

Service Availability and Customer Satisfaction of Telecommunication Services in North-Central, Nigeria

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ABSTRACT

There are issues with devotion from customers, poor customer value, service delays, insufficient backup data, poor interconnectivity, network failures, bad word of mouth and all of these led to customer dissatisfaction. Customer satisfaction is the end result of a customer's evaluation of the service or product's quality in relation to their initial expectations. The aim of this study was to examined relationship between service availability and customer satisfaction of Telecommunication Services in North-Central, Nigeria. This study employed cross-sectional survey research design to gathered data and according to the National Bureau Statistics Telecoms Data – Q1 2023, there were forty three million six hundred and nine thousand and seventy four (43,609,074) and through Taro Yamen formula, the sample size was 400 customers stratified sampling selected. The Structural Equation Model tool was adopted using SMARTPLS software package. The first structural path which represented the first hypothesis of the study showed that there is a positive relationship between service availability and customer value of telecommunication companies in North-Central, Nigeria with a beta value (β) of 0.621 at P-value of $0.00 < 0.05$ and T-Value $4.502 > 1.96$. The second hypothesis of the study showed that there is a positive relationship between service availability and word of mouth of telecommunication companies in North-Central, Nigeria with a beta value (β) of 0.694 at P-value of $0.00 < 0.05$ and T-Value $3.125 > 1.96$. From the findings, the study concluded that service availability significantly related to the measures of customer satisfaction. Based on the findings, the study recommended among others that managers of telecommunication firms in North-Central, Nigeria should foster service availability by implementing programs and initiatives that encourage and support electronic creativity and innovation, as this can significantly improve customer value.

Keywords: Service Availability, Customer Satisfaction, Customer Value, Word of Mouth

1.0 INTRODUCTION

It is getting harder and harder to compete in today's global market. Telecommunications companies aim to stand out from the competition by focussing the service design of their organisational environments on creating memorable customer experiences. These experiences are a result of the interaction of various tangible and intangible stimuli, which customers often view as being similar to other products and services. Ekeke and Akoloh-Isaac (2022) note that technology is constantly altering the manner in which telecommunications companies provide their services to consumers. As part of their overall strategy, telecommunications companies will need to adjust their operations to take advantage of new operating system features made possible by the internet. Social media and online shopping are only two examples of the many uses for the internet. The number of people using the internet currently exceeds half of the world's population, standing at 3.6 billion in 2017 and 2018 (Suliman & Ward, 2021). The trend is only

going up from here, and it's already having a profound impact on society. For example, it's changing the way customers use services and products, and it's making it easier for businesses to sell their wares all over the world.

In spite of the bottleneck in the Nigerian banking sector, providing high-quality e-services is crucial to retaining consumers. Among the tactics for keeping consumers' trust include prompt and comprehensive responses to customer concerns and frequent one-on-one meetings, phone calls, letters, faxes, and emails. In order to keep its current and prospective customers happy, telecommunications companies need to be able to keep up their high performance standards and fix any problems that arise (Sasono et al., 2021). Despite the challenges in the Nigerian communication business, a key to client retention is a high-quality telecommunications industry online service. Among the tactics for keeping consumers' trust include prompt and comprehensive responses to customer concerns and frequent one-on-one meetings, phone calls, letters, faxes, and emails. The importance of the services industry and the telecom sector in Nigeria's economy necessitates further research into how to boost the sector's ongoing expansion and, by extension, the country's economic performance. Kumbhar (2021) found a positive and significant relationship between system availability and customer satisfaction.

Telecommunications firms face a formidable task in this environment: how to sustain their current level of service excellence while simultaneously expanding their customer base (Sasono et al., 2021). Overall service availability, buyer contentment, and plans to repurchase are significantly correlated with service availability parameters; however, word-of-mouth (WOM) is not (Omofowa et al., 2021). According to Omofowa et al. (2021), customer satisfaction is the end result of a customer's evaluation of the service or product's quality in relation to their initial expectations. To rephrase, what matters most to clients is the quality and value of the service or product they purchase. Customers also want to feel like they got their money's worth and have access to the greatest product or service available. Saraswati and Indriani (2021) countered by saying that unhappy clients are still the number one reason why people leave their banks for rivals. As a result, financial institutions take numerous steps to guarantee that their clients receive high-quality e-services. In their 2022 study, Ekeke and Akoloh-Isaac looked at the tourism industry's online travel commerce in Port Harcourt, Rivers State, Nigeria, to see how service availability affected tourists' actions. Studying Nigerian deposit money banks, Osagie and Ugwuonah (2020) looked into the relationship between client loyalty and the quality of online services. There was a strong correlation between customer assistance and the loyalty of deposit money bank customers in Nigeria, and the research also found that there is a significant correlation between interaction and the devotion of deposit money bank customers in Nigeria. Research by Ezenwafor et al. (2020) investigated the relationship between the e-SQ model and the happiness of Nigerians who had used automated saving systems.

There are a lot of problems with the telecommunications services in North-Central Nigeria. These include things like slow internet, dialogue breaks, problems with service delivery and speed, problems with perceived value and brand commitment, and a strong preference for one brand over another. As a result, there are issues with devotion from customers, poor customer value, service delays, insufficient backup data, poor interconnectivity, network failures, and bad word of mouth. Furthermore, consumers have a hard time telling distinct brands apart based on practical features. On the contrary, consumers are on the lookout for brands that evoke feelings of wonder, emotion, and originality in them. Brands employ experiential appeals to differentiate themselves and increase consumer preference for their products. As a result, telecommunications companies encounter challenges while trying to compete in these markets, as staying ahead of the competition necessitates providing exceptional client satisfaction. Many studies have shown that service availability lead to satisfied customers (Ebire & Onmonya, 2020; Mahyunnisa et al., 2022; Deni & Lies, 2021; Wong et al., 2020). Customer satisfaction is positively impacted by service availability, according to Sulieman and Warda (2021). Directly and indirectly, service availability affects customer satisfaction and three behaviour intentions: repurchase intention, word-of-mouth, and site revisit. There are many more. However, as far as we are aware, no research has been carried out in Nigeria to ascertain the impact of service availability on telecom services. Examining the connection between service availability and customer satisfaction of telecommunications service in North-Central Nigeria and their online experiences was the driving force for this research. Specific objectives are to:

- i. ascertain the extent of relationship between service availability and customer value of Telecommunication Services in North-Central, Nigeria.
- ii. examine the relationship between service availability and word of mouth of Telecommunication Services in North-Central, Nigeria..

2.0 LITERATURE REVIEW

Customer Satisfaction

A key performance indicator for business-to-consumer (B2C) online transactions is customer satisfaction (Shin et al., 2023). A customer's level of satisfaction is a measure of how they feel about a service after using it (Udo et al., 2020). Customers' future actions, including online revisits and loyalty, are heavily influenced by their level of

satisfaction, which is a result of their experiences during the purchasing process (Pereira et al., 2016). In addition, if a customer's wants, requirements, and expectations are satisfied, they are more likely to stay loyal, buy from you again, and spread the word. When it comes to ensuring happy customers, the bank's performance is paramount. According to Nagangeastrat et al. (2021), this is typically deduced from the standard of banking services. A happy online shopper is more inclined to make repeat purchases and even positive referrals (Pereira et al., 2017), whereas an unhappy one will likely just stop using the service and go elsewhere (with or without a complaint). When customers feel like they got more than what they expected from a product or service, it's called consumer satisfaction.

When clients are happy, they are less likely to seek out services or products from other companies, which is good for company (Gil & Cervera, 2022; Fawcell & Sewnson, 2019). Businesses prioritise client pleasure and loyalty in order to maximise patronage and sales through effective consumer relationship management. A happy consumer is more inclined to buy from the company again, whereas a dissatisfied one could try to keep sales from skyrocketing. That is to say, word-of-mouth advertising and increased revenue are two outcomes that are likely to result from happy customers (Praveenkumar, 2015). But this research follows the proposal of Manani et al. (2023), who said that customer satisfaction is the feeling of contentment a consumer has after comparing the quality of the service or product they purchased with their initial expectations. To rephrase, what matters most to clients is the quality and value of the service or product they purchase. "Satisfaction" is a word that has been used in many different types of research.

Customer Value

Value to customers is defined as the ratio of the quality or benefit they receive to the costs (in terms of things like time, energy, and money) that they incur. Asiri et al. (2017) found that these factors influence consumers' decisions to purchase, try out, and ultimately rate the product. Sánchez et al. (2019) and Carlos et al. (2023) state that the customer value dimension is comprised of three parts: emotional value, social value and functional value. The perceived usability of the features of a product or service is what defines its functional value. There are four practical values in this study. The primary consideration is the practical importance of setting a shop. It talks about the website's signup page. The second is the practical worth of employees (their professionalism). The staff members are the ones who supply the service. Thirdly, it's the quality of the service in terms of its practical worth. How well a service is rendered is the root cause of its perceived usefulness. In contrast, the subjective experiences that arise as a result of consuming something are what make up its emotional value.

Wang et al. (2014) states that consumers consider both the price and quality of a service when determining its worth, and that they will only buy services that meet these criteria. In order to build a marketing mix that benefits both the company and its customers, successful businesses measure customer perceived value. Customer relationship management's database of customers is a lifesaver when trying to figure out what matters most to them. Organisations can use consumer purchasing trends shown in databases to inform the development of value propositions that appeal to specific demographics. According to Wang et al. (2014), in order for a business to generate outstanding customer value, it must facilitate direct communication between the customer and the business, as well as meet the customer's expectations, learn about the customer well, enhance the customer's experience with the business, and forge an emotional connection with the customer. The value that customers perceive and desire will be used as metrics in this study to quantify customer value.

Word of Mouth

Personal recommendations of a product from one person to another are known as "word of mouth" (WOM) (Solomon, 2015). Customers are more likely to believe word-of-mouth recommendations than they would be to believe advertisements broadcast through more formal channels (Tuten & Solomon, 2015). When reputable and dependable sources convey vital information, word-of-mouth (WOM) communication can significantly impact buying decisions (Ennew et al., 2020). The proliferation of instantaneous global communication made possible by the advent of the internet has facilitated the development of a phenomena called electronic word-of-mouth (WOM) among consumers, as stated by Brown et al. (2017). When researching companies, goods, and services, customers frequently rely on word-of-mouth (WOM). Word-of-mouth (WOM) is still acknowledged as a significant information source that influences consumers' product decisions (Smith et al., 2022).

Positive and bad word-of-mouth (WOM) communication affects telecommunications firms' sales and profits and is strongly linked to customers' behavioural intentions (Jung & Seock, 2017). If clients have faith in a bank's online banking service, they are more likely to suggest it to their friends (Wu et al., 2018). Taghizadeh et al., (2023) opine that word-of-mouth is a powerful marketing tool. Casalo et al. (2018), word-of-mouth has a strong influence on customer decision and choice of goods/services to buy. Word-of-mouth is a product of service experience but could be positive or negative depending on customers evaluation of service encounter influences customer purchase behaviour (Sussknid, 2022). The author advanced that satisfied customers engage more in word-of-mouth than unsatisfied customers. Nitse et al., (2019) assert that customer dissatisfaction with ambient condition of a service

facility complains. This implies that there is an association between ambient conditions and customer's word-of-mouth.

Concept of Service Availability

System availability refers to the correct technical function of the website. In eservice, the system availability makes customers always accessible to the online service offered by online companies, which can help customers to have a good image of online companies (Wong et al., 2020). If customers cannot use the online system when they need online service, they will switch to some other online companies. System availability is part of the technical function in web site which could affect the customer satisfaction in relation to the availability of a web site. Parasuraman et al. (2005), defined system availability as the technical of the web site which function accurately. System availability is part of the technical function in web site which could affect the customer satisfaction in relation to the availability of a web site. Based on Zhuang and Babin (2023), the customers will feel dissatisfied with the experience provided in the web site, if the level of system availability on the website is low. However, in the e-banking sites, it is shows that the system availability does not have any significant effect on the satisfaction which might be due to the standardization of performance issues in most of the bank sites.

When a system is available, it means that the website is technically functioning correctly. Customers get a positive impression of online businesses when they are able to access the services they offer at any time thanks to the system availability in eservice. Customers will go to other online businesses if they are unable to use the system when they require online service. The creators of E-S-QUAL, Parasuraman et al. (2005), described system availability as the precise technical functioning of a website. According to Frame and Grady (2019, quoted in Wong et al., 2020), one of the main concerns related to online shopping is the possibility of technical software faults. One aspect of a website's technical function that could influence consumer happiness is the site's system availability. According to Zhuang and Babin (2023), if the website's system availability is low, customers will be dissatisfied with the experience they receive. On the other hand, private shopping sites demonstrate that E-S-QUAL system availability has no discernible impact on customer satisfaction. This could be because most of these sites have performance standards in place (Wong et al., 2020). This demonstrates that, depending on the website's context, system availability may or may not impact customers' pleasure with the online business. The term "system availability" describes how well the e-banking solutions work technically.

System Availability and Customer Value

To examine system availability in the context of pure-service sites, original items slightly changed. Kumbhar (2021) found a positive and significant relationship between system availability and customer satisfaction. Ekeke and Akoloh-Isaac (2022) who investigated the direct effect of e-service quality on travellers' behavioural intentions in the online travel trade of the tourism industry in Port Harcourt, Rivers State, Nigeria. The result showed that travellers' behavioural intentions towards online reservations are driven by e-service quality. Osagie and Ugwuonah (2020) who investigated on E-Service Quality and Customer Loyalty in Deposit Money Banks in Nigeria. The research therefore revealed that; a significant relationship exist between interactivity and customer loyalty of deposit money banks in Nigeria, a significant relationship exist between customer support and customer loyalty of deposit money banks in Nigeria, as well that there is a significant influence of customer technology adoption on the relationship between e-service quality and customer loyalty. Ezenwafor et al. (2020) study assessed the nexus between e-SQ model and customer satisfaction among the users of automated saving platforms in Nigeria. Their finding revealed that website design, reliability, personalisation, ease of use and trust have appreciable effect on customer satisfaction while responsiveness does not have a significant impact on customer satisfaction. Darlington et al. (2020) findings showed that service availability, fulfilment, privacy and efficiency were all significantly related to overall service quality and customer loyalty for both banking models. The following hypothesis was developed to guide the study;

H₀₁: There is no significant relationship between service availability and customer value to Telecommunication Services in North-Central, Nigeria.

System Availability and Word of Mouth

Mahyunnisa et al. (2022) study determined the effect of e-service quality and customer satisfaction on repurchase intention through online consumer reviews tool as an intervening variable on the marketplace Shopee. The results show that E-service quality has a positive and significant effect on online consumer reviews on the marketplace Shopee. Deni and Lies (2021) research was aimed to analyze the impact of electronic service quality which consists of efficiency, fulfillment, reliability, privacy, responsiveness, contact, and compensation towards the customer satisfaction on the user of internet banking in PT Bank Rakyat Indonesia, Persero. Wong et al. (2020) studied the impact of e-service quality on customer satisfaction in Malaysia. The results showed that the customer satisfaction and the dimensions of e-service quality namely; efficiency, fulfillment, privacy and system availability are positively correlated with one another. Nga et al. (2019) examined 'the impact of e-service aviation on the customer satisfaction

and consumer engagement behaviours toward Luxury hotels” Vic-tram. The results revealed that website service avidity plays key role in boosting customer satisfaction, customer satisfaction behaviours and brand loyalty. Paulo, et al. (2019) examined ‘the impact of electronic service quality and customer satisfaction on consumer behaviour in online shopping’, in portrayal. The analysis revealed that three dimensions of e-service equality (website design, security/privacy and fulfilment have effect on overall electronic service quality. However, customer services does not significantly relate with overall service quality. Sulieman and Warda (2021) revealed a statistical significant impact of electronic service quality (Via ease of use, website design, privacy and responsiveness) on customer’s satisfaction of Islamic banks in fordam. Whereas, there is insignificant impact of reliability and effectiveness on customer satisfaction has great role in stimulating and supporting customer’s altercation. The following hypothesis was developed to guide the study;

H₀₂: There is no significant relationship between service availability and word of mouth to Telecommunication Services in North-Central, Nigeria.

Theoretical Review

Technology Acceptance Model

Among the many models used to describe environmental catalyst and user acceptance behaviours is the Technology Acceptance Model (TAM), first proposed by Davis (1989). In order to forecast whether people would embrace new forms of technology, the technological acceptance model postulates that two factors—PEOU and PU—will be considered (Tung et al., 2018). Ever since its creation, the model has been put through its paces in a number of investigations, and as a result, it has surpassed all others in terms of the number of applications it has in its toolbox (Pikkarainen et al., 2014). In their 2016 publication, Lichtenstein and Williamson emphasised that the model is based on TRA and other theories in social psychology.

As per TRA, one's beliefs shape their attitudes, which in turn cause them to make intentions, which ultimately result in actions. Similarly, the following components make up the TAM construct that Davis (1989) first proposed: attitude, behavioural intention to use, perceived ease of use (PEOU), in addition to perceived usefulness (PU). Out of all the constructs, PU and PEOU are the most important for predicting an end-user's attitude towards and adoption of a technology (Cheng et al., 2016). Many writers have suggested that people who are eager to embrace new technologies would be led to believe that these technologies are simple and will not demand much effort from them. Scientists from Lichtenstein and Williamson (2016) in Australia and Lee (2019) in Finland have used TAM in their studies in different ways, with some adjustments made according to cultural and environmental factors.

Empirical Review

In their 2022 study, Ekeke and Akoloh-Isaac looked at the tourism industry's online travel commerce in Port Harcourt, Rivers State, Nigeria, to see how e-service quality affected tourists' actions. The descriptive survey research gathered information from 138 travellers who were surveyed by the chosen travel agencies. The questionnaire was well-structured and consisted of nine scale items and four demographic items. According to inferential statistics run by SPSS, e-service quality is the primary motivator for travellers' intentions to make online reservations. For travellers, responsiveness was not a determining factor in their repurchase intentions, but information quality was. Studying Nigerian deposit money banks, Osagie and Ugwuonah (2020) looked into the relationship between client loyalty and the quality of online services. Researchers used a quasi-experimental approach in this investigation. Consumers of publicly traded Nigerian deposit money institutions that have international authorisation made up the sample population. According to the Krejcie and Morgan formula, 411 clients made up the sample. When selecting the participants, we also used a probability simple random sampling method. Collection of data was done using a questionnaire using a five-point Likert scale. The research questions were answered by analysing the demographic data of the respondents, mean and standard deviation, and using bar and pie charts for frequency and percentage analysis. The hypotheses were tested using the Kendall tau b correlation coefficient. None of the alternative hypotheses were accepted. There is a strong correlation between customer assistance and the loyalty of deposit money bank customers in Nigeria, and the research also found that there is a significant correlation between interaction and the devotion of deposit money bank customers in Nigeria.

Research by Ezenwafor et al. (2020) investigated the relationship between the e-SQ model and the happiness of Nigerians who had used automated saving systems. A survey research design and quota sampling were employed as research methods and sampling strategies, respectively, in an effort to accomplish this purpose. People living in Anambra state who utilise automated saving platforms and participate in the study were surveyed using a questionnaire. Using multiple regressions in SPSS, the hypotheses that were developed were evaluated. Website design, reliability, personalisation, ease of use, and trust all had a notable impact on consumer satisfaction, according to this study, however responsiveness did not. Research by Darlington et al. (2020) compares and contrasts the effects on customer loyalty of mobile app service quality and unstructured supplemental service data banking. The study used a quantitative technique and a descriptive design, adhering to a positivist worldview. With a response rate

of 73%, a survey was sent out to 300 students using a convenience sample method. In both banking models, the results demonstrated a strong correlation between customer loyalty, total service quality, and efficiency, privacy, and fulfilment.

3.0 METHODOLOGY

An approach that can be used in survey research, the researcher has opted for a cross-sectional research strategy for this study. Our study aims are well-suited to this approach since it allows us to look for trends in the quality of e-services and the correlations between different factors. The population of this study is the customers of MTN, GLOBACOM, AIRTEL and 9MOBILE companies in North-Central States (Benue, Plateau, Kogi, Kwara, Nassawa and Niger), Nigeria. According to the National Bureau Statistics Telecoms Data – Q1 2023, there are forty three million six hundred and nine thousand and seventy four (43,609,074) and thirty million three hundred and fifty four thousand three hundred and twenty one (30,354,321) active voice and internet subscription per zone respectively.

Table 1: Population of Internet Subscribers in North-Central, Nigeria

State/Telecoms	MTN	GLOBACOM	AIRTEL	9MOBILE	Total
Benue	1,684,924	2,064,601	1,364,423	657,106	5,761,043
Kogi	1,029,441	2,164,361	889,911	575,579	4,659,292
Kwara	1,985,373	1,424,467	1,286,129	602,424	5,298,393
Nassarawa	1,356,530	1,454,702	1,205,682	663,663	4,680,577
Niger	1,242,814	1,721,550	1,577,677	684,313	5,226,354
Plateau	1,739,263	1,263,106	1,121,092	605,191	4,728,652
Total	9,038,334	10,092,787	7,444,914	3,788,276	30,354,231

Source: National Bureau of Statistics (September, 2024)

In this study there are thirty million three hundred and fifty four thousand three hundred and twenty one (30,354,321) active internet subscribers North-Central, Nigeria, which implies that the population of the study is known, therefore, stratified sampling is appropriate and therefore adopted. In the same vein, Taro Yemane's technique was adopted to determine the sample size and we had 400. 400 copies of questionnaire were distributed to the customers of telecoms in North-Central, Nigeria.

4.0 RESULTS AND DISCUSSION

The quantitative analysis of the observed data, utilising statistical approaches like Average Variance Extracted (AVE), is the basis of this assessment. So, with the help of SPSS 23.1, we will examine the reliability of the instruments using the Cronbach Alpha test, and we will use the Average Variance Extracted (AVE) test to check the validity of the instrument in this respect based on a 0.50 threshold.

Table 2: The Results of the Measurement Model Assessment with descriptive analysis and factor loadings

Constructs	Item Scale	Mean	S.D	Factor Loadings	Cronbach Alpha	CR	AVE	Sq. Root of AVE
Service Availability	SA1	4.50	.766	0.882	0.921	0.936	0.787	0.888
	SA2	4.02	.849	0.734				
	SA3	4.11	.889	0.981				
	SA4	4.00	.873	0.933				
Customer Value	CV1	4.30	1.044	0.898	0.892	0.933	0.775	0.881
	CV2	4.11	.799	0.779				

Word of Mouth	CV3	4.01	.670	0.904	0.953	0.944	0.803	0.896
	CV4	3.80	.941	0.934				
	WOM1	3.90	.969	0.882				
	WOM2	3.81	.884	0.790				
	WOM3	3.90	.817	0.986				
	WOM4	3.80	.695	0.915				
CFA Model Fit:	χ² (201) = 421.39 at P = 0.001; RMSEA = 0.05; SRMR = 0.05							

Source: Researchers’ Computation, 2024 (Aided by SMARTPLS Version 4.0.9.9).

From the result on the table, it can also be observed that the composite reliability (CR) for each of the constructs; service availability, customer value, and word of mouth exhibit high values of 0.936, 0.933, and 0.944 respectively.

Table 3: Correlation Matrix Showing the Discriminant Validity of latent constructs

	SA	CV	WOM
Service Availability	0.888		
Customer Value	0.751	0.881	
Word of Mouth	0.707	0.681	0.898

Source: Researchers’ Computation, 2024 (Aided by SMARTPLS Version 4.0.9.9).

Note:

SA= Service Availability

CV= Customer Value

WOM= Word of Mouth

Objective One and Two: Assessing the relationship between Service Availability and Customer Satisfaction.

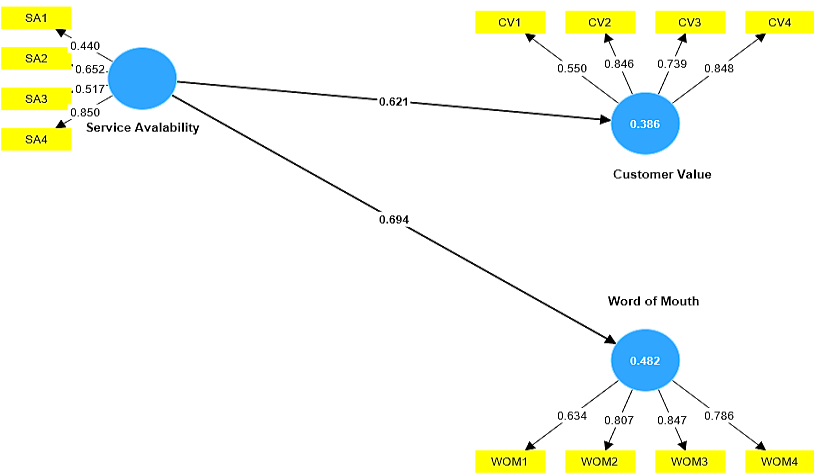


Figure 1: Structural Path Model for Service Availability and Customer Satisfaction

Source: Researchers’ Conceptualization 2024; (Aided by Smart Pls Version 4.0.9).

Table 4: Structural Path Model and Hypotheses Results

S/n	Hypothesized Path	Path Coefficient (β)	P-Value	Standard Error	T Value	Decisions	f-Squared	Effect size
1.	SA->CV	0.621***	0.000	0.046	4.502	Not Supported	1.003	Large
2.	SA-> WOM	0.694***	0.000	0.012	3.125	Not Supported	2.082	Large
***P<0.001 **P<0.01 *P<0.05								

Source: The Researcher's Computation (2024) from Path Analysis Result (Aided by SMARTPLS 4.0.9.9).

The first structural path which represented the first hypothesis of the study showed that there is a positive relationship between service availability and customer value of telecommunication companies in North-Central, Nigeria with a beta value (β) of 0.621 at P-value of $0.00 < 0.05$ and T-Value $4.502 > 1.96$. Thus the null hypothesis was rejected. The second structural path which represented the second hypothesis of the study also showed that there is a positive relationship between service availability and word of mouth of telecommunication companies in North-Central, Nigeria with a beta value (β) of 0.694 at P-value of $0.00 < 0.05$ and T-Value $3.125 > 1.96$. Thus the null hypothesis was rejected.

Discussion of Findings

Service Availability and Customer Value

The first findings of this study established a positive relationship between service availability and customer value of telecommunication services in North-Central, Nigeria. Specifically, the result showed that there is a positive relationship between service availability and customer value of telecommunication companies in North-Central, Nigeria with a beta value (β) of 0.621 at P-value of $0.00 < 0.05$ and T-Value $4.502 > 1.96$. Thus the null hypothesis was rejected.

This study finding are consistent with the previous studies' results such as Ekeke and Akoloh-Isaac (2022) result showed that travellers' behavioural intentions towards online reservations are driven by e-service quality. In specific terms, information quality had a significant effect on travellers' behavioural intentions in terms of repurchase intentions while responsiveness did not. Tourism service providers at the global scale are expected to build capabilities in online reservations in terms of information quality and responsiveness to enhance positive travellers' behavioural intentions towards their online services.

Service Availability and Customer Value

The first findings of this study established a positive relationship between service availability and word of mouth of telecommunication services in North-Central, Nigeria. Specifically, the result showed that there is a positive relationship between service availability and measure of customer satisfaction of telecommunication firms in North-Central, Nigeria. Similarly, it was found that there is a positive relationship between service availability and word of mouth of telecommunication companies in North-Central, Nigeria with a beta value (β) of 0.694 at P-value of $0.00 < 0.05$ and T-Value $3.125 > 1.96$. Thus the null hypothesis was rejected.

This study finding are consistent with the previous studies' results such as Osagie and Ugwuonah (2020) revealed that; a significant relationship exist between interactivity and customer loyalty of deposit money banks in Nigeria, a significant relationship exist between customer support and customer loyalty of deposit money banks in Nigeria, as well that there is a significant influence of customer technology adoption on the relationship between e-service quality and customer loyalty. Ezenwafor et al. (2020) finding revealed that website design, reliability, personalisation, ease of use and trust have appreciable effect on customer satisfaction while responsiveness does not have a significant impact on customer satisfaction.

5.1 CONCLUSIONS

Overall, the study provides valuable practical insights for of telecommunication services to leverage e-service quality effectively and improve their customer satisfaction. Additionally, it contributes to the theoretical understanding of e-service quality and its impact on organizational outcomes.

- i. Service Availability emerges as a crucial factor for improving both customer value and word of mouth of telecommunication services in North-Central, Nigeria. Investing in fostering internet creativity and innovation should be a priority for enhancing customer satisfaction.
- ii. Ease of use alone, as measured in this study, has limited impact on customer value and even a positive effect on word of mouth. Telecommunication services should ensure proper training and integration of technology to avoid the pitfalls of misapplication and maximize the benefits of IT knowledge.

5.2 Recommendations

The following recommendations are hereby made based on the study's findings:

- i. Managers of telecommunication Firms in North-Central, Nigeria should foster service availability by implementing programs and initiatives that encourage and support electronic creativity and innovation, as this can significantly improve customer value.
- ii. Managers of telecommunication Firms in North-Central, Nigeria should utilize electronic service quality strategically by going beyond simply having a e-commerce presence and focusing on utilizing platforms strategically to connect with customers, in order to build customer value.
- iv. Management of Telecommunication Firms in North-Central, Nigeria should train and integrate technology effectively by ensure proper training and integration of technology to avoid the pitfalls of misapplication and maximize the benefits of IT knowledge for customer satisfaction.
- vi. Managers of Telecommunication Firms in North-Central, Nigeria should enhance perceived ease of use as a means of improving customer value and word of mouth by ensuring that customers are able to easily access to several existing products/services in the market.

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