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Article

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### AN APPRAISAL OF DIGITAL TECHNOLOGY AND WORKERS OUTPUT IN FEDERAL CIVIL SERVICE, ABUJA, NIGERIA

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#### Abstract

One of the major features in contemporary service delivery and policy implementation is the adoption of digital technology in the civil service. This adoption has tremendously affected service delivery of civil servants. This research therefore investigated the adoption of digital technology and its effects on workers' productivity in the Federal Civil Service Abuja. This study employed a survey research design, combining questionnaire and interviews, to gather comprehensive data on the experiences of civil service employees with respect to the adoption digital technology. Multi stage sampling technique was adopted coupled with cluster and simple random technique. Four ministries in Abuja were selected for this study namely; Ministry of industry, trade and investment, Ministry of youth, Ministry of education and Ministry of communications, Innovation and Digital Economy. The targeted population of study was 15867 civil servants drawn from 4 selected ministries in Abuja. A total of 396 respondents fully participated in the survey and 4 respondents were interviewed. Data was analyzed in descriptive form. Scientific administrative theory was adopted as a theoretical frame for the study. Qualitative insights from interviews corroborated that higher adoption of digital tools correlates with improved performance, though current usage remains minimal due to infrastructural deficits, skill gaps, and unequal access to sophisticated technological equipment across ministries. The study concludes that while the digital economy holds substantial potential to boost productivity, efficiency, data management, collaboration, and service delivery in the Nigerian Federal Civil Service, its benefits are currently under-realized due to persistent digital divide, low digital literacy,

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inadequate infrastructure, and limited integration of digital platform. The study therefore recommended that the Federal Civil Service in Abuja should prioritize investing in digital skills training for its workers to keep up with the changing trends in the digital economy.

**Keywords:** Digital technology, workers, output, federal civil service, Abuja, Nigeria.

### **Introduction**

The Nigeria federal civil service serves as executional machinery of the state; the roles of the officials of this service are to perform their duties with political neutrality, anonymity and impartiality. The major roles of civil servants are in policy execution, supportive in its national objectives and economic development (Kurama 2021). Efficiency is needed for civil servants at federal and states levels, since it measures the performance of tasks expected to be done. The introduction digitalized systems of operation like office automation and information technology has assisted to strengthen skills and knowledge of workers in the service. According to Bhuiyan (2011) major computerization and infrastructure development in the public sector in state has been taking place to replace internal manual work processes by ICT-based automation. Similarly, the impact of computer education on the efficiency of civil servants in Nigeria cannot be over-emphasized. The civil servants need to be educated in ICT and the use of digital tools, so that the use of typewriters, filling of information on papers in cabinets, keeping of documents and letters in files are modernized through automation. Therefore, for maximum performance and productivity by civil servants in a digitalized world, civil servants must be equipped with the necessary skills and knowledge to operate effectively and efficiently in the digital space. It is against this backdrop that this study focuses on the advent of digital economy and its effects on workers' productivity in the Nigeria civil service.

### **Statement of Problem**

The advent of the digital technology has brought about a significant shift in the way business is conducted and has created numerous opportunities as well as challenges especially in the public service. One of the major challenges associated with the advent of the digital economy is the problem of digital divide especially as it relate to the level of workers performance and productivity. While the digital economy has the potential to promote inclusivity and bridge socio-economic gaps, there is a risk of exacerbating existing inequalities. Access to digital technologies, internet connectivity, and digital literacy are not evenly distributed globally, leading to a digital divide between different regions and socio-economic groups like the federal civil service. Not everyone has equal access to digital technologies and the internet, which creates a significant gap between those who can participate in the digital economy and those who cannot. This divide can exacerbate existing social and economic inequalities, limiting the opportunities available to certain groups and regions (Kunle, Adebimpe & Adedeji 2022). The unequal access of sophisticated technological equipment across most federal ministries has shown the level of digital divide in the federal civil service in Nigeria and have great implication on worker level of productivity and performance (Okeke, 2023).

Furthermore, Cyber security is a notable threat when using digital technology in transacting business. The Global Web Index 2020, reported Nigeria's population to be 203.6 million, with 169.2 million (83 percent) having mobile phone connections. 89.49 million (42 percent) are internet users and 27 million (13 percent) are active social media users. The digital growth indicators in 2020 from that of 2019 indicate an increase of 5.1 million (2.6 percent) million in Nigerian population. There were 122.5 million internet users in Nigeria in

January 2023. Nigeria's internet penetration rate stood at 55.4 percent of the total population at the start of 2023. Kepios analysis indicates that internet users in Nigeria increased by 2.9 million (+2.4 percent) between 2022 and 2023. For perspective, these user figures reveal that 98.63 million people in Nigeria did not use the internet at the start of 2023, suggesting that 44.6 percent of the population remained offline at the beginning of the year (Simon 2023). These figures indicate an important threshold in the study of cyber security and digital communication in Nigeria (Samuel, 2023).

As the digital economy expands, so does the risk of cyber threats and attacks. Malicious individuals are constantly finding new ways to exploit vulnerabilities in digital systems, posing a significant risk to businesses, individuals, critical infrastructure and national security. Strengthening cyber security measures and promoting awareness are crucial to protect the digital economy from cyber threats. It is worthy to note that most federal ministries have adopted digital platforms in performing some of their duties and exchanging informations. The level of cyber security cannot be quantified because of the vulnerabilities of the cyber space. As observed by Alemu and Omer (2014), the administration of public services infrastructure has undoubtedly been impacted by security concerns. Security has evolved into a crucial infrastructure for the development and deployment of innovative governmental applications. Threats to security have never been more common than they are now. Due to one cyber assault or another, agencies, institutions, service providers, and signal carriers have all suffered significant financial and service losses (Vaile, Kalinich, Fair & Lawrence 2013).

### **Objectives of the Study**

The study is aimed at examining the nexus between the advent of digital economy and workers' productivity in the federal civil services in Abuja. The following objectives are imperative to the study:

- i. To examine the extent to which digital economy impact on workers' productivity in the federal civil services in Abuja.
- ii. To evaluate the extent to which digital technology support the level of workers performance in the federal civil services in Abuja

### **Hypothesis of the Study**

**H<sub>0</sub>** There is no significant relationship between digital technology and the level of workers' performance in the federal civil service in Abuja.

### **Literature**

#### **Digital Technology Support and Workers Performance in the Federal Civil Services in Abuja:**

Digital technology plays a crucial role in supporting the performance of workers in the federal civil services in Abuja, as it does in many other government organizations worldwide. Alobidyeen, Al-Edainat, Al-Shabatat and Sakher (2022), highlighted that digital technology contributes to enhancing the efficiency and effectiveness of workers. Digital technology allows for the automation of repetitive and time-consuming tasks, freeing up employees to focus on more complex and strategic aspects of their work. This can lead to increased productivity and efficiency within the civil services. Digital tools enable seamless communication and collaboration among workers, regardless of their physical location (Regina & Sara 2022). This is especially important in large government organizations where employees may be spread across different offices. Collaboration platforms, video conferencing, and instant messaging systems help streamline communication and facilitate teamwork. According to Okeke 2023, the Federal civil services deal with vast amounts of

data. Digital technology supports the efficient management, storage, and analysis of data, enabling decision-makers to make informed choices based on accurate and up-to-date information. This can lead to better policy formulation and implementation. Nagy (2020), observed that the adoption of digital technology allows for the provision of online government services, making it easier for citizens to access information and interact with government agencies. This can reduce the workload on civil servants by automating certain processes, such as online forms and applications.

Digital technology facilitates continuous learning and professional development for civil servants. Online training programs, webinars, and e-learning platforms enable employees to acquire new skills and stay updated on the latest developments in their respective fields. Regina and Sara 2022 posited that Digital tools and systems assist in the effective management of resources, including finances, human resources, and equipment. This contributes to better budgeting, allocation of personnel, and overall resource optimization. It also enhance remote work facilitation especially relevant in the context of global events like the COVID-19 pandemic, digital technology supports remote work arrangements (Regina & Sara 2022). Cloud-based collaboration tools and secure remote access to government systems enable employees to work from different locations, ensuring continuity of operations. The integration of digital technology into the federal civil services in Abuja contributes to level of performance, improved efficiency, enhanced decision-making, and a more responsive and citizen-centric government. As observed by Wu and Shao, (2022) and Byrne (2022), the ongoing evolution of digital tools will likely continue to shape and optimize the functioning of government organizations in the future.

### **Digitalization Technology and Efficiency at the Federal Civil Services**

Digitalization has a direct impact on the performance of efficiency of service and organizations worldwide. As a result, it directly impacts an economy's total trade volume because it aids in enhancing the efficiency of any business. When it comes to trade, the world's services and organizations have enormous potential (Maiti & Kayal, 2017). Digitalization is positively related to firm efficiency and performance (Loebbecke & Picot, 2015). Digitalization has created new business models and ways to create value (Neumeier, Wolf, & Oesterle, 2017). It is a key driver of globalization and innovation as technological developments enable easier, faster, and more affordable interaction among people, companies, and governments without the restraints of time and presence (Vuori, Helander, & Okkonen, 2019). Digitalization has created new business models and also to create value (Neumeier et al., 2017). Digitalization of work may enable better use of knowledge, resulting in enhanced efficiency and productivity (Shujahat et al., 2019). The extent to which digitalization improves efficiency in federal civil services can vary depending on the implementation, technology adoption, and the specific processes involved. Generally, digitalization in the context of federal civil services refers to the integration of digital technologies to streamline operations, enhance communication, and improve overall efficiency. Digitalization allows for the automation of repetitive and routine tasks, reducing the time and effort required for manual processing. This can include tasks like data entry, document processing, and basic administrative functions.

Digital tools facilitate faster and more efficient communication within and between government agencies. This can lead to quicker decision-making processes, enhanced collaboration, and better coordination among different departments. It also enables better data management, storage, and analysis (Lanzolla, 2020). Federal civil services can leverage data analytics to gain insights, make informed decisions, and optimize resource allocation

based on data-driven assessments. Providing online services and platforms can improve citizen engagement and satisfaction. It allows citizens to access information, submit applications, and interact with government services more conveniently, reducing the need for physical visits (Alabi, & Okeke, 2023). Digitalization can help streamline workflows by creating digital processes for various tasks. This reduces bureaucratic bottlenecks and ensures that tasks move through the system more smoothly. Digital systems can improve the security of sensitive government information and ensure compliance with data protection regulations. This is crucial for maintaining the integrity and confidentiality of government operations. However, it's important to note that the successful implementation of digitalization requires careful planning, adequate training for employees, and addressing potential challenges such as cybersecurity concerns and resistance to change. The effectiveness of digitalization efforts in federal ministries may vary depending on the specific goals, policies, and technology infrastructure in place within a particular government agency.

### **Empirical Review**

Martin, Jon, Daniela, Eun, Michael and Iryna (2021), carried out a research titled "The impact of digitalisation on productivity: Firm-level evidence from the Netherlands", The research analyses the role of intangibles and digital adoption for firm-level productivity in the Netherlands drawing on a newly constructed panel data set of Dutch enterprises. Results show that intangibles as measured by levels of digital skill intensity have a positive and statistically significant impact on firm-level productivity growth in the service sector and for younger firms. It was discovered that Productivity benefits from software investment are strong for low productivity firms. Together, these findings highlight the potential of intangibles to support the productivity catch-up of laggard enterprises. The evidence also suggests that productivity benefits from ICT hardware investment and the uptake of high-speed broadband are positive and sizeable. One setback of the study was that it only focused on Dutch enterprises in Netherlands, and thus the findings may not be generalizable to other regions. Guzmán-Ortiz, Navarro-Acosta, Florez-Garcia, and Vicente-Ramos (2020) examined the impact of digital transformation on employee performance in insurance companies in Peru. The study relied on the questionnaire method in collecting data from a sample of its people (305) employees aged 25 years and over in four insurance companies. Operating in Arequipa, Cuzco, Iquitos, Lima, Tacna, and Trujillo regions in Peru, the study results showed that the customer service experience based on digital transformation positively impacted task performance and contextual performance in return. At the same time, it did not affect the adverse behavior of employees. Based on digital transformation, it significantly affects the performance of tasks and contextual performance, and there is no effect on the opposite behavior.

Buthina, Sejoood, Sager and Sakher (2022) in carried out a study on; "Digitalization and Its Impact On Employee's Performance: A Case Study On Greater Tafila Municipality". The study was aimed at measuring and analyzing digitalization's impact on employee performance in Greater Tafila Municipality. The study community consisted of all workers in Greater Tafila Municipality and its (5) administrative regions. To achieve the study's objectives and test its assumptions, a questionnaire was prepared and used as the main tool for data collection. The field study was conducted on a sample of (167) people, and the number of valid questionnaires for analysis was (160). Statistical methods, such as arithmetic averages, standard deviations, Cronbach alpha, and stability coefficient, were applied. The study found a positive correlation between digitalization and employee performance at the

significance level ( $\alpha = 0.05$ ). It also indicated a positive moral effect of digitalization on employee performance in Greater Tafila Municipality. Finally, it provides psychological support to reduce digital stress for employees in the municipality. Chen, Jaw, and Wu (2016) examined the impact of digital service gates on job performance in small and medium-sized companies in the Taiwanese textile industry. Connecting using the dimensions of the portal's utility, the portal interface, and the portal's service-oriented functions on the perceived results for users of small and medium-sized companies' products, the study relied on both descriptive and quantitative methods in testing the study's hypotheses. Data were collected using field interviews and surveys from senior executives in companies. The study results indicated that the dimension of the service-oriented portal function, which is cloud computing, significantly affects job performance. These service composition and results functions provide practical evidence as informative pointers for policymakers, information service providers, and SME executives to evaluate possible elements of web portal design in the traditional industry. The findings from this study may help portal service providers design better web portal functionality for SMEs.

James, Adedeji and Adebimpe (2022) carried out a research titled, "Digital transformation in Nigeria: The prospects and challenges of the gig economy" they observed that Rapid digital transformation has changed the way of life of humans and reshaped the global economy. Internet connectivity has drastically changed work as communication technologies and digital platforms have enabled the availability, execution and delivery of work from anywhere in the world. The study adopted the survey research design using online forms for data collection. The study population were undergraduate students of the Federal University of Technology, Akure, comprising only the internet savvy who were actively participating in the gig economy. Research data were analyzed using descriptive statistics. The study revealed a male to female respondents ratio of 78:22. However, the findings showed no significant relationship between respondents' gender and acceptability of the gig economy. The greatest challenge faced by gig workers in Nigeria is poor electricity power supply and internet access. 67% of the respondents are involved in freelancing and also inadequate digital skills. Half of the study population earns below 20,000 Naira monthly from gig work. Most of the respondents were engaged in the gig economy for 'flexibility' and 'more money' and were willing to take up gig work as full-time employment. It was recommended that the establishment of a regulatory body to guide operational standards for both organizations and gig workers, control pricing and improve payment platforms in Nigeria. The major setback of the research was that the sample size was relatively small.

Regina and Sara 2022 carried out a research for the European Union titled, "Digitalization and changes in the world of work". The aim of the study was to provide the members of the committee on Employment and Social Affairs (EMPL) with an updated review of findings from research on the impact of digitalization in the workplace. The literature review presented recent empirical (quantitative) impact studies and supplements these with qualitative research findings from relevant case studies. The research key findings were that although European countries show weaknesses in the use of digital technologies compared to the United States or China, there was a broad range of fast developing digital technologies already playing or likely to play a significant role in shaping the future of work. Indicators and new company surveys show that Covid-19 had "the great accelerator" not only for remote and platform work but also for the adoption of digital business models and processes in regular work settings. The study findings, however, agreed on the impact of workplace digitalization as uneven among workers with different skills levels. It was

recommended that there should be an increased investment in digitalization, which would translate to increase in employment of high-skilled workers and reduced employment of low-skilled workers. Re-and up skilling might, however, not always be the silver bullet for individual workers with physical or mental limitations, One setback of the study was its Europocentric focus, thus the findings may not be generalizable to other regions.

Muhammad and al Ghubairi (2020), in their study, aimed to analyze the reality of digital transformation in the Kingdom of Saudi Arabia towards adopting its use in bringing about development, modernization, and continuous improvement for the renaissance and progress of the Kingdom and then determining the extent of its progress in dealing with digital and absorbing its contents. Through the study and analysis, it was found that digital transformation in the Kingdom was progressing at an annual rate of 5% from 2011 to 2017. The study made several recommendations, including intensifying and deepening the uses of communication and information technologies and integrating them in the design of operations and activities at all organizational levels. Policymakers must design policies appropriate to the implementation of digital transformation. The drawback was that the research did not explore primary data but relied on past literatures which may not capture contemporary prospects and digital tools.

### **Scientific Administrative Theory**

This is a well-known management theory developed by Frederick Taylor in 1911. This theory is also important due to temporal factors and purpose of the investigation. In history his studies were the greatest event of the nineteenth century. The theory is mainly focused on maximum productivity. This theory delivers a proper solution for problems and challenges of industrialists (Tallman, 2004). Taylor believed that scientific management was the solution to business problems; he discussed scientific management theory in his book entitled as Principles of Scientific Management. He stated that certain efforts change the management system in some cases, so that interests of workers are converted into interests of management (Choi, 2008). Taylor worked on increasing efficiency using scientific methods, eliminating additional movements and transfers at workplace. He wanted to train workers for better jobs, divide the tasks between management and workers and implement scientific management style with respect to different practices and workers in action (Hilman & Abubakar, 2019). In this method, each group makes their best efforts, and he introduced some principles of scientific management theory to increase productivity. He also predicted that these principles are suitable for all kinds of human activities, from an individual simple task to complex organizational activities

In the digital economy, this concept applies to roles in IT, where specialists work on specific aspects of technology such as cyber security, data analysis, and software development. Division of labor ensures that each task is handled by someone with the necessary expertise. Fayol's principles highlight the importance of standardized processes and procedures for achieving organizational goals. In the digital economy, standardization is crucial for ensuring that digital products and services meet quality and security standards. Standardized coding practices, for example, help maintain the integrity and security of software applications. The theory emphasizes the importance of a clear hierarchy and chain of command within an organization. In the digital economy, this is essential for effective decision-making and project management. Agile methodologies, for instance, maintain a clear hierarchy with product owners, scrum masters, and development teams to ensure efficient development and delivery of digital products. Taylor's scientific management theory focused on optimizing efficiency and productivity. In the digital economy, this translates into

optimizing digital processes, automating repetitive tasks through technologies like robotic process automation (RPA), and using data analytics to continuously improve operations. Both Taylor stressed the importance of employee training and development. In the digital economy, this is crucial as technology evolves rapidly. Organizations need to invest in training programs to ensure their employees have the skills and knowledge needed to work with digital tools and technologies effectively. The theory discussed the balance between centralization (concentrating decision-making at the top) and decentralization (delegating decision-making to lower levels). In the digital economy, this choice depends on the organization's size, structure, and industry.

Decentralization can promote innovation and agility, while centralization can ensure consistency and compliance in digital operations. Taylor's theory emphasized the role of incentives and fair compensation in motivating employees. In the digital economy, this translates into offering competitive salaries and benefits, as well as recognizing and rewarding digital innovation and excellence. Effective communication is a cornerstone of scientific administrative theory. In the digital economy, this means utilizing digital communication tools and platforms for efficient collaboration, knowledge sharing, and decision-making across geographically dispersed teams. Both Taylor and Fayol stressed the importance of clearly defining roles and responsibilities. In the digital economy, accountability is essential to ensure that digital projects and initiatives meet their objectives. Clear job descriptions and performance metrics help in this regard. While not explicitly part of the original scientific administrative theory, the digital economy places a strong emphasis on adaptability and continuous improvement. Organizations must be agile and ready to adapt to rapidly changing digital landscapes to remain competitive. In summary, scientific administrative theory provides a solid foundation for managing organizations in the digital economy. While the theory was developed in a different era, its principles can be adapted and applied to contemporary challenges and opportunities presented by digital technologies and the evolving nature of work.

Scientific Administrative Theory, focuses on the systematic study of work processes and the application of scientific principles to improve productivity and efficiency within organizations. When applied to civil servant productivity, this theory can provide valuable insights into how government agencies can optimize the performance of their employees. Here's an explanation of how Scientific Administrative Theory can be used to enhance civil servant productivity, Taylor's approach emphasizes the importance of time and motion studies. Civil service organizations can conduct detailed analyses of the tasks performed by their employees. By recording the time it takes to complete specific tasks and identifying unnecessary movements or delays, organizations can identify bottlenecks and inefficiencies. This information can then be used to streamline processes and reduce wasted time, ultimately increasing productivity. One key principle of Scientific Administrative Theory is the standardization of work processes. Civil service agencies can develop standardized procedures and best practices for common tasks. This ensures that all employees follow consistent, efficient methods, reducing variations in performance and improving overall productivity. Taylor advocated for the specialization of labor, where each employee focuses on a specific set of tasks they are highly skilled at. In a civil service context, this could mean assigning employees to roles that align with their expertise and training. Specialization can lead to increased efficiency as employees become experts in their assigned areas.

Taylor argued that selecting the right people for the job and providing them with proper training are crucial for productivity. Civil service organizations can use rigorous

selection processes to match employees with roles that align with their skills and abilities. Additionally, ongoing training and development programs can enhance employees' skills and keep them up-to-date with the latest practices and technologies. Scientific Administrative Theory also advocates for the use of incentive systems to motivate employees to perform at their best. Civil service agencies can design performance-based incentive programs that reward employees for meeting or exceeding productivity targets. Incentives can include bonuses, promotions, or other forms of recognition. Taylor suggested that managers should only intervene when exceptions or deviations from standard procedures occur. In a civil service context, this means that supervisors should monitor employee performance and step in when there are issues or deviations from established standards. This approach allows managers to focus their attention where it is most needed, ensuring that resources are allocated efficiently. Scientific Administrative Theory encourages a culture of continuous improvement. Civil service organizations should regularly review and revise their processes, based on data and feedback, to identify opportunities for enhancement. This iterative approach ensures that productivity continues to improve over time. By applying the principles of Scientific Administrative Theory to civil service operations, government agencies can enhance the productivity of their employees, deliver services more efficiently, and better meet the needs of the public they serve. This approach requires a commitment to data-driven decision-making, process optimization, and ongoing training and development for civil servants.

**Data Analysis and Discussion of findings**

**Table 1: Distribution of respondents by digital technology literacy**

<b>digital technology literacy</b>	<b>Frequency</b>	<b>Percentage</b>
Digital literate	134	35.3%
Not digital literate	246	64.7%
Total	380	100%

Source: field survey 2023

From Table 1, it is observed that 35.3% of respondents are digital literate, while 64.7% are not digital literate. This implies that most respondents are not digital literate. Not having a more digitally literate workforce in the civil service can have several negative implications on the efficiency, effectiveness, and overall functioning of the federal civil service especially when using digital platform in performing its duties.

**Table 2 Distribution of Repondents by frequent internet usage**

<b>Frequent use of internet</b>	<b>Frequency</b>	<b>Percentage</b>
Very Often	12	3.1%
Often	48	12.6%
Occasionally	270	71.1%
Rarely	50	13.2%
Total	380	100%

Source: field survey 2023

Table 2 depicts 3.1% of total respondents uses the internet very often, 12.6% make use of the internet often, while 71.1% uses the internet it occasionally, whereas 13.2% rarely use the internet. This implies that most of the respondents use the internet occasionally. It indicates that technology, particularly the internet, is not widely integrated into the daily activities of civil servants. This could be due to the decreasing and inadequate digitization of administrative processes, communication, and information management within the federal civil services in Abuja.

**Table 3 Distribution of Respondents who make use of the Digital Technology in Performing their Work**

Use of digital technology in work performance	Frequency	Percentage
YES	21	5.5%
NO	359	94.5%
Total	380	100%

Source: field survey 2023

Table 3. Shows 5.5% respondents use digital technology in job performance, while 94.5% do not. This implies that most civil servants in Abuja lack the necessary digital tools to perform their work. With less respondents using digital technology, this can lead to less informed and interconnected workforce. It's important to note that the implications can vary depending on the context, ministry, and specific individual associated with the usage digital technology. As observed by Ismail, Khater and Zaki, (2017), Accessible technology allows for streamlined communication, efficient task management, and quick access to information. Also Regina and Sara (2022), observed that there is a broad range of fast developing digital technologies already playing or likely to play a significant role in shaping the future of work. With majority of civil savant unable to perform their routine work using digital technology, digital divide can be exacerbated due to existing social and economic inequalities, limiting the opportunities available to certain groups and regions (James, Adebimpe and Adedeji 2022). The unequal access of sophisticated technological equipment across most federal ministries has shown the level of digital divide in the federal civil service in Nigeria.

**Table 4 Response on the Rate to which digital technology supports level of workers performance**

Level of workers performance	Frequency	Percentage
Higher performance	343	92.3%
Low performance	37	9.7%
Total	380	100%

Source: field survey 2023

Table 4 Shows the ratew to which digital technology supports workers performance, 92.3% said that digital technology supports higher workers performance. While 9.7% asserted that it only translates to lower performance. This implies that most respondents are of the view that digital technology supports higher workers performance.

In agreement with the above findings, the general consensus among most participants during the interview was that;

Digital technology has greatly improved the level of worker performance, the higher the adoption of digital technology the higher the level of performance or vice versa. (IDI, 2023)

“The adoption of digital technologies in the civil service has greatly led to increased automation of routine tasks, reducing the time and effort required for administrative processes. This in turn can enhanced overall efficiency and allows civil servants to focus on more complex and strategic aspects of their work”. (IDI, 2023)

However a participants during the interview states that;

Digital tools often enhance efficiency and productivity. Workers with limited access to these tools may find themselves performing tasks more slowly or less efficiently, potentially affecting overall productivity in the civil service. Workers without adequate access may face challenges in accessing such resources, limiting their ability to enhance their skills and advance in their careers. (IDI, 2023)

**Table 6. Responses on the Level at which Digitalization Improve Efficiency of the Federal Civil Service**

Levels	Frequency	Percentage
Low	5	1.3%
Moderate	54	14.2%
High	321	84.5%
Total	380	100%

Source: field survey 2023

Table 6: Evaluates the level of efficiency in the federal civil service due to the impact of digitalization. 1.3% rated the Efficiency level low, while 14.2% of the sampled respondents evaluated it to be moderate. while 84.5% of respondents rate it High. This implies that digitalization \ highly improve the Efficiency of the Federal Civil Service.

**Conclusion**

The adoption of digital technologies in Nigerian Federal Civil Service will help workers do their jobs and make things run more smoothly. The truth is, it currently has not made a big impact because not many people are using digital tools due to problems of digital divide . The numbers from the study shows that there is a difference between people who have access to digital tools and those who do not. These numbers show that there are still a lot of problems like people not having access to tools not having the skills they need and being vulnerable to cyber threats. Even though digital tools are not being used much most of the people in the study, digital transformation can indeed do a lot to help the Nigerian Federal Civil Service like making workers more productive making it easier to get things done managing data better helping people work together and providing services. But this is not happening because the infrastructure is not good enough not many people know how to use tools and these tools are not being used enough. the research finds that although digital transformation offers considerable promise to enhance productivity, policy implementation, data handling, cooperation, and service provision in the Nigerian Federal Civil Service,.

## References

- Alabi, T. & Okeke, C.H. (2023). The Impact of Public Service Reforms on the Performance of the Federal Civil Servants in Abuja. *International Journal of Management and Social Science*, Vol. 16 No.2, December, 2023.
- Alemu, M., & Omer, A. (2014). Cloud computing conceptual security framework for banking industry. *Journal of Emerging Trends in Computing and Information Sciences*, 5(12), 921-930.
- Alobidyeen, B., Al-Edainat, S., Al-Shabatat, S., & Sakher Al-Shabatat (2022). Digitalization and Its Impact On Employee's Performance: A Case Study On Greater Tafila Municipality. *International Journal of Business and Administrative Studies*, volume 8 issue 1, pp. 33-47. doi: <https://dx.doi.org/10.20469/ijbas.8.10004-1>.
- Bhuiyan, M. (2011). Public Sector eService Development in Bangladesh: Status, Prospects and Challenges. *Journal of e-Government*, 15-29.
- Buthina Alobidyeen, Sejoon Al-Edainat, Sager Al-Shabatat, Sakher Al-Shabatat (2022) Digitalization And Its Impact On Employee's Performance: A Case Study On Greater Tafila Municipality. *International Journal of Business and Administrative Studies* volume 8 issue 1 pp. 33-47 doi: <https://dx.doi.org/10.20469/ijbas.8.10004-1>
- Byrne, David M. (2022). The Digital Economy and Productivity. *Finance and Economics Discussion Series 2022-038*. Washington: Board of Governors of the Federal Reserve System.
- Chen, Y., Jaw, Y., & Wu, B. (2016). Effect of digital transformation on organisational performance of SMEs: Evidence from the Taiwanese textile industry's web portal. *Internet Res.*, 26, 186-212.
- Guzmán-Ortiz, Navarro-Acosta, Florez-Garcia, and Vicente-Ramos (2020). [Cited as examining the impact of digital transformation on employee performance in Peruvian insurance companies.]
- Ismail Helmy Abdelaal, Mariam, Khater, Mohamed & Zaki, Mohamed. (2018). Digital Business Transformation and Strategy: What Do We Know So Far?. 10.13140/RG.2.2.36492.62086.
- Kunle James Olorundare,, Adebimpe Olubunmi Olorundare & Adedeji Olowe & (2022) Digital transformation in Nigeria: The prospects and challenges of the gig economy- 2022 *IEEE NIGERCON*
- Kurama, M. (2021). Effect of E-governance on the Performance of Civil Servants in Jigawa State, Nigeria. *International Journal of Public Policy and Administrative Studies*, 11(4):40-49. ISSN: 2384-5578. August, 2021.
- Lanzolla, G., Lorenz, A., Miron-Spektor, E., Schilling, M., Solinas, G., & Tucci, C. L. (2020). Digital transformation: What is new if anything? Emerging patterns and management research (Vol. 6) (No. 3). doi:<https://doi.org/10.5465/amd.2018.0103>
- Martin Borowiecki, Jon Pareliussen, Daniela Glocker, Eun Jung Kim, Michael Polder & Iryna Rud (2021). The impact of digitalisation on productivity: Firm-level evidence from the Netherlands. *OECD Economics Department Working Papers 1680*, OECD Publishing.
- Mohammed, A., & Al-Ghubairi, MA (2020). The Reality of Digital Transformation in the Kingdom of Saudi Arabia - An Analytical Study. *Journal of Administrative and Financial Sciences*, (4)1
- Nagy Hanna K.(2020) Assessing the digital economy: aims, frameworks, pilots, results, and lessons. *J Innov Entrep* 9, 16 (2020). <https://doi.org/10.1186/s13731-020-00129->

- Okeke, H. Chigozie (2023). Impact of public service reforms on employees performance: A study of the federal civil service Abuja (Published PhD thesis, Department of Sociology, University of Abuja).
- Regina Konle-Seidl & Sara Danesi (2022). Digitalisation and changes in the world of work. European Parliament Study (PE 733.986 – September 2022).
- Samuel Okoro (2023) cyber security in university of Abuja. Published dissertation .Department of Socioplogy University of Abuja.
- Simon, G. I. (2023). ‘They are now pocket videos, not home videos’: Streaming and reconfiguration of video consumption in Nigeria. *International Journal of Cultural Studies*, 27(1), 82-98.
- Tallman, S. (2004). Strategic management and the role of the MNC in a post-industrial world market.
- Vaile, D., Kalinich, K. P., Fair, P., & Lawrence, A. (2013). Data Sovereignty and the Cloud: A Board and Executive Officer's Guide. *UNSW Law Research Paper*, (2013-84).
- Wu T, Shao W (2022) How does digital economy drive industrial structure upgrading: An empirical study based on 249 prefecture-level cities in China. *PLoS ONE* 17(11):e0277787 doi: 10.1371/ journal.pone.0277787