

## MEDIATING EFFECT OF CUSTOMER SATISFACTION ON SERVICE QUALITY AND CUSTOMER LOYALTY IN NIGERIAN INFORMAL SECTOR

By

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### ABSTRACT

*Loyalty has become one of the most strategic and sustainable goals of businesses which any business organizations dream to attain. Customer loyalty is a key variable that inspire corporate businesses to compete in order to gain competitive advantage and continuous patronage against their competitors. The purpose of this paper is to investigate the mediation effect of customer satisfaction in the relationship between service quality and customer loyalty in the non-formal sector of the Nigeria economy. The study considered the informal business sector comprising of hair salons, auto repairs, tailoring and masonry in Jos and Bukuru metropolis of Plateau state Nigeria with emphasis on tailoring and auto repairs as the unit of analysis. The sample size of the study is derived by applying the Yamane sample size formula of 1967; the research arrived at 372 as the minimum sample size for the study. Data was collected from a questionnaire survey and analyzed using ADANCO 2.1.1 to test the hypotheses. Findings from the study reveal that customer satisfaction mediates service quality and customer loyalty. Service quality and customer satisfaction also have direct relationship with customer loyalty. This applies that business is not the only factor that can directly affect customer loyalty, but must first go through customer satisfaction. This means that businesses must first understand what the customer needs and service quality to be provided in other to attract customer loyalty when the level of satisfaction is resolved. The study recommended that, service quality offered by this sector needs to be improved upon to enhance customer satisfaction and loyalty.*

**Keywords:** Service quality, Customer satisfaction, Customer loyalty, Informal sector

### 1.0 INTRODUCTION

Businesses depend on the continuous patronage of their customers not to only succeed in the short term but to also remain sustainable over the long term. In this regard businesses, especially service providers like auto repair shops, hair salons, tailoring and masonry must come up with enduring plans that meet with or even exceed the expectations of their customers to continue to remain relevant in the business (Belz & Peattie, 2012). The informal sector in Nigeria as earlier mention above hardly retain customer due to improper service delivery. Therefore, the study aims at investigating customer's loyalty in the informal sector. (Danish & Humayon 2018; Zhang & Wei, 2018) Due to intense competition, sophisticated nature of customers, flexible and unpredictable demand and similarity of services offered by auto repair shops and tailoring shops, enhanced service quality to satisfy customers is regarded as the main concern to retain loyal customers in Nigeria.

Over time especially in the 1980s, the subject of service quality has attracted diverse empirical research work to find out its impact on customer satisfaction and loyalty (Cahyono et al., 2020). There are many studies examine the effects of service quality on customer satisfaction and trust; customer satisfaction and trust on customer loyalty. Gimenez Garcia-Conde, Marin, and Ruiz de Maya, 2016, came up with such models as the Technical and Functional Quality Model. Many studies examine effects of service quality on customer satisfaction, customer loyalty and trust in different areas such as the banking sector and large organizational setting (Talebi et al., 2012; Kranias & Bourlessa, 2013; Khan & Fasih, 2014; Hidayat, Akhmed & Machmud, 2015) ADSL Technology (Rizka & Widji, 2013), Branding (Ashraf et al., 2018), Hospitality (Naing et al., 2019), sport (Aghaei & Elahi, 2019), healthcare (Hashem & Ali, 2019), retail industry (Ivanauskiene & Volungenaite, 2014). They came up with such models as the Technical and Functional Quality Model (Gimenez Garcia-Conde, Marin, & Ruiz de Maya, 2016), SERVQUAL (Brogowicz, Delene, & Lyth, 1990), and SERVPERF (Priporas et al., 2017) all in a bid to find the meeting point of quality and satisfaction in service industries like tourism, hospitality, banking, health, telecommunications, transportation and insurance (Nguyen, Nguyen, Nguyen, & Phan, 2018). The study of (Cahyono 2020) concluded that service quality has a significant effect on student loyalty and satisfaction has a significant effect on student loyalty. Scholars have also agreed that to be competitively relevant every business must pay attention particularly to its service quality which in turn leads to continued patronage due to customer satisfaction and ultimately to customer loyalty thereby building an effective relationship (Setiawan & Sayuti, 2017). Therefore, when it comes to a business relationship between all stakeholders the desirable outcome beneficial to all is that of loyalty as in itself it shows that the right outcome is being achieved, the business enjoys a favorable disposition of the customer and subsequently guarantees consistent revenues for the business (Mandhachitara & Poolthong, 2011). For these reasons that relationship marketing especially as espoused in its service quality dimension has come to be treated with such importance as it is a market differentiator that adds an edge to a company's competitiveness.

However, these models brought forth by scholars have been variously employed in carrying out further studies (Famiyeh, 2018; Park, Lee, Kwon, & del Pobil, 2015) in the aforementioned service industries that had helped to throw more insights on the relationship marketing dimensions of service quality, customer satisfaction and loyalty; All of these studies dwelt on formalized businesses leaving out the important informal sector that forms the fulcrum of any economy especially a developing one like Nigeria. This sector which is described as including all unregulated economic endeavors that are not sufficiently under supervision of formal agencies of government (Becker, 2004), that are characterized by low capital, low level of skills/education required by operators, small inputs and subsequent outputs, and a high level of labor intensiveness (Onwe, 2013). Pioneer economists like Lewis W. Arthur had assumed that as economies develop the informal sector comprised of such diverse small-scale business activities like auto repairs, hair salons, tailoring and masonry would simply disappear and fritter away in the face of more organized and highly capitalized corporations. On the contrary, the sector has not only remained resilient but has become a major contributor to GDP of developing economies accounting for 80% of new jobs in Africa, a major provider of consumables especially for the lower class (Becker, 2004), engaging retrenched/retired people as a result of structural adjustments/globalization and a convenient avenue for entrepreneurial minds (Onwe, 2013). Li Chao (2016) finds that the perceived value

of customers plays a complete mediating role in the positive and indirect effects of personalized service on customer loyalty; the third is the five dimensions of service quality, respectively, have an impact on customer loyalty levels. Li Yan (2014) believes that it can be divided into six aspects, customer satisfaction as the middle of the variable, responsiveness, functionality and credibility have a significant positive impact on customer satisfaction and customer loyalty

This work, therefore, sets out to fill the gap left by other studies on the concepts of service quality, customer satisfaction, and customer loyalty as they relate particularly to the non-formal sector of the Nigerian economy. Two similar studies carried out in Nigeria (Izogo & Ogba, 2015) and in Ghana (Famiyeh, 2018) dwelt on the context of automobile repair shops and employed the SERVQUAL dimensions to arrive at their findings. This study is on its part is contextualized within the entire non-formal sector which also includes auto repair shops, hair salons, tailoring and masonry with respondents drawn from anyone who has ever used any form of those service within the sector and so it is expected to come with more generalized findings. This study aims to investigate the mediation effect of customer satisfaction in relationship with service quality and customer loyalty in the non-formal sector of the Nigeria economy. The study uses descriptive research design based on a cross-sectional survey questionnaire approach. Primary data was gathered through a self-administrated questionnaire which was modified to better fit the context of this study. Furthermore, this research was conducted in order to further understand which variable played a bigger and more important role in affecting customer loyalty in the non-formal sector.

## 2.0 LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### 2.1 Model Building

This study reviews the previous scholars’ research on service quality, customer satisfaction and customer loyalty. It is reference “Empirical Study on the Impact of Service Quality on Customer Loyalty in Chinese Chain Catering Industry” (Lihua Wei, 2013) and “Empirical Study on the Impact of Supermarket Service Quality on Customer Loyalty” (Shuwei Tang, 2013), the construction model is as shown in the following Fig. 1.

**Fig 1:** Research Model





## 2.2 Hypotheses Development

Hypotheses of the study are following:

- H<sub>1</sub> - Service Quality positively influences Customer Satisfaction
- H<sub>2</sub> - Customer Satisfaction positively influences Customer Loyalty
- H<sub>3</sub> - Service Quality positively influence Customer Loyalty
- H<sub>4</sub> - Customer satisfaction mediates the effect of service quality on customer loyalty

## 2.3 Theoretical Review

This study is guided by relationship marketing theory. It outlined how the theory and the model were employed in the study.

## 2.4 Relationship Marketing Theory

Relationship marketing theory states that successful relationship marketing is occasioned by certain aspects of cooperative relationships that characterize successful relational exchanges (Arnett & Badrinayanan, 2005). The theory suggests that successful relationship marketing efforts enhance customer loyalty and firm's performance through stronger relational bonds (Sirdeshmukh, Singh, & Sabol, 2002). There are diverse perspectives about which relational constructs mediate the effects of relationship marketing efforts on outcomes. Besides commitment, trust and communication, satisfaction and quality service have been identified as vital components of relationship marketing orientation (Sin et al., 2005; Eisingerich & Bell, 2006). Relationship marketing theory is adopted in this study to explain the link between the various components of relationship marketing (particularly service quality, customer's satisfaction) and customer loyalty.

Therefore, the advancement of relationship marketing indicates an important movement in the truism of marketing, the basic aim of relationship marketing is to improve the marketing output through attaining effectiveness and efficiency (Sheth & Sisodia, 2000). Several relationship marketing tactics enable efficiency, for example, efficient consumer response (ECR), customer retention and the allocation of resources among the marketing actors. Several studies have adopted the loyalty model regarding the service quality, customer satisfaction and customer loyalty in the service industry. In proposing the relationships between the service quality, the customer satisfaction and customer loyalty, this study applied the approach proposed by Choi and Kim (2013). Choi and Kim (2013) developed a model in which the influence of the service quality on customer satisfaction was investigated, revealing that the outcome quality had a direct effect on customer satisfaction. It was also concluded that customer satisfaction was a mediator variable between service quality and customer loyalty. Liat and Abdul-Rashid (2013) provided a model of customer loyalty in the hotel industry in which loyalty was affected by satisfaction, while satisfaction was influenced by the process and outcome quality. Liat and Abdul-Rashid (2011) found that customer satisfaction mediated the relationship between the process and outcome quality with customer loyalty.

Relationship marketing theory is adopted in this study to explain the link between the various components of relationship marketing (particularly service quality, customer's satisfaction) and customer loyalty. The theory of relationship marketing is related to this study base on adoption of its dimensional model with key factors underlying the variable of this study (Service Quality, Customer Loyalty and Customer Satisfaction). In this study, TRM is used for explaining the relationship of the variables. Though no study known to us has applied this framework to CS in the informal sector, we contend that since several of its dimensions have been successfully tested for significant relationship with or effect on related sectors.

#### 2.4.1 **Customer Satisfaction**

Customer satisfaction is customer expectations which are strategy and this strategic component is very important, it compels customers towards a particular product or services (Danish et al., 2018). If the relationship is negative, more chances of switching the customer to another supplier (Fraering & Minor, 2013). Satisfaction is the awareness of each person separately. These feelings are plagiaristic by comparing expected service with perceived service. (Ratanavaraha et al., 2016). Customer satisfaction is individual person reaction toward particular product when compare the performance of the product with any person expectation (Leong, Hew, Lee, & Ooi, 2015). Customer satisfaction considered psychosomatic state reaction of customer when its emotion about expectations not positive in near future (Naing et al., 2019).

#### 2.4.2 **Customer Loyalty**

The approach based on behavior, loyalty is the behavioral reaction based on influence as the function of psychological processes by the decision-maker in the existence of one or more alternative in time (Jacoby & Keyner, 2007). According to Gounaris and Stathakopoulos (2004), there are four types of loyalty based on purchase, social effect and emotional devotion to the brand. Loyalty is a psychological condition related to behavior toward a product, consumers form their beliefs, whether they like it or not, and decide whether they want to buy the product or not (Hasan, 2008). In business, customer loyalty plays an important role in a business as maintaining customer's means of improving performance and maintaining the viability of the business (Hashem & Ali, 2019). It is the main reason for businesses to maintain their customers. To obtain the consumer's loyal several stages are starting from obtaining potential customer until obtaining partners.

#### 2.4.3 **Service Quality**

Quality has varied definitions such as "fit for use," "fulfilment of requirements," and "variation" (Kotler, 2007). The American Society for Quality (Kotler & Keller 2007) defines quality as the totality of features and characteristics of a product or service that bear on its ability to satisfy expressed or implied needs. Service quality which is often abbreviated to Servqual (Service Quality), according to (Hashem & Ali, 2019) is the comparison between two main factors, namely, the customer perception on the real received/perceived service and the actual expected/desired service. If the reality is better than the expected service, the service can be said to have high quality. Service quality is the provision of service that can meet the expectations of customers (Aghaei & Elahi, 2019). (Agwu, 2018) had defined service quality as "function of the difference between service expected and customer's perceptions of the actual service delivered." Researchers have pointed out that service quality leads to customer satisfaction (de Oña & de Oña, 2015; dell' Olio et al., 2010). Parawansa (2016) found that

service quality influence the positive significance of customer loyalty. (Naing et al., 2019) reported that the service quality of financial services in Europe has significant positive media to give a big impact on customer loyalty. There is a notable relationship between service quality and customer satisfaction, and it affects the customers of service industries (Yilmaz & Ari, 2017). In this article, functional service quality, technical service quality, and service planning and reliability are seen as indicators of service quality; these factors may be well distinguished.

## 2.5 **Empirical Review and Hypotheses Testing**

This study reviewed scholars' findings on service quality, customer satisfaction and customer loyalty to see the basic relationship that exist between them, both in the global and Nigeria contexts based on different measurement method and instruments.

### **H<sub>1</sub> - Service Quality positively influences Customer Satisfaction**

Service quality is the customer assessment of the excellence/specialty of products or whole service (Danish et al., 2018) It means that the service quality is the customer assessment of the service company's performance compared to customer hope. According to (Hashem & Ali, 2019; Of et al., 2017; Zhang & Wei, 2018) good service quality will influence the customer satisfaction. One of the ways of the company to get customer loyalty is giving the service quality to the customer. Makanyeza and Chikaze (2017) in their study, they found service quality, satisfaction influence directly significant positive to the bank customer loyalty in Zimbabwe. Kashif (2016) found that customers of Sharia Bank in Pakistan are satisfied with the service quality offered. The opinion above lead to the study to be observed in informal sector of Nigeria context.

### **H<sub>2</sub> - Customer Satisfaction positively influences Customer Loyalty**

Satisfaction is happiness or the sadness of someone that appeared after comparing the product performance thought to the performance hope (Kotler & Keller 2011). Customer satisfaction is the commitment held deeply to buy or support the product or service preferred in the future although the influence situation and the marketing effort has a potential to make the customer changing (Kotler & Keller, 2011). Minh and Huu (2016) found that customer satisfaction influence significant positive to customer loyalty. Parawansa (2016) found that service quality influence the positive significance of customer loyalty. (Abu-alhaija et al., 2018; Jaén et al., 2013) reported that the service quality of financial services in Europe has significant positive media to give a big impact on customer loyalty. Customer Satisfaction has a significant positive impact on customer loyalty and it can mediate the service quality relationship and customer loyalty (Makanyeza & Chikaze, 2017). Opinions mentioned above lead to the following hypotheses. That product quality, rather than service quality, determines customer satisfaction in the automobile industry. Therefore, adding product quality into the proposed model would be another key area for future research which is the contribution of this study to literature.



### **H<sub>3</sub> - Service Quality positively influence Customer Loyalty**

(Hashem & Ali, 2019) employed the SERVQUAL model developed by (Naing et al., 2019; Vencataya et al., 2019) with five dimensions to evaluate the impact of service quality on customer loyalty among bank customers in Penang, Malaysia. Customer satisfaction was used as an intermediate variable. The findings show that improvement in service quality can enhance customer loyalty. The service quality dimensions that play a significant role in the equation are reliability, empathy, and assurance. The findings indicate that the overall respondents evaluate the bank positively, but still there are rooms for improvements.

### **H<sub>4</sub> - Customer satisfaction mediates the effect of service quality on customer loyalty**

Customer satisfaction is the outcome that customers received when service experienced meets and/or even exceed their expectation. In marketing, it is being viewed as the global evaluation of service experience over time (Lim 2006). Customer satisfaction is generally known as an outcome of service quality. Numerous studies in different industries have proved this relationship. Szwajca (2018; 2016), Ngo and Pavelková (2017) in airline, Srivastava and Sharma (2013) in telecommunication, and (Vencataya et al., 2019) in the banking industry. Customer satisfaction portrays the quality of products or services provided to the customer in a positive manner, whereby the level of customer satisfaction enhanced along with an increased level of service quality (Yeo 2015). Customer satisfaction depends on the quality of the service provided (Zhang & Wei, 2018). Del Castillo and Benitez (2013) found time satisfaction, comfort, accessibility, connectivity, and information as important factors of customer satisfaction. It is important to identify which factors of service quality have an important effect on customer satisfaction. A study by Shen et al. (2016) showed that safety and security were the most important factors that influence the passengers to use the urban rail transit in Suzhou. Canming and Jianjun (2011) studied the mediating role of customer satisfaction between service quality and customer loyalty, and the results showed that service quality had a direct effect on customer satisfaction and an indirect effect on customer loyalty for Nanjing Shanghai high-speed rail. This shows that the more positive customers' perceived service quality, the better their satisfaction level with the service provider is likely to be. The concept of customer value should be an important element in the design and implementation of corporate strategies. According to (Tefula & Tefula, 2017), good value contributes to higher customer loyalty and retention. The indirect influence of the value on the behavioral intention via satisfaction was supported by service marketing researchers and postulated the value as a direct and indirect predictor of loyalty (Chen & Chen, 2010; Kim 2013; Ashraf 2018). Moreover, it was supported that customer satisfaction plays a mediating role between service quality and customer loyalty in several industries (Lai et al., 2009).

In proposing the relationships between the service quality, the customer satisfaction and customer loyalty, this study applied the approach proposed by Choi and Kim (2013). Choi and Kim (2013) developed a model in which the influence of the service quality on customer satisfaction was investigated, revealing that the outcome quality had a direct effect on customer satisfaction. It was also concluded that customer satisfaction was a mediator variable between service quality and customer loyalty.

Summarizing the above, lots of attributes should be taken into account when assessing the service quality, customer satisfaction, and reuse intention of urban rail transit, and these attributes may belong to different categories. As widely treated in the previous literature, service quality, customer satisfaction, and reuse intention are a multidimensional construct, and then, the variation of the quality level perceived by the users depends on how passengers' satisfaction with the various service aspects changes over time. Base on literature review studies on the relationship between service quality and customers' satisfaction have been study and relationship tested. Therefore, mediating the relationship is important base on empirical review, which this study aims at investigating and contribute to literature.

### 3.0 **METHODOLOGY**

#### 3.1 **Design, Population and Sample Size**

The study uses descriptive research design based on a cross-sectional survey questionnaire approach. The population (estimated from available information at 5250) which comprises auto repairs mechanics and tailors random sampling procedure was adopted in the selection of the participants from their various association incubators from NACIN (National Association of Cortege Industries in Nigeria) in their zonal office at school of catering Riyom LGA, it is imperative to select a representative sample.

The study considered the informal business sector comprising of hair salons, auto repairs, tailoring and masonry in Jos and Bukuru metropolis of Plateau state Nigeria as the unit of analysis. The sample size of the study is derived by applying the Yamane sample size formula  $n = \frac{N}{1 + N(e)^2}$  with N and (e) being population (5250) and 1 less assumed confidence level of (95%). The researchers arrived at 372 as the minimum sample size for the study. However, as advice by Israel (2013), the study adds 20% of the sample size to make up for the unreturned questionnaire. Regarding the amount of sample size determined in this research, Hair et al. (2010) stated that between 150 to 400 sample sizes were the right number for a research or study considering the relevant influences including the nature of analysis, population and cost either both structural model (PLS-SEM) and ADANCO. Beaver, Iwata and Lerman (2013) had also stated that for a multivariate research, sample size between 150 to 300 respondents had been deemed appropriate. Furthermore, previous research by Wilson and Keni (2018) also underlined that for a research, the total number of sample size determined by researchers should exceed 200. Based on the theories stated above, a total of 550 sample size was determined and set for this research, in which this number was twice the amount of sample size suggested by researchers stated above.

#### 3.2 **Measures**

Primary data was gathered through a self-administrated questionnaire which was modified to better fit the context of this study. The questionnaire consists of two-part; the demographic part and statements on the variables used in the study. Service quality was measured using six (6) items adopted from (Cahyono et al., 2020). Customer satisfaction was also measured with six (6) items adopted from Kabu and Soniya (2017). Finally, customer loyalty was measured with five (5) items adopted from(Cahyono et al., 2020). All items were measured using a five-point Likert scale. The questionnaire was validated through expert interviews and by a panel of expert practitioners which was then physically administered to respondents. The results of the validity assessed using the content validity indexes were above 0.6.



4.0 **DATA ANALYSIS**

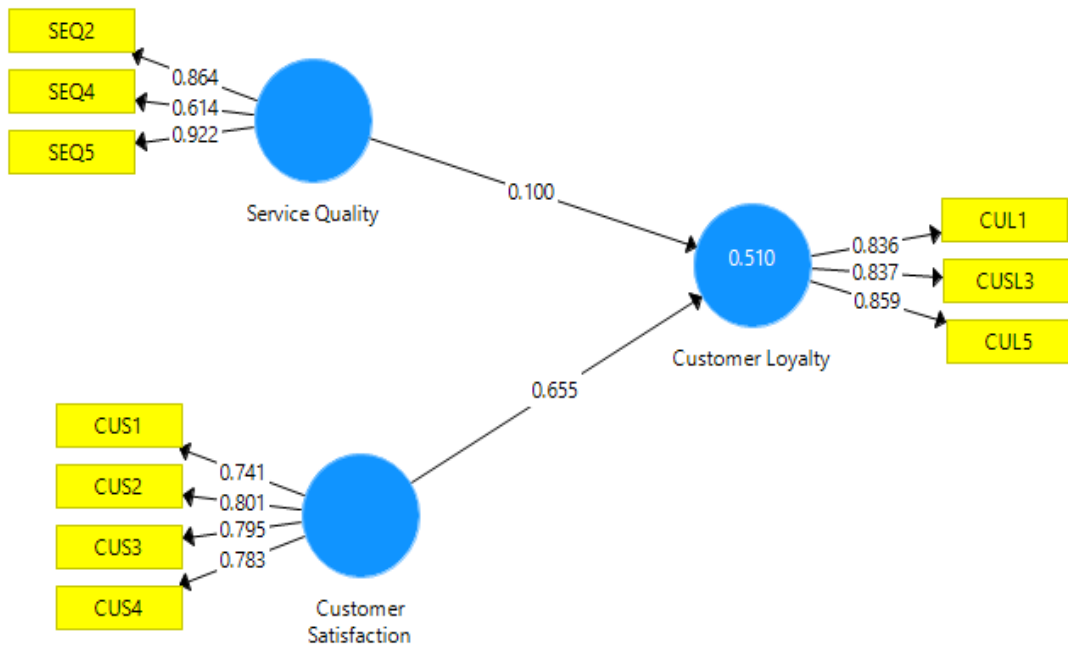
Out of the 447 questionnaires that were distributed, only 387 were collected back, amounting to 92% response rate. Missing data has been seen to be a problem in most data analysis. Adhering to the advice of Hair *et al.*, (2014), 10% was used as a maximum threshold for missing values. Out of 6,592 data points, only 83 were found to be missing in the data set, which constitutes 1.25% of the data set which is far below the 10% benchmark. Mean substitution was used by the study to replace the missing data (Hair *et al.*, 2014).

**Table 1:** Demographic Characteristics of Respondents (n=387)

<b>Characteristics</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Cumulative Percentage</b>
<b>Gender</b>			
Male	309	79.8	79.8
Female	78	20.2	100.0
<b>Age Distribution</b>			
18 – 25	56	14.5	14.5
26 – 35	149	38.5	53.0
36 – 45	102	26.3	79.3
45 and Above	80	20.7	100.0
<b>Year of Operation</b>			
6 Month – 2 Years	65	16.8	16.8
3 Years – 5 Years	182	47.0	63.8
6 Years and Above	140	36.2	100.0
<b>Occupation</b>			
Mechanic	175	45.2	45.2
Tailor	212	54.8	100.0

Table 1 presents the demographic distribution employed in the study. The gender distribution of the sampled respondents shows that 79.8% of the sampled respondents were males, which show that males were more sampled than females. As presented in the table, it can be deduced that most of the sampled respondents of this study are either between the ages of 26-35 and ages 36-45, with 38.5% and 26.3% respectively, therefore most of the respondents are between ages 26 to 45. The year of operation of sampled respondent's shows that majority of the respondents have been in operation between 3 years to 5 years which represent 47% of the total population, 36.2% are in operation from 6 years and above and 16.8% are between 6 months to 2 years. The occupation of the respondent sampled in the informal sector shows that 54.8% while 45.2% are mechanics, According to (Wilson, 2018) that demographic profile is important to determine average respondent which provide sufficient basis for meaningful understanding of the problem being study. The objective of study is to investigate the relationship between the variables.

#### 4.1 Accessing Model Fit



**Fig. 2:** Measurement Model

**Table 2:** Construct Reliability and Validity

Construct	Items	Loadings	AVE	CR
Service Quality	SEQ2	0.864	0.657	0.849
	SEQ4	0.614		
	SEQ5	0.922		
Customer Satisfaction	CUS1	0.741	0.608	0.861
	CUS2	0.801		
	CUS3	0.795		
	CUS4	0.783		
Customer Loyalty	CUL1	0.836	0.713	0.882
	CUL3	0.837		
	CUL5	0.859		

*Note: AVE represents Average Variance Extracted; CR represents Composite Reliability; CA represents Cronbach's Alpha*

Table 2 shows the indicators loading on their intended factors. According to Hair *et al.* (2014), loadings should not be below 0.5; therefore, indicators that do not meet this prerequisite were deleted. Composite reliability should be greater than 0.7 and average variance expectation should be greater than 0.5 (Garson, 2016). From the table, the composite reliability ranges from 0.849 to 0.882 and AVE of the variables ranges from 0.657 to 0.713. This implies that the overall reliability measurement of the instrument is acceptable in terms of reliability thus depicting its internal consistency. Convergent validity is items in a scale ability to come or load together as a single construct. It is determined by examining each loading for each indicators block. The whole path coefficients in this study are statistically significant and larger than 0.50. Discriminant validity indicates how fit individual item factor attaches to its hypothesized construct comparatively to other construct. Discriminant validity is approximated via: The relationship between correlations among first-order constructs and the square roots of AVE.

**Table 3:** Discriminant Validity

<b>Construct</b>	<b>Customer Loyalty</b>	<b>Customer Satisfaction</b>	<b>Service Quality</b>
Customer Loyalty			
Customer Satisfaction	0.862		
Service Quality	0.568	0.642	

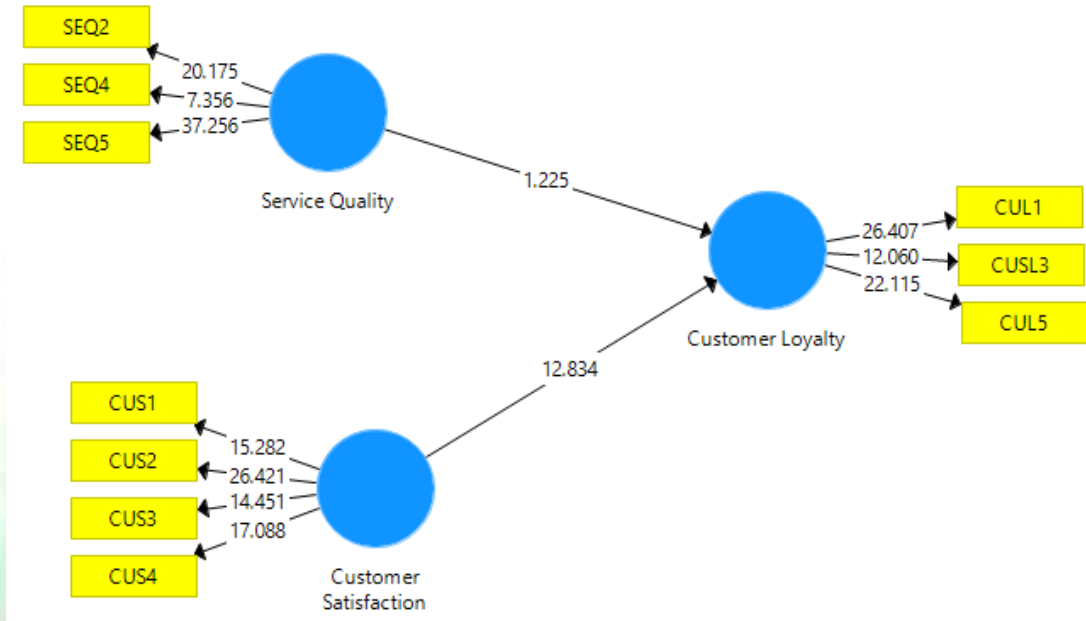
*Note: The heterotrait-monotrait ratio of correlations (HTMT) measures the factors' discriminant validity.*

Table 3 presents the result of discriminant validity. The heterotrait-monotrait ratio of correlations (HTMT) measures the factors' discriminant validity. Henseler *et al.* (2015) proposes a threshold value of 0.90 for structural models with constructs that are conceptually very similar. The smaller the HTMT of a pair of constructs, the more likely they are to be distinct. HTMT values should be below 0.9, or, better, below 0.85 (Henseler, 2017). Table 3, shows HTMT report, all values are below the minimum threshold of 0.85 therefore, the construct of the study achieved discriminant validity. None of the 95 percent upper-bound HTMT scores were above 1.00, thus satisfying the third condition. Our measurement model, therefore, demonstrates satisfactory discriminant validity.

#### 4.2 Test of Hypotheses

It is important to carry out a bootstrapping analysis to determine the direct effect of the independent variables on the independent variable of the study. Bootstrapping was done by using 5000 subsamples using 387 cases.





**Fig. 3:** Structural Model

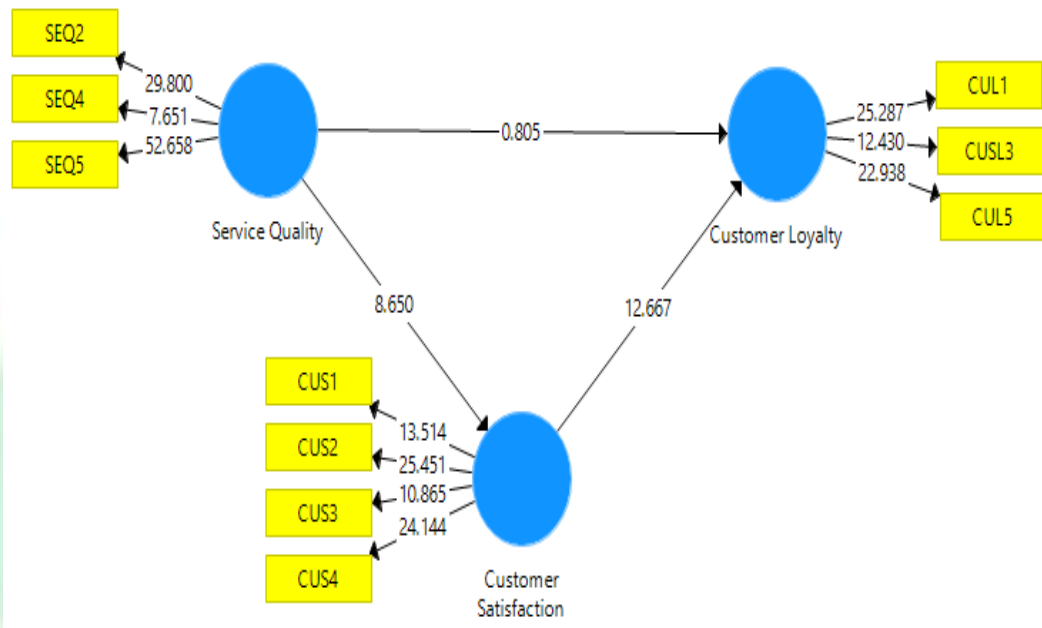
**Table 4:** Direct Path Coefficient

Hypotheses	Beta Value	Standard Deviation	T Stat	P-Value	R <sup>2</sup>	Decision
CUS -> CUL	0.655	0.051	12.834	0.00***	0.510	Supported
SEQ-> CUL	0.100	0.082	1.225	0.22		Not Supported

\*\*\*p< 0.01, \*\*p< 0.05, \*p< 0.1

Table 4, shows that service quality has a positive and significant effect on customer loyalty, significant at ( $\beta=0.65$ ,  $p<0.01$ ). Therefore, the stated alternate hypothesis is supported. Service quality has a positive and insignificant effect on customer loyalty at ( $\beta=0.65$ ,  $p>0.1$ ), thus, the stated alternate hypotheses are not supported empirically. The R square of 0.510, indicating that service quality and customer satisfaction account for 51.0% of customer loyalty the remaining 49% is accounted for by other variables that are not incorporated in this study.

### 4.3 Mediating Effect



**Fig. 4:** Structural Model (Mediating Path)

**Table 5:** Mediated Path Coefficient

Hypotheses	Beta Value	Standard Deviation	T Stat	P Value	Decision
CUS -> CUL	0.666	0.053	12.667	0.00***	Supported
SEQ -> CUL	0.076	0.095	0.805	0.42	Not Supported
SEQ -> CUS	0.571	0.066	8.650	0.00***	Supported
SEQ-> CUS-> CUL	0.380	0.050	7.638	0.00***	Supported

\*\*\*p < 0.01, \*\*p < 0.05, \*p < 0.1

Table 5 presents information on the test of hypotheses. Results in table 5 and figure 4 indicate that, 3 out of 4 hypotheses are supported. CUS significantly predicts CUL. Hence, H1 and H3 are supported with ( $\beta=0.666$ ,  $t=12.667$ ,  $P<0.05$ ) and ( $\beta=0.571$ ,  $t=8.650$ ,  $p<0.001$ ). Additionally, SEQ significantly predicts CUL. Hence H2 is Not supported with ( $\beta=0.076$ ,  $t=0.805$ ,  $P<0.001$ ). Furthermore, the results highlighted that, CUS significantly mediates the relationship among SEQ and CUL ( $\beta=0.380$ ,  $t=7.638$ ,  $P<0.001$ ), hence H4 is supported. It is seen that customer satisfaction has a positive and significant effect on customer loyalty. Service quality has a positive but insignificant effect on customer loyalty. Service quality has a positive effect on customer satisfaction. However, there is a positive effect and significant relationship when testing for the mediating effect of customer satisfaction on service quality and customer loyalty.

## 5.0 DISCUSSION OF FINDINGS

The study examined the mediating effect of customer satisfaction on service quality and customer loyalty in the informal sector. The result shows that service quality has an insignificant effect on customer loyalty. This can be interpreted to mean that the quality of services does not necessarily determine or make a customer loyal. This might be as a result of intense competition in the informal sector where prices of services determined the loyalty of a customer. Also going by the relative scarcity of money in the current economic reality in Nigeria which has reduced purchasing power of an individual, the customers tends to be price-conscious. On the other hand, customer satisfaction has a significant effect on customer loyalty in the informal sector. The result states that when customers are satisfied with services rendered, they tend to be loyal. Therefore, when customers are well satisfied, they tend to stay loyal to a particular service. In auto repairs customers turn to be loyal if they are satisfied with the service provided, so, also tailoring in Nigeria.

The associations among SEQ and CUS and CUL have been investigated widely. This study's results provide extra support for these causal relationships, mainly in the auto mobile repairs and tailoring customers, and propose that SEQ is additional significant factor that indirectly affects these significant customers' outcomes. Similarly, the results also revealed that SEQ has an indirect effect on CUL and CUS, among customers within the auto repairs and tailoring in Nigeria, which confirms the mediation role that CUS has in this context, this is supported by previous studies (Al-Ali et al., 2019; Alkhateri et al., 2019; Deng et al., 2010; Qoura & Khalifa, 2016). This concept has significant value for researchers interested in customer loyalty.

However, the mediating effect of customer satisfaction on the relationship between service quality and customer loyalty show a significant effect. This shows that providing the customer with quality service needs to be enhanced by satisfaction before they can be loyal. Therefore, providing customers with quality services is not enough to gain their loyalty, thus the need to ensure that customers are well satisfied. Customer satisfaction is important in the relationship between service quality and customer loyalty. The strength of the relationship between service quality and loyalty accounted by the mediator was (0.380-7.638), which equal to 51.10% of direct effect. Therefore, there is evidence that satisfaction is partially mediating the relationship between service quality and customer loyalty and it also shows that satisfaction as mediator has mediating influence on service quality and customer loyalty relationship in the non-formal or informal sector in Nigeria.

## 6.0 CONCLUSION

The study examined the mediating effect of customer satisfaction on service quality and customer loyalty in Nigerian informal sector. The study with it dimension adopted from the theory of relationship marketing shows that customer satisfaction and service quality have a positive and significant effect on customer loyalty. Customer satisfaction was found to have mediated the relationship between service quality and customer loyalty. The study, therefore, concludes that service quality and customer satisfaction are important factors considered to influence customer loyalty. Achieving greater success in the aforementioned variables will help Nigeria informal sector to reward loyal customers with quality and satisfactory services.



## 7.0 **IMPLICATIONS**

The study drew its conceptual framework from relationship marketing theory and has contributed to the theory development by empirically examining that the relationship marketing theory is pegged on major factors. These are trust, service quality, customer satisfaction, relationship commitment, and communication as a predictor of customer loyalty in Nigeria informal institutions. The study has contributed to literature and knowledge by establishing a relationship between service quality and customer loyalty, and also the mediating role of customer satisfaction. Hence, the study reaffirms the findings of other scholars that service quality along with other mediating variables like customer satisfaction should be enhanced to achieve customer loyalty.

## 8.0 **RECOMMENDATIONS**

The study recommends that the informal sector should devote their time to creating good customer relationship by providing quality and satisfactory services that will attract repeat buying behavior. The study is only restricted to Jos and Bukuru metropolis of Plateau state, Nigeria. The study uses descriptive research design based on a cross-sectional survey questionnaire approach and primary data was gathered through a self-administrated questionnaire which was modified to better fit the context of this study.

## 9.0 **AREAS FOR FURTHER STUDY (RESEARCH)**

Further research could be conducted in the formal and informal sector respectively in Nigeria that this research work could not capture and also different methodological approach and theory could also be examined. It is equally possible that there are other factors that can moderate and may contribute to influencing customer loyalty in Nigeria informal sector of the economy that were not part of this study.

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