

**WORKPLACE TECHNOLOGY ADOPTION AND ORGANIZATIONAL  
CHANGE IN A SELECTED NIGERIAN CUSTOMS SERVICE, SOUTH-  
SOUTH ZONE**

**BY**

**OBADIAH KURUTST RIKA  
REG NO: 20164998178**

**A THESIS SUBMITTED TO THE DEPARTMENT OF MANAGEMENT  
TECHNOLOGY, SCHOOL OF MANAGEMENT TECHNOLOGY  
FEDERAL UNIVERSITY OF TECHNOLOGY OWERRI**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE  
AWARD OF MASTER OF SCIENCE (M. Sc) IN MANAGEMENT  
TECHNOLOGY**

**SUPERVISORS:           Prof Mrs. I.P Asiabaka  
                                  DR. K. E UGWU**

**JANUARY 2025**

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**JANUARY, 2025**

## **DECLARATION**

I, Obadiah Kurutst Rika with Registration Number 20164998178 declare that the work in this Thesis on Workplace Technology Adoption and Organizational Change in Selected Nigerian Customs Service, South-South Zone was written by me; that it is my original work and that it has not been submitted wholly or in part for the award of a degree in any institution.


**OBADIAH KURUTST RIKA**  
REG NO: 20164998178

**CERTIFICATION**

This is to certify that this work titled “Workplace Technology Adoption and Organizational Change in Selected Nigerian Customs Service, South-South Zone” was carried out by OBADIAH KURUTST RIKA (20164998178) in partial fulfilment for the award of the degree of (M.Sc.) in Management in the Department of Management Technology of the Federal University of Technology Owerri, Imo State.

  
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**Prof (Mrs) I. P Asiabaka**  
(Supervisor)

  
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
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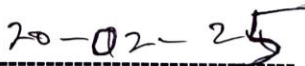
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## **DEDICATION**

This research work is dedicated to Almighty God Almighty, and future researchers.

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## ABSTRACT

The general objective of this research delves on workplace technology adoption and organizational change in selected Nigerian Customs Service, South-South Zone. The study utilized a correlational survey design and questionnaire as instruments for data collection. The total population of the study comprised 565 employees. The sample size was determined statistically using the Taro Yamane formula and calculated as 234. A proportional allocation formula is utilized in determining the number of surveys for each stratum- River, Bayelsa, Edo, Akwa Ibom and Delta State, Nigeria. Out of 234 copies of a questionnaire sent to the participants; only 205 were returned and utilized for the study while the remaining 29 copies were not used. The hypotheses were statistically tested and analyzed using Pearson correlation methods at a 5% level of significance. The findings of research hypotheses one revealed that digital literacy level (skills) positively correlates with employee's engagement. This result confirms a positive result with the value of ( $p = .000$ ,  $r = .991$ ,  $N = 205$ ). The findings of research hypotheses two showed that high-speed internet positively correlate with organizational restructuring. This result confirms a positive result with the value of ( $p = .000$ ,  $r = .993$ ,  $N = 205$ ). The findings of research hypotheses three also highlighted that electronic platform positively correlated with organizational leadership. This result confirms a positive result with the value of ( $p = .000$ ,  $r = .996$ ,  $N = 205$ ). The researcher recommends that organizations should increase investment in continuous technological upgrades. The Nigerian Customs Services should prioritize continuous investment in modern technologies that align with global best practices. These include blockchain for trade transparency, AI-powered analytics, and IoT for real-time tracking of goods. Regular training programs should be implemented to enhance staff digital literacy and ensure the smooth adoption of new technologies. Training should focus not only on technical skills but also on change management to overcome resistance

**Keywords:** Workplace Technology Adoption, Organizational Change, Digital Literacy Level, Employee Engagement, High Speed Internet, and Organizational Networking.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background Information

Over the past decades, workplace technologies have revolutionized many businesses including Nigerian Customs Services. The adoption of workplace technology is significant for providing more accessible and secure public services in government agencies, ministries, and parastatals. The digitalization of the government sector has led to many reforms in the industry to improve efficiency in the country's data security in cross-border regions. The Nigeria Customs Service has incorporated technology to enhance revenue collection, prevent smuggling, and facilitate international trade. This modernization aims to streamline operations and improve efficiency (Del Aguila Obra & Padilla Meléndez, 2006). Public sector organizations leverage technology all the time to perform everyday services more effectively and efficiently. All areas of the public sector benefit from technological advancement to meet modern-day expectations (Smitham, 2022).

The introduction of digital platforms such as e-auction services offered by Nigerian Custom Services has increased the potential for revenue growth, cost saving, and operational efficiency. A recent study by Gartner (2023) predicts that by the year 2026, sixty percent (60%) of government organizations are projected to prioritize business process automation to deliver seamless citizen services. This involves integrating artificial intelligence and data analytics to enhance decision-making capabilities and operational efficiency. The adoption of workplace technology such as Artificial Intelligence provides better decisions, and faster and more accurate information to the government. Governments are increasingly using cloud solutions to replace existing traditional systems. This shift is driven by the need for resilient and scalable IT

infrastructure: by 2025, more than 75% of government workloads are expected to be run by hyperscale cloud service providers. This step is to improve services and reduce operational costs. Blackburn, Harrington, Vidler, and Weddle (2021) pointed out that successful digital transformation in the public sector also requires addressing organizational health. Frequent leadership turnover, a risk-averse culture, and challenges in attracting talent are common issues. By establishing strong baselines for organizational health and focusing on continuous improvement, government agencies can better adapt to citizen needs and enhance service delivery.

However, apart from the government sector other sectors have embraced innovative technology in their businesses to streamline operational processes, consumer behaviors, and expectations (Buchanan, 2024). There has been an increase in the adoption of artificial intelligence tools in the workplace which has become a core component of any modern-day organization's success. A report by Activ-Trak (2024) highlights that the use of AI tools among employees has increased by 50% from the first quarter to the fourth quarter of 2023. This adoption of AI helps automate routine tasks and provides valuable insights for decision-making as well as playing a critical role in transforming modern workplaces by reducing inefficiencies and redundant tasks. Conversely, the rapid adoption of technology is significant in improving administrative challenges as firms are emphasizing work automation to streamline operations to reduce inefficiency and redundancy in the workplace (Bajwa, 2023).

Additionally, a global survey reported by McKinsey and Company (2024) on artificial intelligence indicates that some organizations have deployed artificial intelligence to improve their revenue by nearly double as well as decreasing costs in business areas such as marketing

and sales, product and service deployment, IT functions, supply chain, and inventory management. The survey also provides insights into the kinds of risks presented by generative artificial intelligence (Gen AI), most notably inaccuracy and intellectual property concerns. The study concludes that investment in AI is creating value in several businesses and the rate of adoption has increased on a global level since 2023.

Apart from work automation, organizations have been able to increase their productivity and efficiency at a rapid pace with the aid of innovative technology. Processes that were once manual and time-consuming can now be achieved quickly and efficiently with digital tools, applications, and systems. In addition to making your business more productive and efficient, technology can also help you achieve and maintain compliance. Given the significant role compliance plays in today's digital landscape, coupled with the growing number of regulatory requirements that must be satisfied, it is not far-fetched to say businesses cannot effectively achieve and maintain compliance without the help of technology. Certain software and applications can help your teams review, analyze, and securely store overwhelming amounts of sensitive data across your organization and third-party systems.

Technology adoption refers to the process by which individuals and organizations start using new technology (Activ-Trak, 2024). It encompasses the entire lifecycle from awareness to regular use, and it involves overcoming various challenges, including understanding the technology, integrating it into existing processes, and achieving tangible benefits from its use.

Organizational change is the process by which a firm or company modifies a significant aspect of its structure, including its internal procedures, underlying technology, infrastructure, or culture (Stobierski, 2020). According to the author, organizational change is necessary for companies to

succeed and grow. It enables workers to comprehend the shift, commit to it, and perform well during it. Organizational transitions can be unpredictable and costly in terms of time and resources if they are not managed well. Organizational transformation is required for new leadership, adjustments to the organizational team structure, the adoption of new business models, and the implementation of new technologies. By deploying new technologies in the workplace, organizations can enhance their management strategies, effectively communicate new initiatives, and foster a culture of continuous improvement.

Several researchers have examined the relationship between organizational transformation and technological progress, producing varied findings. Ugwu (2012) illustrated, through a case analysis of Pan Nordic Logistics, that the adoption of advanced information technology tools such as new radio phones, checkpoints, d-scans, and forklifts enhanced labor efficiency in Sweden. Correspondingly, Olanrewaju (2016) found, through a survey of 20 Nigerian banks, that technological innovation has a positive influence on profitability, customer satisfaction, and employee productivity. Chepkurgat, Kipkebut, and Auka (2019) identified notable performance gains in Kenyan universities following organizational enhancements. Chan, Hooi, and Ngui (2021) documented a significant link between digitalized workplaces, a culture of innovation, and workforce engagement in the Malaysian context. Similarly, Ugwu et al. (2024) observed that the integration of internet-based and teleconferencing technologies in Nigeria's telecommunications industry improved service efficiency and employee responsiveness. However, not all the findings were positive. Although studies by Sarachuk, Missler-Behr, and Hellebrand (2021) reported in that ultra-high-speed internet yielded minimal and negative effects on new business establishment in Germany. Del Aguila-Obra and Padilla-Meléndez (2006)

found that organizational size and similar characteristics do not determine internet technology availability in Spanish firms.

Considering the above, it should be noted that earlier research did not examine the impact of digital literacy level, use of internet technologies, and electronic platforms on employee engagement, organizational restructuring, and leadership changes in Selected Nigerian Custom Services, South-South Zone. The objective of the current study is to close this gap.

## **1.2 Problem Statement**

Digital tools are increasingly being adopted in Nigeria's customer service sector to promote faster response times, greater operational efficiency, and improved customer experiences. Yet, these objectives are jeopardized by a range of overlapping challenges. The sector suffers from unstable technology delivery and unsatisfactory user experiences, often arising from erratic electricity supply, unreliable internet service, and underperforming technological infrastructure. Compounding this is a shortage of technical expertise among staff and consumers, which leads to inefficient use of systems and recurrent operational breakdowns.

Moreover, regulatory uncertainty coupled with vulnerabilities in cybersecurity raises significant concerns about trust and data privacy, discouraging stakeholders from fully engaging with digital platforms. The unequal distribution of technological access, especially between urban and rural areas and among socio-economic groups, widens the gap in service quality and access. Additionally, weaknesses in logistics operations including delivery delays, incorrect processing, and service losses undermine confidence in technology-driven solutions.

These issues, taken together, hinder the full realization of technology adoption benefits in Nigerian customer service delivery, thereby weakening the sector's competitive edge, slowing innovation, and reducing customer satisfaction. Addressing these systemic obstacles is critical to developing service systems that meet global performance standards while fostering economic advancement.

### **1.3 Objectives of the Study**

The purpose of this research is to assess the influence of workplace technology adoption on organizational change in a selected Nigerian Customs Service located in the South-South Zone.

The specific objectives, which are derived from the general objectives, aim to:

- I. Assess how the level of digital literacy can affect employee engagement in selected Nigerian Customs Services, South-South Zone.
- II. Determine whether high-speed internet technology impacts organizational structure or restructuring in selected Nigerian Customs Services, South-South Zone.
- III. Examine whether the use of electronic platforms can impact organizational leadership in selected Nigerian Customs Services, South-South Zone.

### **1.4 Research Questions**

To accomplish research objectives, the following research questions are formulated to guide this study.

- I. How does the digital literacy level impact employee engagement in Selected Nigerian Custom Services, South-South Zone?
- II. To what extent does the adoption of high-speed internet technology impact organizational structure/restructuring in selected Nigerian Custom Services, South-South Zone?

- III. How does the adoption of an electronic platform impact organizational leadership in selected Nigerian Custom Services, South-South Zone?

### **1.5 Research Hypotheses**

The following research hypotheses are formulated to guide this study.

#### **Research Hypothesis One**

- I. HA<sub>1</sub>: Digital literacy level can significantly impact employee engagement in Selected Nigerian Custom Services, South-South Zone.
- II. HA<sub>2</sub>: Implementation of high-speed internet technology can significantly impact organizational structure/restructuring in selected Nigerian Custom Services, South-South Zone.
- III. HA<sub>3</sub>: Adoption of an electronic platform can significantly impact organizational leadership in selected Nigerian Customs Services, South-South Zone.

### **1.6 Justification of the Study**

Technological integration and organizational reform have become essential strategies for enhancing efficiency, accountability, and competitiveness in both governmental and private sector. In Nigeria, transformation initiatives within the Nigerian Customs Service (NCS) including electronic customs clearance systems, automated risk assessment tools, and integrated payment platforms have improved trade facilitation, revenue mobilization, and compliance monitoring. Nigerian manufacturing firms are similarly driven to improve output, uphold quality assurance, and optimize supply chain coordination.

Public service agencies are increasingly expected to deliver efficient, transparent, and citizen-centered solutions, with innovations such as e-governance portals, biometric systems, and cloud-based delivery models helping to streamline processes and enhance public accountability. Likewise, sectors including finance, telecommunications, and retail have turned to digital transformation to boost service quality, agility, and data-driven decision-making capabilities.

### **1.7 Scope of the Study**

The study assesses the influence of workplace technology adoption on organizational change in a selected Customs Service located in the South-South Nigeria. The geographic scope of the study is limited to South-South Region, Nigeria. The geographic coverage is comprised of five states: Rivers, Bayelsa, Edo, Delta, and Akwa Ibom. A proportional allocation formula is utilized in determining the number of surveys for each stratum. Simple random sampling technique is applied in the distribution of surveys in various departments.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

#### 2.1 Conceptual Review

##### 2.1.1 The Concept of Workplace Technology

The concept of workplace technology is continually changing. Previously, it mainly consisted of physical hardware and basic software. Nonetheless, with the digital revolution, it has grown to include advanced software solutions, cloud-based services, artificial intelligence, machine learning, and IoT devices (Ahmady, Mehrpour & Nikooravesh, 2016). These advancements not only automate routine tasks but also have a significant impact on decision-making and strategic planning.

Workplace Technology refers to the collection and assembly of tools, systems, and platforms used within an organization to facilitate efficient operations and enhance productivity (Ahmady, Mehrpour & Nikooravesh, 2016). According to the authors, workplace technology encompasses a broad spectrum of elements, from hardware (such as computers and smart devices) to software programs for project management, communication, and data analysis. The scope of workplace technology has also widened with the advent of cloud computing and AI-driven applications. The deployment of modern technologies has gained relevance in all aspects of the digital workplace.

A digital workplace refers to a virtual, modern version of a traditional office or working environment (Advanced Commercial Interiors, 2024). It encompasses personalized services, data, collaborative tools, mobility, and digital applications with a focus on making the work environment more efficient. Key features of a digital workplace include cloud-based software,

mobile applications, data security, flexible working conditions, and collaborative workspaces. These features of a workforce are becoming more and more popular with both employers and employees and provide everyone with a modern way of working. Digitalizing the workplace implies that certain office activities are accessible and accommodate the use of technology for everything including activities such as virtual, remote working, and specific business objectives. Workplaces are providing remote workers with their own laptops, iPad, mice, headphones and even office stationery to allow workers to work wherever and however, they please. Digital workplaces also use their resources during this time in terms of virtual meetings, messaging apps and team calendars. The digitalized workplace offers employees the opportunity to use their mobile applications to view, edit, and work on projects both at the office and at home or improve communication among peers. A digital workplace provides employers, employees, and visitors with a wide range of new opportunities and can make manual labor easier, cheaper, and more accessible for all.

Understanding workplace technologies is essential for businesses and employees' performance. Most businesses leverage these technologies to improve efficiency, reduce costs, and enhance employee satisfaction. It also fosters innovation and growth (Visionect, 2023). Meanwhile, employees benefit from these technologies as powerful tools to increase productivity, streamline collaboration, and enhance overall work experience by reducing mundane tasks and focusing on strategic initiatives. The adoption of technology in the workplace has helped to improve efficiency and productivity.

The implementation of technology can streamline processes, reduce time spent on mundane tasks, and increase overall productivity (Visionect, 2023). This directly contributes to profitability as employees can focus on more essential, revenue-generating tasks. Technology

can help lower marketing costs and other operational expenses. Automated systems, can help minimize errors and resource wastage, leading to cost. Technological tools can enhance customer service and user experience, leading to increased customer satisfaction and loyalty, which in turn can boost profits. Investments in information technology have been found to increase sales more than other investments. Tools like email marketing, triggered by automation software, can help companies reach more potential customers and increase sales. Incorporating new technology into a firm's methodology can help it stay competitive and profitable in the rapidly evolving business landscape.

According to a Deloitte Report (2024), organizations are moving from pilot projects to large-scale deployments of generative artificial intelligence (AI). Deloitte's report on generative AI in the enterprise identified the benefits associated with cutting-edge AI solutions, such as governance, talent acquisition, and managing risks. Despite these benefits, organizations with higher levels of expertise are making AI tools widely available across more functions and seeing tangible benefits in terms of efficiency and innovation. According to Activ-Trak Report (2023), the adoption of new technologies has a direct impact on employee engagement and well-being. The study identified a 67% increase in disengaged employees due to underutilization of employee skills from 2021 to 2023. This highlights the need for effective workforce management strategies that leverage technology to enhance employee engagement and ensure that employees' skills are fully utilized.

In addition, technology adoption is important in communication and collaboration among people. It has made communicating with others easier than ever, which is important in today's corporate environment where many organizations are still working from home and face-to-face interaction is nominal (Buchanan, 2024). The use of Cloud-based platforms such as Microsoft Team, Zoom,

and others have been utilized to provide a pathway for organizations to remain connected and achieve a level of communication that is arguably better than pre-pandemic and the shift to remote work. In addition, technology adoption increases the security of firms. It is of the utmost importance that organizations deploy sophisticated security measures in place to help prevent cyber-attacks from criminals infiltrating organizational networks and systems that could lead to increasing loss of data.

### **2.1.2 Digital Literacy Level**

Digital literacy includes a range of skills needed to navigate, evaluate, and create information effectively and critically using digital technologies (Shalio, 2022). It involves having aptitude, skills, or knowledge in basic skills such as keyboarding and using the Internet to create digital content, communicating using online applications, and using technology more responsibly and ethically. Digital literacy is essential for full participation in the digital world and is a fundamental part of digital citizenship. Digital skills include- performing a variety of tasks in digital environments, operating mobile devices of various kinds, such as phones or tablets, being familiar with enough online tools to choose the right one to accomplish a given task, understanding how to comply with the law in terms of copyright and intellectual property rights (Future learn, N.D).

Digital literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills (Twinkl, N.D). It encompasses a person's ability to read and write online or using technology such as computers, and smartphones. Digital Literacy skills are made up of a wide range of skills like uploading content on the internet to sharing information.

Digital literacy skills are essential in the Nigerian Custom Services sector, as they enable workers to search, collaborate, and present information using digital tools. Employees use digital platforms for learning which improves the quality of work and productivity (Data-Reportal, 2024). In the workplace, digital literacy is essential to effectively carry out work-related tasks, including using office software, managing digital communications, and using data analytics to make decisions. Employers are looking for digital knowledge employees who can adapt to new technologies and improve organizational productivity. At an individual level, digital literacy enables people to use online banking, access government services, and communicate with others through social media. It is essential to understand online privacy and security to protect your personal information.

A recent study by Chan, Hoi, and Nguy (2021) found that digital literacy moderates the relationship between workplace digitalization, innovation culture, and employee engagement. Employees with higher levels of digital literacy are more likely to participate in and benefit from workplace digitization and innovation culture, which in turn increases their levels of engagement. This implies that increasing digital literacy helps employees to prosper in digital work environments better.

Furthermore, a systematic literature review found that digital competencies not only improve individual performance but also organizational performance. Digital competencies, such as the ability to use digital tools effectively, are essential for innovative work behaviors and overall job performance (Huu, 2023). Another study by Lei et al. (2024) explored the role of digital literacy in the context of enterprise digitalization and research and development (R&D) cooperation. It was found that digital literacy significantly influences the effectiveness of digital transformation initiatives and enhances the breadth and intensity of R&D cooperation. This implies that

employees with digital skills are more likely to use digital tools to enhance innovation within the organization through online collaboration.

### **2.1.3 Adoption of High-Speed Internet Technology**

High-speed internet has become a crucial part of our daily lives, impacting everything from business operations to home entertainment. It's the backbone of the digital economy, enabling seamless communication, data transfer, and access to a world of online resources. High-speed internet, also known as broadband, is a type of internet connection that provides faster speeds than traditional dial-up access (Internet Solutions, 2023). The term "broadband" refers to high-speed and high-bandwidth communication infrastructure. It commonly relates to high-speed internet services, which have become increasingly important to both consumers and governments.

Internet adoption refers to the process by which individuals or communities use the Internet for various purposes (McKinsey, 2014). This encompasses both the availability of internet access and the ability of individuals to effectively use it for various purposes. Internet adoption typically involves several stages: awareness of the internet, initial trial, continued use, and integration into daily life. Key factors influencing adoption include the availability of infrastructure, affordability, digital literacy, and the perceived relevance of the Internet to users' needs and interests (McKinsey, 2014; Shalton, 2022).

In addition, the adoption of high-speed internet facilitates more flexible and decentralized organizational structures. It supports remote work and hybrid models, reducing the need for centralized office spaces and allowing for a more distributed workforce. This can lead to a more agile and responsive organizational structure (Sarachuk, Missler-Behr & Hellebrand, 2021).

Recent findings by Data-Reportal (2024) have shown that the internet adoption rate in Nigeria is driven by increased mobile connectivity and digital engagement. According to the report, Nigeria has approximately 103 million internet users and 45.5% of the population uses the internet in doing things. The Nigerian Communications Commission (NCC, 2024) also reported a rise in the number of internet service subscribers, with over 224 million active internet subscriptions recorded in late 2023. This surge reflects the expanding infrastructure and availability of internet services across the country.

In Nigeria, the implementation of modern technologies (e-auction) has contributed greatly to the reforms and revenue generation in Nigerian Custom Services (NCS), according to a recent report by Onyedinefu (2024). The NCS reported a 122% increase in revenue in the first quarter of 2024, reaching N1.35 trillion compared to N606.1 billion in 2023. This rise is fundamentally because of the adoption of high-speed internet and digital reforms like the e-auction system, which alone generated N1.6 billion in two months. According to World Customs Organization, (WCO, 2024), high-speed internet adoption has enabled the Nigerian Customs Service to enhance its trade facilitation and border security operations. The integration of geospatial technology, satellite imagery, and artificial intelligence has significantly boosted the efficiency of anti-smuggling efforts and borders. A report by Nairametrics (2023) also reported that internet adoption such as advanced risk management systems has contributed to reforming the NCS and improving its operational capabilities and simplification of trade procedures. The adoption of high-speed internet has contributed to high revenue, and effectiveness of the NCS in trade facilitation and border security, making it a more efficient and modernized entity.

In other countries such as the United States of America, and Germany, the adoption of high-speed internet has contributed to the increase in firm creation and economic activity (Sarachuk,

Missler-Behr & Hellebrand, 2021). The authors highlight that high-speed internet is positively correlated with economic growth and the creation of new businesses. It enhances productivity by enabling more efficient communication, data transfer, and remote work capabilities.

High-speed internet is a critical enabler of digital transformation and innovation. It allows organizations to adopt advanced technologies like cloud computing, big data analytics, and the Internet of Things (IoT). These technologies, in turn, drive strategic changes and create new business models and opportunities. In regions with previously weak financial infrastructure, the introduction of high-speed internet has significantly improved access to financial services. This includes increased access to loans, longer loan maturities, and overall expansion of financial activities, which are crucial for supporting new business ventures and economic development (Sarachuk, Missler-Behr & Hellebrand, 2021).

Addressing barriers to Internet adoption requires multifaceted approaches, including enhancing infrastructure, making Internet services more affordable, increasing digital literacy through education, and creating relevant content that resonates with local needs and cultures. Collaborative efforts from governments, private sectors, and international organizations are essential to bridge the digital divide and ensure equitable access to the Internet for all (McKinsey, 2014).

In summary, high-speed internet acts as a catalyst for structural changes by enhancing economic growth, enabling flexible organizational models, driving innovation, improving access to financial services, and supporting workforce development.

#### **2.1.4 Electronic/Digital Platforms**

Online platforms are an important part of the business environment that has emerged with the development of the Internet, information technology, and e-commerce (Organization for Economic Cooperation and Development, OECD, 2019). Several online platform service models can be distinguished, such as business-to-consumer (B2C), consumer-to-consumer (C2C), business-to-business (B2B), and business-to-government (B2G) models. The most common are business-to-customers, B2C, and customers to the customer, C2C. Online platforms facilitate businesses by connecting sellers to potential customers via online media for a wide range of activities through platforms such as social networks, online search engines, online marketplaces, shopping software applications, price comparisons, cloud technology, IT services, advertising, and video sharing platform services.

The Organization for Economic Cooperation and Development (OECD, 2019) defined electronic platforms as the use of information and communication technologies to facilitate interactions between users, and the collection and use of data on these interactions and network effects.

Balki (N.D) defined an online platform as a digital service that connects two or more interdependent groups of customers located on different sides of a market. These sets of customers can be businesses and/or individuals, and the platform can create business and/or social networking opportunities. Online platforms bring many efficiencies due to their unprecedented ability to grow and expand, facilitating commerce and creating new opportunities that benefit the economic activity of the businesses and individuals who use them.

According to Gartner (2023), 60% of government organizations will prioritize business process automation by 2026, up from 35% in 2022. Hyperautomation initiatives support business and IT

processes in government to deliver connected and seamless citizen services. Chief Information Officers must align automation initiatives with current priorities to pursue digital transformation, while also optimizing operational costs. The author further states that governments are focusing on formalizing data-sharing initiatives and developing digital identity ecosystems. These efforts are designed to ensure secure, efficient, and user-friendly digital interactions for citizens.

Blackburn, Harrington, Vidler, and Weddle (2021) pointed out that successful digital transformation in the public sector also requires addressing organizational health. Frequent leadership turnover, a risk-averse culture, and challenges in attracting talent are common issues. By establishing strong baselines for organizational health and focusing on continuous improvement, government agencies can better adapt to citizen needs and enhance service delivery.

In addition, the digital platform is applied in both marketing and supply chain management to improve agile and resilient operations in the industry. The use of digital platforms in supply chain management is becoming more prevalent, helping organizations to improve transparency, efficiency, and responsiveness (Gartner, 2023). Technologies such as the Internet of Things (IoT), artificial intelligence (AI), and blockchain are being leveraged to enhance supply chain visibility and reduce disruptions. In marketing, there's a growing emphasis on personalized customer experiences. Companies are using data analytics to better understand customer behavior and preferences, allowing for more targeted and effective marketing strategies (Smitham, 2022). Both marketing and supply chain management are increasingly focusing on sustainability and ethical practices. Companies are adopting green supply chains and transparent marketing practices to meet consumer demands for environmentally friendly and socially responsible products (Blackburn, Harrington, Vidler & Weddle, 2021).

### **2.1.5 Organizational Change**

Organizational change is the transition of an organization from one state to another. Organizational change can take many forms (University of Minnesota, 2017). This may include changes in the company structure, strategy, policies, procedures, technology, or culture. Organizational change may be a fundamental change in the way an organization operates, or it may be a gradual, incremental change in the way things are done. In both cases, change involves abandoning old ways of working and adapting to new ways of working, so it is a process that involves effective people management.

Organizational change is the process by which a firm or company modifies a significant aspect of its structure, including its internal procedures, underlying technology, infrastructure, or culture (Stobierski, 2020). According to the author, organizational change is necessary for companies to succeed and grow. It enables workers to comprehend the shift, commit to it, and perform well during it. Organizational transitions can be unpredictable and costly in terms of time and resources if they are not managed well. Organizational transformation is required for new leadership, adjustments to the organizational team structure, the adoption of new business models, and the implementation of new technologies. The author further stresses that organizational change enables workers to comprehend the shift, commit to it, and perform well during it. Organizational transitions can be unpredictable and costly in terms of time and resources if they are not managed well. Organizational transformation is required for many reasons. The need for organizational reform is based on, new leadership, adjustments to the organizational team structure, the adoption of new business models, and the implementation of new technologies.

One of the main challenges to organizational change is resistance to change. People are resistant to change because it upsets their routines, clashes with certain personality types make them fearful of failing, may have unfavorable effects, may lead to a loss of power, and, if it occurs too frequently, may wear down staff members (University of Minnesota, 2017). The efforts to bring about changes can be seen as a three-step process: first, workers are made ready for the changes; next, the changes are put into practice; and last, new behavioral models take hold. Organizational change is frequently necessary for a business to stay competitive. If a business doesn't adapt, it may not be able to survive. However, employees don't always embrace new procedures. Resistance to change is one of the top two reasons why change initiatives fail, according to a 2007 Society for Human Resource Management (SHRM) survey. Responses to organizational change can range from opposition to compliance to enthusiastic support, with the latter being the exception rather than the rule (Change Management, 2007; Huy, 1999).

A study conducted by Ugwu (2012) using a quantitative research method (interview) on organizational change indicated that information technology changes (d-scan, checkpoint, new radio phone, and new forklift) facilitate work processes. The study used Pan Nordic Logistics Sweden as an example of mergers and acquisitions. A recent study shows that digital transformation in the public sector involves more than just adopting new technologies; it also involves integrating these technologies into organizational culture and core business processes to reach a mature stage of digital readiness. This maturity allows organizations to continuously innovate and adapt to changing market conditions (Bozkus, 2023).

According to Blackburn, Harrington, Vidler, and Weddle (2021), the adoption of modern technology in conjunction with hybrid working styles enables a smooth and seamless integration of change activities. Organizations can implement changes more simply and successfully by

utilizing the efficiency of new technology and the flexibility of hybrid models. Employee routines cannot be significantly disrupted by new procedures and technologies thanks to this integration. Cutting-edge technology and a mixed work paradigm can improve organizational resilience. Depending on their preferences or the demands of their jobs, employees can opt to work from home, remotely, or in the office with the flexibility that the hybrid model offers. Both in-office and remote work preferences are supported by hybrid work arrangements; this flexibility enables a more responsive approach to organizational change projects, which in turn leads to increased productivity and employee satisfaction. This flexibility is essential for successfully executing change projects because it lessens opposition from staff members who have preferences for other work settings (Yee, Chui, Roberts & Issler, 2024; Blackburn, Harrington, Vidler, and Weddle, 2021).

Successful hybrid models rely heavily on technology to facilitate communication and collaboration. Tools such as video conferencing, instant messaging, project management software, and cloud services are essential to keep remote and in-office employees connected and productive. Hybrid working models can improve work-life balance by reducing commute times and providing employees with more control over their schedules. This flexibility can lead to increased job satisfaction and reduced stress (Blackburn et al. 2021; Yee et al., 2024).

For instance, Microsoft and Google have effectively implemented hybrid models to boost output, cut expenses, and broaden their talent pool. According to studies, hybrid models enable workers to work in settings where they are most productive and comfortable, which can increase output. While working from home can cut down on distractions, working in an office can improve teamwork. By using less office space and related utilities, businesses can cut overhead expenses. Workers can save money and time on their commutes (Blackburn et al. 2021; Yee et al., 2024).

### **2.1.6 Employee Engagement**

Employee engagement can be defined as the degree to which a worker is dedicated to assisting the organization in accomplishing its objectives (D'Alessandro, 2024). Employee thoughts, feelings, and behavior, as well as their emotional bond with the company, their job, and their team, all serve as examples of it. Research shows that employee engagement makes people more inclined to work harder and solve problems, grow and develop faster, get along with people better, and stay longer at a company. All these factors have a measurable business impact and contribute to organizational success.

Smith, Kindness, and Kvilhaug (2024) defined employee engagement as the level of enthusiasm and dedication a worker feels toward their job. The authors posit that employee engagement can be critical to a company's success, given its links to job satisfaction and employee morale. Engaged employees are more likely to be productive and higher performing. Employers can foster employee engagement through effective communication, offering rewards, and discussing career advancement.

Since employee engagement is directly related to job happiness and morale, it can be quite important to a business's success. An essential component of developing and sustaining employee engagement is communication. Employee engagement increases the likelihood of improved performance and productivity. They also frequently exhibit a stronger dedication to the principles and objectives of an organization (Smith, Kindness, and Kvilhaug, 2024). Employers have a variety of options for fostering employee engagement, such as setting clear goals, rewarding and promoting exceptional work, updating staff on corporate success, and giving frequent feedback. Other tactics include attempting to instill a sense of worth and respect in staff members as well as a sense that their opinions are being acknowledged and comprehended.

Employees that are engaged feel that their labor matters, that they are valued, and backed by their supervisors and that they have been entrusted with the success of their company.

A related study by the Society of Human Resource Management, (SHRM, 2024) shows that people who are engaged in their work are more likely to help the company achieve its goals. According to Linley, Harrington and Garcea, (2010), engaged employees are 87% less likely to leave their organization. This means that employees with higher levels of commitment are less likely to leave their jobs which in turn reduces costs for HR professionals to recruit new staff, train them, and wait for them to ramp up to full productivity.

Recent studies by Joshi, Patel and Singh (2023) found that higher levels of digital literacy significantly enhance job satisfaction and performance among government employees. The study identified a strong positive correlation between digital literacy and employee engagement. The study concludes that comprehensive digital training programs are essential to bridge the existing skills gap of employees in the government sector.

Employee engagement in the government sector has been a critical area of focus, with digital literacy emerging as a key enabler. According to a report by Gupta and Sharma (2022), employees who are proficient in digital tools are more likely to feel empowered and engaged in their work. This engagement is reflected in improved productivity and a greater willingness to adopt new technologies.

In the area of marketing management, digital strategies have taken center stage. Kumar, Rao, and Banerjee (2023) highlight the importance of digital technologies such as data analytics and AI-driven tools to optimize marketing campaigns. The study concludes that companies leveraging these technologies enhance customer engagement and firm performance. Similar studies by Lee

and Park (2023) have identified the importance of using real-time data from social media and e-commerce platforms to enhance consumer preferences. Understanding consumer behavior through digital channels allows marketers to tailor their strategies more effectively, resulting in higher customer satisfaction and loyalty.

### **2.1.7 Organizational Leadership/Leadership Change**

Medhi (2024) defined leadership change as the ability to influence and inspire others through personal advocacy, vision, and commitment to accessing resources to create a powerful platform for change. The author argues that any change process must be strategy-oriented and aimed at involving employees at all levels and senior management. These change programs are the result of identifying organizational needs or weaknesses and attempting to correct them. Changing leadership helps the team navigate the change process and remain at the forefront of dealing with its consequences. Change leaders focus on long-term goals and are always willing to work towards them for the good of their team.

Blue Beyond Consulting (2024) defined change leadership as the process of leading an organization through significant disruptions, transitions, or other organizational transformations. The author argues that change leadership focuses on people. The author posits that the most successful change leaders are, therefore, the ones who communicate with, set priorities for, and listen to the people who embody their organization. To be a successful change leader, a person needs to think differently and make significant changes in what people think they are important. It is not a question of changing mindset; it is all about directing people towards achieving the set objectives.

Davis (2012) defines leadership change as a process that empowers individuals to create large-scale change and revitalize the organization. Kotter (2011) also supports the above view and agrees that leadership change is about "empowering the people who want to make things happen in the organization." It deals with the drivers, vision, and process that lead to large-scale change in an organization. In essence, leadership change is a proactive attempt to inspire, motivate, and persuade people to do whatever it takes to achieve the desired outcome.

Higgs and Rowland (2005) also defined change leadership as the ability to influence and inspire others through personal advocacy, vision, aspirations, and the ability to access resources to create a solid platform for change. According to the authors, leadership is the key to successful change. The primary goal of change leadership is to ensure the right change is made at the right time, which includes creating a sense of urgency for the changes required and initiating large-scale change to improve organizational performance.

Recent studies have identified the relationship between the adoption of electronic platforms and leadership and organizational changes in the government and manufacturing sectors. In the public sector, it has been shown that the implementation of electronic supply systems, such as the electronic Ghana supply system (Ghaneps), contributes to effective, transparent, and flexible supply activities (Ofori, Light, & Ankomah, 2023). This transformation often requires leadership to adapt to new technologies and effectively manage changes. A study examining public sector organizations in Ghana found that while there are differences in attitudes towards new technology among different groups, these differences are not significant enough to impact the overall adoption of the system.

In manufacturing, digital transformation is often influenced by management's ability to effectively integrate technology into existing business processes. The McKinsey and Company report (2023) highlights several pitfalls in digital transformation efforts, including inconsistent implementation and a technology-driven approach that lacks clear value alignment. Successful transformations typically involve a comprehensive strategy that includes a network-wide scan to identify high-leverage areas and a prioritized deployment roadmap. This strategic approach not only enhances operational efficiency but also fosters leadership changes that support continuous innovation and adaptation to new digital tools.

### **2.1.8 Organizational Restructuring**

Organizational restructuring within the Nigerian Customs Service has been driven by technological advancements. The new Customs Act, which aligns with international best practices, has provided a robust legal framework to ensure transparency, efficiency, and compliance. This restructuring has included comprehensive training programs for officers and continuous engagement with stakeholders to familiarize them with new provisions and technologies (Nairametrics, 2023; Nigeria Customs Service Act, 2023). The Nigeria Customs Service has incorporated technology to enhance revenue collection, prevent smuggling, and facilitate international trade. This modernization aims to streamline operations and improve efficiency (Wang & Feng, 2021).

Verduyn and Scott (N. D) defined organizational restructuring as a strategic process aimed at improving efficiency, adapting to new market demands, or strengthening a competitive position. It can result in significant changes to a company's structure, strategy, and operations. This process involves restructuring departments, redefining roles and responsibilities, and in some

cases downsizing to improve efficiency and effectiveness. This is not just a cost-cutting measure, but a strategic decision to improve overall productivity and long-term sustainability.

Kowalski (2024) defined organizational restructuring as the process whereby a corporation deals with its undesirable present situation in a market that is continuously changing. The author claims that strategic initiative is essential to organizational restructuring because it enables efficient strategic planning, which in turn stimulates business innovation in response to unanticipated occurrences in newly emerging markets. Organizations may choose to undergo restructuring, as part of their response to market trends or the actions of industry leaders which often has a negative financial effect on any business. The author has identified internal factors that contribute to corporate restructuring, including declining or stagnant revenue streams, low gross margins, high operating costs, poor cash flow, excessive or insufficient investment, productivity below market levels, high labor costs, ambiguous roles and responsibilities, a lack of leadership, poor internal communication, and poorly designed processes. On the other hand, outside variables that necessitate organizational restructuring also include shifting consumer preferences, market-redefining inventions, and a decline in the company's market share.

Recent studies have explored the adoption of Internet technology and its impact on organizational restructuring within Nigerian sectors such as the; customs service, manufacturing firms, and service firms. A study by Del Aguila Obra and Padilla Meléndez (2006) found that organizational factors (such as organizational structure, managerial capabilities, and resource availability) significantly influence the stages of Internet technology adoption. Smaller firms often rely on external advice due to limited managerial capabilities, whereas larger firms show more sophisticated technology development. The service sector is increasingly leveraging digital

transformation to improve operational efficiency and customer experience. Adoption rates vary, with leading firms achieving substantial benefits from data analytics and digital tools.

## **2.1 Theoretical Framework**

This study is anchored on the following theories, diffusion of innovation theory and McKinsey framework theory to achieve the study objective.

### **2.2.1 Diffusion of Innovation Theory (DOI)**

The most appropriate theory for examining the technological advancement and organizational change in selected Nigerian Custom Services, South-South Zone is the diffusion of innovation (DOI). This theory was developed by E.M. Rogers in 1962 and is one of the oldest theories in social science. Diffusion of innovation theory describes the process and rate at which new ideas, practices, or products spread through a population. It also explains how, over time, an idea or product gains momentum and diffuses (spreads) through a specified medium of population or social system (Sahin, 2006; Medlin, 2001; Parisot, 1995).

According to Rogers (2003), technology is a design for instrumental action that lessens the uncertainty in the cause-effect relationship in achieving set goals. It is divided into two parts: hardware and software. Hardware embodies technology in materials or physical objects, while software is composed of an information base. Diffusion of innovation is a process that takes time and involves communication channels, social systems, and time. Innovations are not immediately adopted by social systems; rather, they must go through a process and be embraced by sentiments.

Rogers categorizes adopters into five groups: Innovators, Early Adopters, Early Majority, Late Majority, and Laggards. The DOI theory helps organizations identify how different members

within the organization adopt new technologies or processes. By understanding the categories of adopters Innovators, Early Adopters, Early Majority, Late Majority, and Laggards leaders can tailor their change management strategies to meet the needs of each group (Rogers, 2003). This segmentation allows for more effective planning and execution of change initiatives.

### **Key Assumptions of Diffusion of Innovation**

**Innovation Characteristics:** Innovations are evaluated based on five characteristics: relative advantage, compatibility, complexity, trialability, and observability. These attributes influence an individual's decision to adopt an innovation. The five attributes of innovation—relative advantage, compatibility, complexity, trialability, and observability—can guide organizations in assessing and presenting new initiatives (Rogers, 2003). For example, highlighting the relative advantage of a new process over the old one can help gain support from employees. Ensuring compatibility with existing values and practices can reduce resistance while providing opportunities for trialability can allow members to experiment with the innovation in a low-risk environment.

**Communication Channels:** The process relies heavily on communication channels. Innovations are communicated through various channels over time among the members of a social system. Communication channels play a critical role in the diffusion process. DOI emphasizes the importance of leveraging diverse communication channels to disseminate information about new innovations (Rogers, 2003). For organizational change, this means utilizing both formal and informal networks to ensure all members are informed and engaged, thereby reducing resistance and fostering a culture of openness to change.

**Social System:** The social system is the network of individuals who are potential adopters of the innovation. Social systems have structures that influence innovation adoption, such as norms, opinion leaders, and change agents. DOI identifies the role of opinion leaders in influencing the adoption of innovations. In an organizational context, identifying and involving key influencers or champions can accelerate the adoption process (Greenhalgh et al., 2004). These individuals can serve as change agents, advocating for innovation and helping to address concerns from their peers. DOI promotes a culture of continuous improvement by encouraging organizations to regularly evaluate and adopt innovations. This mindset is essential for organizations to remain competitive and adaptable in a rapidly changing environment (Straub, 2009).

**Time:** The adoption process unfolds over time and can be depicted as an S-curve when the cumulative number of adopters is plotted over time. Early in the diffusion process, only a few individuals adopt the innovation; adoption increases rapidly, eventually leveling off. The theory's S-curve model of adoption suggests that change typically occurs in stages, with initial slow adoption followed by rapid uptake and eventual stabilization (Rogers, 2003). Organizations can use this model to plan incremental changes, ensuring adequate support and resources at each stage of the adoption process. This phased approach can make large-scale changes more manageable and less disruptive.

**Adopter Categories:** Understanding the reasons behind resistance to change is crucial. DOI helps organizations anticipate which groups may be more resistant (Late Majority and Laggards) and why. By addressing the specific concerns of these groups, such as perceived complexity or incompatibility, organizations can develop targeted interventions to mitigate resistance (Klein & Sorra, 1996). The population is divided into categories based on their propensity to adopt an innovation.

These categories are innovators, early adopters, early majority, late majority, and laggards.

- I. Innovators Risk-takers and the first to try new ideas.
- II. Early Adopters: Respected opinion leaders.
- III. Early Majority: Deliberate adopters who adopt new ideas just before the average person.
- IV. Late Majority: Skeptical and adopts new ideas after the average person.
- V. Laggards: Last to adopt an innovation, typically due to aversion to change or traditional views.

### **Criticisms of Diffusion of Innovation**

1. **Pro-Innovation Bias:** Critics argue that the DOI theory inherently promotes the diffusion of innovation, assuming that the adoption of innovations is beneficial and desirable without considering possible negative impacts (Rogers, 2003).
2. **Individual Blame Bias:** The theory often places the onus on individuals for failing to adopt innovations, without adequately considering external factors such as socioeconomic barriers and access to resources (Greenhalgh et al., 2004).
3. **Overemphasis on Individual Adoption:** DOI focuses heavily on individual decision-making processes, potentially overlooking the broader institutional and systemic factors that influence adoption (Cochrane et al., 2007).
4. **Underestimation of Rejection:** The theory does not fully account for the active rejection or discontinuation of innovations, which can be as important as the adoption process itself (Klein & Sorra, 1996).

5. **Cultural Bias:** The assumptions and generalizations made in DOI may not be applicable across different cultural contexts, potentially limiting its global applicability (Straub, 2009).

The Diffusion of Innovation theory is connected to this study on technological advancement and organizational change in selected Nigerian Custom Services, South-South Zone. The theory provides a framework for the adoption of innovations within organizations. By deploying new technologies in the workplace through DOI, organizations can enhance their change management strategies, effectively communicate new initiatives, and foster a culture of continuous improvement. The theory is relevant in facilitating successful organizational change.

#### **2.1.4 McKinsey Framework**

The study is anchored on the McKinsey 7S framework developed by business consultants Robert H. Waterman, Jr., and Tom Peters in the 1980s. The theory is a management model designed to diagnose organizational effectiveness and guide organizational change. It identifies seven key internal elements of an organization that need to be aligned to achieve success: Strategy, Structure, Systems, Shared Values, Skills, Style, and Staff.

Technological advancements often require a reassessment of an organization's strategy. The strategy framework emphasizes aligning strategy to achieve firm objectives. For example, integrating new technologies might involve rethinking competitive positioning, market approaches, and long-term goals. This ensures that technological investments support the overall strategic direction of the organization (Kaplan, 2005). Structure framework helps identify how new technologies impact organizational hierarchies, communication channels, and workflow processes. For instance, adopting a new enterprise resource planning (ERP) system might require

restructuring departments to optimize the flow of information and decision-making processes (Waterman, Peters, & Phillips, 1980).

The **systems** framework encompasses the procedures, processes, and routines that characterize how work is done. Technological advancements directly impact these systems. The framework aids in assessing how new technologies, such as automation or artificial intelligence, integrate with existing systems and what modifications are necessary to enhance efficiency and effectiveness (Johnson, Scholes, & Whittington, 2008). Shared Values refer to the core beliefs and cultural aspects of the organization. Technological advancements can challenge existing values, necessitating a cultural shift to embrace change. The 7S Framework highlights the importance of aligning new technologies with the organization's culture and values, ensuring that employees understand and support the technological changes (Peters & Waterman, 1982).

The skill framework emphasizes evaluating current skills and identifying gaps that need to be addressed through training and development programs to match technological advancement. This ensures that employees are equipped to utilize new technologies effectively and that the organization can maintain a competitive edge (Waterman, Peters & Phillips, 1980).

Leadership style and management practices must evolve to support technological changes. The 7S style Framework encourages leaders to adopt styles that foster innovation, flexibility, and adaptability. This might include promoting a more collaborative and inclusive leadership style to encourage buy-in and facilitate smooth transitions during technological implementations (Kaplan, 2005). Staffing involves the selection, development, and management of employees. Technological advancements often lead to changes in staffing needs, including the creation of new roles or the elimination of obsolete ones. The 7S-staffing framework helps organizations

plan and execute these changes, ensuring that the right people are in the right positions to support new technologies (Waterman et al., 1980).

### **Key Assumptions of the McKinsey 7S Framework**

1. **Holistic Approach:** The framework assumes that all seven elements are interconnected and that changes in one element will likely impact others. This interconnectedness means that to be effective, an organization must achieve internal alignment across all seven elements (Peters & Waterman, 1982).
2. **Soft and Hard Elements:** The framework divides elements into 'hard' elements (Strategy, Structure, Systems) that are more tangible and easier to identify and manage, and 'soft' elements (Shared Values, Skills, Style, Staff) that are more intangible and harder to measure. Both sets of elements are equally important in achieving organizational effectiveness.
3. **Shared Values at the Core:** Shared Values, which refer to the core values and culture of the organization, are placed at the center of the framework. This positioning underscores the belief that organizational values are central to all other elements and critical to overall success (Peters & Waterman, 1982).
4. **Dynamic Interaction:** The framework assumes that the organizational environment is dynamic and that continuous reassessment and realignment of the seven elements are necessary to respond to internal and external changes effectively.
5. **Top-Down and Bottom-Up Implementation:** Effective use of the framework requires involvement from both top management and employees at all levels. This participatory

approach ensures that strategic changes are supported and reinforced throughout the organization.

### **Applicability of the McKinsey 7S Framework**

1. **Strategic Planning:** The framework is widely used in strategic planning to ensure that all elements of the organization are aligned with the overall strategy. By evaluating each of the seven elements, organizations can identify misalignments and areas for improvement, facilitating more coherent and effective strategic planning (Waterman, Peters, & Phillips, 1980).
2. **Organizational Change:** The 7S Framework is a valuable tool for managing organizational change. It helps leaders understand how changes in one area (e.g., introducing a new strategy) will impact other areas (e.g., structure, systems, and staff) and ensure a holistic approach to change management (Kaplan, 2005).
3. **Performance Improvement:** Organizations can use the 7S Framework to diagnose performance issues and identify root causes. By systematically examining each element, leaders can develop targeted interventions to address weaknesses and enhance overall performance (Waterman et al., 1980).
4. **Mergers and Acquisitions:** The framework is particularly useful in the context of mergers and acquisitions. It helps organizations assess the compatibility of merging entities across all seven elements, facilitating smoother integration and reducing the risk of cultural clashes and operational disruptions (Johnson, Scholes, & Whittington, 2008).

5. **Cultural Assessment:** Shared Values and Style elements make the framework effective for cultural assessment and transformation. Organizations can use it to understand their current culture, identify desired cultural attributes, and develop strategies to bridge the gap between the current and desired states (Kaplan, 2005).
6. **Human Resource Development:** The framework's focus on Staff and Skills highlights the importance of human resource development in achieving organizational goals. It guides organizations in aligning their HR strategies with overall objectives, ensuring that employees have the necessary skills and are motivated to contribute to the organization's success (Waterman et al., 1980).

The McKinsey 7S Framework is connected to this study on technological advancement and organizational change in selected Nigerian Custom Services, South-South Zone. The theory is relevant for managing organizational change driven by technological advancements. By considering the interconnectedness of strategy, structure, systems, shared values, skills, style, and staff, organizations can ensure comprehensive alignment and effective implementation of new technologies. This holistic approach not only enhances the adoption of technological innovations but also supports sustainable organizational growth and competitiveness.

## **2.2. Empirical Review**

Several researchers have researched the adoption of workplace technology and organizational change in selected Nigerian Custom Service, South-South Zone. These studies are carried out in both Nigeria and other countries generating both positive and negative results. Some of these studies on this subject are stated below.

### **2.3.1 Influence of Workplace Technology on Organizational Change**

A study conducted by Ugwu (2012) analyzed the influence of organizational change on mergers and acquisitions using Pan Nordic Logistics Sweden. The study employed a quantitative research method using primary data. The data was analyzed using content analysis. The findings indicated that information technology changes (d-scan, checkpoint, new radio phone, and new forklift) significantly enhance work processes.

Dastane (2020) Investigated the impact of Technology Adoption on organizational productivity in Malaysia. The research employed an explanatory research design and quantitative research method with the aid of online and offline questionnaires. The study target population consisted of 300 IT managers and senior-level executives (production as well as service team) in leading IT companies in Malaysia selected using snowball sampling. Normality and reliability assessment was performed in the first stage utilizing SPSS 22, and Confirmatory Factor Analysis (CFA) was performed with maximum likelihood estimation to assess the internal consistency, convergent validity, and discriminant validity. The study hypothesis was tested and analyzed using the Structural Equation Model (SEM) and path analysis to generate data. The research findings showed that technological change and IT infrastructure positively and significantly impact the organization's productivity while IT knowledge management has a significant but negative impact on the organizational productivity of IT companies in Malaysia.

Ugwu, Awah, Duru, and Onyeonwu (2022) examined the digital transformation and operational performance of the Nigerian financial sector. The study employed quantitative research methodology using secondary data. Secondary data was obtained from the Central Bank of Nigeria Statistical Bulletin (2021) and Nigeria Inter-Bank Settlement System (NIBSS) Industry Statistics (various years). The data obtained were quarterly data on the Financial Sector Gross

Domestic Product (FSGDP), values of Automated Teller Machine (ATM), Point of Sales (POS), Web pay (WEBPAY), and Mobile pay (MOBPAY) transactions covering the period from 2010 to 2019. The study employed the robust multi-regression ordinary least square method to estimate the coefficient of the variables. The study found that there exists a positive linear relationship between values of automated teller machines (ATM), point of sales transactions, and financial sector contributions to the gross domestic product of Nigeria. The result also showed that there exists a negative relationship between the values of web pay, mobile pay transactions, and financial sector contributions to the gross domestic product of Nigeria. The study also showed that the variables when taken individually or isolated, are not statistically significant but when you bulk the variables together that is jointly, they impacted significantly on the financial sector performance

Al-Nashmi and Ali Ame (2014) examined the impact of Information Technology adoption on employee productivity in Non-Government Organizations in Yemen. The research utilized survey research design and questionnaire as instruments for data collection. The convenience sampling method was utilized in data collection from a sample of 138 staff comprised of managers and IT officers working in non-governmental organizations. The data was tested and analyzed statistically using the Pearson correlation method. The result showed that Information technology infrastructure, information technology innovation, and information technology knowledge management are related to technology adoption. Also, results showed that Information technology infrastructure, information technology innovation, and Information technology knowledge management exert a moderate positive influence on employee productivity. Finally, results show that IT knowledge management has the most impact on employee productivity.

Wijaya, Pratami, Yudiastra, Pratami, and Yudi-Arista (2019), examined the impact of the use of information technology, user ability on user motivation and employee performance in the Keperasi Kuta Mimba, Indonesia. Primary data was obtained from the results of the Kuta Mimba employee opinion. Data was analyzed using multiple regression and path analysis techniques. The results showed that the use of information technology has a significant positive impact on User Motivation, while user ability has a significant positive impact on user motivation in the Koperasi Kuta Mimba. User motivation had a significant positive impact on employee performance. The use of information technology has a significant positive impact on employee performances; User motivation was able to mediate the influence of the use of information technology on employee performances in The Koperasi Kuta Mimba. User ability had a positive insignificant impact on employee performances; User motivation was able to mediate the influence of user ability on employee performances in the Koperasi Kuta Mimba.

Andriani, Kesumawati, and Kristiawan (2028) investigated the influence of Transformational Leadership and work motivation on Teacher's performance in Palembang City South Sumatra, Indonesia. The researcher used a correlational survey and quantitative research design. The total population of the study was made up of 790 teachers. A sample of 193 teachers was drawn from the entire population. Primary data was subjected to statistical tests using correlation and multiple regression analysis techniques. The result showed that transformational leadership has a positive and significant effect on the teacher's performance SMK Negeri in Palembang; work motivation has a positive and significant effect on the performance of SMK Negeri in Palembang; and transformational leadership and work motivation have a positive and significant influence on teachers' performance of SMK Negeri in Palembang.

Ogundare, Iyamabhor, and Ojieh (2023), examined the Technology Adoption Management Strategies and Organizational Performance using the telecommunication industry in Nigeria. The research employed a survey research design method and questionnaire as instruments for data collection. The total population of the study consists of 390 customers of Telecommunication in the South-South region in Delta State using the Taro Yamane formula. The data generated were tested using Pearson correlation to generate results. The results indicate that technology innovation has significantly and positively affected organizational performance.

Lakhwani, Dastane, Satar and Johari (2020). The impact of technology adoption on organizational productivity in Malaysia. The research adopted an explanatory and quantitative research method with the aid of a questionnaire using both online and surveys. The population of the study was made up of IT managers and senior-level executives (production as well as service teams) in leading IT companies in Malaysia selected using snowball sampling. Normality and reliability assessment was performed in the first stage utilizing a statistical package on social science (SPSS, version 22), and Confirmatory Factor Analysis (CFA) was performed with maximum likelihood estimation to assess the internal consistency, convergent validity, and discriminant validity. The hypothesis was tested and analyzed using a structural Equation Model (SEM) and path analysis using AMOS 22. The research findings showed that technological change and IT infrastructure positively and significantly impact the organization's productivity, while IT knowledge management has a significant negative impact on the organizational productivity of IT companies in Malaysia.

Olanrewaju (2016) investigated the effects of information technology on organizational performance in Nigerian Banking Industries. The researcher employed a descriptive research method using 20 banks. A total of Four hundred and fifty (450) questionnaires were distributed

to customers out of which 400 were utilized for the study. The hypothesis was tested and analyzed using the Chi-Square method. Findings revealed that technological innovation influenced bank employees' performance, customer satisfaction, and improvement in banks' profitability.

Chepkurgat, Kipkebut, and Auka (2019), investigated the effects of organizational change on performance in Kenya, a comparison of chartered universities. The study used a purposive sampling method to select 43 public and private chartered universities in Kenya. The questionnaires were administered to 43 Vice Chancellors and 103 Deputy Vice Chancellors. Pearson correlations and multiple regression analysis were used to test the hypothesis respectively. The result reveals that organizational changes have a significant positive influence on the performance of the universities.

### **2.3.2 The influence of digital literacy on employee engagement**

Chan, Hooi, and Ngui (2021) assessed the role of digital literacies as a moderator between employee engagement and its antecedents, namely, workplace digitalization and innovative culture in Kuala Lumpur. The study adopted a correlation research survey to administer the survey to a total of 256 employees. The respondents were individuals used as management-level executives in companies located in Selangor/Kuala Lumpur. The hypotheses were tested and analyzed using structural equation modeling. The findings revealed that there exists a significant association between employee engagement and its antecedents, namely, workplace digitalization and innovative culture. Digital literacies were also found to moderate the relationships between workplace digitalization-employee engagement and innovative culture-employee engagement.

Ongel, Yavuz, and Tatli (2021) investigated factors affecting digital literacy of human resources, at Beykent University, Istanbul, Turkey. The study utilized descriptive research design and the population of the study statistically from the data generated and the hypothesis was analyzed and tested using SPSS.v.25 program. The findings indicate a significantly positive effect on employee readiness and their digital literacy level.

Huu (2023) examined the impact of employee digital competence on the relationship between digital autonomy and innovative work behavior. The study employed a systematic literature review approach. The study highlights the importance of digital capability and autonomy in fostering employee creativity, learning, and knowledge sharing. Research shows that employees with greater digital autonomy are more likely to engage in innovative work, leading to increased productivity and accountability. Therefore, make the development of digital empowerment a priority for your organization by providing access to digital tools, training, and a supportive work environment.

Zhao, He, Guo, and Sarpong (2023) investigated organizational digital literacy and enterprise digital transformation: Evidence from Chinese Listed Companies. The paper explores a Systematic Literature Review. The study identified that organizational digital literacy attributes (i.e., employee, executive, and hard and soft organizational skills) are important conditions for digital transformation, but higher-level digital transformations are driven by a combination of these conditions across seven types of configurations.

Almeida, Santos, and Monteiro (2020) examined the challenges and opportunities in the digitalization of companies in a post-COVID-19 World. The study used an exploratory research approach using three areas of business: labor and social relations, marketing and sales, as well as

technology. The result revealed that the influence of digitalization stimulates the emergence of new digital products and services based on the principle of flexibility. Moreover, new ways of working drive demand for new talent, regardless of people's geographic location. Again, findings showed that cybersecurity and privacy support the integrated development of technology.

Bejaković and Mrnjavac (2020) examine the relationship between digital skills and employment and in this way accentuate the importance of policy interventions for improving digital literacy. The study made use of Eurostat data. The findings demonstrate a statistically significant correlation between digital skills and employment rates in the European Union and EU.

Bikse, Lusena-Ezera, Rivza, and Rivza (2021) carried out a study on the development of digital transformation and relevant competencies for employees to identify the opportunities and challenges in Latvia. The research method applied in this study is based on the study of relevant theoretical concepts and EU publications related to digital transformation. To investigate the opinions of Latvian employers regarding the importance of digital transformation and related competencies for employees, a survey method was used. Findings showed that most respondents rated their level of digital transformation implementation as high or medium-high, indicating a positive trend indicating that the digitalization process is continuously progressing.

Ugwu, Onwuka, Okwedy, Chris-Ejiogu, and Njoku (2024) investigated the influence of information technology on employee responsiveness in the Telecommunication Sector in Nigeria. The study used a correlational survey design, with copies of the questionnaire serving as the main data collection tool. The total sample size for the study was 131 employees. A probability simple random sampling technique was used to distribute the survey. Primary data were gathered using a face-to-face, researchers-administered structured questionnaire made using

a Likert scale with five possible outcomes. The data was statistically tested, and Pearson Product Moment Correlation to generate the result. The findings of the research hypothesis demonstrate that a unit rise in teleconferencing applications results in a 0.996 increase in employee responsiveness at a 5 % level of significance. The result of the study also revealed that a unit increase in internet applications results in a 0.865 increase in service quality at a 5 % level of significance.

Chukwurah, Uzor, Iwuno, and Chukwueloka (2020) investigated capacity building and employee productivity in the Nigeria public sector, a case study of Anambra State Civil Service Commission, Awka. The study adopted a survey design and the questionnaire as an instrument for data collection. The study population comprised 280 employees. The researcher used a chi-square to analyze the data and test the hypothesis. The finding indicates that capacity building enhances the quality-of-service delivery in the Anambra State Civil Service Commission, Awka.

### **2.3.3 The influence of high-speed Internet technology adoption on organizational restructuring**

Sarachuk, Missler-Behr, and Hellebrand (2021) studied ultra-high-speed broadband internet and firm creation in Germany. The study focuses on the possible effects of (ultra) broadband provision on firm entry rates in 401 German administrative districts and independent cities. The hypothesis was tested statistically using a regression method. The Result demonstrates the significance of basic broadband availability for the whole country (and very strong for less-urbanized administrative districts), while the ultra-high-speed connections have a weak and negative influence on new business formations. Hence, the advanced digital infrastructure does not seem like an important prerequisite for a better entrepreneurial milieu, at least in the case of Germany.

Del Aguila Obra and Padilla Meléndez (2006) investigated the factors that influence the adoption of technology on organizational factors in Spain. Primary data and a questionnaire were used to source data from 280 Spanish firms. The hypothesis was tested and analyzed using factor and clustering analysis to generate data. The findings established that organizational factors (the size of the company) do not have any effect on the availability of these Internet technologies.

Dzwigol (2019) wrote about the process of organizational restructuring of the company in terms of the system. To accomplish its goals, the study employed a methodical approach to literature review, which included analyzing the operational documents of the organization and conducting interviews, observations, and case studies. The study concludes that the restructuring process ought to be conducted by certain restructuring objectives that arise from the extent of change.

Kaziro, Tukamuhembwa, and Agba (2024) investigated technology adoption and its impact on organizational productivity with a case study of Metropolitan International University in Uganda. The study opted for a mixed research design strategy. The population of the study comprised 270 staff. Primary data was collected with the aid of a survey. The findings showed a strong positive correlation between technology adoption and organizational productivity.

Hottenrott, Rexhauser, and Veugelers (2016) also studied the organizational change and the productivity effects of green Technology Adoption in Germany. The paper explored a systematic literature review approach. The study also identified that a relationship exists between green technology adoption and organizational change. The study also found that adoption of green technology is associated with lower productivity.

#### **2.3.4 The influence of electronic platforms on leadership changes**

Bawa and Yahaya (2022) examine the relationship between the electronic payment system and economic growth in Nigeria. Secondary data was obtained from the published Central Bank of Nigeria Statistical Bulletin which was. Then tested and analyzed using descriptive and inferential statistics. The findings reveal that electronic payment systems are positively and significantly correlated with economic performance.

Ugwu, Osisoma, Onwuzuligbo, and Nnaji-Ihedinmah (2020) looked at how change management affected deposit money banks' business performance in Imo State, Nigeria. The questionnaire and a descriptive survey design were employed in the data collection process. There were 124 employees in all, including employees of United Bank for Africa Plc, Access Bank, Fidelity Bank, and Eco-Bank. Out of the 124 copies of the questionnaire that were sent to the participants, 116 were returned and used for analysis, leaving only 6 copies unanswered. To produce the outcome, the research hypothesis was put to the test and examined using the basic regression procedure. The null hypothesis was deemed invalid at the 5% significance level. The study findings showed that the leadership change significantly improved the competitiveness and firm performance of banks in Owerri, Nigeria.

Jones and Wynn (2021) carried out a study on the leading digital technology companies and their approach to sustainable development in the United Kingdom. This article aims to offer an exploratory review of how the leading companies within the digital transformation market have addressed sustainable development. The study adopts an inductive, qualitative approach based on an examination of published company reports and identifies six major sustainability themes being actively promoted and supported. The article concludes that the current sustainability objectives of the technology companies are driven as much by commercial reality as any

altruistic motives, and that support and promotion of the circular economy may offer the best opportunity for digital technologies to meaningfully impact sustainable development.

HM and Abidin (2023) investigated the role of leadership in managing information technology change and its impact on organization human resources, Sekolah Tinggi Umu Ekonomi YPUP Makassar, Sulawesi Selatan, and Indonesia. The study explores a systematic literature review. The results of the study show that leadership in managing information technology change is very significantly positive.

Pawar and Dhumal (2024) investigated the role of technology in transforming leadership management practices in India. The study explores a systematic literature review. The results show that technology-virtual training and electronic learning platforms tremendously improve leadership performance management.

Koc and Sahin (2021) examined the role of electronic payments in the inflation dynamic in Turkey. The researcher applied secondary data derived from the Turkey Central Bank between 2005-2016. The obtained data and hypotheses were tested using the Augmented Dickey-Fuller Test (ADF) to analyze the generated data. The findings show that both volumes and the number of transactions affect the inflation dynamics in Turkey.

### **2.3.5 Research Gap**

Present study assesses the level of influence of digital literacy, a high-speed internet, electronic platform on employee engagement, organizational structure and leadership in selected Nigerian Customs Services, South-South Region, Nigeria. This is the gap present the study seeks to fill.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Research Design**

To address certain research issues, a thorough plan for data collection and analysis must be created (Creswell & Creswell, 2018; Edmonds & Kennedy, 2017; Bryman, 2016). Every study needs a research design since it offers a methodical way to look at research problems. A good research design provides valid and trustworthy results by carefully choosing the right design, sample strategies, and data gathering and analysis procedures. The above references provide insightful advice on how to create successful research investigations. To accomplish the goal of the study, the researcher carefully selects and applies a quantitative survey as a suitable research design to guarantee that this investigation yields insightful and useful information.

#### **3.2 Population of the study**

The population of a study refers to the entire group of individuals or entities to which researchers intend to generalize their findings (Vladimira & Beutels, 2020). This can include people, organizations, events, objects, or times. Identifying and defining the study population is a critical step in the research process as it influences the study's design, sampling method, and the validity of the conclusions drawn. Defining the population of the study is fundamental for ensuring the research is relevant, representative, and generalizable. The criteria for choosing five hundred and sixty-five (565) staff working in the Nigerian Custom Services were based on their managerial position and professional experience in the industry. These employees represent top, middle and lower-level cadre of Nigerian Custom Services in the following states- River, Bayelsa, Edo, Delta, and Akwa Ibom States, South-South Nigeria.

**Table 1: Population Distribution of Nigerian Customs Service in South-South Zones, Nigeria**

S/N	Offices	Number of Employees
1.	River State	123
2.	Bayelsa State	106
3.	Edo State	113
4.	Delta State	109
5.	Akwa-Ibom State	114
	Total	565

**Source: (Personal Records of Nigerian Customs Services Plc).**

### 3.3 Sample Size

A sample size is the portion of the population chosen specifically for the research project. For the results to be accurately generalized, the sample needs to be typical of the population. By providing a manageable representation of the population, the sample size allows the researcher to investigate, analyze, and draw conclusions without having to look at every aspect of the population. Choosing the right sample size is essential since it affects the validity and dependability of the study's conclusions. Three hundred and thirty-six (336) people from five South-South zones—Rivers, Bayelsa, Edo, Delta, and Akwa Ibom State—make up the study's sample size. The sample size for this investigation is likewise determined using Taro Yamane's (1968) formula.

Yamane formula:

$$n = \frac{N}{1 + N(e)^2}$$

Were,

n = sample size to be determined

N = population size

e = the error of sample at 5% or 0.05 significant level

The Yamane formula is stated as follows:

n =     The total sample size; N = The population.

$$n = \frac{565}{1 + 565 * (0.05)^2}$$

$$n = \frac{565}{1 + 565 * 0.0025}$$

The sample size is = 234

Bowler's proportional allocation method was used as a sampling technique to allocate appropriately the questionnaire to the selected states and firm. The Bowlers proportional allocation formula is stated below as follows:

$$nh = \frac{nN_h}{N}$$

Where nh = Bowley's allocation formula  
 N<sub>h</sub> = Number of items in each stratum in the population.  
 n = Sample size  
 N = Population size

Applying the formula, we have:

$$i). \text{ Rivers, State - Office } nh = \frac{234 * 123}{565} = 50.94$$

$$ii). \text{ Bayelsa State – Office } nh = \frac{234 * 106}{565} = 43.90$$

$$iii). \text{ Edo State – Office } nh = \frac{234 * 113}{565} = 46.8$$

$$iv). \text{ Delta State – Office } nh = \frac{234 * 109}{565} = 45.14$$

$$v). \text{ Akwa Ibom State – Office } nh = \frac{234 * 114}{565} = 47.21$$

### 3.4 Sources of Data

Primary and secondary sources are the two main categories into which research data sources may be divided; each has advantages and disadvantages of its own. Information gathered straight from the source for a particular research project is referred to as primary data (Vladimira & Beutels, 2020). This kind of data is unique and tailored to the requirements of the investigation.

Surveys and questionnaires were used in the study as the main data collection tools to get information from many respondents. Conversely, secondary data refers to information that has been gathered for a different reason but is used by researchers for an unrelated investigation (Vladimira & Beutels, 2020). Academic publications and books function as secondary data sources by offering theoretical details pertinent to the goals of the investigation.

### **3.5 Methods of Data Collection**

There are three main methods for collecting data: experiments, interviews, and surveys (Creswell & Creswell, 2018). Research requires data collection techniques because they give researchers a way to obtain the information, they need to test hypotheses and find answers to research questions. To collect data for this study and fulfill its research objectives, a questionnaire and survey were used.

### **3.6 Instrumentation**

Workplace technology adoption (WTA) and organizational change (OC) in selected Nigerian Customs Service, South-South Zone. The questionnaires were divided into distinct parts. The following interval scales were used in all the questions using five-point Likert scales: "Strongly Agree, SA" = 5, "Agree" AG = 4, "Undecided" UN = 3, "Disagree" DA = 2, and "Strongly Disagree, SD = 1.

### **3.7 Test of Validity of the Instrument**

The degree to which an instrument measures what it is intended to measure is referred to as validity. The questionnaire was validated with the aid of an expert on the subject who looked at the instrument and made adjustment on face, content and construct level.

Construct, criterion, and content validity are the many forms of validity (Leavy, 2022). By ensuring that the instrument covers the whole range of the notion being measured, content validity is ensured. To ensure that every facet of the idea is covered, literature research and expert opinion are required. Construct validity determines whether the instrument assesses theoretical construct is supposed to test accurately. It makes use of statistical methods such as factor analysis. Criteria-Associated Validity evaluates an instrument's efficacy by contrasting it with another measure, or criterion, that is reliable.

### 3.8 Test of Reliability of the Instrument

Reliability refers to the consistency of an instrument in measuring what it is supposed to measure. There are several types of reliability (Leavy, 2022). The researcher ensures validity and reliability by conducting pilot testing, expert review, and statistical analysis. Pilot Testing was conducted using a preliminary sample questionnaire to identify any issues and make necessary adjustments. Expert Review also involves experts in the field to review the instrument and provide feedback on its content and structure. Statistical Analysis was done using statistical methods to test the validity and reliability of the instrument. Techniques like factor analysis, correlation coefficients, and Cronbach's alpha are commonly used. The Cronbach Alpha was used in testing the reliability of the research instrument with the aid of Statistical Package for Social Sciences (SPSS) version 25 which showed a value of .995.

**Table 2: Reliability Statistics**

Cronbach's Alpha	N of Items
.995	8

Source: (SPSS Version 25)

### **3.9 Method of Data Analysis**

The two types of data analysis techniques are quantitative and qualitative techniques. Regression analysis and descriptive statistics are used in a quantitative approach to find patterns and correlations (Creswell & Creswell, 2018). Thematic analysis is a tool used in qualitative research methods to find recurring themes and insights in transcripts of interviews. To achieve the study objective, the researcher adopted a quantitative data analysis technique with the aid of descriptive statistics and the Pearson correlation technique to ascertain the influence of workplace technology adoption on organizational change in selected Nigerian Customs Service, South-South Zone. The research hypotheses, one, two, and three were statistically tested and analyzed using the Pearson correlation approach.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### 4.1 Presentation of Data

This study aims to evaluate workplace technology adoption (WTA) and organizational change (OC) in selected Nigerian Customs Service, South-South Zone. To achieve this objective, the data were presented following the order of the research questions. Data were collected, tabulated, and analyzed using Statistical Package on Social Science (SPSS Version 25). Out of 234 copies of the questionnaire distributed to the respondents, only 205 were filled and returned, while the remaining 29 were not returned and used for the analysis.

**Table 3: Schedule of Questionnaire Administered and Returned for Selected Nigerian Custom Services**

S/N	Offices/ States	Population	Copies Distributed	Copies filled and returned
1.	River State	123	51	45
2.	Bayelsa State	106	44	38
3.	Edo State	113	47	41
4.	Delta State	109	45	40
5.	Akwa-Ibom State	114	47	41
	Total	565	234	205

Source: (Field Survey, 2024).

#### 4.2 Analysis of Research Question One

How does digital literacy level impact employee engagement in Selected Nigerian Custom Services, South-South Zone?

**Table 4: Investigative Questions on Digital Literacy Level and Employee Engagement**

S/N	Questions	SA	AG	UN	DA	SD	Total
<b>A. Digital Literacy Level (Independent Variable)</b>							
1	Our firm has significantly improved its digital literacy levels, leading to more efficient and streamlined operations.	92	84	8	7	3	205
2	Operations in our organization are now more streamlined and efficient because of a considerable improvement in digital literacy	88	97	10	6	4	205
3	An increasingly proactive and creative workforce has been fostered by increased digital literacy, which has increased employee engagement within our firm.	86	99	7	11	2	205
4	High levels of digital literacy have made it possible for our firm to minimize disruptions by responding to organizational changes more quickly and effectively.	90	93	9	8	5	205
5	Even with these advancements, there is still a technological gap in the NCS, with certain staff finding it difficult to stay up to date with emerging technologies.	91	94	5	7	8	205
6	Some employees exhibit resistance to digital transformations, hindering the full potential of organizational change initiatives.	92	95	10	6	2	205
7	Inadequate digital skills have hindered employee engagement, as some staff struggle to utilize digital platforms effectively.	100	96	8	0	1	205
<b>B. Employee Engagement (Dependent Variable)</b>							
1	We use various digital platforms (such as Zoom platform) to collaborate.	101	97	3	2	2	205
2	Employees with robust digital skills feel more confident in their roles, leading to higher engagement and active participation in organizational activities.	103	89	6	4	3	205
3	Strong digital skills afford us the chance to communicate more effectively with other staff.	100	86	8	9	2	205
4	Opportunities for learning and improving digital skills encourage employees to stay engaged, as they see a clear path for personal and professional growth.	92	99	1	6	7	205
5	Employees lacking digital skills may feel disengaged and overwhelmed, leading to reduced participation and productivity.	93	95	10	4	3	205
6	Sometimes, the pressure to acquire new digital skills quickly can lead to increased stress and burnout, reducing overall employee engagement.	98	93	7	1	6	205
7	Poor digital skills can result in some employees being excluded from key projects or initiatives, negatively impacting their engagement and morale.	94	99	3	1	8	205

**Source: (Field Survey, 2024).**

### **4.3: Test of Research Hypothesis One**

$H_{A1}$ : Digital literacy level can impact significantly employee engagement in Selected Nigerian Custom Services, South-South Zone.

#### **4.3.1 Decision Rule**

The null hypothesis is rejected when the p-value is less than 0.05; if not, accept the alternative hypothesis ( $H_A$ ). The table below shows the results of the Pearson correlation method. The null hypothesis which states that digital literacy level can impact significantly employee engagement in Selected Nigerian Custom Services, South-South Zone was rejected. This is because the p-value (000) is less than the critical value (0.05). On the contrary, the alternate hypothesis which states that digital literacy level can impact significantly employee engagement in Selected Nigerian Custom Services, South-South Zone was accepted. The result confirms that a significant positive linear correlation existing between X (digital literacy level, DLI) and Y (employee engagement, ERM). This result confirms a positive result with the value of ( $p = .000$ ,  $r = .991$ ,  $N = 205$ ).

**Table 5: Result of Pearson Correlation**

		DLI	EEM
DLI	Pearson Correlation	1	.991**
	Sig. (2-tailed)		.000
	N	205	205
EEM	Pearson Correlation	.991**	1
	Sig. (2-tailed)	.000	
	N	205	205

Source: (SPSS Version 25)

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 6: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
DLI	205	.00	100.00	40.6857	43.20456
EEM	205	1.00	103.00	41.0000	45.41573
Valid N (listwise)	205				

Source: (SPSS Version 25)

#### **4.4 Analysis of Research Question Two**

To what extent does the adoption of high-speed internet technology impact organizational structure/restructuring in selected Nigerian Custom Services, South-South Zone?

##### **4.4.1 Test of Research Hypotheses Two**

HA<sub>2</sub>: Implementation of high-speed internet technology can impact significantly organizational structure/restructuring in selected Nigerian Custom Services, South-South Zone.

**Table 7: Investigative Questions on High-Speed Internet Adoption and Organizational Restructuring**

S/N	Questions	SA	AG	UN	DA	SD	Total
<b>A.</b>	<b>High-Speed Internet Adoption (Independent Variable)</b>						
1	High-speed internet adoption has significantly boosted employee productivity by enabling faster access to essential resources and information.	93	96	9	6	1	205
2	With high-speed internet, employees can engage more effectively in virtual meetings, training sessions, and collaborative projects.	87	92	14	8	4	205
3	The adoption of high-speed internet has improved employee morale, as they can efficiently perform their tasks without connectivity issues.	85	98	6	9	7	205
4	The unequal access to high-speed internet among employees has created a digital divide, leading to disparities in engagement and performance.	90	96	8	6	4	205
5	The rapid adoption of high-speed internet has raised security concerns, as employees may not be fully trained to handle cyber threats effectively.	95	93	4	8	5	205
6	Overreliance on high-speed internet for daily operations can lead to significant disruptions if there are connectivity issues or technical failures.	91	94	9	4	7	205
7	Some employees are resistant to the organizational changes brought about by high-speed internet adoption, preferring traditional methods.	99	95	8	2	1	205
<b>B.</b>	<b>Organizational Restructuring (Dependent Variable)</b>						
1	Organizational restructuring has been smoother due to the seamless communication and data sharing facilitated by high-speed internet.	100	96	4	1	5	205
2	Some employees are resistant to the organizational changes brought about by high-speed internet adoption, preferring traditional methods.	102	92	5	3	3	205
3	High-speed internet adoption facilitates faster access to data and real-time communication, speeding up decision-making processes and enhancing organizational agility.	101	93	2	4	5	205
4	High-speed internet streamlines operations by enabling efficient digital workflows, reducing delays, and improving overall productivity during organizational change.	90	97	6	9	3	205
5	Sometimes, the initial costs of implementing high-speed internet infrastructure can be high, potentially straining organizational budgets and resources.	92	94	7	4	8	205
6	Organizations may become overly dependent on high-speed internet, leading to significant disruptions in case of connectivity issues or outages.	96	90	3	6	7	205
7	The uneven adoption of high-speed internet within different parts of the organization can create disparities, leading to resistance and friction during the change process.	94	99	2	6	4	205

**Source: (Field Survey, 2024).**

#### 4.4.2 Decision Rule

The study null hypothesis is rejected once the p-value is less than 0.05; if not, accept the alternative hypothesis (HA). The table below shows the results of the Pearson correlation method. The null hypothesis which states that Implementation of high-speed internet technology can impact significantly organizational structure/restructuring in selected Nigerian Custom Services, South-South Zone was rejected. This is because the p-value (.000) is less than the critical value (0.05). In contrast, the alternate hypothesis which states that Implementation of high-speed internet technology can impact significantly organizational structure/restructuring in selected Nigerian Custom Services, South-South Zone was accepted. The result confirms that a statistically significant positive linear correlation existing between X (high speed internet, HSI) and Y (organizational restructuring, ORR). This result confirms a positive result with the value of (p= .000, r = .993, N = 205).

**Table 8: Result of Pearson Correlations**

		HSI	ORR
HSI	Pearson Correlation	1	.993 <sup>**</sup>
	Sig. (2-tailed)		.000
	N	205	205
ORR	Pearson Correlation	.993 <sup>**</sup>	1
	Sig. (2-tailed)	.000	
	N	205	205

Source: (SPSS Version 25)

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 9: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
HSI	205	1.00	99.00	40.9143	43.39922
ORR	205	1.00	102.00	40.9429	45.23139
Valid (listwise)	N205				

Source: (SPSS Version 25)

#### 4.5 Analysis of Research Question Three

How does the adoption of an electronic platform impact organizational leadership in selected Nigerian Custom Services, South-South Zone?

##### 4.5.1 Test of Research Hypotheses Three

HA<sub>3</sub>: Adoption of an electronic platform can significantly impact organizational leadership in selected Nigerian Custom Services, South-South Zone.

**Table 10: Investigative Questions on Electronic Platforms and Organizational Leadership**

S/N	Questions	SA	AG	UN	DA	SD	Total
<b>A.</b>	<b>Electronic Platform (Independent Variable)</b>						
1	My organization use electronic platforms such as zoom and Microsoft teams to facilitate seamless communication and collaboration.	91	94	7	4	9	205
2	Leaders can easily connect with their teams to share information and track progress and performance metrics, promoting accountability across the organization.	85	89	12	6	13	205
3	Electronic platforms enable better collaboration among teams and foster a unified approach to organizational goals.	87	93	19	4	6	205
4	It affords everyone easy and better access to crucial information from any location, improving their ability to manage and respond to issues promptly.	89	96	7	8	5	205
5	However, it can be very expensive to adopt and integrate an electronic platform into the work environment.	94	92	3	9	7	205
6	Employees may feel reluctant to adapt to new electronic systems, hindering the transition process.	90	93	8	5	9	205
7	Sometimes, electronic platforms can pose cybersecurity risks, requiring robust measures to protect sensitive organizational data.	94	97	6	2	6	205
<b>B.</b>	<b>Organizational Leadership (Dependent Variable)</b>						
1	The adoption of an electronic platform provides leaders with real-time data and analytics, enabling more informed and timely decision-making.	103	91	3	1	7	205
2	Leaders can streamline workflows and automate routine tasks, freeing up time to focus on strategic initiatives.	101	90	11	2	1	205
3	Leaders can use electronic platforms to engage with employees through feedback mechanisms, surveys, and regular updates, fostering a more connected workforce.	92	100	4	0	9	205
4	Electronic learning platforms and digital training resources allow organizational leaders to provide ongoing	91	96	3	7	8	205

	development opportunities for their teams.						
5	Leaders might overly rely on electronic data, potentially overlooking qualitative insights and human intuition in decision-making processes.	93	97	10	4	1	205
6	The complexity of managing and maintaining an electronic platform can add an additional layer of responsibility for organizational leaders.	96	91	3	8	7	205
7	The use of electronic platforms raises privacy concerns, as leaders must ensure compliance with data protection regulations and safeguard employee information.	93	97	9	5	1	205

Source: (Field Survey, 2024).

#### 4.5.2 Decision Rule

The study null hypothesis is rejected once the p-value is less than 0.05; if not, accept the alternative hypothesis (HA). The table below shows the results of the Pearson correlation method. The null hypothesis which states that adoption of an electronic platform can significantly impact organizational leadership in selected Nigerian Custom Services, South-South Zone was rejected. This is because the p-value (000) is less than the critical value (0.05). In contrast, the alternate hypothesis which states that adoption of an electronic platform can significantly impact organizational leadership in selected Nigerian Custom Services, South-South Zone was accepted. The result confirms that a statistically significant positive linear correlation existing between X (electronic platform, EPF) and Y (organizational leadership, ORL). This result confirms a positive result with the value of (p= .000, r = .996, N = 205).

**Table 11: Result of Pearson Correlations**

		EPF	ORL
EPF	Pearson Correlation	1	.996**
	Sig. (2-tailed)		.000
	N	205	205
ORL	Pearson Correlation	.996**	1
	Sig. (2-tailed)	.000	
	N	205	205

Source: (SPSS Version 25)

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 12: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
EPF	205	2.00	97.00	41.1143	42.07121
ORL	205	.00	103.00	41.0000	44.94441
Valid N (listwise)	205				

Source: (SPSS Version 25)

#### 4.6 Discussion of Findings

The goal of the study is to assess the role of workplace technology in facilitating organizational change in Nigerian Custom Services: A South-South Zone Perspective. The Pearson correlation approach was employed to statistically test the research hypothesis one. The result confirms that there exists a positive correlation between digital literacy level, (DLI) and employee engagement, (ERM). This result can be interpreted further that digital skills can enhance employee's engagement. That is, digital literacy enables employees to use communication and collaborative tools more effectively to enhance teamwork and information sharing which can enhance engagement by making employees feel more connected and involved. This result confirms a positive result with the value of ( $p = .000$ ,  $r = .991$ ,  $N = 205$ ). This result agrees with the literature on the previous findings of Chan, Hooi, and Ngui (2021) which state that digital literacies were also found to moderate the relationships between workplace digitalization-employee engagement and innovative culture-employee engagement in Kuala Lumpur.

The result of research hypotheses two was also tested using Pearson correlation approach. The findings showed that there exists a statistically significant positive linear correlation between high-speed internet, (HSI) and organizational restructuring, (ORR). The result can be interpreted that high-speed internet can significantly impact organizational change/restructuring. With high-speed internet organization can more effectively implement remote work strategies allowing employees to continue working seamlessly from different locations during restructuring. This result confirms a positive result with the value of ( $p = .000$ ,  $r = .993$ ,  $N = 205$ ). This result aligns

with the literature on the previous work of Kaziro, Tukamuhembwa, and Agba (2024) which identified a strong positive correlation between technology adoption and organizational productivity. This finding is supported by the literature on the previous work of Sarachuk, Missler-Behr & Hellebrand (2021) which identified high-speed internet as a critical enabler of digital transformation and innovation.

Furthermore, the result of hypotheses three was tested using Pearson correlation approach. The findings also showed that there exists a statistically significant positive correlation between electronic platforms (EPF) and organizational leadership, (ORL). The result can be interpreted that electronic platform aid leaders to connect easily with their teams, share information and manage projects more effectively and efficiently via zoom platforms. This result confirms a positive result with the value of ( $p = .000$ ,  $r = .996$ ,  $N = 205$ ). This result also aligns with the findings of Pawar and Dhumal (2024) who found that technology-virtual training and electronic learning platforms tremendously improve leadership performance management.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Summary of Findings

The summary of the findings is as follows:

- I. The result of research hypotheses one revealed that digital literacy level (skills) positively correlates with employee's engagement. This result confirms a positive result with the value of ( $p = .000$ ,  $r = .991$ ,  $N = 205$ ).
- II. The findings of research hypotheses two showed that high-speed internet positively correlate with organizational restructuring. This result confirms a positive result with the value of ( $p = .000$ ,  $r = .993$ ,  $N = 205$ ).
- III. The findings of research hypotheses three also highlighted that electronic platform positively correlated with organizational leadership. This result confirms a positive result with the value of ( $p = .000$ ,  $r = .996$ ,  $N = 205$ ).

#### 5.2 Conclusion of the Study

The general objective of the study is to assess the role of workplace technology in facilitating organizational change in Nigerian Custom Services: A South-South Zone Perspective. The result of research hypothesis one revealed that digital literacy level (skills) positively correlates with employee engagement at a 5 % level of significance. Acquisition of digital skills can enhance employee engagement. That is, a high level of digital literacy enables employees to effectively use communication and collaborative tools to enhance teamwork and information sharing to increase productivity. This result agrees with the literature on the previous findings of Chan, Hooi, and Ngui (2021) which state that digital literacies were also found to moderate the

relationships between workplace digitalization-employee engagement and innovative culture-employee engagement in Kuala Lumpur.

On the other hand, the findings of research hypothesis two also showed that high-speed internet positively correlates with organizational restructuring at a 5 % level of significance. This result aligns with the literature on the previous work of Kaziro, Tukamuhembwa, and Agba (2024) which identified a strong positive correlation between technology adoption and organizational productivity. This finding is supported by the literature on the previous work of Sarachuk, Missler-Behr & Hellebrand (2021) which identified high-speed internet as a critical enabler of digital transformation and innovation.

Furthermore, the findings of research hypothesis three also highlighted that electronic platform positively correlated with organizational leadership at a 5 % level of significance. This result also aligns with the findings of Pawar and Dhumal (2024) who found that technology-virtual training and electronic learning platforms tremendously improve leadership performance management. The findings demonstrate how leaders can easily connect with their teams, share information, and manage projects more effectively and efficiently via Zoom platforms .

The study concludes that digital literacy level, high-speed internet, and electronic platforms positively enhance employee engagement, organizational restructuring, and leadership in Nigerian Custom Services within the South-South Zone region. The deployment of modern technologies such as automated systems, digital tracking, and data analytics have contributed greatly to streamlined operations, enhanced transparency, and increased efficiency of Nigerian Custom Services.

### **5.3 Recommendations**

Based on the findings and conclusion of the study above, the researcher made the following recommendations.

- I. Establishing collaborations with e-learning platforms is crucial to guaranteeing that staff members have access to training on emerging tools, technologies, and trends. Organizations should make investments in staff learning and development to ensure employees have access to digital upskilling and reskilling programs to improve themselves.
- II. Custom Services is advised to promote an atmosphere where workers are inspired to use and experiment with digital technologies in their everyday tasks. This will help to foster a culture of digital fluency in the workplace.
- III. Organizations should make use of high-speed internet to encourage hybrid or completely remote work arrangements for dispersed teams. For synchronous work to be done while maintaining cooperation, procedures must be redesigned to allow for the use of Slack or Microsoft Teams.
- IV. To encourage open and consistent communication among stakeholders, the NCS should adopt digital interactions with importers, exporters, and other government agencies via electronic platforms (such as intranets, mobile apps, or video conferencing).
- V. Every unit and department should implement a strong system for tracking and assessing the efficacy of new technology. By doing so, organizations would be able to scale successful programs and pinpoint areas for improvement as a result.

#### **5.4 Suggestions for Further Studies**

Future researchers should examine the long-term impact of organizational digital upskilling initiatives on employee engagement and retention across diverse industries in Nigeria. Further studies should evaluate how digital skills adoption facilitates engagement in hybrid or fully remote work environments.

#### **5.5 Contribution to Knowledge**

The present study employed the Nigerian Customs Services (NCS) in the South-South Zone, to delve into how technology is driving organizational change in the workplace. This study provides fresh perspectives on how businesses might close skill gaps to improve worker engagement and well-being. The study advances knowledge by pointing out difficulties that the Nigerian Customs Services faces while utilizing technology for organizational transformation, such as leadership changes and skill shortages, and by making suggestions to enhance the sector's performance.

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## **Appendix 1: Personal Letter**

Department of Management Technology  
School of Management Technology,  
Federal University of Technology, Owerri  
PMB 1526, Imo State  
February 06, 2024.

Dear Respondent,

### **COMPLETION OF QUESTIONNAIRE ON WORKPLACE TECHNOLOGY AND ORGANIZATIONAL CHANGE IN NIGERIAN CUSTOM SERVICES, SOUTH-SOUTH ZONE**

I am a postgraduate student in the above department. I am collecting data to complete my studies which necessitates your support in filling the questionnaire.

Please, this physical activity would help me to gather data from the field to fulfill the aim of this research. The questionnaire is structured in a way to tick the options that apply to you. Your personal information will be protected and treated with a high level of confidentiality. I appreciate your kind support and cooperation.

Yours Faithfully,  
Obadiah  
MBA, Researcher



**Table 4: Investigative Questions on Digital Literacy Level and Employee Engagement**

S/N	Questions	SA	AG	UN	DA	SD	Total
<b>A.</b>	<b>Digital Literacy Level (Independent Variable)</b>						
1	Our firm has significantly improved its digital literacy levels, leading to more efficient and streamlined operations.						
2	Operations in our organization are now more streamlined and efficient because of a considerable improvement in digital literacy						
3	An increasingly proactive and creative workforce has been fostered by increased digital literacy, which has increased employee engagement within our firm.						
4	High levels of digital literacy have made it possible for our firm to minimize disruptions by responding to organizational changes more quickly and effectively.						
5	Even with these advancements, there is still a technological gap in the NCS, with certain staff finding it difficult to stay up to date with emerging technologies.						
6	Some employees exhibit resistance to digital transformations, hindering the full potential of organizational change initiatives.						
7	Inadequate digital skills have hindered employee engagement, as some staff struggle to utilize digital platforms effectively.						
<b>B.</b>	<b>Employee Engagement (Dependent Variable)</b>						
1	We use various digital platforms (such as Zoom platform) to collaborate.						
2	Employees with robust digital skills feel more confident in their roles, leading to higher engagement and active participation in organizational activities.						
3	Strong digital skills afford us the chance to communicate more effectively with other staff.						
4	Opportunities for learning and improving digital skills encourage employees to stay engaged, as they see a clear path for personal and professional growth.						
5	Employees lacking digital skills may feel disengaged and overwhelmed, leading to reduced participation and productivity.						
6	Sometimes, the pressure to acquire new digital skills quickly can lead to increased stress and burnout, reducing overall employee engagement.						
7	Poor digital skills can result in some employees being excluded from key projects or initiatives, negatively impacting their engagement and morale.						

**Source: (Field Survey, 2024).**

## Appendix 4: Data Analysis

### Analysis of Research Question One

How does digital literacy level impact employee engagement in Selected Nigerian Custom Services, South-South Zone?

### Test of Research Hypotheses One

Ho<sub>1</sub>: Digital literacy level does not impact significantly employee engagement in Selected Nigerian Custom Services, South-South Zone.

**Table 5: Result of Pearson Correlations**

		DLI	EEM
DLI	Pearson Correlation	1	.991**
	Sig. (2-tailed)		.000
	N	205	205
EEM	Pearson Correlation	.991**	1
	Sig. (2-tailed)	.000	
	N	205	205

Source: (SPSS Version 25)

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 6: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
DLI	205	.00	100.00	40.6857	43.20456
EEM	205	1.00	103.00	41.0000	45.41573
Valid (listwise)	N205				

Source: (SPSS Version 25)

## Appendix 5: Data Analysis

### Analysis of Research Question Two

To what extent does the adoption of high-speed internet technology impact organizational structure/restructuring in selected Nigerian Custom Services, South-South Zone?

**Table 7: Investigative Questions on High-Speed Internet Adoption and Organizational Restructuring**

S/N	Questions	SA	AG	UN	DA	SD	Total
<b>A.</b>	<b>High-Speed Internet Adoption (Independent Variable)</b>						
1	High-speed internet adoption has significantly boosted employee productivity by enabling faster access to essential resources and information.						
2	With high-speed internet, employees can engage more effectively in virtual meetings, training sessions, and collaborative projects.						
3	The adoption of high-speed internet has improved employee morale, as they can efficiently perform their tasks without connectivity issues.						
4	The unequal access to high-speed internet among employees has created a digital divide, leading to disparities in engagement and performance.						
5	The rapid adoption of high-speed internet has raised security concerns, as employees may not be fully trained to handle cyber threats effectively.						
6	Overreliance on high-speed internet for daily operations can lead to significant disruptions if there are connectivity issues or technical failures.						
7	Some employees are resistant to the organizational changes brought about by high-speed internet adoption, preferring traditional methods.						
<b>B.</b>	<b>Organizational Restructuring (Dependent Variable)</b>						
1	Organizational restructuring has been smoother due to the seamless communication and data sharing facilitated by high-speed internet.						
2	Some employees are resistant to the organizational changes brought about by high-speed internet adoption, preferring traditional methods.						
3	High-speed internet adoption facilitates faster access to data and real-time communication, speeding up decision-making processes and enhancing organizational						

	agility.						
4	High-speed internet streamlines operations by enabling efficient digital workflows, reducing delays, and improving overall productivity during organizational change.						
5	Sometimes, the initial costs of implementing high-speed internet infrastructure can be high, potentially straining organizational budgets and resources.						
6	Organizations may become overly dependent on high-speed internet, leading to significant disruptions in case of connectivity issues or outages.						
7	The uneven adoption of high-speed internet within different parts of the organization can create disparities, leading to resistance and friction during the change process.						

Source: (Field Survey, 2024).

### Test of Research Hypotheses Two

Ho<sub>2</sub>: Implementation of high-speed internet technology does not impact significantly organizational structure/restructuring in selected Nigerian Custom Services, South-South Zone.

**Table 8: Result of Pearson Correlations**

		HSI	ORR
HSI	Pearson Correlation	1	.993**
	Sig. (2-tailed)		.000
	N	205	205
ORR	Pearson Correlation	.993**	1
	Sig. (2-tailed)	.000	
	N	205	205

Source: (SPSS Version 25)

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 9: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
HSI	205	1.00	99.00	40.9143	43.39922
ORR	205	1.00	102.00	40.9429	45.23139
Valid (listwise)	N205				

Source: (SPSS Version 25)

## Appendix 6: Data Analysis

### Analysis of Research Question Three

How does the adoption of an electronic platform impact organizational leadership in selected Nigerian Custom Services, South-South Zone?

**Table 10: Investigative Questions on Electronic Platforms and Organizational Leadership**

S/N	Questions	SA	AG	UN	DA	SD	Total
<b>A.</b>	<b>Electronic Platform (Independent Variable)</b>						
1	My organization use electronic platforms such as zoom and Microsoft teams to facilitate seamless communication and collaboration.						
2	Leaders can easily connect with their teams to share information and track progress and performance metrics, promoting accountability across the organization.						
3	Electronic platforms enable better collaboration among teams and foster a unified approach to organizational goals.						
4	It affords everyone easy and better access to crucial information from any location, improving their ability to manage and respond to issues promptly.						
5	However, it can be very expensive to adopt and integrate an electronic platform into the work environment.						
6	Employees may feel reluctant to adapt to new electronic systems, hindering the transition process.						
7	Sometimes, electronic platforms can pose cybersecurity risks, requiring robust measures to protect sensitive organizational data.						
<b>B.</b>	<b>Organizational Leadership (Dependent Variable)</b>						
1	The adoption of an electronic platform provides leaders with real-time data and analytics, enabling more informed and timely decision-making.						
2	Leaders can streamline workflows and automate routine tasks, freeing up time to focus on strategic initiatives.						
3	Leaders can use electronic platforms to engage with employees through feedback mechanisms, surveys, and regular updates, fostering a more connected workforce.						
4	Electronic learning platforms and digital training resources allow organizational leaders to provide ongoing development opportunities for their teams.						
5	Leaders might overly rely on electronic data, potentially overlooking qualitative insights and human intuition in decision-making processes.						

6	The complexity of managing and maintaining an electronic platform can add an additional layer of responsibility for organizational leaders.						
7	The use of electronic platforms raises privacy concerns, as leaders must ensure compliance with data protection regulations and safeguard employee information.						

Source: (Field Survey, 2024).

### Test of Research Hypotheses Three

H<sub>03</sub>: Adoption of an electronic platform can significantly impact organizational leadership in selected Nigerian Custom Services, South-South Zone.

**Table 11: Result of Pearson Correlations**

		EPF	ORL
EPF	Pearson Correlation	1	.993**
	Sig. (2-tailed)		.000
	N	205	205
ORL	Pearson Correlation	.993**	1
	Sig. (2-tailed)	.000	
	N	205	205

Source: (SPSS Version 25)

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Table 12: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
EPF	205	2.00	97.00	41.1143	42.07121
ORL	205	.00	103.00	41.0000	44.94441
Valid (listwise)	N205				

Source: (SPSS Version 25)