Sig. | 95.0% Confidence Interval for B | |
|--------------------------|----------------------------------|------------|--------------------------------|-------|------|---------------------------------------|----------------|
| | B | Std. Error | Beta | | | Lower Bound | Upper Bound |
| (Constant) | 4.771 | 1.034 | | 4.614 | .000 | 2.684 | 6.858 |
| Warranty | .333 | .141 | .264 | 2.361 | .023 | .048 | .618 |
| Installation Services | .608 | .218 | .306 | 2.782 | .008 | .167 | 1.049 |
| Maintenance service | .378 | .138 | .247 | 2.742 | .009 | .100 | .657 |
| Delivery Service | .813 | .236 | .316 | 3.438 | .001 | .336 | 1.290 |

a. Dependent Variable: Customer Retention and Loyalty

Based on the regression analysis, it can thus be argued that the dependent variable customer loyalty and retention is greatly influenced by the independent variables: warranty, delivery, repairs/maintenance and installation. The study

regression model can thus be stated as:

$$Y = 4.771 + 0.333x_1 + 0.608x_2 + 0.378x_3 + 0.813x_4$$

where Y is the dependent variable (customer loyalty and retention), x_1 is Warranty, x_2 is Installation Services, x_3 is Maintenance service and x_4 is Delivery Service. Note needs be taken here that this study findings have aligned with findings of other authors (Muhammad, 2019; Alireza *et. al.*, 2011; Shaharudin *et. al.*, 2009; Murali, *et. al.*, 2016; Muhammad, 2011) across the world, thus confirming the importance of after-sales service as a business competitive tool.

6. Conclusion

Based on the beta coefficients from the regression model $Y = 4.771 + 0.333x_1 + 0.608x_2 + 0.378x_3 + 0.813x_4$, the study concludes that the quality of delivery service was the most influencing factor in creating and ensuring customer loyalty and retention at the 47 sampled building materials enterprises in the Bamenda metropolis. Other influencing factors in order of importance are Installation Services, Maintenance service and then Warranty.

It is clear that warranty and maintenance service contributions to customer retention and loyalty at the 47 sampled building materials enterprises in the Bamenda metropolis though positive are weak. The study thus provides practical advice that management should step up the quality of the offer in these areas. This may be through increasing warranty periods as well as ensuring quick and

timely response when repairs when customers complain.

As usual, this study had some limitations notably: the fact that it made use of only 47 enterprises, reaching only 470 customers and further just a segment of its customer base. This implies that much data could not have been captured as the experiences of customers making purchases of less than 5million FCFA have not be studied. Also, the study excluded pre-purchase and post-purchase factors such as belonging to same ethnic group or tribe, availability of credit among other factors that influence customer loyalty as well. More still, the study focused on using customer satisfaction as the only mediating factor failing to include other mediating factors like cultural affiliations and groupings.

Given the limitations and findings, this study recommends that future research should focus on investigating the dissatisfaction factors occurring or associated with after-sales service at the building materials enterprises in the Bamenda metropolis. Also, a comparative study on the quality of after-sales service may be conducted to establish the extent to which after-sales service contributes to creating and ensuring customer loyalty and retention among the different enterprises dealing in construction materials in the Bamenda Metropolis. Such a study may provide insights to uncover which enterprises are provided more value added through after-sales service quality. Further, the study recommends that a holistic study investigating how both pre and post purchase factors affect customer loyalty and retention.

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