

Driving Service Quality Through Strategic Agility and Technological Capabilities: A Study of Nigeria's Telecom Sector

¹Akitunde, O. O.,
²Adegbuyi, O. A., &
³Herbertson, E. A.

^{1,2,3}Department of Business
Administration and Marketing,
Babcock University,
Ilishan-Remo, Ogun State,
Nigeria.

²Department of Business
Management, College of
Management Sciences,
Covenant University Ota Ogun
State, Nigeria.

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Corresponding Author:

Akitunde, O. O.

Abstract

The quality of service provided by telecommunications companies is widely recognized as a pivotal factor in maintaining competitiveness and meeting the diverse needs of customers. Its significance is underscored by its profound impact on customer retention rates, making it a focal point of interest. Nevertheless, the sector grapples with persistent challenges such as diminishing levels of empathy, availability, reliability, and responsiveness. These issues are often linked to constraints in strategic adaptability and technological prowess. Notably, while existing research extensively examines this subject in developed nations, it tends to overlook the distinctive dynamics prevalent in developing countries like Nigeria. Hence, the study examined the effect of strategic agility and technological capabilities on service quality of selected telecommunication companies in Nigeria. Survey research design was adopted. The population was 8,155 tertiary institution students and 855 employees of MTN, Glo, Airtel, and 9Mobile. A sample size of 477 students and 477 telecommunication employees was determined using the Raosoft calculator. Simple random sampling techniques was adopted for the telecommunication employees, while stratified random sampling techniques was adopted for the students. A validated questionnaire was used for data collection. Cronbach's alpha reliability coefficients for the constructs ranged from 0.79 to 0.92. The response rate was 76.6%. The data were analysed using descriptive and inferential (partial least square-structural equation modelling) statistics. Findings revealed that strategic agility and technological capability had significant effect on service quality ($Adj.R^2 = 0.36$, $F^2 = 0.09$, $Q^2 = 0.01$, $p < 0.05$) of the selected telecommunication companies in Nigeria. The study concluded that strategic agility and technological capability enhanced service quality of the selected telecommunication companies in Nigeria. The study advocates for telecommunications management to bolster their strategic agility and technological competencies as a means to enhance their overall service quality.

Background to the Study

The importance of service quality within the telecommunications industry cannot be overstated, as it directly influences customer satisfaction, loyalty, and overall business performance (Ruholla et al., 2020). High service quality not only builds trust and enhances the customer experience but also serves as a key differentiator for telecom operators in a fiercely competitive market (Cunha et al., 2020). It is instrumental in both attracting new customers and retaining existing ones, leading to increased revenue, a positive brand reputation, and sustained long-term success (Jafari-Marandi et al., 2020). However, despite its significance, the telecommunications sector grapples with persistent challenges in maintaining service quality standards. Issues such as diminishing service empathy, availability, reliability, and responsiveness continue to plague the industry (Gyemang & Emeagwali, 2020; Visan et al., 2021). These challenges are often attributed to constraints in strategic adaptability and technological capabilities, hampering the industry's ability to meet evolving customer expectations and remain competitive in the market. These issues may stem from limited strategic agility and technological capabilities, hindering the industry's ability to meet customer expectations and maintain a competitive edge (Wei et al., 2020).

The global telecommunications industry faces a myriad of daunting challenges that significantly undermine customer satisfaction and trust. Issues such as inconsistent service performance, including dropped calls, network congestion, slow internet speeds, and unreliable voice quality, continue to frustrate users and hinder seamless communication experiences (Berkani, 2020). Moreover, the persistent lack of network coverage in remote and underserved areas exacerbates the digital divide, impeding access to essential communication services and hindering socioeconomic development (Fuller, 2021). Coupled with poor customer support characterized by lengthy wait times, unresponsive helplines, and ineffective issue resolution, these challenges leave customers feeling unheard and dissatisfied, further exacerbating the problem (Ardiansyah & Handrijaningsih, 2021). In the United States, the telecommunications sector encounters additional hurdles in service delivery, including poor call quality, inefficient complaint handling, and long wait times for phone complaints (Dastmalchian et al., 2020). These issues are compounded by a lack of understanding of customer expectations and a failure to measure and evaluate customer preferences for continuous improvement. Furthermore, the emergence of over-the-top messaging services has diverted traffic away from traditional telecom services, resulting in a decline in SMS usage and revenue, while the shift towards voice over IP (VoIP) and Wi-Fi has led to a decrease in voice traffic and revenue, adversely affecting telecommunication service quality and contributing to the decline in landline subscriptions (Mugo & Macharia, 2021).

The telecommunications sector in the United Kingdom has witnessed significant growth, but this expansion has brought forth challenges regarding service quality (Ruholla et al., 2020). Intensified competition and elevated customer expectations have placed operators under immense pressure to deliver exceptional service experiences (Jafari-Marandi et al.,

2020). Despite substantial investments in infrastructure upgrades, the recent slowdown in investment growth could potentially hinder the industry's ability to uphold service quality standards and address evolving technological demands, notably the timely deployment of critical infrastructure such as 5G (Jeon et al., 2022). Moreover, the decline in traditional voice revenue underscores the need for developing effective strategies to monetize data and explore new revenue streams, as failure to do so may jeopardize operators' capacity to sustain growth and fully leverage emerging technologies (Visan et al., 2021). Conversely, the telecommunications sector in Asia is grappling with significant concerns surrounding service quality, with declines observed in service empathy, availability, reliability, and responsiveness (Mugo & Macharia, 2021). This, coupled with a slowdown in unique subscriber growth due to regulatory constraints and intense competition, is gradually saturating mobile markets in the region. Although projections suggest Asia Pacific will gain 247 million new subscribers by 2025, the credibility of these projections is questionable given the consistently unstable service quality. Increased competition from over-the-top (OTT) services like social media platforms further compounds challenges, placing pressure on industry margins and prompting a shift in focus towards data revenue diversification to sustain growth and resilience.

The telecommunications landscape in Africa has undergone significant reforms in recent years, yet substantial challenges persist. Despite efforts to expand network access, approximately 600 million people across the continent still lack access to mobile broadband services, hindering widespread adoption (Pscheidt-Gieseler et al., 2018). Moreover, market competition remains highly concentrated among dominant players in countries such as Tanzania, Ghana, and Kenya, limiting consumer choice and stifling market innovation. Intense competition for new customers, particularly in rural areas, often results in compromised service quality as companies prioritize expansion over reliability, compounded by infrastructure challenges and higher costs in remote regions (Olu-Egbuniwe & Maeyouf, 2019). Regulatory limitations and high retail and wholesale prices further impede service deployment and consumer access, highlighting the need for continued regulatory reforms and investment in infrastructure (Wei et al., 2020). In Nigeria, despite rapid growth in the telecommunications sector, setbacks in service quality, including declines in empathy, availability, reliability, and responsiveness, pose significant threats to industry success (Akinloye et al., 2020; Adegbile et al., 2017). The Nigerian telecom market is dominated by four major players, creating an oligopolistic structure that presents challenges for new entrants to establish themselves. These players control nearly 100% of the market share, offering a range of homogeneous but differentiated products and services through various channels (National Communication Commission, NCC, 2019).

MTN holds the largest share of voice and data subscribers in Nigeria, with 37.2% and 42.9%, respectively, followed by Globacom with 28.0% and 22.9% market share, and Airtel with 27.2% and 27.4%, respectively (National Communication Commission, NCC, 2019). This dominance presents significant barriers for new entrants aiming to penetrate

the market. While subscriber numbers in Nigeria have seen rapid growth over the past decade, reaching 151,017,244 by the end of 2015, recent figures show a slowdown, with 148,745,464 subscribers recorded by March 2020, indicating potential market saturation (National Bureau of Statistics, 2020). The economic landscape, particularly the recession and currency depreciation, has profoundly impacted MTN Nigeria, a major revenue contributor to its South African parent company, experiencing a 23.6% revenue decline in 2017 due to currency fluctuations (Khdour & Al-Raoush, 2020). These challenges underscore the complexities faced by the Nigerian telecommunications industry, with the dominance of major players posing competition limitations and potential implications for service quality. The telecom industry is an interesting industry to study, not only because of its volatile nature in terms of technological breakthroughs and policies but also because of its rapid growth rate over the last few decades and significant contribution to national economies. Based on the aforementioned gaps and problems, the telecommunication industry in Nigeria has experienced a decline due to service quality issues, leading to decreased customer satisfaction and trust. Hence, this study examined the effect of strategic agility and technological capabilities on service quality of selected telecommunication companies in Nigeria.

Literature Review

This section discussed the concepts of strategic agility, strategic sensitivity, strategic decision-making, strategic flexibility, technological capability, proactive stance capability, business spanning capability, infrastructure capability and service quality adopted in this study, the theories, the empirical findings of past research works and the conceptual model for the study.

Service Quality

Service quality, as articulated by various scholars, encompasses the delivery of services that meet or exceed customer expectations, as described by Zeithaml and Bitner (2013), and involves the sum of attributes that fulfill stated or implied needs, as outlined by Kotler and Keller (2012). This concept entails the evaluation of specific service parameters based on customer perceptions, highlighting the disparity between expectations and actual service received, as noted by Sulaiman et al. (2021). Moreover, service quality is depicted as the successful delivery of promised outcomes or products to customers, according to Blair (2018), and reflects the customer's overall assessment of the service delivery process standard, as posited by Tan et al. (2016). Additionally, service quality is perceived as a cognitive process influenced by perceptions, learning, reasoning, and understanding of service features, as emphasized by Sultan and Wong (2012), and encompasses the benefits and advantages perceived by consumers regarding expected health services, according to Al-Jazzazi and Sultan (2017). In summary, service quality is defined as an organization's capacity to produce and deliver services or products that meet customer needs and expectations, as synthesized from the existing literature.

Strategic Agility

Strategic agility, as defined by Murungi (2015), Sampathy and Krishnamoorthy (2017), and Arokodare and Asikhia (2020), encompasses an organization's capacity to swiftly adjust its strategic direction in response to changing circumstances while maintaining effectiveness and efficiency. It involves the ability to anticipate and adapt to both anticipated and unforeseen changes by leveraging resources and knowledge to innovate and ensure competitive advantage, as highlighted by Sampathy and Krishnamoorthy (2017). Additionally, strategic agility entails making strategic commitments while remaining flexible to navigate evolving environments without sacrificing efficiency, as articulated by Arokodare and Asikhia (2020). For this study's purposes, strategic agility involves the proactive and responsive navigation of environmental changes and challenges with ease, speed, and dexterity. On the other hand, strategic sensitivity, as described by Winkelmann & Duch (2019), involves heightened awareness and attention to strategic developments, facilitated by open communication channels and relationships with diverse stakeholders, as noted by Doz & Kosonen (2018). Strategic decision-making, as defined by Kotenko et al. (2019) and Jafari-Marandi et al. (2020), encompasses the process of reaching conclusions or judgments after considering alternatives and evaluating potential consequences, while strategic flexibility, according to Gamba and Triantis (2018) and Wang (2014), refers to an organization's ability to manage both positive and negative shocks, adapt to environmental uncertainty, and rapidly adjust strategies when necessary.

Technological Capability

Technological capabilities encompass the skills, knowledge, and experience required to harness existing technology or develop new technology in response to competitive business demands, as articulated by Aeron & Jain (2015) and Bataineh et al. (2015). This involves proactively initiating change within the organization rather than reacting to external events, demonstrating a commitment to seizing business opportunities and embracing innovation, as emphasized by Rank et al. (2017) and Frese & Fay (2018). Business spanning capability, as described by Mao et al. (2015) and Akram et al. (2018), refers to an organization's capacity to leverage its IT infrastructure to support business objectives, facilitating the creation, control, and execution of inter-firm transactions while controlling costs and delivering systems as needed. Infrastructure capability, viewed as an internal capability, enables efficient access to customer information and supports the delivery of IT services through hardware, software, networks, and facilities, as highlighted by Isichei et al. (2020), Cassia et al. (2020), and Qin et al. (2021).

Strategic Agility, Technological Capability and Service Quality

This study underscores the significant effect of strategic agility and technological capability on service quality within the telecommunications industry. Studies by Abd-Elrahman et al. (2020), Munir and Marat (2018), Akinloye et al. (2020), Gyemang and Emeagwali (2020), Privalov et al. (2020), and Ruholla et al. (2020) consistently highlight the positive influence of strategic agility on service quality. Similarly, Feng et al. (2020), Al-Mamary et al. (2015), Chae et al. (2018), Adegbile et al. (2017), Rohrbeck and Kum

(2017), and Oosthuizen and Scheepers (2018) affirm the positive impact of technological capability on service quality. However, Adebisi et al. (2019), Clifford and Kim (2019), John et al. (2019), Prakoso et al. (2017), Aeron and Jain (2015), Bataineh et al. (2015), Olaitan et al. (2016), and Anaza et al. (2018) present contrasting findings, indicating either no significant effect or even a negative impact of strategic agility and technological capability on service quality. These discrepancies highlight the need for further research to explore the nuanced relationships between these variables, particularly within the context of the Nigerian telecommunications industry, as suggested by Adebisi et al. (2019) and Clifford and Kim (2019). Additionally, future studies should aim for broader sample coverage and geographical expansion to enhance the generalizability of findings and consider the inclusion of other independent variables to enrich the understanding of service quality dynamics in this sector.

Research Conceptual Model

The study was conceptualized as shown in the model below:

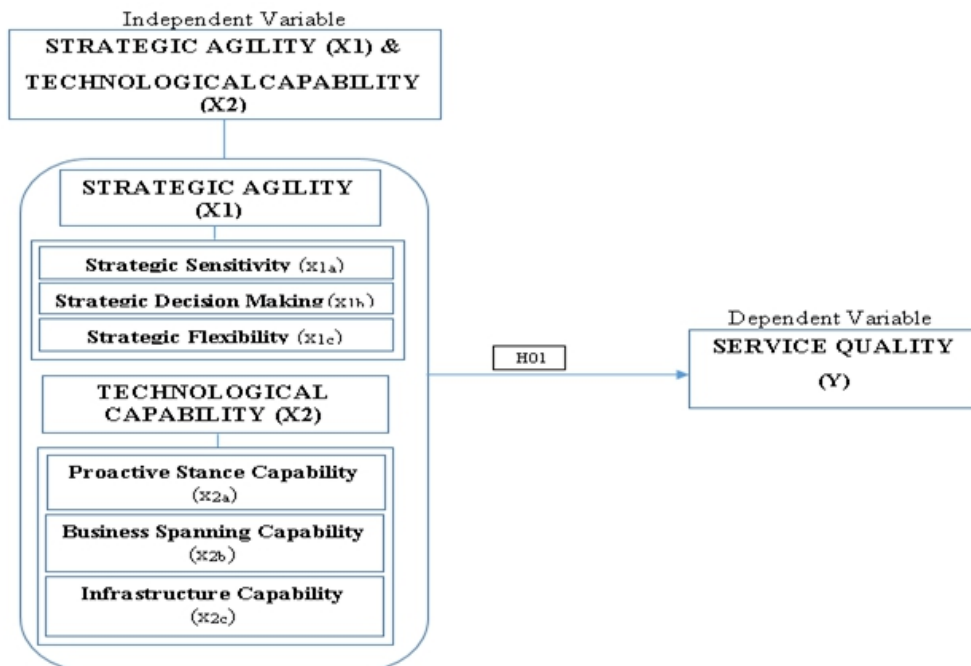


Fig 1: Research Model (2024)

Figure 1 above shows the research model which indicates the interaction between the independent variables of strategic agility dimensions (strategic sensitivity, strategic decision making and strategic flexibility), technological capability dimensions (proactive stance capability, business spanning capability and infrastructure capability) and the dependent variable of service quality.

Theoretical Review

The study leverages on Disruptive Innovation Theory (DIT) theoretical framework. The DIT, introduced by Bower and Christensen in 1995, focuses on the disruptive impact of innovation and the failure of established businesses to respond effectively to new competition (Bower & Christensen, 1995). Strategic agility factors, such as strategic sensitivity, decision-making, and flexibility, are essential components of technological endeavors and are supported by the DIT, emphasizing the alignment of organizational strategy with structure and resources (Bower & Christensen, 1995). The DIT also sheds light on how disruptive operators can enhance market competition, benefiting consumers in terms of price and quality (Bower & Christensen, 1995). Through this theoretical synthesis, the study illuminated the complexities of service quality dynamics and provided insights for industry stakeholders aiming to navigate the evolving telecommunications environment effectively.

Methodology

The study utilized a survey research design, targeting a population of 8,155 tertiary institution students and 855 employees from major telecommunications companies including MTN, Glo, Airtel, and 9Mobile. A sample size of 477 students and 477 telecommunication employees was determined using the Raosoft calculator, with simple random sampling for the employees and stratified random sampling for the students. Data were collected through a validated questionnaire, demonstrating high internal consistency with Cronbach's alpha reliability coefficients ranging from 0.79 to 0.92. The overall response rate was 76.62%. Descriptive and inferential statistics were employed for data analysis, with hypothesis testing conducted using multiple regression approaches. The survey items were rated on a six-point scale, from Very High (VH) to Very Low (VL), capturing both independent and dependent variables. Multiple regression equations were developed to model the relationships between the variables, providing a comprehensive framework for analysis and interpretation of the study findings.

Variables Identification

For this study, the independent variable is strategic agility (X1) measured by sub-variables of strategic sensitivity, strategic decision making, and strategic flexibility and technological capabilities (X2) measured by sub-variables of proactive stance capability, business spanning capability and infrastructure capability, while the dependent variable (Y) is service quality measured by sub-variables of service empathy, service availability, service reliability and service responsiveness.

Functional Relationship

The functional model for the study variables is denoted in the equations below:

$$Y = f(X)$$

$$Y = \text{Service Quality (SQ)}$$

$$X1 = \text{Strategic Agility (SA)}$$

$$X2 = \text{Technological Capability (TC)}$$

Where:

Y = Service Quality (SQ)

X1 = (x₁, x₂, x₃)

Where;

X1 = Strategic Agility (SA)

x_{1a} = Strategic Sensitivity (SS)

x_{1b} = Strategic Decision Making (SDM)

x_{1c} = Strategic Flexibility (SF)

X2 = (x₁, x₂, x₃)

Where;

X2 = Technological Capability (TC)

x_{2a} = Proactive Stance Capability (PSC)

x_{2b} = Business Spanning Capability (BSC)

x_{2c} = Infrastructure Capability (IC)

Regression Model

The model formulated for each of the hypotheses are written as

Hypothesis

$$SQ = \alpha_0 + \alpha_1 SS + \alpha_2 SDM + \alpha_3 SF + \alpha_4 TC + \alpha_5 PSC + \alpha_6 BSC + \epsilon_i \text{----- Eqn}$$

Where:

$\alpha_0 - \alpha_1$ = Coefficient of the independent variables for objective

ϵ_i = error term

Data Analysis, Results and Discussion

A total of 477 copies of questionnaire were administered to the top management staffs of Telecommunication providers (MTN, Airtel, Glo, 9 Mobile) and 477 to students of tertiary institution from the same selected states and federal capital (Lagos, Abuja and Port Harcourt) in Nigeria. Out of 954 copies of questionnaire that were distributed to Telcos providers, and the students, 739 (i.e., 328 copies from staffs and 411 copies from the students in the selected States) were correctly filled and returned. This represented 76.82%. Bryman and Bell (2011) posited that a response rate of $\geq 50\%$ is acceptable to analyze the results of the study. Therefore, a response rate of 76.82% was considered okay for this study.

Restatement of Research Objective, Research Question and Hypothesis

Objective: determined the effect of strategic agility dimension and technological capability dimensions on service quality of selected Telcos in selected states in Nigeria

Research Question: What is the effect of strategic agility and technological capability dimensions on service quality of selected telecommunication providers in selected states in Nigeria?

Restatement of Hypothesis

H0: There is no significant effect of strategic agility dimension and technological capability dimensions on service quality.

To test the hypothesis, a structural equation modelling (SEM) was deployed with strategic agility dimension (strategic sensitivity, strategic decision making and strategic flexibility), technological capability dimensions (proactive stance capability, business spanning capability infrastructural capability) as an independent variable and service quality as the dependent variable. First assumption tested before conducting structural equation modelling for H0 is multicollinearity test. The result of the multicollinearity shows that all the sub variables had Variance Inflation Factor less than 5.0, therefore confirm no issues with multicollinearity. The path coefficient relevance and P- value significant level at 95% confidence level using two tails T test was tested.

Fig 2: Bootstrapping Outcome for strategic Agility, Technological Capability and service empathy

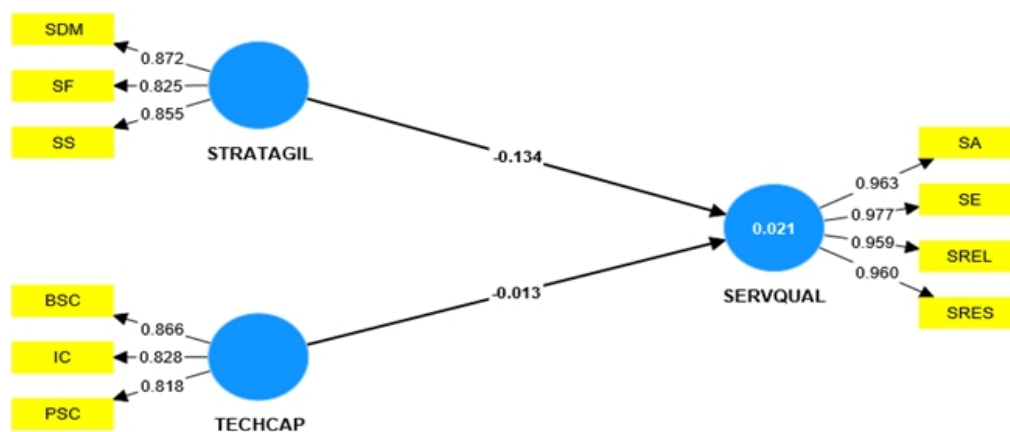


Figure 2 shows the strategic agility and technological capability dimensions, structural path and how it affects the consumer service quality review of some selected telecommunication providers in Nigeria. The diagram shows how the individual dependency arrow is connected to the dependent variable (service quality). The individual variable regression weight or estimate is represented on the path-dependent arrow indicating the effect of strategic agility and technological capability dimensions on service empathy.

Table 1: Path Coefficient

Variables	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics	P values
STRATAGIL -> SERVQUAL	-0.239	-0.229	0.083	2.872	0.004
TEHCAP -> SERVQUAL	0.212	0.197	0.094	2.260	0.024

Source: Researcher's Field Survey Results, (2024)

The Results presented above (table 1) shows the path analysis of the effect of Strategic agility dimension and technological capability dimension of some selected Telecommunication providers (MTNN, AIRTEL, GLO and 9 MOBILE) in Nigeria on service quality. It contains the values of the path coefficients, standard error, t-statistics, and p-value. The results, however, revealed that technological capability dimension ($\beta = -0.239, t = 2.872, p < 0.05$), have a negative and significant effect on the service quality of some selected telecommunication providers in Nigeria, strategic agility dimension ($\beta = 0.212, t = 2.260, p < 0.05$), have a positive and significant effect on the service quality of some selected telecommunication providers in Nigeria.

Consequently, it is strongly advised that telecommunication providers should deliberately focus their attention to combine and concentrate their efforts on both technological agility dimension and strategic agility dimension in other to strengthening customer perception on service quality.

$$SQ = \beta_0 + 0.21SA - 0.39TC + (SA * TC) \dots\dots\dots \text{eq.}$$

Where:

SQ= Service Quality

SA = Strategic Agility

TC = Technological Capability

The path regression model above revealed that when combining all the strategic agility dimensions and technological capability dimension together as the independent variable have a positively and significantly predicted service quality. Moreover, the unit of change in strategic agility tend to result in 0.21 improvements in the service quality reviews of some selected telecommunication providers in Nigeria keeping other variables constant. However, a unit change in the technological capability of the telecommunication provider would 0.39 times the impact negatively the services quality perception of the consumer in the same telecommunication market. Further, the result shows that combining the strategic agility dimensions and technological capability dimensions could impact positively service quality of the selected telecommunication service providers in selected state in Nigeria. Based on the stated information, the null hypothesis (H_0) which states that strategic agility dimension and technological agility dimensions has no significant effect on service availability in Nigeria hereby is rejected.

Table 2: R-Squared

Variable	R-square	R-square adjusted
SSERVQUAL	0.44	0.36

Source: Researcher's Field Survey Results, (2024)

Table 3: F-Squared

Variables	SSERVQUAL	SSTRATAGIL	TEHCAP
SSERVQUAL			
SSTRATAGIL	0.04	0.06	0.09
TEHCAP	0.03	0.01	0.05

Source: Researcher's Field Survey Results, (2023)

The adjusted R^2 as shown in above table (Table 3) indicates that strategic agility dimension (strategic sensitivity, strategic decision making and strategic flexibility) and technological agility dimensions) explained 36.0% of the variances in the services quality of some selected Telecommunication providers in Nigeria. It indicated that putting all the constructs together tends to influence a 36.0% change in the services quality of some selected telecommunication providers in Nigeria, which depicts a significant effect of the value, with the remaining 64.0 % making up for the other factors explaining the difference in the services quality of some selected Telecommunication providers in Nigeria. Meanwhile, the R-squared (R^2) value was used to calculate the amount of variance explained by exogenous variables in the endogenous variable (predictive accuracy of the model).

According to Hair et al. (2013), R^2 values of 0.75, 0.50, or 0.25 for endogenous latent variables can be classified as considerable, moderate, or weak (Hair et al., 2011; Hair et al., 2013). R^2 values of 0.36 are deemed moderate in SEM-PLS. Furthermore, technological capability and strategic agility have effect size (F-Square) 0.04 and 0.03 respectively (see Table 18) on the R-Square if they are removed from the model, while the rest of the exogenous variables show less than 0.04. The effect size of these variables (strategic agility and technological capability could therefore be seen to have a large effect. In the meantime, when an exogenous variable is removed from the model, F-Square (f^2) is the change in R-Square (R^2). Cohen f^2 was used to calculate the changing effect of R^2 . Effect sizes of f^2 equal to 0.02, 0.15, and 0.35 indicate tiny, medium, and large effects, respectively (Hair et al., 2013; Hair et al., 2019) hence the listed variables above in table 4 have effect sizes that are all the in range classified as large effect.

Table 4a: RMSE Predict

Variables	PLS-SEM_RMSE	LM_RMSE
SA	1.014	1.016
SE	1.021	1.023
SREL	1.018	1.022
SRES	1.019	1.024

Source: Researcher's Field Survey Results, (2024)

Table 4b: Summary of the Model Fit

Variables	Average loss difference	t value	p value
SSERVQUAL	-0.007	1.175	0.241
Overall	-0.007	1.175	0.241

Source: Researcher's Field Survey Results, (2024)

To assess a model predictive power, the researcher draws on several predictive statistics that quantify the number of predictive errors in the indicators of the particular endogenous construct. The most popular metric to quantify the degree of the prediction error is root mean square error (RMSE), so therefore, the researchers focus on the use of RMSE. The data used for the purpose of this research revolve around the mean shows that they were all symmetric and therefore supporting the evidence to use RMSE instead of Mean absolute errors (MAE) for determination of the model predictive power. As shown from the table 1.4a and 1.4b, all of the endogenous indicators (PLS_RMSE) were all less than the linear regression Model (LM-RMSE). The values range from 1.014 to 1.019 with an average loss of -0.007, t values > 1.175, $p > 0.05$. This shows that the model has high predictive power and also insignificantly predicting the endogenous variables.

Discussion

The path regression analysis conducted on strategic agility dimensions, technological capability dimensions, and service quality of telecommunication providers in selected Nigerian states yielded noteworthy findings. It revealed a significant positive effect of both strategic agility and technological capability dimensions on service quality, as validated by responses from telecommunication staff and customers alike. Specifically, strategic sensitivity, strategic decision making, and strategic flexibility within the realm of strategic agility, along with proactive stance capability, business spanning capability, and infrastructural capability within technological capability, emerged as influential factors enhancing service quality. These results align with prior studies, reinforcing the positive correlation between strategic agility and service excellence, as well as the impact of technological capability on service quality, contrary to the limited influence claimed by previous research.

The theoretical underpinnings of the Resource-Based View (RBV) further support the study's findings, emphasizing the significance of firm-specific resources and capabilities in sustaining competitive advantage. From durability and rarity to simplicity of imitation and transferability, the RBV framework underscores the importance of strategic agility and technological capability in maintaining competitive edge, particularly in the dynamic telecommunication industry. While past studies suggest a negative association between technological capability components and service quality, the present research emphasizes the strong link between strategic agility dimensions and service quality, implying that simultaneous implementation of strategic agility and technological capability aspects may significantly enhance service quality for telecommunication providers in Nigeria's selected states.

Conclusion and Recommendations

The research article examined the effect of strategic agility and technological capabilities on the service quality of selected telecommunications companies in Nigeria. It revealed that both strategic agility and technological prowess exerted positive influences on the service quality delivered by the chosen telecommunication firms in Nigeria.

Implication to Management

These findings offer critical insights for telecommunication management, underscoring the need to bolster strategies and capabilities to enhance service quality and ensure industry longevity.

Implication to Sales

Improving strategic agility and technological capabilities will bring about delivering customer satisfaction and ensure that both the top-line and bottom-line of telecommunications company keeps growing positively.

Implication to Researchers

Researchers can leverage on strategic agility and technological capabilities to gain a deeper understanding of market dynamics and consumer behavior in the telecommunications industry.

Implication to Practitioners

Finally, practitioners can use these research variables to improve their technology investments and corporate flexibility to stay ahead of their competitors.

Moreover, the study emphasized the pivotal role of technological capabilities, including infrastructure and network coverage, in delivering reliable and responsive services, thereby elevating overall service quality. The recommendations highlighted the imperative for telecommunication management to prioritize investments in strategic agility and technological enhancements, achieved through robust strategic planning, infrastructure investments, and continual service delivery refinement. Such measures, the study contends, are essential for driving improvements in service quality, bolstering customer satisfaction and loyalty, and ultimately fortifying the competitive position and success of telecommunication firms in Nigeria's dynamic market environment.

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