DIGITAL PLATFORMS AND ENTERPRISE RESPONSIVENESS OF TELECOMMUNICATION COMPANIES IN SOUTH-SOUTH, NIGERIA

NDAMATI , Wobiareri Fiona and Prof. E. **TANTUA** Jr.
Rivers State University Port Harcourt
Faculty of Administration and Management
Department of Office and Information Management

Correspondence Email: Email: wobiafndamati@gmail.com

ABSTRACT

The Nigerian telecommunications sector operates in a volatile, competitive, and rapidly evolving environment. This study was designed to ascertain the relationship between digital processes and enterprise responsiveness of telecommunication companies in South-South, Nigeria. The study was guided by a research questions and two hypotheses. The descriptive research design was adopted in carrying out this study using the cross-sectional survey approach; hence the study was a co-relational study. As a macro level study, four telecommunication companies in south-south, Nigeria serve as the population, using a census of 143 principal managers who represented the company. A structured closed ended questionnaire was used to gather responses. The research instrument was validated by professionals in the department of Office and Information Management, while the reliability of the instrument was achieved through the use of Cronbach Alpha Coefficient presented with the help of Statistical Package for Social Sciences, version twenty and all items scoring above zero point seven. Responses gathered were tested using descriptive statistic for the primary analysis, while Spearman's Rank Order of Correlation Coefficient was used to test the predictor and criterion variables. The findings revealed that there is a very strong coefficient between digital processes and tested measures of enterprise responsiveness of the telecommunication companies in south-south, Nigeria. Hence, the study conclude that the digital processes have very strong relationship with enterprise responsiveness of telecommunication companies in South-South, Nigeria. Therefore, the study recommend that telecommunication companies should: automate their workflow for quick adaptation, use real-time to resolve issues and invest in resilient platforms to ensure uninterrupted services.

Keywords: Digital Processes, Enterprise Responsiveness, adaptability, operational resilience

INTRODUCTION

Nigeria telecommunication sector is the hub in the nation's digital economy drive, it one sector that touches the daily lives of millions of Nigerians whether bourgeois class or poor class. Though, it stands at the heart of modern communication, commerce and national development yet it is increasingly confronted by systemic issues that cannot be ignored. The common issues experienced by subscribers ranging from inability to make calls, frequent network interruptions, dropped calls, unstable data, unexplained data depletion to slow complaint resolution and fibre optic cable cuts (NCC Press Release on Submarine Cable Cuts, 2024), thus mounting customer dissatisfaction. The situation is further compounded by rising operational costs, aging infrastructure, vandalism of critical facilities and a growing gap between digital innovation and service delivery (ALTON's Statement, Punch Newspaper, 2023). The persistent systemic issues that is rooted in the country's infrastructure deficits has exposed widening gap in digital processes, where operational workflows are too slow or fragmented; in digital data management, where information is not always captured, analyzed and acted upon in real time; and in digital platforms where the tolls meant to empower customers often fail to deliver seamless, efficient experiences (Vanguard Newspaper Report on ALTON's Plea, 2022).

Addressing these challenges requires level of responsiveness one that is not only visible but measurable. We must look at adaptability, how quickly and effectively telecommunication operators can reconfigure systems and strategies when disruptions occur. Strengthening operational resilience ensures that services can withstand shocks and recover swiftly when failures happen. And to enhance customer interaction efficacy requires creating communication channels that resolve issues promptly, transparently and to the satisfaction of the customer served. This is not just a call for technical upgrades, it is a call for a cultural shift within the industry one that embraces agility, transparency and innovation as standard practice. If companies can measure and improve our adaptability, resilience and customer engagement, then customer trust can be restored, improve service quality and business continuity.

Despite the growing scholarly interest in digital transformation, the majority of existing studies tend to focus on service quality, customer satisfaction (Adebayo, 2022), organizational vision and structural factors as the primary predictors of responsiveness outcomes. Also, the focus on impact of fibre optic cable cuts on quality service in Nigeria (Chukwuma, 2023), as a result, limited attention has been paid to other potentially influential variables, particularly those related to internal administrative capabilities. While the work of (GSMA Intelligence, 2022) looked at the macro-economic perspective on national economic growth, investment and development, there remains a significant research gap in systematically linking the dimensions of this study such as digital processes, digital data management and digital platforms with the measures of enterprise responsiveness as adaptability, operational resilience and customer interaction efficacy. The absence of empirical studies integrating these proxies limits the telecommunication sector's ability to develop targeted strategies for improving responsiveness and by extension, overall service performance.

LITERATURE REVIEW

Digital Processes

The evolution of technology has redefined the operational frameworks of organizations across sectors, with digital processes emerging as a central driver of efficiency, innovation and competitiveness. Conceptually, digital processes refers to the use of technology to automate, optimize and manage business workflows, eliminating manual, paper-based tasks. Digital processes is the backbone of modern administration, its automotive capability of repetitive tasks, helps in reducing processing time rapidly and with ease. Also, effective digital processes of an organization's workflow integrates proper and accurate monitoring processes using KPIs like revenue trends in real time. Several studies have identified digital processes as using of digital tools to replace manual steps, improving transparency, auditability and services in public and private sectors. According to Deloitte, (2021), an organization ability to understand beforehand the lower administrative cost digital processes brings through paperless workflows and reduced human error, then much financial resource will be allocated to have a seamless process. Thus, evaluating digital processes accuracy is a process that requires planning before any data exploitation (Mylavnappa, Thomas, & Viswanathan, 2019). Also, digital processes has gained significant scholarly attention as organizations increasingly transition from manual operations to technology-driven workflows. Digital processes is broadly refer to automation and optimization of business activities through digital technologies, facilitating enhanced efficiency, innovation and strategic decision-making. Lee, (2025) contend that a structured, technology-mediated sequences of tasks that standardize

operations, reduce variability and enable data- driven decision making in organizations. Therefore, digital processes orchestrate the digital tools to execute business functions, fostering agility and competitive advantage. This helps align the organization administration with its business strategies as it governs how the business information is collected, integrated, enhanced, stored, and delivered to business people who use it to do their jobs. It helps make support organizational growth without proportional cost increases cloud-based HR systems for remote teams. The goal of digital processes is to simplify as much as possible, create reusable standards and optimize efficiency, so that the administration can support the future growth of the business.

According to Ogunnaike and Ogueyungbo (2016), digital processes encompass the adoption of computerized systems to automate, optimize and transform traditional business workflows, thereby fostering real-time communication and dynamic decision-making. Similarly, Peppard, and Ward, (2016), define digital processes as technology-enabled changes that fundamentally after organizational structures, value creation mechanisms and the way businesses operate. Again, Westerman, et al (2011), view digital processes as the integration of digital technologies into all areas of a business, resulting in fundamental changes to how organizations operate and deliver value to customers. In another dimension Nutleyer et al., (2014), characterizes digital processes as a process whereby digital technologies create disruptions, triggering strategic responses from organizations that seek to alter their value creation paths to improve their competitive position. However, the study of digital processes is increasingly vital as industries navigate the fourth industrial revolution, where agility, innovation and digital fluency dictate organizational survival and growth. Understanding and strategically implementing digital processes can empower organizations to streamline operations enhance customer engagement and maintain a competitive advantage in an increasingly digital economy. Thus, this thesis explored the conceptual foundations, strategic implications and the practical; applications of digital processes within the Nigerian telecommunications.

Enterprise Responsiveness

Enterprise responsiveness of the organization is the extent to which firms react rapidly to changes in a business environment to seize potential opportunities (Bernardes & Hanna, 2009). This responsiveness places the efficiency and effectiveness with which firms sense, interpret, and act on market stimuli (Garrett, Covin & Slevin, 2009), and has been treated as a competitive advantage. For example, Groomman and Hadseler (2015), proposed that this responsiveness represents a competitive marketing advantage by deploying resources to satisfy customer needs. Kelemen, et al, (2010) noted that a firm with a high level of responsiveness outperforms its competitors in terms of operations. Scholars have conducted numerous studies to explore how organizational responsiveness can be enhanced (Karimi, 2015). According to Nwinyokpugi and Brown, (2022), central to this concept of organizational responsiveness seems to be the capability to learn fast in an environment where changes are fast-paced and difficult to foresee. Accordingly, scholars have increasingly realized that to develop and maintain responsiveness, a firm must constantly learn from partners with rich experiences in terms of responding to market changes. From the perspective of dynamic capabilities, organizational responsiveness assumes the role of adaptive capacity, which is reflected in the company's ability to reconfigure its resources and coordinate processes according to the fast-changing environment. Although some recent research has been carried out into the responsiveness of firms from the perspective of dynamic capabilities (Sia, Weill, & Zhang, (2021),

these investigations are still in their early stages and require more consistent results. What can be observed is that the perspective of dynamic capabilities is a versatile integrated theoretical approach both to the broader theories of management, such as RBV, and the more specific approaches to marketing, as in the case of market orientation Setia, Venkatesh, & Joglekar, (2013). In dynamic and complex environments, organizational responsiveness presents itself as the adaptive capability of the company. Organizations can anticipate unexpected changes and uncertainties more rapidly when this pattern fits their strategic direction. Underlining this point when they referred point to strategic orientation as an important driver of the adaptive capacity of a company. Market responsiveness is a market-driven behavior of the firm and its units. Responsiveness requires some market maturity, as customers, competitors, and other relevant market actors need to be distinguished. The firm would then be able to specify a suitable degree of responsive action, such as product customization and building customer relationships

In addition, enterprise responsiveness is the act of being ready and disposed to offer services in a timely manner to clients in a bid to meet or surpass their expectations by utilizing information obtained from the market. Responsiveness is important in creating a good impression in the minds of customers which will likely increase their tendency in prolonging their relationship with the organization. Through technology, organizations are now able to perform creditably and respond swiftly in line with customers' expectations that will bring up the level of customers' satisfaction (Sebastian, et. al, 2017). Enterprise responsiveness denotes the multiplicity of responsive measures that a firm can make without effort, speed, and expertise upon detecting opportunity and threat in a business environment. In order for organizations to be successful and achieve superior performance, firms must continually anticipate, determine and deliver customer satisfaction to the "great markets, keep abreast with the emerging market trends, monitor competitor activities and practically adjust their products and service offering, reconfigure internal resources and operating factors more effectively and efficiently than competitors.

Adaptability

In the digital era, particularly within dynamic sectors like telecommunications, organizations must continuously adjust to emerging technologies, market shifts, and administrative innovations. This has intensified the need for adaptability, a concept that captures the degree to which enterprise processes can evolve in response to changing conditions. In digital processes, adaptability underpins operational flexibility and is crucial for sustaining enterprise responsiveness. Adaptability is broadly defined as an organization's ability to reconfigure and align its processes in response to internal or external stimuli. Afolabi and Okereke (2020) describe adaptability as the capability of an enterprise to modify its business and administrative processes to suit evolving demands without compromising service quality or performance and this view emphasizes flexibility and continuity in operations. Danjuma and Ojo (2021) define it as the organizational skill to iteratively restructure workflows and decision paths using digital tools in response to environmental disruptions or opportunities, highlighting the digital infrastructure behind adaptability. This provide a broader perspective, noting that process adaptability reflects the degree of agility with which enterprises revise procedural frameworks to achieve optimal responsiveness and innovation. In this sense, adaptability is tied to innovation and continuous improvement. Furthermore, that adaptability is a strategic competence that enables administrative systems to evolve in tandem with technological, policy, or consumer-related changes, positioning it as a competitive advantage in

digital transformation. Environmental and situational factors further complicate cognitive adaptability. Stress, uncertainty, and time pressure can reduce mental flexibility and decision-making quality. Moreover, cognitive biases such as confirmation bias or anchoring can hinder the ability to objectively reassess information or adapt strategies effectively. Addressing these challenges requires fostering a supportive context that encourages risk-taking, reflection, and continuous learning to enhance cognitive adaptability. Summarily, cognitive adaptability is a vital proxy for overall adaptability, underpinning how individuals and organizations think and respond to change. Its capacity to enable flexible thinking is crucial for innovation and effective problem-solving in complex environments.

Together, adaptability, process changes, and system architecture play a pivotal role in ensuring administrative agility and responsiveness. Within the Nigerian telecommunications industry, these elements enable firms to evolve their service delivery mechanisms, automate decision-making, and respond effectively to consumer and regulatory demands. Their strategic relevance in digital administration cannot be overstated, especially in highly competitive and technologically intensive environments. To understand why adaptability is important in business, one will consider the flexibility in business market environment. The rapid growing pace of competitive and environmental challenges are never ending thus making adaptability as an organizational trait. Adaptability has been recognized as a key dynamic capability for competing in the contemporary business environments and a superior source of organizational comparative advantage (Teece, Piasno & Shuen 1997). Even more importantly, the ability to manage the organizational portfolio of processes, including reconfiguring them for continued effectiveness, designing and utilizing appropriate metrics and controls, and applying them as strategic options, has emerged as an organizational imperative. While agility is paramount to adaptability in business, it's insufficient for creating maximum organizational efficiency. Understanding process adaptive strategy execution requires the organization to first grasp the basics of strategy execution. Moreover, external environmental uncertainty further complicates organizational adaptability. Unpredictable shifts in technology, regulations, or customer preferences can create turbulent conditions that are difficult to anticipate or control (Porter, 2014). Organizations must therefore develop robust sensing mechanisms and foster a culture of learning to detect and respond to these changes proactively (Ihemebiri et al., (2021). Failure to do so risks obsolescence and competitive disadvantage, underscoring the high stakes associated with organizational adaptability. Therefore, organizational adaptability is a crucial proxy for overall adaptability, reflecting a firm's capacity to navigate change and maintain relevance in dynamic contexts. While its significance in sustaining competitive advantage and fostering innovation is well established, organizations encounter persistent internal and external barriers that hinder adaptability. Overcoming inertia, balancing dual strategic demands, and managing environmental uncertainty are ongoing challenges that require conscious effort and strategic foresight. As the business environment continues to evolve, enhancing organizational adaptability remains an imperative for long-term success and resilience

Operational Resilience

Operational resilience refers to the capacity of an organization to anticipate, absorb, adapt to, and rapidly recover from technological disruptions while maintaining continuous business operations. According to Trimi and Berbegal-Mirabent (2012), resilience is not only about returning to a previous state but also about learning and transforming in response to disturbances. Technological

resilience applies this idea specifically to digital infrastructure, systems, and tools that are central to modern enterprises. As digital transformation deepens, firms increasingly depend on technologies like cloud computing, automation, and data analytics. When these technologies face cyber threats, system failures, or rapid shifts in demand, resilient organizations adapt without major losses. Also, Bitrus Fulani Kwajaffa, (2023) emphasized resilience as the ability to absorb shocks and still maintain function, which in technological terms involves redundancies, flexible architectures, and strong cybersecurity protocols. The importance of operational resilience for business continuity and survival cannot be overstated. In an age where cyberattacks are increasing in frequency and sophistication, businesses must ensure systems remain operational under stress. A failure in digital systems can halt production lines, compromise customer data, or interrupt service delivery leading to loss of revenue and reputation. For instance, a 2017 attack disrupted major enterprises worldwide, including the UK's National Health Service, illustrating the vital need for resilient infrastructures. Moreover, companies with resilient digital operations recover 50% faster from disruptions. Thus, resilience is not only protective but also strategic positioning firms to compete in uncertain environments. Operational resilience serves as a key indicator of an enterprise's responsiveness in volatile markets. It reflects how quickly and effectively a business can pivot when faced with new challenges, such as remote work shifts or supply chain breakdowns. Firms with high technological resilience exhibit adaptive capacity modifying their digital processes and systems to suit emergent needs. For example, during the COVID-19 pandemic, companies with scalable cloud infrastructures adapted faster to remote operations, maintaining productivity and customer service. This responsiveness is crucial for agility, which, according to Ciampi et al. (2021), is a core dynamic capability enabling sustained competitive advantage. Hence, technological resilience underpins a firm's ability to respond proactively to both threats and opportunities.

Several factors hinder the smooth functioning of reputational resilience, chief among them being poor leadership and lack of crisis preparedness. Organizations with centralized and opaque leadership structures are more vulnerable to reputational collapse during crises. Inadequate stakeholder communication, rigid bureaucratic processes, and insufficient social listening capabilities also contribute to fragility. Furthermore, firms that underestimate reputational risks or treat them as peripheral to strategic management often lack the adaptive mechanisms to respond effectively. Organizational silos impede information flow, delaying coordinated responses and weakening stakeholder confidence (Deloitte, 2022). Cultural inertia, where firms resist change and transparency, can also erode resilience. Lastly, digital misinformation and social media amplification can exacerbate crises, overwhelming unprepared firms and magnifying reputational harm. To build and sustain technological resilience, organizations must foster a culture of preparedness, innovation, and collaboration. This includes investing in robust IT infrastructure, conducting regular risk assessments, and developing disaster recovery plans. Cross-functional teams should be empowered to respond to crises quickly, and data governance must be improved to support decision-making under pressure. Furthermore, resilience must be integrated into enterprise architecture and digital strategies from the outset, not treated as an afterthought. As enterprises face increasing digital complexity and risk, technological resilience becomes not only a defensive necessity but a defining feature of organizational maturity and long-term success.

METHODS/DATA ANALYSIS

The study adopted cross-sectional survey research design; this approach is relevant as it offers a wide coverage and also permitted the researcher to generalize the research findings to the entire study population. Population of the study comprised four (4) Telecommunication companies in South-South Nigeria. As a macro study level the entire population was used making it a census. The questionnaire was distributed to the respondents based on the study sample size of which 143 copies was retrieved and used for the study analysis. The hypotheses were tested using Spearman Rank Order Correlation Coefficient statistics and result presented through the Statistical package for social science (SPSS) version 23.0 to find the relationship between digital platforms and enterprise responsiveness of telecommunication companies in South-South, Nigeria.

$$r_s = 1 - \frac{6\sum d_1^2}{n(n^2-1)}$$

Univariate Analysis

Univariate means single unit variable. Therefore, the univariate analysis is simply an approach to describing data generated from individual variables used in the study. It is an approach used by analyzing data generated from responses to items that make up an individual research question and/or study. In another development, Southern (2007) observed that univariate statistics are used to explain the distribution of only variable with simple frequency tables, percentages distributions.

Table 1: Descriptive Statistics for Digital Processes

	N	Minimum	Maximum	Mean	Std. Deviation
Good optimization of digital tools into daily administrative tasks enhances job performance.	143	1	5	3.66	.985
Digital workflows enhance adaptability of telecommunication industry in Nigeria.	143	1	5	4.37	.924
Proper utilization of digital process increase customer interaction efficacy.	143	1	5	4.17	1.183
Regularly updates of digital processes helps to align with process change.	143	1	5	4.34	.979
Valid N (listwise)	143				

Source: Data Survey, 2025

The data in Table 1 illustrates that there is a high of confirmation (where x > 2.50) as regards the indicators of digital processes which is a proxy of the dimension of digital administration dynamics. The construct examined the context and manifestations of digital processes within the target companies with indicators aimed at examining respondents' perception of digital processes through

its indicators. The results affirm to all four indicators of digital processes within the target companies as also supported by the low disparity in response (SD <2.00). The implication of these responses is that the respondents in telecommunication companies in South-South, Nigeria are strongly of the opinion that digital processes is an observed phenomenon in their companies that lead to effective responsiveness advantage and hence are largely on the agreement range of the scale.

Table 2: Descriptive Statistics for Adaptability

	N	Minimum	Maximum	Mean	Std. Deviation
Process change of a company is tied to the level of workflow automation.	143	1	5	4.22	1.077
Good real-time data analytics is tied to process change.	143	1	5	4.26	1.115
Proper centralized data administration enhance process adaptability.	143	1	5	4.06	1.226
Digital platforms enhance system architecture.	143	1	5	4.26	1.099
Valid N (listwise)	143				

Source: Data Survey, 2025

The data in Table 2 illustrates that there is a high level of confirmation (where x > 3.0) as regards the indicators of process adaptability which is a measure of enterprise responsiveness. The construct examined the context and manifestations of process adaptability within the target organizations with indicators aimed at examining respondents' perception of process adaptability through its indicators. The results affirm to all four indicators of process adaptability within the target organizations as also supported by the low disparity in response (SD <2.00). The implication of these responses is that the respondents in the telecommunication companies in south-south, Nigeria are strongly of the opinion that process adaptability is an observed phenomenon in their organizations and hence are largely on the agreement range of the scale.

Table 3: Descriptive Statistics for Operational Resilience

	N	Minimum	Maximum	Mean	Std. Deviation
Proper system re-engineering service helps in real-time data.	143	1	5	4.20	1.043
Network scalability enable respond to market competition.	143	1	5	4.19	1.169
Effective operational resilience helps in workflow automation.	143	1	5	4.13	1.140

Proper operational resilience determines an effective digital processes.	143	1	5	4.30	1.035
Valid N (listwise)	143				

Source: Data Survey, 2025

The data in Table 3 illustrates that there is a high level of confirmation (where x > 3.0) as regards the indicators of operational resilience which is a measure of enterprise responsiveness. The construct examined the context and manifestations of operational resilience within the target organizations with indicators aimed at examining respondents' perception of operational agility through its indicators. The results affirm to all four indicators of operational resilience within the target organizations as also supported by the low disparity in response (SD < 2.00). The implication of these responses is that the respondents in the telecommunication companies in South-South, Nigeria are strongly of the opinion that operational agility is an observed phenomenon in their organizations and hence are largely on the agreement range of the scale.

Bivariate Analysis

The bivariate hypothetical statements for the study are tested using the Spearman rank order Correlation Statistics. Spearman rank order Correlation Statistics is adopted as the correlation statistical tool as a result of non-parametric features (non-normality of distribution of variance for the variables) and its suitability for data which is either scaled on the interval or ordinal level of scaling.

Table 4: Correlations Matrix for Digital Processes and Enterprise Responsiveness

			Digital Processes	Adaptability	Operational Resilience
Spearman's rho	Digital Platforms	Correlation Coefficient	1.000	.980**	.988**
		Sig. (2-tailed)	.	.000	.000
		N	143	143	143
	Adaptability	Correlation Coefficient	.980**	1.000	.985**
		Sig. (2-tailed)	.000	.	.000
		N	143	143	143
	Operational resilience	Correlation Coefficient	.988**	.985**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	143	143	143

**. Correlation is significant at the 0.01 level (2-tailed).; Source: SPSS Result Output, 2025

RQ1: What is the relationship between digital platforms and enterprise responsiveness of the telecommunication companies in South-South, Nigeria?

The Spearman rank order correlation coefficients presented in Table 4 were employed to address Research Question. The bivariate correlation analysis revealed exceptionally very strong positive correlation between digital processes and the two dependent variables measuring enterprise responsiveness outcomes. The correlation analysis demonstrated a Spearman rank order correlation coefficient of rho = 0.980 between digital processes and adaptability, indicating an exceptionally

very strong positive linear relationship. This correlation coefficient suggests that approximately 97.2% of the variance in process adaptability can be explained by digital processes levels (r^2 = 0.972). The magnitude of this correlation coefficient falls within Cohen's (1988) classification of a large effect size, substantially exceeding the conventional threshold of $r \geq 0.50$ for strong relationships in digital transformation research. The positive directionality of this association indicates that increases in digital processes are systematically associated with corresponding improvements in adaptability among telecommunication companies operating in the South-South, Nigeria. Similarly, the correlational analysis yielded a Spearman rank order correlation coefficient of rho = 0.988 between digital processes and operational resilience, representing an exceptionally robust positive linear association. The coefficient of determination (r^2 = 0.974) indicates that digital processes accounts for approximately 97.4% of the observed variance in operational resilience measures. This correlation magnitude substantially exceeds established benchmarks for very strong relationships in organizational responsiveness literature, demonstrating a near-perfect positive linear relationship between these constructs. The positive correlation direction suggests that enhanced digital processes levels are systematically associated with improved operational resilience within the telecommunication sector.

Hypothesis Testing and Statistical Significance

To facilitate hypothesis testing for Hypotheses 1 and 2 to enable generalization of findings to the broader population of telecommunication in South-South Nigeria, statistical significance was evaluated using p-values at the conventional $\alpha = 0.05$ significance level. **H_{01}:** There is no statistically significant relationship between digital processes and adaptability among telecommunication in South-South Nigeria. There is a statistically significant relationship between digital processes and adaptability among telecommunication in South-South Nigeria. The statistical significance test revealed $p < 0.001$ ($p = 0.000$), which falls substantially below the predetermined alpha level of 0.05. Consequently, the null hypothesis (H_{01}) is rejected with high confidence, and the alternative hypothesis (H_1) is accepted. These findings provide compelling statistical evidence for a significant positive relationship between digital processes and adaptability within the study population. Also, **H_{02}:** There is no statistically significant relationship between digital processes and operational resilience among telecommunication in South-South Nigeria. There is a statistically significant relationship between digital processes and operational resilience among telecommunication in South-South Nigeria. The significance testing yielded $p < 0.001$ ($p = 0.000$), demonstrating statistical significance well below the established threshold of $\alpha = 0.05$. Based on these results, the null hypothesis (H_{02}) is rejected, and the alternative hypothesis (H_2) is accepted. The findings establish statistically significant evidence for a positive relationship between digital processes and operational resilience in the telecommunication sector.

DISCUSSION OF FINDINGS

The comprehensive statistical analysis of the first and second hypothesis set examining relationships between digital processes and enterprise responsiveness indicators yielded the following empirically supported conclusions: A statistically significant, very strong positive correlation (rho = 0.980, $p < 0.001$) exists between digital processes and adaptability among telecommunication in South-South Nigeria, supporting the theoretical proposition that processes digitalization contribute meaningfully to enhanced adaptability experiences. Likewise, a statistically significant, very strong positive correlation (rho = 0.988, $p < 0.001$) was established

between digital processes and operational responsiveness, providing empirical validation for the theoretical linkage between digitalization of processes and operational resilience outcomes. Thus, the results of this study aligned with the dynamics capabilities view, positioning digital processes as a key resource that companies can leverage to reconfigure their operations and strategies dynamically. Also, this study findings correlated with the following studies: Rogeir and Johan, (2021), they investigated the impact of real-time data analytics on administrative responsiveness of various industries in Nigeria. They surveyed 108 senior executives from various industries and found that real-time data analytics capabilities, which include workflow automation, had a positive and significant effect on a firm's market performance and operational performance. Tajudeen and Tolulope, (2024) who carried out a study on digital administration practices and challenges in academic libraries: The study provided a comprehensive and detailed analysis of research on digital administration practices in academic libraries, shedding light on the critical role they play in supporting data-driven research. By drawing insights from a diverse range of global studies, it identifies challenges and offers strategic recommendations to bolster and facilitate open science principles in academic research. Ren, Lee and Chenxi, (2023), authentic digital processes enhances user confidence, thereby increasing the perceived responsiveness of enterprise. The registration and higher perceived responsiveness of the enterprise. This is particularly relevant in telecommunication companies where accurate data is vital for network management, billing, and customer service. The study by Nkomo and Kalise, (2023) further supports the notion, demonstrating that reliable digital processes significantly influences the perceived responsiveness of telecommunication services. This highlights the importance of ensuring effective digital processes in telecommunication companies to enhance process adaptability and operational resilience.

CONCLUSION

Based on the findings, the study concludes that digital administration dynamics have a very strong relationship with enterprise responsiveness within the telecommunication companies in South-South Nigeria. This suggest that the digitalization of internal processes is not merely an operational efficiency tool but a strategic lever that significantly enhances the responsiveness of telecommunications companies in Nigeria. The study's findings furthermore demonstrate that in a market characterized by volatility and disruption, investing in digital processes directly builds the capabilities needed to adapt to change and withstand shocks. In addition, the study establishes that digital processes serve as a critical antecedent to enhanced operational resilience outcomes, with correlation coefficients approaching unity, suggesting that this is a critical pathway to achieving sustainable competitive advantage and ensuring uninterrupted service delivery to the nation.

RECOMMENDATIONS

Based on this empirical finding, the following recommendations are made:

i.) Telecommunication executives in south-south, Nigeria should move beyond siloed technology projects and pursue an integrated strategy focused on end-to-end automation of core processes like customer service, network management and revenue assurance.

ii.) Telecommunication companies should not view digital tools in isolation. They must simultaneously invest in training employees to work alongside automated systems and

develop crisis simulation exercises that leverage digital dashboards and data analytics to enhance human decision-making during disruptions.

REFERENCES

Afolabi, M., & Okereke, J., (2018). Exploring the relationships between IT competence, innovation capacity and organizational agility. *The Journal of Strategic Information Systems, 27*(1), 22–42.

Bernardes, R., & Hanna, J., (2009). Comparing knowledge management systems: IBM Lotus and Microsoft SharePoint. *Communications of the ACM, 52*(10), 82–88.

Bitrus Fulani Kwajaffa, (2023). Digital transformation: Opportunities to create new business models. *Strategy & Leadership*.

Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies*. Norton & Company.

Ciampi, K.,McLaughlin, S., Paton, R. A., & Macbeth, D. K. (2021). Co-evolutionary relationship between digitalization and organizational agility: The role of digital transformation in supply chain performance. *Journal of Operations Management, 26*(3), 265–283.

Cohen, W. D., (1988). The effects of absorptive capability theory on competitive performance: Do integration strategies mediate the relationship? International Journal of Education and Social Science, 7(1), 18–27.

Danjuma, W., & Ojo, I., (2021). *Designed for digital: How to architect your business for sustained success*. MIT Press.

Deloitte. (2022). *Digital transformation in telecommunications*. Deloitte Insights. https://www2.deloitte.com.

Garrett, N., & Slevin, Covin, F., Y., (2009). Toward further understanding the market-driving and customer responsiveness capabilities of the firm. *Journal of the Academy of Marketing Science, 42*(5), 558–579.

Groomman, B. K., & Hadseler, G., (2015). Technological capability and relationship performance: The roles of power. International Journal of Education and Social Science, 1(1), 18–27.

Ihemebiri, Collins, Shuen, & Jones-Farmer, (2021). Data quality for data science, predictive analytics, and big data in supply chain management: An introduction to the problem and suggestions for research and applications. International Journal of Production Economics, 154, 72–80.

Karimi, J., (2015). The role of dynamic capabilities in responding to digital disruption: A factor-based study of the telecommunications industry. *Journal of Management Information Systems, 32*(1), 39–70.

Kelemen, Z. D., Trienekens, J., Kusters, R., & Balla, K. (2010). A process based unification of process oriented software quality approaches. Proceedings of the 4th IEEE International Conference on Global Software Engineering (pp. 285–288). IEEE

Kooste & Malhotra (2000). Five decades of research on export barriers: Review and future directions. International Business Review, 27(6), 1172–1188. https://doi.org/10.1016/j.ibusrev.2018.04.008

Koudal & Wellener (2013). Big data, tacit knowledge, and organizational competitiveness. In Proceedings of the 10th International Conference on Intellectual Capital, Knowledge Management and Organizational Learning.

Lee, F. (2025). Leading digital transformation: Three emerging approaches for managing the transition. *International Journal of Operations & Production Management, 40*(6), 840–862.

Mylavnappa, S., Thomas, P., & Viswanathan,K., (2019). IT industry infrastructure: Shaping the future of technology. *International Journal of Information Technology and Management Information Systems, 16*(2), 1435–1447. https://doi.org/10.34218/IJITMIS_16_02_090.

Nkomo, D. A., & Kalisz, J. D. (2023). Establishing organizational resilience through developing a strategic framework for digital transformation. Sloan Management Review, 41(4), 69–80.

Nutleyer, N., Carayannis E., Falle A., Edith P., & Bryan O (2014). Big data, tacit knowledge, and organizational competitiveness. In Proceedings of the 10th International Conference on Intellectual Capital, Knowledge Management and Organizational Learning, 2(1), 93–109.

Nwinyokpugi, P. N., & Brown, M. I. (2022). Organizational creativity: The information security paradigm. IAR Journal of Tourism and Business Management, 1(2), 90–108.

Ogunnaike & Ogueyungbo. (2016). Future of Telco: Leading in the era of digital transformation: Lean supply chain practices and their impact on organizational performance. *Journal of Supply Chain Management Research, 12*(4), 123–145.

Peppard, J., & Ward, J. (2016). *The strategic management of information systems: Building a digital strategy* (3rd ed.). Wiley.

Porter, M. E., & Heppelmann, J. E. (2014). How smart, connected products are transforming competition. *Harvard Business Review*.

Ren, C., Lee, J., & Chenxi, M. (2023). Digitalization Improves Enterprise Performance: New Evidence by Text Analysis. International Marketing Review, 36(2), 190–212.

Rogier, K. & Johan, M., (2021). The impact of digital administration on organization productivity, agility. *Journal of Market Research of Computation and Nasoscience, 28(5), 1 – 10.*

Sebastian, I. M., Ross, J. W., Beath, C. M., Mocker, M., Moloney, K. G., & Fonstad, N. O. (2017). How big old companies navigate digital transformation. *MIS Quarterly Executive, 16*(3), 197–213.

Setia, P., Venkatesh, V., & Joglekar, S. (2013). Leveraging digital technologies: How information quality leads to localized capabilities and customer service performance. *MIS Quarterly, 37*(2), 565–590.

Sia, S. K., Weill, P., & Zhang, N. (2021). Accelerating digital transformation in incumbent firms: A capabilities-based perspective. *MIS Quarterly Executive, 20*(2), 109–123.

Tajudeen, P., & Tolulope, M., (2024). Influence of digital transformation capabilities on adaptive performance of administrative staff of public tertiary institutions in South-west, Nigeria. Journal of Product Innovation Management, 34(6), 719–738. https://doi.org/10.1111/jpim.12408.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal, 18(7), 509–533.

Teece, D. J. (2018), Okoye, (2021). Business models and dynamic capabilities. *Long Range Planning, 51*(1), 40–49. https://doi.org/10.1016/j.lrp.2017.06.007

Trimi, S., & Berbegal-Mirabent, J. (2012). Business model innovation in entrepreneurship. *International Entrepreneurship and Management Journal, 8*(4), 449–465. https://doi.org/10.1007/s11301-012-0234-3

Westerman, G., Bonnet, D., & McAfee, A. (2011). *Digital transformation: A roadmap for billion-dollar organizations*. MIT Center for Digital Business and Capgemini Consulting.

Yoo, Y., Boland, R. J., Lyytinen, K., & Majchrzak, A. (2012). Organizing for innovation in the digitized world. *Organization Science, 23*(5), 1398–1408.

Yoo, Y., Neil, R. J., Lyytinen, K., & Majchrzak, A. (2010). Organizing for innovation in the digitized world. *Organization Science, 23*(5), 1398–1408