

Customer Relationship Marketing and Organizational Performance in the Nigerian Telecom Industry

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Abstract

This study is on the relationship between customer relationship marketing (CRM) and organizational performance in the Nigerian Telecommunication industry, given the level of growth and competition in the industry the questionnaire obtain from 235 customers of telecom in the Southwestern part of Nigeria. A convenience sampling technique was adopted for the study. Data was collected from the customers of telecom service operators in the Southwestern part of Nigeria. Multiple regression analysis was used to test the hypothesis. The results show a strong relationship between CRM and information knowledge, while CRM has significant effects on customer value and loyalty. As a managerial implication, it is suggested that service providers should put their efforts into improving advertising or economic bonus to customers. The study was limited to youths in Ojo L.G.A of Lagos in the Southwestern part of Lagos, Nigeria.

Keywords: Relationship marketing, Services marketing, Customer loyalty, Performance

JEL Classification: M300, M310

1. Introduction

Relationship marketing is crucial to the success, productivity, performance, and viability of businesses today (Opaleye, Ojelade, and Aremu, 2020). When it comes to customer retention in today's competitive global market, companies of all stripes and the telecommunications industry in particular are influenced by the actions of their competitors. This includes things like how they treat new customers, how quickly they respond to complaints, how much they value their customers' continued patronage, and so on. It is important for organizations not to focus on transactions only but to turn the opportunity to sell products to stabling lasting solutions with the clients (Hassan, Nawaz, Lashari & Zafar, 2015). Building the right and lasting relationships with the clients can be done in various ways. One important and very popular way is the use of customer relationship marketing (CRM). Customer relationship marketing can be used in two reactive processes: to capture, integrate, access, and exchange information about the customers in order to create value for future customers. As such, CRM is becoming increasingly popular because, organizations are more concerned about their customers and their ability to be able to retain them (Wang & Feng, 2012). A review of

literature, revealed that earlier studies concentrated on mechanisms of customer relationship marketing (CRM) strategies, for instance, a connection between delight and company success (Kamakura et al., 2002), and the association between customer loyalty and profitability (Reinartz and Kumar, 2017), customer productivity heterogeneity, and customer loyalty programme (Verhoef, 2003). As such, as far as it can be determined, there is no cause-and-effect relationship between CRM and performance in the Telecom industry, particularly in a developing nation like Nigeria. The application of CRM confers a number of benefits on the organization which makes its acceptance and its implementation inevitable. These benefits according to Bull (2021) include customer satisfaction, purchaser progress controlling, new trade prospects, consumer acknowledgment, and classification of consumers into lucrative and non-lucrative consumers. This research tries to find out the extent of the implementation of CRM by Nigerian telecom companies in satisfying the consumers and in improving performance. Customer relationship marketing as experienced tremendous growth and acceptance in recent years (Volmohammadi & Beladpes, 2014).

Over the years, Nigerians have flooded telecoms service providers with complaints about poor customer service, including ineffective handling of customer issues, unwanted promotion, slow response times, and a general lack of communication and feedback regarding the use of products and services. It appears that this has resulted in customers abandoning one telecom company for another, which has a knock-on effect on revenue, loyalty, and bottom line. Based on the perseverance of these issues it is necessary to look into the consequence of customer relationship marketing and how it improves organizational performance among telecommunication firms. To maintain a competitive advantage in Nigeria's telecommunications service sector, businesses must employ a number of strategies aimed at boosting customer satisfaction and other key performance indicators. However, this is only possible if these establishments have a detailed knowledge of their clients' wants and needs. Some of the ways by which, customer satisfaction and retention issues can be solved are through customer responses, knowledge management and interaction with the customers. Customer relationship marketing should be built to elicit customer response to the organizational marketing activities. This can be achieved through in-depth knowledge of the customers. The end result is to build a framework of customer interaction that may lead to satisfaction and retention.

The main objective of this study is to examine effect of customer relationship marketing on organizational performance within Lagos State telecom industry. The specific objectives are to examine combine effect of Customer response, Knowledge management application, customer interaction on customer satisfaction within Lagos State telecom industry. Also, to determine combine effect of Customer response, Knowledge management application, customer interaction on customer retention within Lagos State telecom industry. Examine combine effect of Customer response, Knowledge management application, customer interaction on brand experience within Lagos State telecom industry. Based on the above, the following hypothesis were to be tested.

H0₁: Customer response, Knowledge management application, customer interaction does not have a significant effect on customer satisfaction within Lagos State telecom industry.

H0₂: Customer response, Knowledge management application, customer interaction does not significantly affect customer retention within Lagos State telecom industry.

H0₃: There is no significant effect of Customer response, Knowledge management application, customer interaction on customer loyalty within Lagos State telecom industry.

2. Literature Review

Conceptual Review

Customer relationship marketing Customer Relationship Marketing (CRM) is one of the most effective marketing policies that are used to create and manage associations between the organization and the consumers. According to the research of Anton and Hoeck (2002), the goal of customer relationship management (CRM) is to increase both customer value and business profits by establishing and strengthening connections with specific groups of customers. In a dynamic environment like Nigeria, with increasing competition among firms and dwindling consumer disposable income as a result of the downturn of the economy, it has become increasingly important for firms to retain old customers than win a new ones. A large number of firms had also developed several strategies to remain competitive in the marketplace.

Companies can manage its connection with its suppliers, customers, and sales opportunities, things like customer retention, loyalty, and satisfaction are all aspects of customer relationship marketing. It's a model that considers customers' wants and habits (Nasution & Rafiki, 2018) to foster more meaningful connections. According to Bhakane (2015), CRM is "an operational activity involving the collection, analysis, and management of information about customers to facilitate more effective management of relationships between an organisation and its customers and to maximise the economic value that customers derive from those interactions." Relationship marketing's end goal is an increase in consumer happiness and loyalty. An alternative explanation offered by Hammoud, Bizri, and Baba (2018) states that customer relationship marketing is when a business finds, sorts, and assesses customers according to their buying habits so that the goods and reputation of the business can be improved. According to the authors of the aforementioned study (Lubis, Dalimunthe, Absah, and Fawzee, 2020), "customer relationship marketing" refers to "a method of controlling a company's interaction with customers through brand perception, product performance, organisational trust, complaint handling, and after-sale service." These factors are crucial because they address everything that consumers care about in a product they want to buy often. This study is also further comprehensive than others because other research did not include all these factors.

Customer Interaction Management- The term "customer interaction management" refers to the processes put in place to maintain productive relationships with customers (Peppers & Rogers, 2019). Interaction management, as defined by Buttle (2019), is the process of overseeing ongoing relationships with customers. There is a growing body of research on customer interaction, and businesses that succeed do so by identifying the type of customer

they should target, determining the best time to approach them, and allocating a proportionate amount of resources to each customer acquisition and interaction strategy (Bhatnagar, Maryott, & Bejou, 2018).

For this study, it defines customer interaction as "all marketing strategies and initiatives designed to retain both existing and new customers by fostering, sustaining, and optimizing long-term mutual advantages that enhance and prolong the collaborative relationship between the two entities".

Knowledge Management- Management of Knowledge is one of the characteristics in today's global economy that makes it so competitive. To join today's vibrant market effectively, which is the resources to make profit, it is crucial to consider the client as another important aspect. The term "customer knowledge management" is used to describe the practice of collecting, analysing, and enhancing information about consumers for the benefit of both the business and its clientele. Customers' interests, preferences, and ever-changing demands may be better understood with the use of customer relationship management (CRM) software, which companies are encouraged to use in today's business climate (Mithas et al., 2019). By making it easier for customer service agents to keep track of pertinent details about each interaction with a client, customer relationship management (CRM) solutions assist businesses to acquire and apply customer knowledge.

Information Technology- Information technology provides a veritable platform for firms to collect and analyze specific information relating to customers with respect to their behavioral patterns; the ability to analyze data and development of appropriate modes; respond to timely and effective customized communication and develop products and services to meet consumers' specific needs (Shang & Lu, 2012). Customer expectations of goods and services delivery have changed considerably over time, competition, dynamic complex environment and increasing customer knowledge had changed the way the firm interacts with the customers (Faroghian & Mazhab, 2015). Consumers have choices and desire better services. Companies are interested in increasing sales and customers base as well as increasing profit levels (Guerola-Navarro, Oltra-Bedenes, Gil-Gomez & Gil-Gomez, 2021). To achieve these, therefore, firms attempt to identify their customers and shift emphasis to their customers. This is so because, it has been proven in literature, that it is five times cheaper to retain existing customers than to win a new one (Ngo & Vu, 2021). As a consequence of growing consumer expectations, CRM is seen as an indispensable tool for the success of an organization. There is an increasing demand by the consumers for more service reliability of the product. More importantly, is the need for greater interactions and dependency between consumers and the firms. Market orientation in recent decades has shifted from a service-centered approach to a more customer-centered approach. This is a result of increasing competition, a dynamic and complex operating environment, low sales, and increased consumer knowledge of the product and the economy (Ahmed, 2016).

Arising from this, Santouridis and Tsachtani (2015) indicated that information technology is used to gather and process customer data in order to obtain relevant information from qualifying customers and customize offerings to meet their needs. Consumers are becoming more sophisticated as a result of the high level of exposure, competition, and changing business environment. Consumers are not just "mere" consumers but have graduated to be

involved in the production, operations, creation of values, and development of knowledge and competencies.

Organizational Performance- Business success may be measured in large part by an organization's performance, which is why it's a common topic of debate in managerial studies. In most cases, a corporation may gauge how close they were to reaching their goals by looking at how well its organisation performed. Assets owned by shareholders, returns on investments, and earnings per share are all tangible indicators of organisational success and profitability. Norms, which are established by the consensus of many groups within an organisation, are a prime example of a subjective aspect. This is according to (Haghshenas and Ahmadi, 2015). Since performance is multifaceted, it cannot be captured by a singular metric (Mohammed et al., 2013). Researchers have used a wide range of conceptualizations and metrics to study corporate performance. This line of thinking proposes that, as conflicting to only qualitative or accounting-related performance metric, a compound amount of performance would more accurately echo a firm's development. The Key Performance Indicator (KPI) was used to evaluate the effectiveness of the telecom company in meeting the needs of its consumers (Mohammed et al., 2013).

Customer Loyalty- Maintaining a loyal clientele is crucial for a company's profitability and long-term success. Customers that demonstrate brand loyalty while dismissing similar items from rivals are essential to any firm. Loyalty is a "passionate dedication to a particular brand, often resulting in the future repurchase of a preferred product or service," despite external influences that may encourage consumers to explore other brands. The frequency of purchases is associated with consumer loyalty. Chih-Hung, Kuo-Min, and Santos (2019) assert that loyal consumers are those who "identify with a brand or its products/services," resulting in their propensity for repeat purchases. Loyalty is characterized as a commitment to repurchase from the firm. Research by Raza, Umer, Qureshi, and Dahri (2020) defines a loyal customer as an individual who intends to repurchase the product or service and endorse it to others.

Customer Retention- Customer retention is the marketing approach that keeps clients from defecting to the competitor. However, customer retention may also refer to the percentage of customers that remain loyal over time (Dawes, 2009). According to Molapo and Mukwada (2011), businesses would stop at nothing to prevent customers from seeking out alternatives to their current shops. In addition, customers are more likely to return to a business that meets their demands (Fill, 2015). Attitude data reflecting emotional and psychological connection with the customers (loyalty, devotion, adherence), as suggested by (Trasorras Weinstein & Abratt, 2019), can be used to determine the extent of consumer retention. Next, composite assessment, which incorporates both behavioural and attitude data, is used to assess customer retention.

Customer satisfaction- According to Kotler and Armstrong (2010), the degree to which a customer is happy with a product depends on how it performs in comparison to their expectations. Customer satisfaction is described as "customer's response to a product or service in terms of the extent to which consumption meets expectations" by Hair, et al (2003). Rather than focusing on improving customer satisfaction in respect to individual transactions, a company that implements customer relationship management aims to build and maintain a long-term relationship with its consumers. Customer satisfaction with the service they receive

has a significant impact on a company's bottom line, as stated by Nelson (2012) as referenced by Thuita and Muturi (2014). According to the results of his research, a completely satisfied consumer generates 2.6 times as much income for a business as a just satisfied one. Furthermore, a fully satisfied consumer generates 17 times as much money as a partially satisfied one. In contrast, the revenue loss from a single unhappy customer is 18 times that from a single happy customer.

Theoretical Review

Reviewing relevant ideas is the focus of a theoretical analysis. It helps to explain the phenomena's behaviour and provides a foundation for the topic of research. Specifically, the research is interested in marketing theories that shed light on the ways in which customer relationship marketing influences the success of organizational performance in the telecommunications sector.

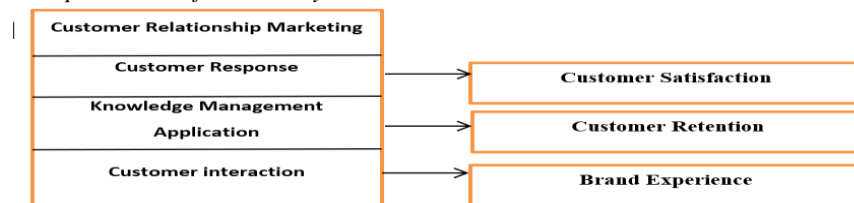
Emerging information technology cannot enhance corporate efficiency without acceptance and use by prospective users.

Technology Acceptance Model (TAM)

According to Davis, as referenced by Ughovero, Ogundare, and Akparobi (2021), The Technology Acceptance Model (TAM) is a widely used framework for assessing the extent of computer usage among individuals. The adoption of technology is influenced by several factors, including perceived advantages and ease of use, aligning with the Technology Acceptance Model (TAM) as noted by Rogers in Ughovero, Ogundare, & Akparobi, 2021. TAM addresses two particular beliefs: the perceived usefulness of a system and its ease of use. The perceived utility of a system is the degree to which its user expects an increase in productivity from its use. The perceived ease of use of a system refers to the simplicity with which people believe they can use it.

Understanding why a system can be unsatisfactory and take the necessary precautions by scholars and practitioners, TAM aims not just to forecast but also to explain. For organisations to succeed in their missions, the study concluded that all staff members should be given equal weight when it comes to adopting new technologies. If an organisation wants to succeed, it needs to design and apply policies on a regular basis that chip away at the foundation of preconceived notions and prejudice classifications. The Technology Acceptance Model (TAM) is pertinent to this study since it provides guidance on how to best manage an organization's adoption of new technologies.

Conceptual Model for the Study



Source: Study Conceptual Model

Empirical Review

Akpoviro, Amos, Oladipo, and Adewale (2020) investigated the effect of product quality on customer loyalty in Nigeria's telecommunications market. To keep the scope manageable, the study focused on only three of Lagos's main telecommunications companies: Globacom, Airtel, and MTN. To conduct this study, a survey research approach was used to randomly select 120 participants. The study used ANOVA and correlation analysis, findings shows that product branding in the telecommunications industry has a substantial effect on products and contributes to the retention of loyal customers. Branding has an important role in maintaining customer loyalty, especially in the highly competitive telecommunications market. Despite the rapid expansion of Nigeria's food and beverage industries, the research focused solely on telecommunications firms. Bukola, Abosede, and Adesola (2019) examined the impact of customer relationship management on the productivity of SMEs in Oyo state, Nigeria. 100 participants from 20 SMEs across four local governments in Oyo state were surveyed using a purposive sampling approach. The data gathered from the respondent was analysed using the Ordinary Least Square (OLS) and Pearson Product Moment Correlation Coefficient (PPMCC) methods of estimation. Customer relationship management was shown to have a favourable effect on the results of SMEs in Oyo state.

Egilla (2018) investigated the effects of CRM on port efficiency by analysing its ability to increase customer satisfaction and loyalty. Trade across borders has increased, and ports have taken on new functions as dynamic commercial networks. Employees and consumers of KPA are surveyed using questionnaires. The correlation between the variables is examined by means of a regression analysis performed in SPSS, and the study discover that customer satisfaction has a positive effect on customer loyalty, which in turn has a positive effect on port performance, and employee engagement and port goals both positively affect the success of a company's implementation of customer relationship management (CRM). The study, however, found no evidence that customer happiness had any bearing on productivity. To increase customer happiness and loyalty, the study recommends that KPA adopt CRM to improve the port's service quality and customer value. Nkanata (2018) conducted a case study of Realism Company in the crop protection sector to investigate the impact of customer relationship marketing on business performance. This research used a descriptive methodology. It used a stratified sampling method to choose 55 respondents from a target group of 185 workers. It was discovered that three aspects of the customer relationship process—customer loyalty and brand value—had a favourable and substantial impact on business outcomes.

Barit, Marasigan, and Alusen (2018) conducted a study on how relationship marketing influenced customer loyalty for CebuanaLhuillier's AC Alabang branch. One hundred people filled out a predetermined questionnaire for the research. Overall, the results show that relationship marketing and client loyalty are highly intertwined and consequential. Waskito (2018) used regression analysis and domestic theory to investigate how CRM affects bottom line results for businesses. 420 participants were used in the study, all of them were recruited using a convenience sample process. Effective customer relationship management found, leads to higher profits for businesses. The research also discovered that there is a statistically significant positive correlation between CRM and a company's degree of profit. Ojiaku,

Aghara, and Ezeoke (2017) investigated the connection between relationship marketing (customer trust, satisfaction, and commitment) and brand loyalty. Three hundred and fifty-four clients of pension companies in the state of Anambra were used in the research. The research found via multivariate analysis that relationship marketing boosts consumer loyalty.

Magasi (2015) investigated the impact of customer relationship management (CRM) on banking customer retention rates and discovered that even pleased consumers did not necessarily commit to a long-term relationship with the bank. However, the study found that fostering a long-term relationship between the company and its clients was essential to ensuring the success of the latter. Multiple regression analysis was performed to analyse the survey data. The factors of customers' loyalty, trust, satisfaction, and relationships were studied. However, only client royalty was examined; brand value and customer relationship processes were left out of the research. If these three components aren't used in tandem, customer relationship management may not be successful. The present research centred on all three principles concurrently.

3.Methodology

This study was limited to the consumer market in the Telecom industry because the Telecom industry provides a large customer base that can be used to assess CRM relationships with the customers. Youths within the age bracket of 18-30 in Ojo L.G.A of Lagos State were used for the study.

The criteria for their selection are that each respondent must have been using an active mobile for the past three years the questionnaire was administered with the use of goggle form. This aligns with the argument of Oyeniyi, Abiodun, Obamiro, Moses, and Osibanjo (2016) that the optimal sample size is a comprehensive census of the population, since it necessitates the inclusion of all demographic aspects in the survey. This will provide the sample statistics a valid approximation of the sample's data. The sample size for research using multiple regression is affected by many variables. The elements include the required statistical power, the alpha level, and the quantity of variables to be examined (Tabachnick & Fidell, 1996; Oyeniyi et al., 2016). A cross-sectional study approach was used. The research instrument was derived from many sources in the literature (Shang & Lu, 2012). The validity of the instrument, a crucial indicator of its accuracy, was assessed throughout the formulation of questionnaire questions. Content validity was established by a thorough literature study and an evaluation of the survey content to confirm the inclusion of all necessary variables (Kalafatis, 2002). Factor analysis was performed on the instrument to uncover and condense several CRM features into a smaller, manageable collection of underlying elements. Confirmatory factor analysis (CFA) is used to evaluate the measurement model, including reliability, convergent validity, and discriminant validity. The sample size was calculated by Cochran's (1977) method.

Reliability and Validity of Instrument

The study instrument was validated using face, and construct validity. Experts in the field of marketing help to assessed the instrument to confirm its validity and correctness. The survey was adjusted with the help of their inputs. By asking participants to complete comprehension

questions, the instrument's face validity was evaluated. The drive of the research was to determine whether or not the participants understood the instructions. To assess the construct validity of the questionnaire, this study performed exploratory factor analysis (EFA) using the Varimax Extraction Method. The Average Variance Extracted was estimated using their factor loadings (AVE). Any AVE value more than 0.5 was considered additional evidence of convergent validity. So, it was determined that all research variables had strong construct validity. Table 1 displays the concept and convergent validity of the instrument.

Table 1: CFA result

Variables	No. of Items	AVE	KMO	Bartlett Test	Composite Reliability
Customer Response	5	0.531	0.765	0.000	0.734
Knowledge Management	5	0.621	0.807	0.000	0.725
Customer Interactions	5	0.704	0.775	0.000	0.870
Customer Satisfaction	5	0.604	0.834	0.000	0.840
Customer retention	5	0.612	0.775	0.000	0.767
Customer Loyalty	5	0.744	0.701	0.000	0.812

Source: Field Survey

Reliability test on the internal consistency of the instrument was conducted. The Cronbach's Alpha was used to determine the consistency and reliability of the mechanism. The composite Cronbach's Alpha was 0.86 while the Cronbach's Alpha of each dimension is shown in Table 2.

Table 2: Result of Cronbach's Alpha of CRM Dimensions

CRM dimensions	Number of Items	Cronbach's Alpha	Mean	SD
Customer Response	5	0.764	5.9	0.82
Knowledge Management	5	0.786	5.9	0.73
Customer Interactions	5	0.793	5.6	0.81
Customer Satisfaction	5	0.838	5.7	0.71
Customer retention	5	0.795	5.9	0.78
Customer loyalty	5	0.767	5.5	0.76

Source: Field Survey

The reliability results for both composite and individual dimensions are all greater than the threshold of 0.70 and are reflected acceptable for a suitable level of reliability (Nunnally, 1978; Sekeran, 1992). From the result on the table, the most critical dimensions of CRM using the mean scores according to the respondents are customer response (5.9), Knowledge management (5.9), and customer interactions (5.9).

Testing of Research Hypotheses

Table 3: Result of Customer Response, Knowledge Management Application, Customer Interaction on Customer Satisfaction within Lagos State Telecom Industry

Model	β	T	Sig.	F(5,441)	R^2	Adj. R^2	F(Sig)
(Constant)	0.260	1.102	0.272	85.531	0.542	0.535	0.000
Customer Resopne	0.273	4.350	0.000				
Knowledge Management Application	0.40	3.491	0.001				
Customer Interaction	0.453	6.200	0.000				

Source: Field Survey

Table 3 presents the multiple regression findings about the impact of customer relationship marketing. (Customer response, Knowledge management application, customer interaction) on organizational performance (customer satisfaction) within telecom Industry in Lagos State. The outcomes show that Customer response ($\beta = 0.273$, $t = 4.350$, $p = 0.000$), Knowledge management ($\beta = -0.240$, $t = 3.491$, $p = 0.000$) and Customer interaction ($\beta = .453$, $t = 6.200$, $p = 0.000$) have positive and substantial impact on customer satisfaction on telecom industry within Lagos State. The results implied that Customer response, Knowledge management application, Customer interaction flexibility are significant predictors of customer satisfaction among telecom industry in Lagos State.

The consequences further exposed that customer relationship marketing (Customer response, Knowledge management application, Customer interaction) explained 54.2% of the variation in organizational performance (customer satisfaction) among telecom industry in Lagos State (Adj. $R^2 = 0.535$). Conversely, the model did not elucidate 88.4% of the distinction in customer satisfaction among telecom industry in Lagos State, indicating that there are more aspects related to customer satisfaction among telecom industry that were not captured in the model.

$F(5,411) = 85.531$, $p = (0.000)$ indicates that the overall model was significant in predicting customer satisfaction among telecom industry within Lagos State. This was confirmed by the results of the Analysis of Variance (ANOVA) for regression coefficients, which were used to test the overall significance of the regression model. The model had 5,441 degrees of freedom and a p-value of 0.000, which was less than 0.05. That is, customer satisfaction is influence by customer relation marketing components (Customer response, Knowledge management application, Customer interaction) and the F value erect at 85.531. The effect indicate that at slightest one of the customer relationship marketing components has a substantial influence on the customer satisfaction among telecom industry within Lagos State. In developing the ultimate regression model customer satisfaction among telecom industry In Lagos State, the customer relationship marketing components are statistically significant and were retained in the model.

Table 4: Result of Customer Response, Knowledge Management Application, Customer Interaction on Customer Retention within Lagos State Telecom Industry

Model	β	T	Sig.	F(5,441)	R^2	Adj. R^2	F(Sig)
(Constant)	0.618	1.847	0.066	29.769	0.291	0.281	0.000
Customer Resopne	0.088	1.006	0.315				
Knowledge Management Application	0.323	3.320	0.001				
Customer Interaction	0.370	3.574	0.000				

Source: Field Survey

The multiple regression findings were shown in Table 4 for the impact of customer relationship marketing (Customer response, Knowledge management application, customer interaction) on organizational performance (customer retention) within telecom Industry in

Lagos State. The outcomes show that Customer response ($\beta = 0.088$, $t = 1.006$, $p = 0.000$), Knowledge management ($\beta = 0.323$, $t = 3.320$, $p = 0.000$) and Customer interaction ($\beta = .370$, $t = 3.574$, $p = 0.000$) have positive and significant effects on customer retention on telecom industry within Lagos State. The results implied that Customer response, Knowledge management application, Customer interaction flexibility are significant predictors of customer retention among telecom industry in Lagos State.

The outcomes further show that customer relationship marketing (Customer response, Knowledge management application, Customer interaction) explained 29.1% of the variation in organizational performance (customer retention) among telecom industry in Lagos State (Adj. $R^2 = 0.281$). As such, the model failed to explain 88.4% of the variance in customer retention among telecom businesses in Lagos State, showing that there are additional characteristics associated with customer retention among telecom sector that were not included in the model. Furthermore, the results of the Evaluation of Variance (ANOVA) for regression coefficients used to evaluate the general significance of the regression model have a value of 29.769 with (5,441) levels of freedom and a p-value of 0.000, which is less than 0.05 ($F(5,411) = 29.769$, $p = (0.000)$). This suggests that the entire model was effective in forecasting customer retention in Lagos State's telecom business. That is, customer retention is affected by customer relation marketing components (Customer response, Knowledge management application, Customer interaction) and the F value standing at 29.769. The effect indicates that at least one of the customer relationship marketing components have a significant effect on the customer retention among telecom industries within Lagos State. In coming up with the final regression customer retention among telecom industries in Lagos State, the customer relationship marketing components are statistically significant and were retained in the model.

Table 5: Result of Customer Response, Knowledge Management Application, Customer Interaction on Customer Loyalty within Lagos State Telecom Industry

Model	β	T	Sig.	F(5,441)	R^2	Adj. R^2	F(Sig)
(Constant)	1.011	3.415	0.001	31.818	0.305	0.295	0.000
Customer Resopne	0.241	3.138	0.002				
Knowledge Management Application	0.189	2.202	0.029				
Customer Interaction	0.303	3.306	0.001				

Source: Field Survey

The result of multiple regression for the effect of customer relationship marketing (Customer response, Knowledge management application, customer interaction) on organizational performance (customer loyalty) within telecom industries in Lagos State. The results revealed that Customer response ($\beta = 0.241$, $t = 3.138$, $p = 0.000$), Knowledge management ($\beta = 0.189$, $t = 2.202$, $p = 0.000$) and Customer interaction ($\beta = .303$, $t = 3.306$, $p = 0.000$) have positive and significant effects on customer loyalty on telecom industry within Lagos State. The results implied that Customer response, Knowledge management application, Customer interaction

flexibility are significant predictors of customer loyalty among telecom industries in Lagos State.

The results further revealed that customer relationship marketing (Customer response, Knowledge management application, Customer interaction) explained 30.5% of the variation in organizational performance (customer loyalty) among telecom industry in Lagos State (Adj. $R^2 = 0.295$). Nevertheless, the outcome did not explain 88.4% of the disparity in customer loyalty among telecom industry in Lagos State, implying that there are other things related with customer loyalty among telecom industry that were not captured in the model.

The Analysis of Variance (ANOVA) outcomes for the regression coefficients indicate an F-value of 31.818 with (5,441) levels of freedom and a p-value of 0.000, which is less than 0.05 ($F(5,411) = 31.818$, $p = 0.000$). This suggests that the overall predictive model is significant in predicting customer loyalty within the telecommunications sector in Lagos State. That is, customer loyalty is affected by customer relation marketing components (Customer response, Knowledge management application, Customer interaction) and the F value standing at 31.818. The outcome indicates that at least one of the customer relationship marketing mechanisms has a strong influence on the customer loyalty among telecom industry within Lagos State. Finally the regression reveal that customer loyalty among telecom industries in Lagos State, have the customer relationship marketing components as statistically significant and were retained in the model.

Discussion of Findings

According to the results, there is a statistically substantial link amid Customer response, Knowledge management application, Customer interaction and customer satisfaction. Most people who used the company's telecommunications service said it was because of the great quality of the call networks. Respondents also overwhelmingly agreed that stable call networks are crucial to the development of the telecommunications sector. Results supported the idea of Alabar et al., (2014), who underlined call quality as a proxy for consumer contentment, regarding the most lucrative subsets of the Nigerian mobile phone sector. These results are congruent with those found by Ashfaq et al., (2019), who presents empirical evidence for the importance of the links within customer response, knowledge management application, customer interaction, and customer pleasure in Afghanistan's telecoms business.

The outcome of the second hypothesis test indicates that customer response, knowledge management application, and customer contact have a very favorable and robust influence on customer retention. The regression coefficient (r) was computed at .291 (29.1), and its F-value of .000 was below the 5% significance threshold. Based on this, we can assert that effective customer response, knowledge management implementation, and customer contact are significant factors in customer retention. This indicates that an increase in customer response, knowledge management application, and customer engagement correlates with a better degree of customer retention, and vice versa. The policy consequence is that enterprises in the Nigerian telecommunications sector must provide effective communication to stay viable and retain clients. This aligns with the results of Egilla (2018).

The third hypothesis demonstrated that customer response, knowledge management application, and customer engagement have a favorable, powerful, and statistically significant

influence on customer loyalty. The multiple regression R^2 was calculated at .305 (30.5%), and its F-value of .000 was below the 5% significance threshold. This indicates that customer responsiveness, knowledge management application, and customer contact are significant determinants of customer loyalty. This indicates that for managers to cultivate client loyalty, they must prioritize the establishment of customer response, knowledge management applications, and consumer engagement inside their goods. The policy implication of this finding is that firms in the Nigerian telecommunications sector must adopt innovative relational marketing strategies to elicit customer responses, implement knowledge management, and enhance customer interactions in order to secure a strategic advantage and thrive in an increasingly competitive landscape. This result aligns with the results of Nkanata (2018) and Barit et al. (2018).

A number of deductions can be made from this study. The importance of CRM has been established in literature over the years, and its competitive advantage in the telecom industry of Nigeria has been previously established as far as it can be defined. More importantly, a review of the telecom industry has suggested/revealed the critical importance and contribution of the sector to the Nigerian Economy. Oyeniyi et al., (2008) had established the importance of customer service in the Telecom industry, this study has expanded the basics for the success of the service sector. The success of the service sector of which telecom is an integral part is dependent on CRM which affects the performance of the Telecom firms.

5. Conclusion and Recommendation

The major CRM dimensions tested in this study: Customer response, knowledge management, information technology, and performance provide a foundation and clues to show how telecom firms should respond to customer relationships in order to sustain their level of performance. The result of the study will also be of value to present and future service Based organizations in their attempt to improve performance.

The following suggestions are offered on the basis of the study's findings in demand to advance the organisational performance of the telecommunication industry and raise the standard of customer relationship marketing practise. The telecommunications sector must identify, distinguish, and engage with consumers deemed more significant, and initiate the provision of tailored services for these essential clients. To better serve their customers and foster long-lasting relationships with them, telecommunications companies should evaluate their current organisational structure, procedures, and techniques for providing service. Telecommunications management may increase the quality of customer knowledge management if they use CRM principles across all service rules and strategies.

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