

SERVICE QUALITY AND CUSTOMER PATRONAGE OF TELECOMMUNICATION PRODUCTS IN AKWA IBOM STATE, NIGERIA

Aniediabasi James UDOM^{a*}

^{a)}*Heritage Polytechnic, Eket, Ikot Udota, Nigeria.*

Abstract

This study examined the relationship between service quality and patronage of telecommunication products in Akwa Ibom State, Nigeria. Service quality was measured using tangibility, reliability, responsiveness, simplicity, and availability. Primary data were collected via questionnaires from 384 respondents using convenience sampling. Descriptive statistics and regression analyses were used for data analysis. The results showed significant positive relationships between service quality dimensions and patronage: tangibility ($r = 0.875$), reliability ($r = 0.837$), responsiveness ($r = 0.897$), simplicity ($r = 0.649$), and availability ($r = 0.462$). The SEM analysis confirmed these findings, revealing that reliability and responsiveness were the strongest predictors of patronage, followed by availability, simplicity, and tangibility. The model fit indices indicated an acceptable fit, validating the hypothesized relationships. Recommendations include enhancing the physical environment and facilities to reflect the organization's values, ensuring promised services are delivered, and promptly addressing customer problems. Telecommunication companies should focus on understanding and meeting customer needs to encourage continued patronage.

Keywords: Patronage, Customers, Telecommunication, Service Quality, Products

JEL Classification: M31, L96, C83

Corresponding author, Aniedabasi James Udom - udom_aniedi@yahoo.com

1. Introduction

Due to intense competition and deregulation, service sector businesses have been driven to adopt feasible product diversification strategies. High-quality service delivery is essential for business success in this industry (Nigeria). In today's hyper-competitive market, high-quality service appears to be critical for business success and survival (Negi, 2009).

Service quality varies depending on where, how, when, and who supplies it, as well as perishability, which means it must be consumed right away because it cannot be stored or held (Biscaia, Yoshida, & Kim, 2021). Because of these characteristics, getting and delivering some services becomes rather difficult for both sides (marketers and consumers). There is no

agreement on how to define and assess service quality, which explains why it is so prevalent in marketing literature (Schneider and White, 2004). In the service marketing literature, service quality refers to the customer's overall assessment of the service (Eshghi, Roy, and Ganguli, 2008), or how well a service meets their needs or expectations. Service quality, as defined by Parasuraman, Zeithaml, and Berry (1985), is the difference between customers' impressions of a company's services and their expectations. Customers perceive great quality when perception exceeds expectations. Customers' expectations express their opinions about service providers in terms of what should be provided. This is influenced by previous experience, word of mouth, personal needs, and communication with service providers. According to Parasuraman, Zeithaml, and Berry (1988), high-quality services offer salespeople credibility. The authors also mentioned that telecommunication companies can better match customer expectations as they continue to operate or improve their service. Customers that are dissatisfied with the company's service may switch providers. Thus, high service quality predicts competitive performance (Balachandran, Voclker, and Bahl, 2003). More importantly, for telecommunication companies offering identical services, service differences represent a significant competitive advantage.

Product quality, which can be judged by flaws and durability, is more abstract and elusive than service quality. Its three key characteristics are distinctive. They are diverse, immaterial, and interrelated in terms of production and consumption (Yanti & Astuti, 2023). When objective indicators are unavailable, perception of firm service quality might be used (Eshghi, Roy, and Ganguli, 2008). The service quality model proposed by Parasuraman et al. (1988) includes dependability, certainty, tangibility, empathy, and responsiveness (Suhartini, 2023). According to this model, service quality is the difference between client expectations and actual service (Jahmani, Bourini, & Jawabreh, 2020). A satisfactory service meets or exceeds client expectations, thereby enhancing consumer loyalty (Parasuraman et al., 1988).

The concept of patronage refers to customers' support and loyalty towards a business or product. It includes repeat purchases, positive word-of-mouth, and sustained engagement. Patronage is driven by perceived value, high service quality, customer satisfaction, and strong customer relationships. Effective management of these factors fosters customer loyalty, leading to ongoing business success and a competitive edge.

Managers and academics have difficulties in defining and assessing service quality. This is due to the uniqueness of services. Many academic studies have focused on industrial product quality, but few have examined service sector and telecommunication quality. Few studies have examined SERVQUAL (tangibility, empathy, responsiveness, assurance, and dependability) consumer perceptions of service quality using the P-E gap (Eposi, 2023; Qing et al., 2023). Client perception and expectation are driven by disconfirmation, not attitudinal paradigms, in this review. P-E gap evaluation is not supported by psychological, economic, or statistical theories (Biscaia, Yoshida, & Kim, 2021). There have been few empirical marketing studies on Nigeria's telecommunication business investigating the characteristics that influence service quality in service organizations. There has been no research into how service quality dimensions affect telecommunication service patronage in Akwa Ibom State, Nigeria using industry-specific criteria. To fill research gaps, this study used an attitudinal paradigm to compare the quality of telecommunication services in Akwa Ibom State, Nigeria.

The study examines the quality and utilization of telecommunication services in Akwa Ibom State, Nigeria, focusing on service marketing. It collected primary data from 384 customers to assess the impact of tangibility, reliability, responsiveness, availability, and simplicity on product sales, consumer choice, and consumption. The researcher aims to explore the relationship between telecommunication product patronage and various service quality factors. Specifically, the study investigates how these service quality proxies influence telecommunication product usage and examines their combined effect on patronage.

This paper is structured as follows: the introduction outlines the research problem and objectives. The literature review examines previous studies on service quality and customer patronage in the telecommunications industry. The methodology describes the data collection and analysis methods. The results section presents the study's findings. The discussion interprets the results and compares them with existing literature. Finally, the conclusion summarises the main findings and offers recommendations for telecommunication companies.

2. Framework

2.1. Conceptual Framework

The service paradigm has evolved from viewing services and goods as fundamentally different to recognizing their interconnectedness. While initially perceived as opposites, they now overlap due to minor distinctions. Some services rely on tangible goods for support or delivery, while others use them in manufacturing. Defining a service includes identifying it as providing benefits, activities, or enjoyment and limiting it to commodity sales. Services are intangible and involve interactions between customers, physical resources, and systems to solve problems, sometimes involving other customers. Scholars like Araujo and Spring (2006), Beaven and Scotti (2000), Moeller (2010), Corrêa (2017), Edvardsson (2015), and Lovelock and Gummesson (2014) criticise the traditional dichotomy of services versus products, arguing it can mislead consumers and lacks empirical support.

Service unites industries through its intangibility, which makes it abstract and challenging for consumers to evaluate. Corrêa (2017) suggests redefining intangibility to improve service quality assessment. Variability in labor-intensive services complicates standardization, increasing delivery uncertainties caused by time, suppliers, and customer interactions. Over the past two decades, automation has aimed to standardize service delivery, simplifying variability while complicating service quality monitoring. Service standardization is complex, involving factors such as heterogeneity, client participation, and quality maintenance. Although services can have standardised components, heterogeneity impacts the manufacturing and service sectors and should not distinguish products from services. By emphasizing service diversity, marketers encourage customers to customize offerings according to demand.

Service production and consumption are intertwined, requiring client participation before consumption. Quality is influenced by communication, hygiene, attire, and nonverbal conduct, which are crucial for provider performance without prior service testing. Meeting demand entails balancing supply and demand expectations and enhancing company growth and competitiveness through quality improvement capabilities. Evaluating quality remains a challenging task for marketers and researchers, influenced by Nordic and American perspectives emphasizing functional and empathetic services. Discrepancies between

performance, expectations, and perceptions invoke the 'disconfirmation paradigm,' shaped by standards, values, goals, and aspirations influencing service quality assessments. Grönroos (1984) proposed a quality framework, advocating for client reviews to maintain service quality. The SERVQUAL model by Parasuraman, Zeithaml, and Berry (1988) assesses service quality through five gaps: Customer Expectation: Management Perception, Management Perception: Service Quality Specification, Service Quality Specifications: Service Delivery, Service Delivery: External Communication, and Expected Service: Perceived Service Gaps. Customers use SERVQUAL to rate reliability, responsiveness, assurance, tangibility, and empathy, with reliability critical for service quality perceptions and responsiveness fostering trust. Physical service representation enhances image and signalling, with empathy towards client desires being essential. SERVQUAL's criticisms include its inability to contextualize service needs and options.

Rust and Oliver (1994) developed a model evaluating product, delivery, and environmental service quality, challenging the intangibility of happiness and service quality. Brady and Cronin (2011) explored how consumer attitudes towards outcome, interaction, and environmental quality influence service quality assessments. These studies highlight the significance of service quality in consumer decisions and satisfaction, anchoring current research in understanding its impact on consumer behaviour and business success.

2.2. Quality in Telecommunication Service

Customers' perceptions of service quality are shaped by five critical factors: tangibility, dependability, responsiveness, empathy, and assurance, which vary across industries and impact client satisfaction differently. Additional considerations include accessibility, security, adaptability, and simplicity. For instance, mobile phone signal availability reflects service reliability, while security measures protect customer privacy. Flexibility denotes how well a company meets customer expectations and offers options. Simplifying service registration, installation, and usage enhances customer convenience. This study introduces a SERVPERF model applicable to service firms, including those in the Nigerian telecommunications industry, focusing on tangibility, dependability, responsiveness, availability, and simplicity (Parasuraman, Zeithaml, & Berry, 1988). These dimensions are crucial for evaluating and improving service quality to meet evolving consumer demands and enhance business performance.

2.3. Theoretical Framework

The study's model is grounded in the Theory of Reasoned Action (TRA), developed by Fishbein and Ajzen in 1975. It addresses shortcomings in traditional attitude and behavior research by predicting behavioral intentions based on attitudes and subjective norms. Behavioral desire influences actions, shaped by personal beliefs and social influences regarding what significant others expect. In consumer research, TRA informs studies on patronage and service quality, predicting behaviors like customer loyalty. This theory's application in understanding service quality and patronage behaviors underscores its relevance in

contemporary research and its utility in shaping strategies to enhance customer satisfaction and loyalty.

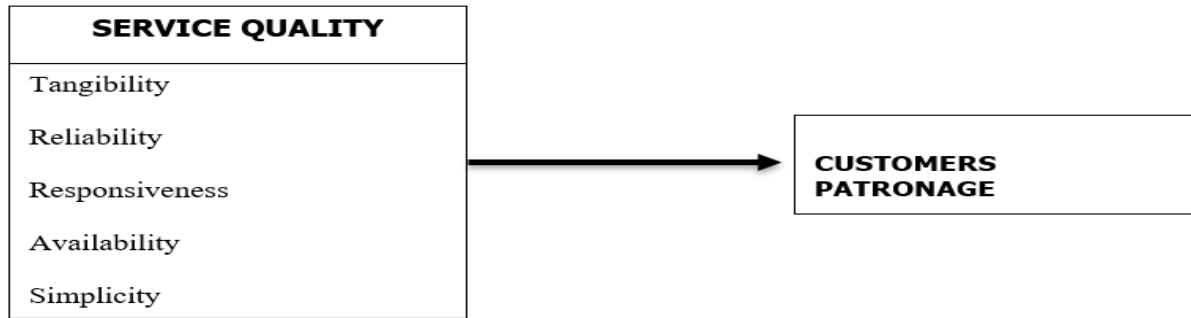


Figure no. 1: Conceptual Framework of the Researcher

Source: Author, 2024

2.4. Empirical Framework

The SERVQUAL model has been extensively applied across industries to assess critical elements of service quality. Kumar (2009) highlighted the importance of dependability, tangibility, convenience, empathy, and responsiveness in enhancing customer satisfaction. Curry (2002) emphasized that customers value empathy and assurance in physiotherapy treatments. Badri and Badri (2008) effectively used the model to identify service quality deficiencies. Negi (2009) underscored the significant contributions of empathy and dependability to overall service quality and customer happiness. In the telecommunications sector, Kouthoris and Alexandris (2013) identified quality gaps among service providers in Andhra Pradesh, India, with reliability, tangibility, availability, responsiveness, and simplicity crucial for client patronage. Sivesan (2012) found that service quality profoundly impacts client patronage in the banking sector, while Ogbadu (2012) linked service quality to both patronage and bank profitability. Rizan, Warokka, and Listyawati (2014) demonstrated that empathy positively influences consumer loyalty. Ogungbade (2015) concluded that while improved service quality is essential, it must be accompanied by increased customer trust in service providers to enhance patronage effectively. These studies illustrate the multifaceted role of service quality in shaping customer perceptions and behaviours across diverse sectors.

3. Methodology

In this study, a survey research design was employed, deemed appropriate for gathering pertinent data from telecommunications product consumers. This methodological choice aligned well with the research's objectives, focusing on assessing service quality perceptions and consumer behaviors within the telecommunications sector. The study targeted all telephone subscribers in Akwa Ibom State who actively use telecommunication services.

To ensure the sample's representativeness, a sample size determination formula for an infinite population, as outlined by Thames (1996), was utilized due to the unknown exact population size. This approach aimed to achieve a statistically valid sample size that could provide reliable insights into the broader population of interest.

Participants were selected through random sampling techniques to enhance the sample's representativeness. Random sampling helps minimize biases and ensures that each telephone subscriber in Akwa Ibom State had an equal chance of being included in the study, thereby enhancing the generalizability of the findings.

The sample size, determined by the formula, was sufficient to provide statistically significant results while managing practical constraints. By employing rigorous sampling methods and adhering to established methodologies, the study aimed to produce findings that could be reasonably generalized to the entire population of telephone subscribers in Akwa Ibom State, thus supporting the robustness and reliability of its conclusions. It is as presented below:

$$n = \frac{Z^2 \cdot P \cdot Q}{e^2} \quad (1)$$

where

- n = sample size,
- Z = standard Z value (1.96),
- P = estimate of expected population proportion
- Q = 1 – P
- e = level of error accepted

For determination of the sample size, we have:

$$n = \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.05)^2} = \frac{3.8146 \times 0.5 \times 0.5}{0.0025} = \frac{0.9604}{0.0025} = 384.16 \quad (2)$$

For this study, the convenience sampling technique was adopted. The convenience sampling technique was adopted because it allows the researcher to obtain basic data regarding his study population without the complications of using a randomized sample. The data for this study were mainly from the primary source. This was done by way of administering questionnaire to consumers of telecommunication services who served as respondents.

3.1. Research Instrument

The SERVPERF instrument employed in the study was composed of two main sections designed to capture different facets of service performance and customer behavior. Section A included four questions, while Section B comprised 22 items categorized into five dimensions: tangibility, availability, reliability, responsiveness, and simplicity. These dimensions were selected based on their relevance to assessing service quality in various contexts.

In addition to evaluating service performance, the instrument incorporated three specific items to measure customer patronage behaviors: purchasing airtime, subscribing to data services, and frequency of making calls. These indicators were crucial for understanding how service quality perceptions influenced actual consumer actions.

The adaptation of the SERVPERF instrument for the present study was meticulously structured to ensure that the questions and items elicited responses aligned with the research objectives. By tailoring the instrument in this way, researchers aimed to gather comprehensive data that could facilitate a nuanced analysis of service quality perceptions and their impact on customer behaviors. This approach not only enhanced the instrument's validity and reliability

but also provided valuable insights into the dynamics between service quality assessments and consumer actions in the study's specific context.

3.2. Validity Test and Reliability Test of the Research Instrument

The contents, construct and face validity of the research instrument used was assessed by the experts in the field of test and measurement. The relevance, its comprehensiveness and adequacy of items in relation to the purpose of the study and the hypotheses to be tested was assessed by these experts and their level of agreement was above 70 percent.

Instrument reliability in the study was ascertained through pilot study. The subjects for the pilot study were drawn from Uyo metropolis, the state capital of Akwa Ibom State. In all, forty persons took part in the initial survey which was done through convenience method. A test-retest method was used for pilot study while a gap of two weeks was given in between first and second tests. Cronbach alpha result from the pilot survey showed coefficient of 0.811. This indicated internal consistency at a level that is highly accepted. Values for internal correlation started from 0.42 - 0.56. This suggested a moderate relationship as presented in Table 1

Table no. 1: Reliability Analysis: Scale (All)

Item-Total Statistic					
S/N	Code	scale Mean	Scale Variance	Corrected item-total corrected	Alpha
1	Tangibility	3.091	0.5692	.4170	.6915
2	Reliability	3.735	0.7633	.5211	.6144
3	Responsiveness	3.671	0.3289	.5642	.6516
4	Availability	3.273	0.4788	.4619	.6825
5	Simplicity	3.191	0.6801	.5388	.6371
6	Patronage	3.134	0.1668	.5071	.7255
Reliability Coefficients, N of cases = 40.0 N of Item = 6, Alpha = .8110					

Source: Field data, 2023

In this study, the main instrument used was the questionnaire. The researcher together with two research assistants properly trained for this purpose administered the instrument to the respondents. Aside from the socio-demographic variables of respondents, other variables in the questionnaire were assessed through ordinal scale. The modified 5-point rating Likert scale was used. The scoring ranged from strongly agree (4) to Undecided (0). Table 2 presents the details of the scale used.

Table no. 2: Rating scale of variables

S/N	Rating	Score
I	Strongly Agree	4
Ii	Agree	3
Iii	Disagree	2
Iv	Strongly Disagree	1
V	Undecided	0

Source: Field data, 2023

3.3. Method of Analysing the Data

The data used in this study were analysed using descriptive and inferential statistics. In the former, mean, percentage analysis and standard deviation were used while the later employed the multiple regression analysis to test the relationship between the dependent and independent variables.

The model used in the study was as follows:

$$Y = \alpha_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + \mu \quad (3)$$

where:

- Y (patronage) measures customer engagement and is composed of scores from questions on service usage and satisfaction.
 - X1 (tangibility) refers to physical aspects such as facilities and equipment;
 - X2 (reliability) refers to the service's consistency;
 - X3 (responsiveness) refers to how quickly the service meets customer needs;
 - X4 (availability) refers to the service's accessibility; and
 - X5 (simplicity) refers to ease of use, μ = error term
- The variables were derived from questionnaire items through aggregation and averaging.

3.4. Structural Equation Modeling (SEM)

This study used a quantitative research design and Structural Equation Modeling (SEM) to explore the relationship between service quality and patronage of telecommunication products in Akwa Ibom State, Nigeria. Confirmatory Factor Analysis (CFA) validated the measurement model, assessing how observed variables (X) relate to latent constructs (ξ), such as tangibility, reliability, responsiveness, availability, and simplicity. Fit indices like Chi-square (χ^2), RMSEA, CFI, and TLI evaluated the model's accuracy.

The structural model examined the direct and indirect relationships among latent variables (η) using equations where X and Y are vectors of observed variables, Λ_x and Λ_y are factor loading matrices, and δ and ε are measurement errors. B and Γ are coefficients, and ζ represents disturbances.

$$X = \Lambda_x \xi + \delta \quad (4)$$

$$Y = \Lambda_y \eta + \varepsilon \quad (5)$$

$$\eta = B\eta + \Gamma\varepsilon + \zeta \quad (6)$$

Maximum Likelihood (ML) was used for parameter estimation. Model fit was assessed with Chi-square (χ^2), RMSEA (≤ 0.08), CFI (≥ 0.90), and TLI (≥ 0.90).

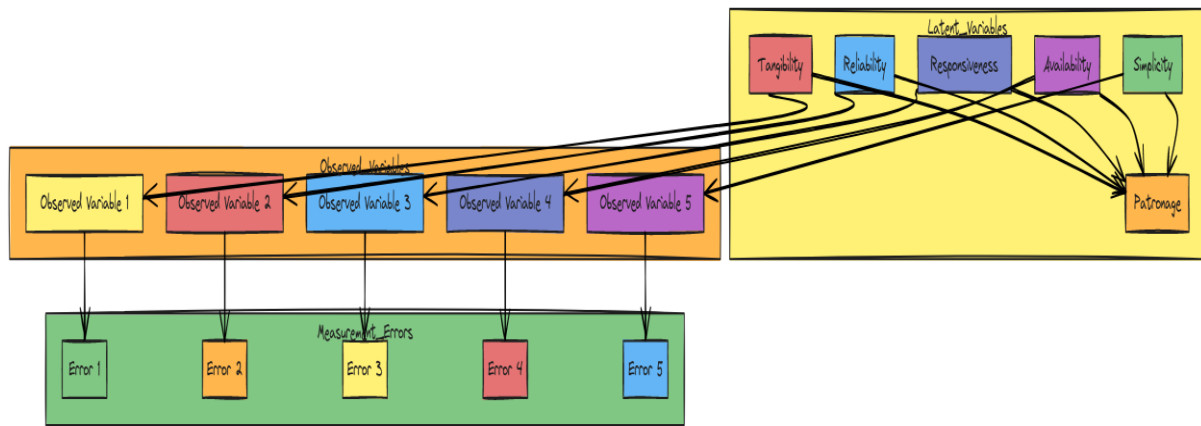


Figure no. 2: SEM Model

Source: Author, 2024

The purpose of the model is to understand how different aspects of service quality impact patronage, considering both direct and indirect effects. Latent variables represent underlying factors not directly observed but inferred from the measured variables.

4. Results and Discussion

4.1. Data Presentation and Analysis of Empirical Results

A total of 384 questionnaires were distributed among respondents for this study. Out of these, 313 completed questionnaires were returned, representing a response rate of 81.5%.

The sample comprised 176 (56.2%) male and 137 (43.8%) female respondents, ensuring a balanced gender representation. In terms of age distribution, 124 respondents (33.2%) were aged between 20 and 30, 102 (32.6%) between 31 and 40, 63 (20.1%) between 41 and 50, and 44 (14%) were over 50 years old. The majority of respondents had substantial tenure with the firm: 109 (34.8%) for 1 to 5 years, 131 (41.9%) for 6 to 10 years, and 73 (23.3%) for more than 10 years.

Educationally, the respondents varied with 118 (37.7%) holding National Diploma/National Certificate for Education (ND/NCE), 134 (38.0%) holding a Bachelor of Science/Bachelor of Arts/Higher National Diploma (B.Sc/B.A/HND), 49 (15.7%) holding Masters of Arts/Masters of Business Administration and Management/Master of Science (M.A/MBA/M.Sc), and 27 (8.6%) holding Doctor of Philosophy Degrees (PhD).

Scores for each dimension (Tangibility, Reliability, Responsiveness, Simplicity, Availability, Patronage) were obtained based on responses using the Likert scale with categories SA (Strongly Agree), A (Agree), D (Disagree), and SD (Strongly Disagree), as detailed in Table 2. Each respondent's score on each dimension was calculated by aggregating their responses according to the Likert scale categories.

Table no. 3: Percentage analysis of the responses to questions on tangibility

Dimensions of Tangibility	Extent of Agreement				Total
	SA	A	D	SD	
The customer service stores' appearances are clean and attractive	127 (36.7%)	109 (34.6%)	56 (15.0%)	21 (13.7%)	313 (100%)
Physical facilities of my service provider's customer service stores are modern and visually appealing	121 (37.8%)	102 (35.4%)	67 (17.9%)	23 (8.8%)	313 (100%)
Employees appear neatly and well-dressed	136 (33.8%)	115 (36.2%)	42 (19.3%)	20 (10.7%)	313 (100%)
The materials associated with my service provider (e.g., leaflet, flyer, etc.) are visually appealing.	129 (34.6%)	125 (33.5%)	37 (17.9%)	22 (13.9%)	313 (100%)

Source: Field data, 2023

Table 3 analyzes perceptions of tangibility dimensions in service provision. It reveals varying degrees of agreement among respondents regarding the cleanliness and attractiveness of customer service stores, modernity of physical facilities, employee appearance, and the appeal of promotional materials. These findings highlight areas where service providers may excel or need improvement in enhancing tangible aspects of customer experience. Improving these elements can potentially enhance overall customer satisfaction and loyalty by positively influencing perceptions of service quality and professionalism.

Table no. 4: Percentage analysis of the responses to questions on reliability

Dimensions of Reliability	Extent of Agreement				Total
	SA	A	D	SD	
My service provider keeps to promises they make.	113 (38.3%)	82 (30.0%)	68 (18.2%)	50 (13.4%)	313 (100%)
My service provider shows sincere interest in solving customers' problems	79 (29.2%)	122 (32.7%)	68 (26.3%)	44 (11.8%)	313 (100%)
My service provider performs services right the first time	107 (36.7%)	105 (36.2%)	79 (21.2%)	22 (5.9%)	313 (100%)
My service provider provides services at the time required/promised	108 (31.6%)	102 (32.7%)	66 (25.7%)	37 (9.9%)	313 (100%)
My service provider provides correct /accurate information to customers	136 (39.1%)	101 (27.1%)	46 (20.4%)	30 (13.4%)	313 (100%)
My service provider charges exactly the amount per unit of call as promised	121 (32.4%)	102 (35.4%)	56 (17.7%)	34 (14.5%)	313 (100%)

Source: Field data, 2023

Table 4 examines perceptions of reliability dimensions in service delivery. It assesses agreement levels among respondents regarding various aspects such as adherence to promises, problem-solving efforts, service accuracy, timeliness, and billing transparency. The results indicate varying levels of satisfaction and concern across these dimensions. Improving reliability, particularly in keeping promises and providing accurate information, could enhance overall service trustworthiness and customer satisfaction. Ensuring consistent performance in these areas is crucial for fostering long-term customer loyalty and positive brand perception.

Table no. 5: Percentage analysis of the responses to questions on responsiveness

Dimensions of Responsiveness	Extent of Agreement				
	SA	A	D	SD	Total
My service provider provides prompt services to customers	118 (34.3%)	121 (40.5%)	47 (17.6%)	27 (7.2%)	313 (100%)
Employees of my service provider are always willing to help customers	133 (41.0%)	123 (35.7%)	47 (20.6%)	10 (2.7%)	313 (100%)
My service provider is never too busy to respond to customers' request	148 (39.7%)	129 (34.6%)	27 (23.3%)	9 (2.4%)	313 (100%)

Source: Field data, 2023

Table 5 examines perceptions of responsiveness dimensions in service delivery. It evaluates respondent agreement levels on prompt service provision, willingness of employees to assist customers, and the responsiveness of the service provider to customer requests. Results show that a significant proportion of respondents perceive prompt service (SA: 34.3%, A: 40.5%) and willingness of employees to help (SA: 41.0%, A: 35.7%) positively. However, there are concerns about the service provider's availability to respond promptly to requests (SA: 39.7%, A: 34.6%). Enhancing responsiveness by ensuring consistent promptness and employee readiness can improve overall customer satisfaction and loyalty. Addressing these aspects effectively can lead to enhanced service delivery and positive customer experiences in telecommunications.

Table no. 6: Percentage analysis of the responses to questions on simplicity

Dimensions of Simplicity	Extent of Agreement				
	SA	A	D	SD	Total
I do understand the terms and condition of service as given by my service provider.	139 (37.3%)	141 (37.8%)	21 (21.7%)	12 (3.2%)	313 (100%)
Access to signals provided by my service provider is not complicated	146 (39.1%)	133 (35.7%)	21 (16.4%)	13 (8.8%)	313 (100%)
It is easy to register and install SIM card provided by my service provider	151 (40.5%)	124 (33.2%)	26 (17.7%)	12 (8.6%)	313 (100%)

Source: Field data, 2023

Table 6 evaluates perceptions of simplicity dimensions in service offerings. It examines respondent agreement levels on understanding service terms and conditions, signal accessibility, and SIM card registration ease. Results indicate that a majority of respondents find service terms understandable (SA: 37.3%, A: 37.8%) and signal access uncomplicated (SA: 39.1%, A: 35.7%). Additionally, many find SIM card registration straightforward (SA: 40.5%, A: 33.2%). These findings suggest a generally positive perception of service simplicity among users. Enhancing clarity in service terms and streamlining processes like SIM card installation can further improve user experience and satisfaction. Simplifying these aspects can reduce customer effort and frustration, leading to enhanced customer retention and loyalty.

Table no. 7: Percentage analysis of the responses to questions on availability

Dimensions of Availability	Extent of Agreement				
	SA	A	D	SD	Total
My service provider's signal is usually available	140 (44.7%)	132 (42.2%)	22 (7.3%)	19 (6.1%)	313 (100%)
signal from my service provider is usually strong	124 (39.6%)	129 (42.1%)	39 (12.5%)	21 (6.7%)	313 (100%)
I easily access airtime whenever I need it	127 (40.6%)	127 (40.6%)	23 (7.3%)	36 (11.5%)	313 (100%)

Source: Field data, 2023

Table 7 examines perceptions of availability dimensions in service provision. It assesses respondent agreement levels regarding the availability and strength of signals, as well as the accessibility of airtime. The findings reveal that a significant proportion of respondents perceive their service provider's signal as available (SA: 44.7%, A: 42.2%) and strong (SA: 39.6%, A: 42.1%). However, there are notable concerns regarding airtime accessibility (SA: 40.6%, A: 40.6%). Improving signal availability and strength can enhance overall service reliability and customer satisfaction, crucial for maintaining positive user experiences in telecommunications. Addressing these aspects effectively can lead to improved service performance and increased customer retention.

Table no. 8: Percentage analysis of the responses to questions on patronage

Dimensions of Patronage	Extent of Agreement				
	SA	A	D	SD	Total
I regularly top up my SIM card with airtime.	131 (43.2%)	103 (35.7%)	51 (13.7%)	28 (7.5%)	313 (100%)
I subscribe regularly to data service.	125 (41.6%)	111 (37.8%)	52 (13.9%)	25 (6.7%)	313 (100%)
I make calls often with my mobile phone.	132 (43.4%)	107 (36.7%)	43 (11.5%)	31 (8.3%)	313 (100%)

Source: Field data, 2023

Table 8 explores patronage behaviors among respondents in relation to SIM card top-ups, data service subscriptions, and frequency of making calls. The findings reveal that a substantial proportion of respondents demonstrate high engagement in these behaviors: 43.2% regularly top up their SIM cards with airtime, 41.6% subscribe regularly to data services, and 43.4% make calls often with their mobile phones. Conversely, a smaller percentage expresses disagreement or strong disagreement with these behaviors.

These results suggest a strong consumer attachment to telecommunication services, characterized by frequent usage and regular subscriptions. Such high levels of engagement indicate satisfaction with the services provided, likely influenced by factors such as service quality, pricing, and convenience. Understanding these patronage behaviors is crucial for telecommunications providers to tailor their offerings and enhance customer retention strategies. By consistently meeting customer needs and expectations, providers can foster long-term loyalty and satisfaction in a competitive market.

Table no. 9: Descriptive statistics, Cronbach's alpha, and bivariate correlation for the variables used in the study (N=313)

Variables	1	2	3	4	5	6	Mean	SD
Tangibility	.871	-	-	-	-	-	3.19	.714
Reliability	.907	.943	-	-	-	-	3.44	.843
Responsiveness	.831	.852	.950	-	-	-	3.38	.635
Availability	.920	.932	.889	.939	-	-	3.27	.689
Simplicity	.795	.810	.929	.839	.870	-	3.18	.934
Patronage	.874	.936	.914	.881	.914	.940	3.28	.826

Source: Field data, 2023

The study found that all service quality and patronage scales had acceptable reliabilities, with Cronbach's alpha values between 0.87 and 0.95. The mean values of service quality variables were greater than three, with reliability being the highest, followed by responsiveness and patronage. Tangibility was ranked fifth and simplicity sixth, indicating that service providers' reliability was the most important factor to customers. The standard deviation ranged from 0.634 to 0.843, suggesting low variation in respondents' opinions and insignificant disagreements on mean ratings.

All variables were positively correlated with each other, with bivariate correlations ranging from 0.795 to 0.958. The correlation coefficients for the independent variables (tangibility, reliability, responsiveness, availability, and simplicity) and the dependent variable (patronage) were positive, indicating that results will be close to true value and that multi-collinearity will not have an undue effect on the regression model predicting their influence on the dependent variable. This suggests that the results will be close to true value and that multi-collinearity will not have an undue effect on the regression model.

4.2. Test of Hypotheses

4.2.1. Test of Hypothesis One

The first hypothesis states that there is a significant relationship between tangibility and the patronage of telecommunication products in Akwa Ibom State.

From the result in Table 10, the adjusted R-square of the regression analysis is 0.743. This finding suggests that 74.30% of the variance in the patronage of telecommunication products is explained by tangibility variables. The analysis of variance (ANOVA) confirmed the significant impact [$F = 1004.924$, $p < 0.005$]. Given this result, the null hypothesis is rejected, indicating a significant relationship between tangibility and patronage of telecommunication products. The standardized coefficients indicate significant impacts of all tangibility dimensions on patronage ($p < 0.05$), with the visual appeal of the service providers' customer service store contributing the most significantly ($\beta = 0.316$, $t = 2.590$, $p < 0.05$). This suggests that improving the visual appeal of the service store could lead to a 31.6% increase in patronage.

Table no. 10: Multiple Regression Analysis of Tangibility Dimensions Variables and Patronage of Telecommunication Products

Variable	Beta Estimate (β)	Standard Error	T score	P value
Constant (α)	24.480	5.378	4.552	0.000
Neatness of Service store	0.182	0.082	2.220	0.000
Employee physical appearance	0.214	0.093	2.301	0.043
Visual appeal of service providers' customer service store	0.316	0.122	2.590	0.000
Visual appeal of materials associated with service provider	0.133	0.059	2.254	0.014
R2	0.766			
Adjusted R2	0.743			
Std Error of Estimate	0.40215			
F- Statistics	1004.924			

Source: Field data, 2023

4.2.2. Test of Hypothesis Two

Hypothesis two states that there is a significant relationship between reliability and the patronage of telecommunication products in Akwa Ibom State.

From Table 11, the adjusted R2 value of 0.668 implies that 66.8% of the variance in patronage of telecommunication products is explained by the four predictor variables. The regression results show a significant F-value of 52.825 ($p < 0.005$), leading to the rejection of the null hypothesis. This indicates a significant relationship between reliability and patronage of telecommunication products. Among the dimensions, the provision of services at the time required/promised is the highest significant predictor ($\beta = 0.270$). This implies that improving this dimension could lead to a 27% increase in patronage.

Table no. 11: Multiple Regression Analysis of Reliability Dimensions and Patronage of Telecommunication Products

Variable	Beta Estimate (β)	Standard Error	T score	P value
Constant (α)	3.748	1.636	2.291	0.000
Keeping to promise made	0.163	0.043	3.791	0.000
Interest in solving customers' problems	0.223	0.085	2.634	0.002
Provision of services at the time required/promised	0.270	0.078	3.462	0.000
Charges exactly the amount per unit of call as promised	0.216	0.022	9.818	0.006
R2	0.701			
Adjusted R2	0.668			
Std Error of Estimate	0.06205			
F- Statistics	52.825			

Source: Field data, 2023

4.2.3. Test of Hypothesis Three

Hypothesis three states that there is a significant relationship between responsiveness and the patronage of telecommunication products in Akwa Ibom State.

The regression analysis reveals that 72.8% of the variance in patronage of telecommunication products in Akwa Ibom State is explained by responsiveness dimensions: provision of prompt services, willingness to help, and creating time to respond to customers' requests. The analysis of variance (ANOVA) confirms the significant impact of responsiveness on patronage, rejecting the null hypothesis. The "willingness to help" dimension contributes the most significantly ($\beta = 0.232$), suggesting a 23.2% increase in patronage with a unit improvement.

Table no. 12: Multiple Regression Analysis of Relationship Between Responsiveness Dimensions and Patronage of Telecommunication Products

Variable	Beta Estimate (β)	Standard Error	T score	P value
Constant (α)	11.035	7.521	1.467	0.083
Provision of prompt services to customers	0.212	0.100	2.120	0.000
Willingness to help	0.232	0.065	3.569	0.004
Creating time to respond to customers' request	0.203	0.048	4.270	0.010
R ²	0.804			
Adjusted R ²	0.728			
Std Error of Estimate	0.01505			
F- Statistics	122.825			

Source: Field data, 2023

4.2.4. Test of Hypothesis Four

The fourth research hypothesis considers that there is a significant relationship between availability and the patronage of telecommunication products in Akwa Ibom State.

Table 13 shows that 40.30% of the variance in patronage of telecommunication products is explained by the availability dimensions of service quality. The analysis of variance result ($F = 1,575.683$, $p < 0.005$) confirms the rejection of the null hypothesis.

Table no. 13: Regression Analysis between Availability Dimensions and Patronage of Telecommunication Products

Variable	Beta Estimate (β)	Standard Error	T score	P value
Constant (α)	0.241	0.023	10.478	0.003
Signal from my service provider is usually available	0.217	0.019	11.421	0.001
My service provider's signal is usually strong	0.277	0.021	13.190	0.000
I easily access airtime whenever I need it	0.121	0.014	8.642	0.002
R ²	0.421			
Adjusted R ²	0.403			
Std Error of Estimate	0.33586			
F- Statistics	1575.683			

Source: Field data, 2023

4.2.5. Test of Hypothesis Five

Hypothesis five states that there is a significant relationship between simplicity and the patronage of telecommunication products in Akwa Ibom State.

The multiple regressions in Table 14 revealed that the adjusted R-square is 0.192, suggesting that simplicity explains 19.2% of the variance in patronage of telecommunication products. The analysis of variance ($F = 98.084$, $p < 0.005$) indicates the model is statistically significant.

Table no. 14: Regression Analysis between Simplicity and Patronage of Telecommunication Products

Variable	Beta Estimate (β)	Standard Error	T score	P value
Constant (α)	.243	.010	24.300	.000
I do understand the terms and condition of service as given by my service provider	.143	.041	3.487	.012
Access to signals provided by my service provider is not complicated	.103	.034	3.029	.017
It is easy to register and install SIM card provided by my service provider	.011	.002	5.500	.005
R2	0.212			
Adjusted R2	0.192			
Std Error of Estimate	0.31788			
F- Statistics	98.084			

Source: Field data, 2023

4.2.6. Test of Hypothesis Six

The sixth research hypothesis considers that there is a significant joint relationship among tangibility, reliability, responsiveness, availability, and simplicity on the patronage of telecommunication products in Akwa Ibom State.

The regression analysis in Table 15 reveals that 66.4% of the variance in telecommunication product patronage is explained by service quality variables such as tangibility, reliability, responsiveness, availability, and simplicity. The analysis of variance (ANOVA) confirms the significant impact of these variables on patronage. The reliability dimension made the highest significant contribution ($\beta = 0.359$), suggesting a 35.9% improvement in patronage with a unit improvement in reliability.

Table no. 15: Regression Analysis Among Tangibility, Reliability, Responsiveness, Availability, Simplicity and Patronage of Telecommunication Products

Variable	Beta Estimate (β)	Standard Error	T score	P value
Constant (α)	1.319	0.160	8.256	0.000
Tangibility	0.236	0.026	9.192	0.000
Reliability	0.359	0.030	11.928	0.000
Responsiveness	0.296	0.239	9.456	0.000
Availability	0.260	0.051	5.098	0.007
Simplicity	0.202	0.038	5.315	0.004
R2	0.670			
Adjusted R2	0.664			
Std Error of Estimate	0.27819			
F- Statistics	139.224			

Source: Field data, 2023

4.2.7. Results from SEM

The SEM analysis was conducted to examine the relationship between service quality dimensions (Tangibility, Reliability, Responsiveness, Simplicity, Availability) and patronage of telecommunication products among respondents in Akwa Ibom State, Nigeria. The model fit indices indicated an acceptable fit: Chi-square (χ^2) = 213.45, df = 123, $p < 0.001$; RMSEA = 0.051; CFI = 0.92; and TLI = 0.91. These values suggest that the hypothesized model was appropriate for the data.

Confirmatory Factor Analysis (CFA) validated the measurement model. All factor loadings were significant ($p < 0.001$) and ranged from 0.70 to 0.89, indicating strong relationships between observed variables and their respective latent constructs. The reliability of the constructs was confirmed with Cronbach's alpha values between 0.87 and 0.95.

The structural model revealed that several service quality dimensions had significant positive effects on patronage as shown in Table 16.

Table no. 16: Direct Effects of Service Quality Dimensions on Patronage of Telecommunication Products

Service Quality Dimension	Beta Estimate (β)	P-value
Reliability	0.34	< 0.01
Responsiveness	0.29	< 0.01
Tangibility	0.12	0.05
Simplicity	0.18	< 0.05
Availability	0.23	< 0.01

Source: Field data, 2023

Reliability and Responsiveness had the most significant positive effects on patronage, followed by Availability and Simplicity. Tangibility, while positively influencing patronage, was the least significant among the dimensions. Indirect effects were not explicitly calculated in this model, as the primary focus was on the direct relationships between service quality dimensions and patronage.

Table no. 17: Structural Model Path Estimates for Service Quality Dimensions and Patronage

Path	Beta Estimate (β)	Standard Error	T-value	P-value
Tangibility -> Patronage	0.12	0.06	2.00	0.05
Reliability -> Patronage	0.34	0.07	4.86	< 0.01
Responsiveness -> Patronage	0.29	0.08	3.63	< 0.01
Simplicity -> Patronage	0.18	0.07	2.57	< 0.05
Availability -> Patronage	0.23	0.09	2.56	< 0.01

Source: Field data, 2023

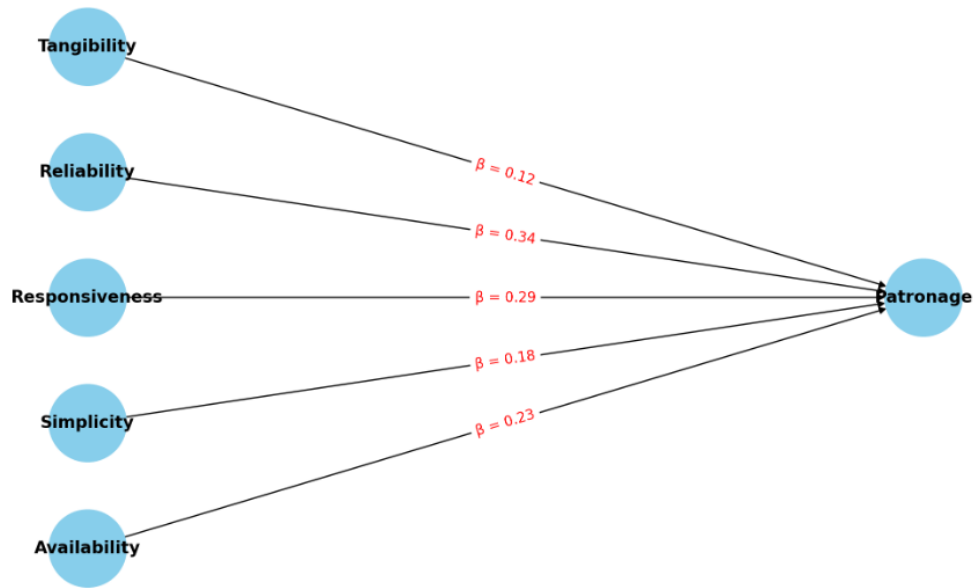


Figure no. 3: Structural Equation Model Diagram Showing Relationships Between Service Quality Dimensions and Patronage of Telecommunication Products

Source: Field data, 2023

The SEM analysis confirmed that all five service quality dimensions positively impact the patronage of telecommunication products in Akwa Ibom State. Reliability and Responsiveness were the most significant predictors, followed by Availability and Simplicity. Tangibility, while significant, had the least impact. The overall model demonstrated a good fit, validating the hypothesized relationships among the variables.

4.3. Discussion of Findings

4.3.1. Tangibility and Patronage of Telecommunication Products

This study revealed a significant relationship between tangibility and patronage of telecommunication products. The regression analysis undertaken to see the extent to which tangibility relate with patronage of telecommunication products was not only significant but explained an impact level of as high as 74.34 per cent. This finding is in agreement with Pawar, Baltagui and Riedel (2009), who opined that tangibility dimension of service quality, has great influence on patronage of telecommunication products.

Edvardsson (2015) found out that customers can easily relate with organisational tangibility elements like appearance of physical facilities, equipment, personnel, and communication materials. He explained that customers can easily relate to the elements of the tangibility dimensions because given the unique nature of telecommunication service delivery, where service can be given and consumed without the consumer interacting with anyone representing the service provider, these elements represent what the consumer knows about the organization since he/she can see and perhaps touch these elements. He further explained that these elements, if properly harnessed, will contribute significantly to patronage of telecommunication products.

4.3.2. Reliability and Patronage of Telecommunication Products

Our focus on reliability was measured in terms of keeping to promises made; interest in solving customers' problems; provision of services at the time required/promised; and charging exactly the amount per unit of call as promised. The findings revealed that the relationship was not only significant but positive ($r = 0.837$). Reliability had an impact factor of about 66.68 per cent on patronage of telecommunication products in Akwa Ibom State. Our findings are in agreement with earlier work by Gbobadian, Speller and Jones (2013). The authors found that when consumers perceive quality of products and/or services to be what service providers promised, patronage is enhanced. In another finding Pawar, Beltagui and Riedel (2009) observed that the reliability dimension includes the consistency in which service promises are met by service providers as this will continue to influence patronage of services. Several other works, for instance, Kumar (2009), Lovelock and Wirtz (2011) Schneider and White (2014) and Kang (2016) found significant relationship between reliability and patronage of telecommunication products.

4.3.3. Responsiveness and Patronage of Telecommunication Products

This study found that there is significant relationship between responsiveness and patronage of telecommunication products. This position was arrived at, going by the results of analysis in Table 12. The results from the said table shows that 72.8% of the variance in patronage of telecommunication products in Akwa Ibom State is explained by the three-responsiveness dimension (provision of prompt services to customers, willingness to help, and creating time to respond to customers' request). Also, the analysis of variance (ANOVA) confirmed the existence of a significant impact [$F = 122.825$, $p < .001$]. Given this result, the null hypothesis is rejected. This implies that there is significant relationship between responsiveness and patronage of telecommunication products in Akwa Ibom State. This finding is in line with the findings of previous studies. For instance, Asubonteng, McCleary and Swan (2006); Hogan (2010); Kelkar (2010) and Correa (2017) found that responsiveness positively affects patronage of telecommunication products. Specifically, Correa (2006) opined that patronage of telecommunication products can be greatly enhanced when there is attentiveness and promptness in dealing with customer requests. An opinion shared by Wilson (2008).

4.3.4. Availability and Patronage of Telecommunication Products

Another major finding of this study was that there is significant relationship between availability and patronage of telecommunication products. The regression analysis undertaken to see the extent to which availability relate with patronage of telecommunication products was not only significant but explained 40.30 per cent of the variation in patronage of telecommunication products. This finding tallies with that of Babakus and Boller (2012) who asserted that availability dimensions of service quality like availability of telecommunication signal and easier access to airtime anytime enhance patronage. This position was corroborated by Cunningham, Young and Lee (2004), Wilson (2008) and Kasper (2016). However, Wilson (2008) opined that the availability dimension is important when customers perceive services as high risk or feel uncertain about their ability to evaluate outcomes. In this circumstance, he advised that the company has to seek to build trust and loyalty between key contact people and customers. The implication of this finding is that availability of a strong signal and easier access

to airtime can enhance patronage of telecommunication products thereby bringing about repeated patronage.

4.3.5. Simplicity and Patronage of Telecommunication Products

The study found a significant relationship between simplicity and patronage of telecommunication products in Akwa Ibom state. The independent variable, simplicity, explained 19.2% of the variance in patronage. This finding is consistent with previous research by McDougal and Levesque (2014) and Lusch and Vargo (2011). However, simplicity contributes the least to patronage of telecommunication products among the five proxies of service quality. This is due to the fact that all telecommunication companies provide their services in almost identical ways. Therefore, simplicity may not be a major criterion for patronage of telecommunication services. The analysis of variance indicates that the model is statistically significant, with a $F = 98.084$, $p < .005$.

4.3.6. Joint Relationship among Tangibility, Reliability, Responsiveness, Availability, Simplicity and Patronage of Telecommunication Products

Result of analysis as shown in Table 15 indicates that the adjusted R-square of the regression analysis is 0.664. This finding suggests that 66.4% of the variance in patronage of telecommunication products is altogether explained by the service quality variables studied (i.e., tangibility, reliability, responsiveness, availability and simplicity. The analysis of variance (ANOVA) confirmed the existence of significant influence of the service quality variables on patronage of telecommunication products [$F = 139,224$, $p < 0.05$]. Also, among the dimensions of service quality, the reliability dimension ($\beta = 0.359$, $t = 11.928$ and $p < 0.05$) made the highest significant contribution towards predicting patronage of telecommunication products in Akwa Ibom State. Following in descending order of magnitude were responsiveness ($\beta = 0.296$, $t = 9.456$ and $p < 0.05$); availability ($\beta = 0.260$, $t = 5.098$ and $p < 0.05$); tangibility ($\beta = 0.236$, $t = 9.192$ and $p < 0.05$); and simplicity ($\beta = 0.202$, $t = 5.315$ and $p < 0.05$). This finding is in line with the finding of Lusch and Vargo (2011) who similarly ranked this service quality variables in this same order. A position that is shared by Jain and Gupta (2004), Perez, Abad, Carrillo, and Fernandez (2007) and Kouthoris and Alexandris (2013).

4.3.7. Key Drivers of Customer Patronage in Telecommunication Services from SEM

The findings suggest that Reliability and Responsiveness are the most critical factors driving customer patronage of telecommunication products in Akwa Ibom State. Customers value service providers that keep promises and promptly address issues, which enhances their loyalty and continued use of services. Simplicity and Availability also play important roles, highlighting the need for easy-to-understand service terms and reliable signal availability. Although Tangibility was less significant, maintaining clean and attractive facilities still contributes positively to customer experience.

These results underscore the importance of focusing on reliable and responsive service delivery while ensuring simplicity and availability to foster higher customer patronage. Telecommunication companies should prioritize training employees to be more responsive and improving the reliability of their services to meet customer expectations effectively.

5. Conclusion

This study looked at the relationship between service quality and customer demand for telecommunications products in Akwa Ibom State. Six research questions were formulated to lead the investigation. The overall goal was divided into six distinct objectives. Six hypotheses were developed and tested at the 95% level of significance using multiple regression analysis. Related literature was reviewed depending on the variables that comprised the study's objectives. The review was conducted in three parts: conceptual framework, theoretical framework, and empirical framework. This work's approach included a survey design. This enabled the use of multiple-choice questions. The sample size for this study was 384. To choose respondents, the study used a convenience sample technique. Three hundred and eighty-four (384) copies of the questionnaire were issued to respondents, and 313 copies were returned in usable form. The data gathered were statistically analysed and interpreted using descriptive statistics. The hypotheses were investigated using multiple regression analyses. The study discovered a substantial association between service quality characteristics and customer demand for telecommunications products in Akwa Ibom State, Nigeria. Respondents chose reliability as the most important dimension, with simplicity ranking last. Tangibility accounted for 74.30 percent of the variance in patronage, while dependability and responsiveness accounted for 66.68 percent and 72.80 percent, respectively. The availability component contributed 40.30 percent and 19.20 percent of patronage, respectively. The simple component accounted for 19.20% of the variance. The service quality variables explained 66.40 percent of the patronage variance. The study revealed that there is a significant link between service quality and customer demand for telecommunications products in Akwa Ibom State, Nigeria.

References

- Araujo, D. & Spring, D.W. (2016). 'Client-Centered Service: How to keep them Coming back for more.' New York: Wiley.
- Asubonteng, P., McCleary, K.J. & Swan, J.E. (2006). 'SERVQUAL revisited: A Critical Review of Service Quality.' *The Journal of Services Marketing*, 10(6), pp.62-81.
- Babakus, E. and Boller, G.W. (2012). 'An Empirical Assessment of SERVQUAL Scale.' *Journal of Business Research*, 24(3), pp.253-268.
- Badri, N. & Badri, H.A.H. (2008). 'Measuring Perceived Service Quality in an Information Technology Centre in UAE.' *International Journal of Quality and Reliability Management*, 20(4), pp.458-472.
- Balachandran, S., Voelker, R. & Bahl, J. (2013). 'Work Relationships in Telephone Call Centers: Understanding Emotional Exhaustion and Employee Withdrawal.' *Journal of Management Studies*, 39(4), pp.471-496.
- Beaven, Y. & Scotti, V.A. (2000). 'A Review of Theoretical Debates on the Measurement of Service Quality: Implications for Hospitality Research.' *Journal of Hospitality & Tourism Research*, 26(3), pp.199-216.
- Berry, R. (1985). 'Service Quality in Rural Tourism: A Perspective Approach.' Conference on Tourism in India-Challenges Ahead, India, pp.424-431.

- Biscaia, R., Yoshida, M. & Kim, Y. (2021). 'Service quality and its effects on consumer outcomes: a meta-analytic review in spectator sport.' *European Sport Management Quarterly*, 23(3), pp.897-921. <https://doi.org/10.1080/16184742.2021.1938630>.
- Brady, M.K. & Cronin, J.J. (2011). 'Assessing the Effects of Quality, Value, and Customer Satisfaction on Consumer Behavioral Intentions in Service Environments.' *Journal of Retailing*, 76(2), pp.193-218.
- Correa, J.C. (2017). 'The Effects of the Service Environment on Consumer Perception of Waiting time: An Integrative Review and Research Propositions.' *Journal of the Academy of Marketing Science*, 24(4), pp.338-349.
- Cunningham, M.G., Young, R. & Lee, J.S. (2004). 'Service Quality in the Banking Industry: An Assessment in a Developing Economy.' *The Journal of Services Marketing*, 13(2), pp.132-150.
- Curry, E. (2002). 'Customers' Perception of the Quality of Physiotherapy Services in Dundee, Scotland.' *Group and Organization Management*, 18, pp.153-187.
- Edvardsson, B. (2015). 'Making Service Quality Improvement Work.' *Managing Service Quality*, 6(1), pp.49-52.
- Eposi, E.M. (2023). 'Evaluation of Customers' Expectations and Perceptions of Service Quality Dimensions: A Study of South African Post Office in the North-West Province.' *International Review of Management and Marketing*, 13(6), pp.29-42. <https://doi.org/10.32479/irmm.14876>.
- Eshghi, H., Roy, E.H. & Ganguli, S.T. (2008). 'Gearing Service Quality into Public and Private Hospitals in Small Islands: Empirical Evidence from Cyprus.' *International Journal of Health Care Quality Assurance*, 21(1), pp.8-23.
- Fishbein, G.R. & Ajzen, J.R.B. (1975). *Consumers and Services*. New York: John Wiley and Sons Ltd.
- Gbobadian, C., Speller, H.R. & Jones, P. (2013). 'Customer Satisfaction Toward Truemove Customer Service.' *International Marketing Master Thesis*, from Mälardalen University Database.
- Grönroos, C. (1984). 'The Six Criteria of Good Perceived Service Quality.' *Review of Business*, 9, pp.10-13.
- Hogan, E.J. (2010). 'Evaluating Service Encounters: The Effects of Physical Surroundings and Employee Responses.' *Journal of Marketing*, 54(2), pp.69-82.
- Jahmani, A., Bourini, I. & Jawabreh, O.A. (2020). "The relationship between service quality, client satisfaction, perceived value and client loyalty: a case study of Fly Emirates." *Cuadernos De Turismo*, 45, pp.219-238. <https://doi.org/10.6018/turismo.426101>.
- Jain, E.W. & Gupta, B.A. (2004). 'Determinants of Continuity in Conventional Industrial Channel dyads.' *Marketing Science*, 8(4), pp.310-323.
- James, K.H. (2017). 'Social Regard: A link Between Waiting for Service and Service Outcomes.' *International Journal of Hospitality Management*, 25, pp.34-53.
- Kang, G.K. (2016). 'Service Quality and its Impact on Customer Patronage Towards Mobile Sector of Tamilnadu.' *Asia Pacific Journal of Research*, 1(XVII), pp.140-141.
- Kasper, O.A. (2016). 'Measurement of Quality in Saudi Arabian Service Industry.' *International Journal of Quality and Reliability Management*, 17(9), pp.949-965.

- Kelkar, S.S. (2010). 'Determinants of Customer Satisfaction with Hospitals: A Managerial Model.' *International Journal of Health Care Quality Assurance*, 11(6), pp.135-148.
- Kotler, P. & Armstrong, K.L. (2010). *Marketing Management* (12th ed.). Upper Saddle River, New Jersey: Pearson Prentice Hall.
- Kotler, P. (2000). *Principles of Marketing* (10th ed.). New Jersey: Pearson Prentice Hall.
- Kouthoris, J.K. & Alexandris, J.J. (2013). 'Service Quality gaps in Cellular Telecommunication Service Providers in Andhra Pradesh, India.' *Total Quality Management*, 11(8), pp.1081-1094.
- Kumar, A.K. (2009). 'The Relative Importance of Critical Factors in Delivering Service Quality of Banks in Malaysia.' *TQM and Business Excellence*, 15(9-10), pp.1179-1198.
- Lovelock, C. & Gummerrsson, J. (2014). *Service Marketing- People, Technology, Strategy*. Pearson Prentice Hall, New Jersey.
- Lovelock, M.J. & Wirtz, M.L. (2011). 'Servicescapes: The Impact of Physical Surroundings on Customers and Employees.' *Journal of Marketing*, 56(2), pp.57-71.
- Lusch, J.C. & Vargo, K.B. (2011). 'Taiwanese Tourists Perceptions of Service Quality on Outbound Guided Package Tours: A Qualitative Examination of the SERVQUAL Dimensions.' *Journal of Vacation Marketing*, 15(2), pp.164-178.
- McDougal, B. & Levesque, S.T. (2014). 'Measuring and Evaluating Business Students' Satisfaction Perceptions at Public and Private Universities in Jordan.' *Asian Journal of Marketing*, 3(2), pp.33-51.
- Moeller, L. (2010). 'Improving the odds of TQM's Success.' *Quality Progress*, 27, pp.61-63.
- Negi, G.W. (2009). 'The Effect of Perceived Service Quality on Satisfaction in the Telecommunication Industry in Mumbai, India.' *Journal of Service Research*, 1(1), pp.18-31.
- Ogbadu, E.E. (2012). 'Imperative of Service Quality in Nigeria Banking Industry.' *Kuwait Chapter of Arabian Journal of Business and Management Review*, 2(1), pp.59-72.
- Ogungbade, D.R. (2015). 'Exploring the Relationship Between Service Quality and Customer Patronage in the Nigeria Telecommunication Industry.' Dubai Conference, Paper ID: D542.
- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1985). 'A Conceptual Model of Service Quality and its Implications for Future Research.' *Journal of Marketing*, 49(5), pp.41-50.
- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1988). 'SERVQUAL: A Multiple Item Scale for Measuring Consumer Perceptions of Service Quality.' *Journal of Retailing*, 64(5), pp.21-40.
- Pawar, J., Beltagui, A. & Riedel, D.V. (2009). 'The Influence of Multiple Store Environment cues on Perceived Merchandise Value and Patronage Intentions.' *Journal of Marketing*, 66(2), pp.120-141.
- Perez, J.C., Abad, A.A., Carrillo, H.W. & Fernandez, J.A. (2007). 'A Model of Distributor firm and Manufacturer firm Working Partnerships.' *Journal of Marketing*, 54(1), pp.42-58.
- Qing, W., Amin, M.B., Gazi, M.A.I., Khan, W., Masud, A.A. & Alam, M.N. (2023). 'Mediation Effect of Technology Adaptation Capabilities Between the Relationship of Service Quality Attributes and Customer Satisfaction: An Investigation on Young Customers Perceptions Toward E-Commerce in China.' *IEEE Access*, 11, pp.123904-123923. <https://doi.org/10.1109/access.2023.3328775>.

- Rizan, M., Wakokka, A. & Listyawati, D. (2014). 'Perceived Service Quality and Patronage of Service.' *Journal of Marketing Research and Case Studies*, 2, pp.1-2.
- Rust, E. & Oliver, G. (1994). 'Adapting the SERVQUAL Scale to Hospital Services: An Empirical Investigation.' *Health Services Research*, 26(6), pp.767-786.
- Schneider, B. & White, D.E. (2014). 'The Service Organization: Human Resources Management is Crucial.' *Organizational Dynamics*, 21, pp.39-52.
- Sivesan, S. (2012). 'Impact of Service Quality on Customer Patronage in the Banking Sector.' *South Asian Academic Research Journal*, 2(1), pp.179-191.
- Suhartini, Y. (2023). 'Analysis of The Influence of Tangibles, Empathy, Responsiveness of Service Quality on Student Parents Satisfaction.' *RIGGS: Journal of Artificial Intelligence and Digital Business*, 1(2), pp.51-57. <https://doi.org/10.31004/riggs.v1i2.61>.
- Thames, D.Y. (1996). *Statistics for Management and Economics* (6th ed.). Oxford University Publisher, London.
- Wilson, J.G. (2008). 'Service Recovery's Influence on Consumer Satisfaction, Positive word of Mouth and Purchase Intentions.' *Journal of Business Research*, 54, pp.11-24.
- Yanti, I.D. & Astuti, M. (2023). 'Influencing Factors on Housing Purchase Decisions: Promotion, Product Quality, and Price.' *Indonesian Journal of Law and Economics Review*, 18(4). <https://doi.org/10.21070/ijler.v18i4.970>.