

## Strategic Agility and Service Empathy: A Transformative Journey of Selected Telecommunication Companies in Nigeria

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### Abstract

Service empathy among telecommunications companies is regarded as one of the critical elements of competitiveness and plays a vital role in satisfying customer needs. It has become an interesting phenomenon due to its profound influence on the customer churn rate. However, telecommunications service empathy faces persistent challenges such as the severe incompetence and apathy of customer service agents in addressing consumers' needs and concerns, the blatant disregard of customer service agents in empathizing with the customers' perspective, the alarming deterioration of customer service agents' courtesy and respect towards customers, and the alarming unavailability and inaccessibility of call center agents, leaving customers feeling helpless and abandoned in their time of need. These issues are likely attributed to limited strategic agility. Existing research primarily focuses on developed nations, overlooking the unique context of developing countries like Nigeria; hence, the study focused on unleashing the power of strategic agility and service empathy: A transformative journey 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 were adopted by the telecommunication employees, while stratified random sampling techniques were adopted by the students. A validated questionnaire was adopted for data collection. Cronbach's alpha reliability coefficients for the constructs ranged from 0.79 to 0.92. The response rate was 76.62%. The data were analysed using descriptive and inferential statistics. Findings revealed that strategic agility had significant effect on service empathy ( $Adj.R^2 = 0.22$ ,  $F^2 = 0.09$ ,  $Q^2 = 0.01$ ,  $p < 0.05$ ). The study concluded that strategic agility improved the service empathy of the selected telecommunication companies in Nigeria. The study recommended that telecommunication management should regularly assess the effectiveness of service empathy initiatives and make adjustments as necessary. Monitor customer satisfaction metrics, gather employee feedback, and seek opportunities for continuous improvement in service empathy practices.

**Keywords:** Service empathy, Strategic agility, Strategic decision making, Strategic flexibility, Strategic sensitivity.

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## **Background to the Study**

The telecommunications sector plays an important role in contemporary economic life and has a big impact on economic expansion and development (Dastmalchian et al., 2020). Rapid technological development and expansion have been observed in the telecommunications sector during the past 20 years (Mugo & Macharia, 2021). Today's technology for mobile networks has steadily impacted every country in the world, having a favorable impact on economic activity and raising the caliber of commercial services (Varo et al., 2022). The telecommunications industry provides a technological foundation for societal and business communications, and it is becoming increasingly important in enabling investors to participate and develop local businesses in the global economy (Bankole et al., 2020). Despite the tremendous contribution of the telecommunications industry to businesses, evidence from the literature suggests that the telecommunications industry still records unstable service empathy, which is suggestive of insufficient strategic agility (Jeon et al., 2022).

Globally, telecom operators in the digital age are facing growing challenges as a result of internet-based networking platforms such as Weixin, Weibo, and Twitter, which have drastically reduced telecommunications service empathy, thereby reducing their revenues from SMS and voice calls (Dastmalchian et al., 2020). The decline in fixed-line service empathy has been particularly severe in countries with underdeveloped traditional cable infrastructure. This reality, however, is more visible in most developing economies (Williams et al., 2017). In the United States of America, the telco sector is dealing with an increase in complaints about poor service delivery, such as poor call empathy, automatic subscription to unrequested services, an inefficient complaint feedback mechanism, and a long wait time for over-the-phone complaints, among other things (Agu et al., 2019). The rapid growth of the digital economy in UK has resulted in increased competition and shifting customer needs, forcing operators to broaden their service portfolios while maintaining capital expenditure for facility and network upgrades to increase capacity and meet demand (Statista, 2021). Since 2010, mobile operators have invested more than \$1.5 trillion in the deployment of mobile and fixed broadband networks worldwide. However, investment is slowing, with CAPEX increasing at a 0.4% CAGR between 2017 and 2021, compared to a -3.3% CAGR between 2014 and 2016. CAPEX has averaged 5.0% relative to industry GDP between 2015 and 2021 (Telecommunications Industry Outlook, 2021).

The telecommunication sector in Asia Pacific is predicted to gain a staggering 247 million new subscribers from 2020 to 2025, a substantial figure indeed. Meanwhile, Sub-Saharan Africa, MENA, Latin America, Northern America, Europe, and Commonwealth Independent State (CIS) are projected to experience an even more alarming surge of approximately 363 million new subscribers (Statista, 2021). However, the validity of these projections is called into question, given the troubling reality of consistently unstable service empathy. This is primarily attributed to a distressing decline in service empathy, rendering the projected growth numbers far from realistic. Similarly, the core function of telecommunications is under threat from increased competition from Over-the-Top (OTT) services like social media platforms. OTT services, which are delivered over service providers' networks, enable users to communicate at lower costs than traditional telecoms. Because of the high rate of adoption, this has put

pressure on industry margins, reducing revenue from voice while increasing data revenue. Furthermore, Mobile Network Operators (MNOs) have been forced to diversify beyond their core functions in order to sustain growth and resilience (Statista, 2021).

In Africa, limited network access coverage continues to be a major barrier to mobile internet adoption. Mobile broadband networks currently cover roughly half of the population, implying that 600 million people in the region lack access to mobile broadband services (Mugo & Macharia, 2021). Kenya's mobile broadband access coverage increased from 7.2 million in 2019 to 12.7 million in 2020. In 2019, only 1% of Somalia's population had access to mobile broadband (Visan et al., 2021). South African operators are a mix of multinational corporations such as Vodafone (Vodacom) and Airtel, as well as African brands such as MTN and Econet Wireless (Afrinvest Research, 2021). The presence of intense competition for service empathy is a significant problem in Tanzania. With Vodacom holding a commanding 31% market share, closely followed by Millicom Tigo at 29% and Airtel at 26%, the market is highly concentrated among these dominant players. Similarly, in Ghana, MTN monopolizes a staggering 49% of the market share, while Vodafone holds 22%, Airtel holds 13%, and Millicom Tigo holds 14%. The situation in Kenya is no different, with Safaricom controlling a whopping 65% of the market, while Airtel and Orange account for 17% and 13% respectively.

The state of telecommunication network coverage in Nigeria is a major problem, with significant repercussions on service empathy across the country. Even in urban areas, the network coverage is widely regarded as poor, resulting in a decline in service empathy, service. This decline in overall service empathy has been observed and documented (Alqahtani & Uslay, 2020). This discrepancy between coverage and capacity exacerbates the problems faced by subscribers. Network-related issues, such as frequent network outages and call dropouts, further contribute to the dissatisfaction of subscribers, prompting them to switch network service providers (Danish et al., 2015). This lack of empathy in customer service interactions leads to decreased customer satisfaction, diminished customer loyalty, and negative perceptions of the company's brand image (Gyemang & Emeagwali, 2020). This lack of empathy stems from factors such as insufficient employee training, high turnover rates, a focus on efficiency metrics, limited customer feedback channels, and technological barriers (Olu-Egbuniwe & Maeyouf, 2019).

Extant studies in the literature on strategic agility suggest that the adoption of strategic agility has lagged behind current organizational practices (Dastmalchian et al., 2020; Pscheidt-Gieseler et al., 2018). Despite the fact that many studies in the management literature have studied the effect of strategic agility on organizational performance (Bankole et al., 2020; Cacciolatti & Lee, 2016; Tutar et al., 2015), the influence of strategic agility and service empathy remains inconclusive. While some researchers discovered a positive link between strategic agility and service empathy (Sulaimon et al., 2015), others discovered a negative effect (Danish et al., 2015). Based on the aforementioned issues of strategic agility causing a decline in telecommunication industry service empathy, the study focused on unleashing the power of strategic agility and service empathy: A transformative journey of selected telecommunication companies in Nigeria.

## **Literature Review**

This section was discussed under three headlines: conceptual clarification, empirical review, theoretical review and research conceptual model.

### **Conceptual clarification: Service Empathy**

Service empathy is defined as a person's ability to detect another person's thoughts, feelings, and experiences, to share another person's emotional experience, and to react to another person's observed experiences (Bahadur et al., 2018). Hussain (2020) further opined that service empathy has both cognitive and emotional elements. From a cognitive standpoint, empathy is the ability of a service representative to grasp the customer's mind, thoughts, and intentions (Daniels, 2014). In terms of emotion, service empathy refers to employees' ability to engage in beneficial activities toward customers, such as interpersonal care and emotional contagion (Mayshak et al., 2017). Service empathy has been defined and conceptualized within the listening literature in a number of ways leading to a lack of consensus and consistency in research, but it is typically associated with being an attentive communicator and other-oriented.

According to Chakrabarti et al. (2018) service empathy is the willingness to care, providing personal attention to customers. Service empathy entails caring and provision of individualized attention to customers by personnel of an organisation (Cudjoe et al., 2015). Ardiansyah and Handrijaningsih (2021) stated that service empathy is the ability for service delivery firms to pay attention to individual customer problems and demands, then address these issues effectively. Service empathy is the ability to treat people in response to their emotional reactions (Wisniewski, 2016). Service empathy has nothing to do with adopting other people's emotions and accepting them as your own, but rather with a talent that makes the subject aware of other people's problems, wants, or feelings while making sound decisions (Wisniewski, 2016). Based on the literature, the researcher defines service empathy as caring, understanding the requirements of consumers, and paying attention to each customer individually.

### **Strategic Agility**

Arokodare and Asikhia (2020) defined strategic agility as an organization's ability to make strategic commitments while remaining nimble and flexible without sacrificing efficiency, and it is viewed as a means for organizations to transform and reinvent themselves, adapt to changes in the environment, and ultimately survive. This is accomplished through the development of new products and services, as well as new business models and creative approaches. Strategic agility, according to them, is useful in explaining how adaptive skills are triggered in organizations. According to Murungi (2015) strategic agility is the ability to continuously and adequately adjust and adapt in appropriate time the strategic direction in core business in relation to changing circumstances. Sampathy and Krishnamoorthy (2017) see strategic agility as the capability of response to both foreseen and sudden changes using resources and knowledge to come up with innovative solutions that not only ensure near term competitive edge but also long-term survival through constant business model renewal. According to Sampath (2015) considered strategic agility to be about being adaptive to changes

in the business context, spotting opportunities, threats and risks, and launching new strategic initiatives rapidly and repeatedly. For the purpose of this study, strategic agility is defined as the involvement of tactfully sightseeing and acting responsively with ease, high speed, and dexterity to environmental changes and challenges.

Strategic sensitivity is the ability of organisations to actively seek out and gather useable data, assimilate this into information (by filtering it for relevancy, timeliness, accuracy and content), interpret and analyze the urgency, causes and impact of the derived information and as such, anticipate or detect opportunities and threats in the business environment (Privalov, et al., 2020). Strategic sensitivity is defined as the sharpness of perception of, and the intensity of awareness and attention to, strategic developments (Winkelmann & Duch, 2019). Strategic sensitivity means being open to as much information, intelligence and innovations as possible by creating and maintaining relationships with a variety of different people and organizations (Doz & Kosonen, 2018). For the purpose of this study, strategic sensitivity is defined Strategic sensitivity as the sharpness of perception and the intensity of awareness and attention.

Kotenko et al. (2019) defined strategic decision-making as the act of reaching a conclusion, position or judgement after due consideration of alternatives. Strategic decision-making can be defined as choosing between alternatives (Jafari-Marandi et al., 2020). It can be regarded as an outcome of a leader's mental processes leading to the selection of a course of action among several alternatives (Ahmad & Shahid, 2015). Strategic decision making involves mopping ideas and mapping the likely consequences of decision by working out the importance of individual factors while choosing the best course of action to take (Kurniawana & Hamsal, 2019). Berkani (2021) defined strategic decision-making as a systematic approach which consists of seven steps namely: problem identification, information and data gathering, data analysis, developing of alternatives, evaluation of alternatives and choosing of appropriate alternatives. Strategic decision-making is a process of making a choice from several alternatives to achieve a desired outcome (Visan et al., 2021). In view of the above opinion in literature, the researcher defines strategic decision-making as the process of charting a course based on long-term goals and a longer-term vision.

Gamba and Triantis (2018) defined strategic flexibility as the firms' capability to manage the negative shocks, avoiding any telco service crisis and getting benefits for the positive shocks for the easily available opportunities. Wang (2014) defines strategic flexibility as organizational capability that allows for rapid adaptation to change at a lower cost and shorter time, when facing the challenge of environmental uncertainty. Ang and Smedema (2015) defined flexibility in business as the ability of a company to make whatever internal changes that is necessary to respond effectively to the changing outward environment of the organization as quickly as possible. Al-Slehat (2019) and Gamba and Triantis (2018) stated that the characteristics of organisational flexibility are; flexible work pattern initiatives, rapid adaptation to change at a lower cost and shorter time, ability to mobilize its financial resources in facing future uncertainties, timely reaction to any future unexpected events in cash flow and to maximize the company's value. In view of the above opinion in literature, the researcher defines strategic flexibility as the ability of the organization in response to changes in the work conditions; changes are like environment, technology, markets and structure.

### Empirical Review: Strategic Agility and Service Empathy

Munir and Murat (2018) study on strategic management sensitivity scale development and validity research indicated that strategic agility dimensions had significant positive effect on service empathy. The study of Privalov et al., (2020) on increasing the sensitivity of the method of early detection of cyber-attacks in telecommunication networks based on traffic analysis by extreme filtering also discovered that strategic agility dimensions had significant positive effect on service empathy. Similarly, Ruholla et al. (2020) found that strategic agility had a positive effect on service empathy. Wei et al. (2020) discovered that strategic agility had a significant effect on service empathy. Fuller et al., (2021) discovered that strategic agility had a significant impact on service empathy. Akinloye et al., (2020) discovered that strategic agility had a significant impact on service empathy. In line with these findings, Gyemang and Emeagwali (2020) found that strategic agility improved service empathy.

In contrast to the previous findings, Adebisi et al., (2019) discovered that strategic agility had no effect on service empathy as a dimension of service quality. According to the findings of John et al. (2019), strategic agility has a negative impact on service empathy. Adebile et al., (2017) also confirmed that strategic agility had no effect on service empathy. Furthermore, Anaza et al., (2018) discovered that the strategic agility dimension has a negative effect on service empathy and service quality. Kurniawan and Hamsal (2019), Lamia (2020), Lungu (2018), and Olu-Egbuniwe and Maeyouf (2019) discovered that strategic agility had no effect on service empathy. Likewise, Lehtimaki and Karintaus (2012) study on social capital for strategic sensitivity in global business revealed that strategic agility dimensions had negative effect on service empathy. Furthermore, the study of John et al (2019) on empathy and responsiveness in a high-service context also corroborate the above findings indicating that strategic agility dimensions had negative effect on service empathy.

### Research Conceptual Model

The study was conceptualized as shown in the model below:

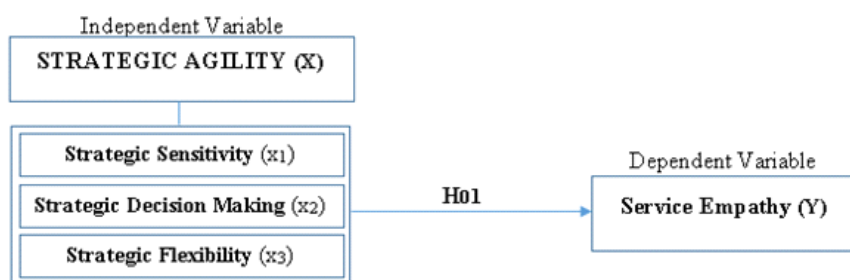


Fig 1: Research Model (2023)

Figure 1 above shows the research model which indicates the interaction between the independent variable of Strategic agility dimensions (Strategic sensitivity, strategic decision making and strategic flexibility) and the dependent variable of service empathy.

### **Theoretical Review**

This study is anchored on the Disruptive Innovation Theory (DIT) and the Resource-Based View (RBV) as the baseline theories for this study. Bower and Christensen (1995) propounded the concept of disruptive innovation theory, which was expanded upon by Clayton Magleby Christensen in 1997, while the resource-based view was developed by Pfeffer and Salancik in 1978. For this study, theory of disruptive innovation theory supports the variables of strategic agility. Understanding the customer's needs more than the customer is critical in informing strategic product and service development. The disruptive innovation theory dictates that strategic agility, strategic sensitivity, strategic decision making and strategic flexibility are important in successful technology pursuits. It is critical that the organisation's structure and resources are linked with its strategy and business environment.

The Disruptive Innovation theory looks at the ability and current activities of the telco in relation to the implementation of strategic agility. The main intent of the adoption of Disruptive Innovation theory as an underpinning theory is that the Disruptive Innovation theory explain why incumbent firms fail to respond accordingly when confronted with innovations introduced by new entrants (Bower & Christensen, 1995). From a regulator's perspective, disruptive operators can increase competitive rivalry in markets dominated by a handful of large companies, thus allowing consumers to obtain more benefits in terms of price and quality (Bower & Christensen, 1995).

The resource-based view of the firm supports this study by validating the variables of service empathy. The resource-based view advances the importance of firm-specific resources, that is, those resources that maintain value in the context of the given firm's markets and other resources that are difficult to replicate by other firms (Wernerfelt 1984). The resource-based view (RBV) takes an 'inside-out' view or firm-specific perspective on why organizations succeed or fail in the market place. In this regard, the RBV is a useful framework for explaining company service empathy and growth using surplus elements. In this regard, the disruptive innovation theory and resource-based view are deemed suitable for studying the effect of strategic agility dimensions (strategic sensitivity, strategic decision making, and strategic flexibility) on service empathy in Nigeria's telecommunication sector. Thus, the Disruptive Innovation Theory and the Resource-Based View is adjudged appropriate nexus in explaining the influence of strategic agility dimensions of strategic sensitivity, strategic decision making and strategic flexibility on service empathy.

### **Methodology**

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 were adopted by the telecommunication employees, while stratified random sampling techniques were adopted by the students. A validated questionnaire was adopted for data collection. Cronbach's alpha reliability coefficients for the constructs ranged from 0.79 to 0.92. The response rate was 76.62%. The data were analysed using descriptive and inferential statistics. The hypothesis was tested using multiple regression approaches. The

principal factors investigated were measured on a six-point scale with anchors ranging from Very High (VH) to Very Low (VL), for the independent variables and dependent variable respectively. Multiple regression equation developed along the dependent and independent variables. Thus, the models can be represented as follows:

### **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 and Research Question One**

**Objective One:** evaluate the effect of strategic agility dimensions on service empathy.

**Research Question One:** How does strategic agility dimensions affect service empathy

The first objective evaluated the effect of strategic agility dimensions and services quality of major telecommunication provider in selected states in Nigeria. On a six-point Likert scale, the respondents were requested to rate their perception of various items about strategic agility dimensions and empathy of the telecommunication providers and students in selected States in Nigeria.

### **Restatement of Hypothesis One**

**H01:** Strategic agility dimensions does not significantly affect service empathy.

To test hypothesis one, structural equation modelling (PLS-SEM) was deployed with strategic agility dimensions (Strategic sensitivity, strategic decision making and strategic flexibility) as an independent variable and service empathy as the dependent variable. First assumption tested before conducting structural equation modelling for H01 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.

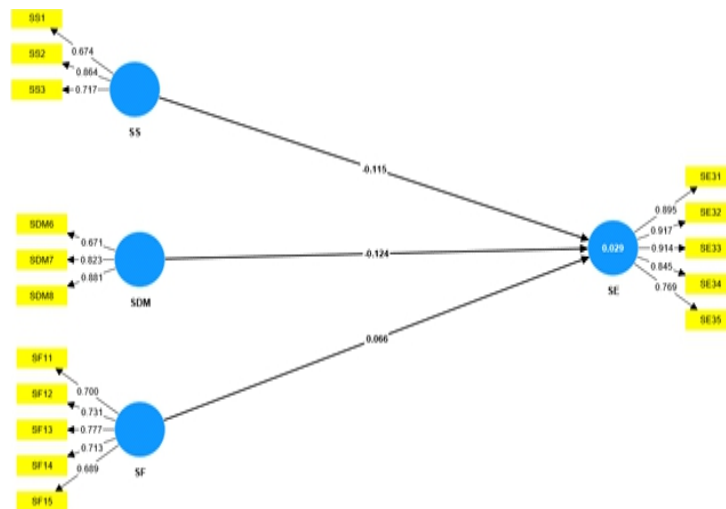


**Table 1:** Collinearity Statistics for Strategic Agility and Service Empathy

Collinearity statistics (VIF)/ Outer model	VIF
SDM6	1.433
SDM7	1.576
SDM8	1.404
SE31	3.446
SE32	4.447
SE33	4.280
SF11	1.401
SF12	1.522
SF13	1.574
SS1	1.295
SS2	1.491
SS3	1.193

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

The next assumption tested is path coefficient relevance and P- value significant level at 95% confidence level using two tails T test.



**Fig 1:** Bootstrapping Outcome for strategic Agility and service empathy

Figure 1 shows the strategic agility dimensions, structural path and how it affects the consumer service empathy review of some selected telecommunication providers in Nigeria. The diagram shows how the individual dependency arrow is connected to the dependent variable (service empathy). The individual variable regression weight or estimate is represented on the path-dependent arrow indicating the effect of strategic agility on the consumer service empathy.

**Table 2:** Path Coefficients for the Strategic Agility dimensions and Service Empathy

	Original sample (Beta Coeff.)	Sample mean (M)	Standard deviation (STDEV)	T statistics	P values
SDM -> SE	-0.052	-0.053	0.085	0.609	0.543
SF -> SE	0.036	0.002	0.091	0.393	0.694
SS -> SE	-0.137	-0.127	0.061	2.239	0.025

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

The Results presented above (table 2) in shows the path analysis of the effect on the service empathy of some selected telecommunication providers (MTNN, AIRTEL, GLO and 9 MOBILE) in Nigeria. It contains the values of the path coefficients, standard error, t-statistics, and p-value. The result shows that at least one of the strategic agility dimensions has a significant effect on services empathy of telecommunication providers in selected states. In coming up with the final regression model to predict services empathy of telecommunication providers in the selected states in Nigeria, the strategic agility dimensions that are statistically significant are therefore retained in the model. The path regression model from the results is thus expressed as:

$$SE = \beta_0 + 0.036SF - 0.052SDM - 0.137SS \text{ ----- eq. (1.0)}$$

Where:

SE= Service Empathy

SF= Strategic Flexibility

SDM = Strategic Decision Making

The path regression model above revealed that when combining all the dimensions of the strategic agility together as the independent variable have a positively and significantly predicted service empathy.

The results, however, revealed that Strategic sensitivity ( $\beta = -0.137, t = 2.239, p < 0.05$ ), have a negative and significant effect on the service empathy of some selected Telecommunication providers in Nigeria. On the other hand, Strategic decision making ( $\beta = -0.052149, t = 0.609, p > 0.05$ ), have a negative and does not have a significant effect on service empathy while Strategic flexibility ( $\beta = 0.036, t = 0.393, p > 0.694$ ) have a positive and does not have a significant effect on the service empathy. Consequently, it is strongly advised that telecommunication providers should deliberately pay more attention to and concentrate their effort on strategic sensitivity in other to enhance service empathy (by strengthening customer perception) rather than their competency in strategic flexibility and decision making to improve on customer service quality. The results reveal that Strategic sensitivity ( $\beta = -0.137, t = 2.239, p < 0.05$ ), was the most significant predictor (among strategic agility dimensions) of service empathy of telecommunication providers in selected states in Nigeria, since all of the regression coefficients is significant at 5% significance level as indicated in the table above, the null hypothesis was rejected. Therefore, the null hypothesis one ( $H_{01}$ ) which states that strategic agility dimensions (strategic sensitivity, strategic decision making and strategic flexibility) have

no significant effect on service empathy of telecommunication providers in selected states in Nigeria is hereby rejected. The third assumption to be validated is the quality Criteria, this involves examination of explanatory power using R square, F square and Q square test as depicted below:

**Table 3:** R-square

	R-square	R-square adjusted
SE	0.37	0.22

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

The adjusted  $R^2$  as shown in above table (Table 3) indicates that Strategic Agility dimensions (Strategic sensitivity, strategic decision making and strategic flexibility) explained 22.0% of the variances in the services empathy of some selected telecommunication providers in Nigeria. It indicated that putting all the constructs together tends to influence a 22.0% change in the services empathy of some selected telecommunication providers in Nigeria, which depicts an excellent effect of the value, with the remaining 63.0 % making up for the other factors explaining the difference in the services empathy 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 academic research focusing on social sciences,  $R^2$  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 0.24 are deemed poor in SEM-PLS. However, because  $R^2$  frequently overestimates their corresponding population values, particularly with small samples, the Adjusted  $R^2$  was employed to adjust for such bias (Mertler et al., 2023). Furthermore, Strategic sensitivity, strategic decision making and strategic flexibility have effect size (F-Square) 0.01, 0.01 and 0.01 respectively (see Table 3) on the R-Square if they are removed from the model, while the rest of the exogenous variables show less than 0.02. The effect size of these variables (Strategic sensitivity, strategic decision making and strategic flexibility) could therefore be seen to have a small 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 small, medium, and large effects, respectively (Hair et al., 2013; Hair et al., 2019) hence the listed variables below in table 4 have effect sizes that are all the in range classified as tiny.

**Table 4:** F-Square

	SE
SDM	0.01
SE	0.01
SF	0.01
SS	0.01

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

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 is a residual and the lower it is the better, this is the difference between the actual value and the predicted values. The most popular metric to quantify the degree of the prediction error is root mean square error (RMSE), so therefore the researchers focus was the use of RMSE. The data used for the purpose of this research revolving round 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. The last assumption was tested on predictive power of the exogenous indicator to predict accurately the level of consistency in measure the endogenous variables. As shown from the table 5a – 5b, most of the endogenous indicators (PLS\_RMSE) were all less than the linear regression Model (LM-RMSE). The values range from 1.521 to 1.757 hence shows that the model has high predictive power with an average loss of -0.109, t values > 1.96,  $p < 0.005$ . This shows that the model has high predictive power and also statistically significant.

**Table 5a:** RMSE PREDICT

	PLS-SEM_RMSE	LM_RMSE
SE31	1.757	1.795
SE32	1.644	1.678
SE33	1.522	1.546
SE34	1.559	1.593
SE35	1.521	1.559

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

**Table 5b:** PLS-SEM vs. Linear model (LM)

PLS-SEM vs. Linear model (LM)	Average loss difference	t value	p value
SE	-0.109	3.072	0.002
Overall	-0.109	3.072	0.002

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

### Discussion

The result of the path regression analysis on strategic agility dimensions and service quality of telecommunication providers in selected states in Nigeria indicated that strategic agility dimensions have a positive and significant effect on service quality. This result further specified that the responses of both telecommunication staff and the customers corroborates with the above result. This implies that on the overall that strategic agility dimensions have a significant positive effect on service quality of telecommunication providers in selected States in Nigeria especially when strategic sensitivity, strategy decision making and strategic flexibility were implemented. The result affirms the study of Munir and Murat, (2018) that show the importance of the managers' strategic management activities in the planning and decision-making processes. This finding shows a strong relationship between strategic management and strategic planning on managerial issues, human resource effectiveness and firms' strategies. Anaza, et al. (2018), the findings show that sales people respond well to logic, facts, and

motivational stimuli which ultimately drive sales performance. Privalov et al. (2020) also indicated that adoption of strategic agility dimensions significantly affects service quality. Similarly, Cunha et al. (2020) further confirmed that strategic agility dimensions have significant effect on the service quality and performance of service firms with results pointing to positive relationship. The finding further asserts that accentuating the previously planned strategy can reduce temporal responsiveness; accentuating the immediate problems/opportunities that can harm overall consistency.

Theoretically, the findings are validated by Resource based view advanced by (Barney, 1991) which asserts that it is advantageous for a firm to pursue a strategy that is not currently being implemented by any other competing firm. Such resources must be either rare or hard to imitate or not easily substitutable. The competitive strategies provide the firm's ability to recognize and utilize various resources to increase firm performance, hence the resource-based theory is highly relevant to the study. While the configuration theory which is advanced by Walker and Ruekerts (1987) is in tandem with the above results and asserts that an organization was have superior performance if there is an appropriate fit between a firm's internal organizational characteristics and its strategic focus. It further posits that a match between marketing function and strategic function of a firm was lead to a firm's performance having a positive effect. The combination of both the RBV and the disruptive Innovation theory (DIT) are appropriate nexus in explaining the role of firm's strategic agility on firm performance. There is therefore an agreement among these studies and the result of this current research that strategic agility has a significant effect on service quality, as the various studies reviewed seem to have supported the positive association that exists between strategic agility components and service quality.

### **Conclusion and Recommendations**

The study concludes that strategic agility improved the service empathy of the selected telecommunication companies in Nigeria. The findings of this study made important contributions to knowledge conceptually, theoretically and empirically. Conceptually, the study identified and filled conceptual gaps in literature regarding strategic agility dimensions of strategic sensitivity, strategic decision making and service empathy of selected Telecommunication Companies in Nigeria. Theoretically, the findings of this study affirmed the utilization of Disruptive Innovation Theory and Resource Based View as the baseline theories of the study. Both theories were selected to guide this study because they provided perspectives that are directly related to this study and the variables under investigation. As a result, future studies can cite this study as supporting these theories. Empirically, the findings of this study support the view that strategic agility dimensions' influences service empathy. The empirical outcome of this study contributes to the existing empirical findings in the area of strategic agility, and service empathy, and equally serve as a reference material for future researchers. The study recommended that telecommunication management should regularly assess the effectiveness of service empathy initiatives and make adjustments as necessary. Monitor customer satisfaction metrics, gather employee feedback, and seek opportunities for continuous improvement in service empathy practices. Further study should examine the role of strategic alliances and technological competence on product performance in the telecommunication industry.

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