

Adoption of Digital Technologies' Dimensions as Predictors of Secretaries' Job Performance in Post-COVID-19 Era in State Universities in Southwest Nigeria

Dr. Odusanya Abosede Abolanle

Department of Business education, Tai Solarin University of Education, Ijagun, Ogun State, Nigeria

ABSTRACT: The adoption of digital technologies in higher education has significantly transformed administrative processes, particularly in the post-COVID-19 era. With growing demands for efficiency, universities are increasingly relying on digital innovations to streamline both academic and non-academic operations. Secretarial staff, who form the core of institutional administrative systems, are central to this transformation, yet their engagement with digital technologies remains underexplored. To examine this relationship between the adoption of digital technologies and secretaries' job performance, a correlational research design was adopted, and data were collected from 315 secretaries in state universities across Southwest Nigeria using stratified random sampling. Digital Technology Dimensions Questionnaire (DTDQ) was used to assess four dimensions of digital technology adoption: awareness, availability, receptivity, and utilization. Statistical analysis involved descriptive statistics of survey type and multiple regression analysis for testing hypotheses. Results revealed low levels of awareness ($M = 1.63$), availability ($M = 1.68$), receptivity ($M = 1.74$), and utilization ($M = 1.66$), despite a high job performance rating ($M = 3.59$). Among the four predictors, only receptivity had a significant positive influence on job performance ($\beta = .876$; $t = 26.586$; $p < .05$). Compositely, awareness, availability, receptivity and utilisation significantly contributed 73.8% (Adj. $R^2 = .738$) to Secretaries' Job Performance (SJP) ($F(4,300) = 214.608$; $p < .05$). Recommendations point to the need for investment in continuous digital training, establishment of inclusive ICT policies, and provision of user-friendly tools that align with secretarial functions. Universities should also promote a culture of digital receptivity and mentorship to derive sustainable organizational development and improve administrative effectiveness.

KEYWORDS: Digital Technologies, Job Performance, Secretarial Staff, Higher Education, Organizational Development, Post COVID-19, Nigeria

INTRODUCTION

The evolution of digital technology has become a defining force in shaping the structure and operational efficiency of modern institutions. Across all sectors, including education, digital transformation is redefining how work is performed, decisions are made, and services are delivered. In the context of higher education, digital technologies now play an indispensable role in not only instructional delivery but also in administrative efficiency and organizational development. The COVID-19 pandemic further accelerated the adoption of digital tools and platforms, necessitating a shift from traditional practices to more technology-driven approaches. Institutions that were once slow to embrace change had to pivot rapidly to maintain continuity, revealing significant gaps in digital readiness, particularly among non-teaching staff such as secretaries.

Secretaries serve as the administrative backbone of academic institutions, handling critical duties such as document processing, scheduling, communication management, and records maintenance. As universities increasingly digitize their operations, the expectations and responsibilities of secretarial staff have evolved. They are now required to navigate and utilize digital tools ranging from word processors and database management systems to virtual collaboration platforms and cloud-based document storage solutions. This study is grounded in the premise that the performance of secretaries in state universities, especially in a post-COVID-19 era, is intricately linked to the degree of digital technology adoption in their workspaces.

The importance of understanding this dynamic cannot be overstated. Effective organizational development in higher education hinges not just on the capabilities of academic staff, but also on the efficiency and adaptability of administrative personnel. Theories of organizational behavior posit that technology adoption influences employee performance through its impact on communication, workflow efficiency, information access, and decision-making accuracy (Brynjolfsson & McAfee, 2017). Thus, for state universities

Adoption of Digital Technologies' Dimensions as Predictors of Secretaries' Job Performance in Post-COVID-19 Era in State Universities in Southwest Nigeria

striving for excellence and global competitiveness, investing in the digital capacities of all staff, including secretaries, becomes a strategic imperative.

Several studies have examined digital technology in higher education, but most focus predominantly on teaching and learning outcomes or the digital preparedness of faculty members (Nguyen et al., 2021; Wang et al., 2020). Fewer have explored how non-academic staff, particularly secretaries, adapt to and benefit from digital innovations. Moreover, in the Nigerian context, where infrastructure deficits, resistance to change, and limited digital literacy persist, there is a critical need to assess how these factors interact to influence secretaries' job performance.

This study examines the relationship between the adoption of digital technologies and secretaries' job performance in state universities in Southwest Nigeria. The focus is on four dimensions of technology adoption: awareness, availability, receptivity, and utilization. Awareness refers to the degree to which secretaries are informed about the existing and emerging digital tools relevant to their roles. Availability denotes the extent to which these technologies are physically accessible in their work environment. Receptivity captures the willingness and openness of secretaries to embrace digital tools, while utilization measures the frequency and effectiveness with which these tools are employed in daily tasks.

The post-COVID-19 era presents a unique context for this investigation. During the pandemic, institutions were compelled to adopt remote work arrangements, virtual meetings, and electronic record management, bringing digital competencies to the forefront of operational viability. Secretaries, who had been accustomed to face-to-face communication and physical documentation, had to rapidly adjust to digital platforms, often without adequate training or infrastructural support (Hassan & Omar, 2021). This shift has created a new paradigm where digital technology is not just an option but a necessity for administrative efficiency.

The significance of this research lies in its potential to inform policy and practice in the area of institutional development. By evaluating how well secretaries are adapting to digital transformation, university administrators can identify areas that require targeted interventions—whether in terms of infrastructure, training, or organizational culture. Furthermore, the study provides empirical evidence on the predictors of job performance among secretarial staff, offering a basis for strategic human resource development in the digital age.

The study also considers the role of gender in digital technology adoption and job performance. Existing literature suggests that women may be more adaptable to technology in certain organizational settings due to their communication skills and collaborative tendencies (Ajayi et al., 2021). Understanding these dynamics can help institutions create inclusive strategies that leverage the strengths of all employees, fostering equity and effectiveness in digital transformation efforts.

Overall, this research contributes to the growing body of knowledge on digital transformation in higher education by centering on a group of employees that are often overlooked in policy and academic discourse. It responds to the call for more inclusive and holistic approaches to organizational development, particularly in African contexts where digital divides and systemic inefficiencies still challenge institutional progress.

In summary, the study seeks to answer critical questions about how digital awareness, availability, receptivity, and utilization affect the job performance of secretaries. It interrogates the conditions that enable or hinder digital adoption, examines gender-based disparities, and provides actionable recommendations for enhancing the digital capacity of administrative personnel in Nigerian universities. Through this investigation, the research aims to support evidence-based strategies that will not only improve secretaries' job performance but also contribute to broader institutional effectiveness in a rapidly evolving digital landscape.

STATEMENT OF THE PROBLEM

Coronavirus (COVID-19) pandemic had an impressive effect on office operations worldwide so much that it revolutionised the day-to-day practices in organisations and ushered in fundamental and desirable changes. It brought about the introduction of digital technologies that enhanced the job performance of secretaries during the lockdown. Many secretaries and other staffers were caught unprepared as they were not digitally ready to confront the post COVID-19 digital operations embraced by organisations including the universities world over. This constituted a challenge in which this study investigated the potentials of Digital Technology Dimensions as Predictors of Secretaries' Job Performance in post COVID-19 era in State Universities, Southwest, Nigeria.

OBJECTIVE OF THE STUDY

The main objective of the study was to examine the influence of Digital Technology dimensions on secretaries' job performance in post COVID-19 era in State universities in Southwest, Nigeria. Specifically, the study sought to:

1. Examine the overall level of awareness of Secretaries in the availability of Digital Technologies in the Post COVID-19 era in State universities in Southwest, Nigeria.
2. Investigate the overall level of availability of Digital Technologies in the Post COVID-19 era in State universities in Southwest, Nigeria.

Adoption of Digital Technologies' Dimensions as Predictors of Secretaries' Job Performance in Post-COVID-19 Era in State Universities in Southwest Nigeria

3. Assess the overall level of Secretaries' receptivity of Digital Technologies in the Post COVID-19 era in State universities in Southwest, Nigeria.
4. Investigate the overall level of the utilisation of Digital Technologies by secretaries in the Post COVID-19 era in State universities in Southwest, Nigeria
5. Assess the secretaries' overall rating of their job performance in the Post COVID-19 era in State universities in Southwest, Nigeria
6. Examine the relative contribution of Digital Technology dimensions (awareness, availability, receptivity and utilisation) to the job performance of secretaries in post-COVID-19 era in State universities in Southwest, Nigeria.
7. Assess the composite contribution of Digital Technology dimensions (awareness, availability, receptivity and utilisation) to the job performance of secretaries in post-COVID-19 era in State universities in Southwest, Nigeria

RESEARCH QUESTIONS

The following research questions were answered in this study.

- RQ1. What is the overall level of awareness of Secretaries in the availability of Digital Technologies in the Post COVID-19 era in State universities in Southwest, Nigeria?
- RQ2. What is the overall level of availability of Digital Technologies in the Post COVID-19 era in State universities in Southwest, Nigeria?
- RQ3. What is the overall level of Secretaries' receptivity of Digital Technologies in the Post COVID-19 era in State universities in Southwest, Nigeria?
- RQ4. What is the overall level of the utilisation of Digital Technologies by Secretaries in the Post COVID-19 era in State universities in Southwest, Nigeria?
- RQ5. What is the secretaries' overall rating of their job performance in the Post COVID-19 era in State universities in Southwest, Nigeria?

RESEARCH HYPOTHESES

The following two (2) null hypotheses were tested at 0.05 level of significance using Multiple Regression Analysis.

- H₀₁:** There is no significant relative contribution of Digital Technology dimensions (awareness, availability, receptivity and utilisation) to the job performance of secretaries in post-COVID-19 era in State universities in Southwest, Nigeria.
- H₀₂:** There is no significant composite contribution of Digital Technology dimensions (awareness, availability, receptivity and utilisation) to the job performance of secretaries in post-COVID-19 era in State universities in Southwest, Nigeria.

SCOPE OF THE STUDY

This study focused on both conceptual and geographical perspectives. Conceptually, it explored the Digital Technologies' awareness, availability, receptivity, and utilization on secretaries' job performance. Geographically, it covered State universities in Southwest Nigeria, which includes Lagos, Ogun, Oyo, Osun, Ondo, and Ekiti, states.

LITERATURE REVIEW

EMPIRICAL REVIEW

Studies on Digital Technologies' Dimensions and Secretaries' Job Performance

Oyerinde et al. (2023) investigated how secretaries in government parastatals in Ekiti State, Nigeria, performed their job in relation to the availability of digital devices. The study's objectives were to determine which digital gadgets secretaries may use for work and to evaluate how well they were doing their jobs at government parastatals. With 196 secretaries working in government offices in Ekiti State as its target group, the study used a descriptive research approach. The test-retest reliability method was used which showed a high reliability coefficient of (0.71). Analysis of Variance (ANOVA), basic regression, and mean computations were all part of the data analysis process. The results showed that digital gadgets were widely used in government offices, although their impact on secretaries' productivity was not considered substantial.

Maliki (2021) carried out a research to evaluate how employees' job productivity at two cement factories in Ogun State, Nigeria, was affected by the availability and usage of digital technology. A questionnaire was given to 550 administrative staff as part of the research; 350 of them were from Lafarge Cement and 250 were from Dangote Cement Factory. The results showed that the usage of digital technology had a major impact on job productivity, especially when it came to promoting cooperation, raising the standard of work production, and boosting information exchange. The survey also noted the difficulties that workers encountered, such as insufficient ICT training and a dearth of organizational support when it came to using digital tools for work-related tasks. The

Adoption of Digital Technologies' Dimensions as Predictors of Secretaries' Job Performance in Post-COVID-19 Era in State Universities in Southwest Nigeria

creation and execution of internal regulations pertaining to the use of digital technology, as well as ongoing ICT training for staff members, were among the recommendations.

Olore and Adepoju (2019) looked at the availability and utilisation of contemporary office technology for the effective operation of confidential secretaries in Oyo State tertiary institutions. 110 secretaries from three Oyo State tertiary institutions participated in the study, which employed a descriptive survey research design. A self-created 4-rating scale structured questionnaire with a reliability coefficient of 0.73 according to Cronbach alpha was used to gather the data. It was face validated by professionals in business education. According to the study, having access to and using contemporary office technology solutions improved secretaries' productivity.

Kayode et al. (2019) looked into how the availability of ICT affected staff job performance efficiency in two universities in Oyo State, Nigeria. Of the 904 secretariat employees from the two universities, 228 were specially selected to take part in the study using a descriptive survey research methodology. A standardised questionnaire with a reliability coefficient of 0.76, as assessed by Cronbach Alpha, was used to collect the data. The findings showed a significant correlation between the effective use of ICT, as well as the availability, in-service training, and limitations of ICT facilities, and the job performance of the personnel at the two institutions. The infrastructure, including power supplies and Wi-Fi, required for internet access should be ensured, and the employees should get continual ICT training.

Asogwa and Agusiobo's (2022) goal was to evaluate office secretaries' performance in terms of modern technologies at private institutions in Enugu State. A uniform questionnaire with 20 subjects was distributed to 56 secretaries from four private institutions in Enugu State. The study tools were personally validated by three experts. The internal consistency of the questionnaire was evaluated using the Cronbach Alpha reliability test, yielding a coefficient of 0.87. Weighted mean and standard deviation descriptive analysis was used to achieve the study's objectives. The findings indicated that while current technologies enhance secretaries' job execution, they also pose challenges for those utilizing these tools. Consequently, it was recommended that private institutions should invest in contemporary office technology and equipment to enhance secretaries' productivity.

Deedenwii (2022) investigated the impact of digital technologies on office secretarial performance. Through content analysis, it was observed that digital technologies, as recent workplace innovations, contribute to the expedited and efficient completion of office activities by secretaries. Modern technologies have become indispensable tools in various professions over the past two decades, significantly influencing every facet of human endeavor. They have enhanced the effectiveness and international competitiveness of secretaries in office work and business transactions. Government ministries now have access to digital technology resources such as software for creating printer-based products, email capabilities, telecommunication devices, and internet access. This has substantially improved secretaries' information processing capabilities and contributed to organizational growth. According to the study's findings, modern businesses have optimised their information and communication processes thanks to technical breakthroughs and the availability of digital technology resources like email, videoconferencing, and the internet. Adenekan and Jimoh (2021) assessed the impact of technology innovation and digital competency on secretaries' job performance at public tertiary institutions in Ogun State, Nigeria. The research was conducted with secretaries from each of the state's three senatorial districts. The data was collected using a questionnaire, and the findings were analysed using both descriptive and inferential statistics. The results demonstrated the high level of technical innovation and digital expertise had by secretaries in the institutions under investigation.

Additionally, the survey showed that digital proficiency and technology improvements have a major impact on secretaries' ability to manage technology-driven office and secretarial tasks effectively. The study stressed how crucial it is for effective office administration that secretaries have access to modern tools, embrace cutting-edge technology, and continually improve their skills to adjust to changing office procedures, techniques, and tools as well as secretarial tasks.

Olaniyi and Mukoro (2020) in their investigation of information and communication technology (ICT) in secretarial administration within governmental and private workplaces in Ekiti State. The study used a descriptive survey approach with a 10% sample of 200 secretaries, encompassing 2056 secretaries from both parastatals. A validated questionnaire was used to gather the data, and the test-retest procedure was used to evaluate reliability. A reliability value of 0.70 was found. The results highlighted how, in the modern computer age, secretaries' ability to accomplish their jobs depends on how well they use ICT resources. The study found that secretaries in private vs public workplaces performed significantly differently, especially when it comes to their skilful use of ICT resources.

Abosede and Akintola (2015) examined how well secretaries performed at Ogun State's public and private institutions in terms of using ICT (information and communication technology) resources. 300 secretaries from each sectors as well as 300 senior officials participated in the study. The pre-selected sample was given an organized questionnaire. The study's results emphasized how accessing ICT resources affects secretaries' effectiveness at work and showed a significant relationship between the two in both public and private university contexts. But there was no appreciable variation in how male and female secretaries used ICT resources.

Adoption of Digital Technologies' Dimensions as Predictors of Secretaries' Job Performance in Post-COVID-19 Era in State Universities in Southwest Nigeria

METHODOLOGY

This study employed descriptive research design of survey type, to examine the extent to which the adoption of digital technologies dimensions measured through awareness, availability, receptivity, and utilization, predicts secretaries' job performance in the post-COVID-19 era within state universities in Southwest Nigeria. The choice of design was appropriate given the objective of analyzing the contributions of each of the independent variables on the dependent among multiple variables without manipulating the study environment. The population for the study comprised 830 secretarial employees across state-owned universities in the Southwest geopolitical zone of Nigeria, which includes Lagos, Ogun, Oyo, Osun, Ondo, and Ekiti states. Stratified random sampling was used to ensure proportional representation across universities. From the population, a sample of 315 secretaries was drawn, allowing for generalizability and statistical rigor.

The primary data collection instrument was the "Digital Technology Dimensions Questionnaire (DTDQ)," which was structured in sections to capture digital awareness, availability, receptivity, utilization, and job performance. The instrument's reliability coefficient, as tested through a pilot study yielded a reliability coefficient of 0.79 using Cronbach's alpha method. This indicates internal consistency and suitability for data collection. Data collection spanned over six weeks, with research assistants deployed to administer and retrieve the questionnaires from participants. Ethical considerations such as informed consent, confidentiality, and voluntary participation were observed throughout the process. For data analysis, descriptive statistics (mean and standard deviation) were used to assess the level of digital technology adoption. While the inferential statistics of multiple regression analysis was used to test the research hypotheses at a 0.05 level of significance.

RESULTS AND DISCUSSION

Descriptive Statistics and Visual Representation

The analysis revealed that secretaries in state universities in Southwest Nigeria had low levels of digital technology adoption across four dimensions of awareness, availability, receptivity, and utilization. Despite this, self-reported job performance was notably high.

Table 1: Descriptive Statistics of Digital Technology Dimensions and Job Performance

Variable	Mean (GRM)	Benchmark Mean (BMM)	Interpretation
Awareness	1.63	2.50	Low
Availability	1.68	2.50	Low
Receptivity	1.74	2.50	Low
Utilization	1.66	2.50	Low
Job Performance	3.59	2.50	High

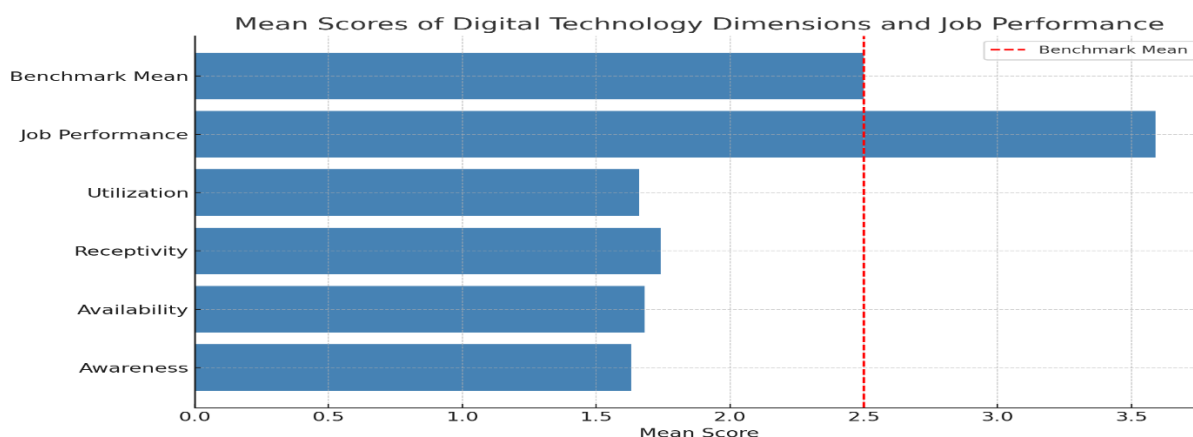


Figure 1: Mean Scores Compared to Benchmark

Decision rule: If the grand mean is less than 2.5 (Benchmark), it means that the Secretaries have a low level of Digital Technologies' Dimensions (awareness, availability, receptivity and utilization) in the Post COVID-19 era but if greater than 2.5 they are of high level of Digital Technologies' Dimensions.

Decision: Since the grand mean level of awareness was 1.63 is less than 2.5 benchmark, it shows that the Secretaries have a low level of awareness of Digital Technologies in the Post COVID-19 era. Since the grand mean of availability was 1.68 is less than 2.5 benchmark it shows that the Digital Technologies in the Post COVID-19 Era were of low availability. Since the grand mean of receptivity was 1.74 is less than 2.5 benchmark, it shows that the Secretaries' receptivity of Digital Technologies in the Post COVID-19 Era was of low level. Since the grand mean of utilization was 1.66 is less than 2.5 benchmark, it shows that the Secretaries'

Adoption of Digital Technologies' Dimensions as Predictors of Secretaries' Job Performance in Post-COVID-19 Era in State Universities in Southwest Nigeria

utilisation of Digital Technologies in the Post COVID-19 Era was of low level. Since the grand mean of job performance was 3.59 is greater than 2.5 benchmark, it shows that the secretaries' overall rating of their job performance was high in the Post COVID-19 Era.

Multiple Regression Analysis

Regression analysis was used to determine the extent to which digital technology dimensions predict secretaries' job performance. The model explained 73.8% of the variance.

Table 2: Multiple Regression Summary

Model R	R ²	Adjusted R ²	F	df	Sig. (p)
0.860	.740	.738	214.608	(4, 300)	< .05

The correlation coefficient resulting from the Multiple Regression shows that there is a strong multiple correlation ($R = .861$) between the predictors (awareness, availability, receptivity and utilisation) and the response variable (Secretaries' Job Performance). The coefficient of determination (Adj. $R^2 = .738$) indicates how much of the total variation in the dependent variable (Secretaries' Job Performance) could be explained by the independent variables (Awareness, Availability, Receptivity and Utilisation). The adjusted R^2 is used because it considers the number of predictors in the model and adjusts R-squared accordingly. This adjustment helps to avoid over fitting, providing a more accurate measure of the model's goodness of fit. In this instance, approximately 73.8% could be explained, which is large enough showing a high strength in the prediction of Secretaries' Job Performance. Thus 73.8% of the variance in Secretaries' Job Performance was explained by Awareness, Availability, Receptivity and Utilisation. The remaining unexplained 26.2% could be attributable to the presence of other variables not accounted for by this study.

Table 3: The beta (β) coefficients^a in the Multiple Regression Analysis showing the relative contributions of Awareness, Availability, Receptivity and Utilisation to Secretaries' Job Performance.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.778	3.768		1.533	.126
	DT Awareness					
	DT Availability	.039	.070	.017	.552	.581
		.005	.045	.003	.107	.914
	DT Receptivity	.866	.033	.876	26.586	.000
	DT Utilisation	-.085	.073	-.040	-1.169	.243

a. Dependent Variable: Secretaries' Job Performance

From Table 3; the Beta (β) weightings of the four predictor variables (Awareness, Availability, Receptivity and Utilisation) are given in the standardized coefficient column. The constant is 5.778. Relative to each other, of Digital Technology Awareness had a positive influence on Secretaries' Job Performance which was not statistically significant ($\beta = .017$, $t = .552$; $p > .05 = .581$), Digital Technology Availability had a positive contribution to Secretaries' Job Performance and this was not statistically significant ($\beta = .003$, $t = .107$; $p > .05 = .914$), Digital Technology Receptivity had a positive contribution to Secretaries' Job Performance and this was statistically significant ($\beta = .876$, $t = 26.586$; $p < .05 = .001$) Digital Technology Utilisation had a non-significant negative contribution to Secretaries' Job Performance ($\beta = -.040$, $t = -1.169$; $p > .05 = .243$). From the result, it can be observed and concluded that Awareness had a relative contribution of 1.7%, availability contributed 0.30%, Receptivity had a relative contribution of 87.6%, and Utilisation had a relative contribution of -4.0%, Therefore Receptivity predicted Secretaries' Job Performance more than the other Digital Technology dimensions.

Table 4: ANOVA^a summary of significance level in the Simple Linear Regression Analysis

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9304.772	4	2326.193	214.608	.000 ^b
	Residual	3251.786	300	10.839		
	Total	12556.557	304			

a. Dependent Variable: Secretaries' Job Performance

b. Predictors: (Constant), DT Utilisation, DT Availability, DT Awareness, DT Receptivity

Adoption of Digital Technologies' Dimensions as Predictors of Secretaries' Job Performance in Post-COVID-19 Era in State Universities in Southwest Nigeria

The information in the ANOVA Summary show if the explanatory variables (Awareness, Availability, Receptivity and Utilisation) are significant predictors of Secretaries' Job Performance. As the significance value in the Table is greater than $p = 0.05$, then the Regression Model significantly predicts Secretaries' Job Performance ($F_{(4,300)} = 214.608$; $p < 0.05 = .001$). This indicates that the combined contribution of Awareness, Availability, Receptivity and Utilisation is statistically significant and could predict Secretaries' Job Performance thereby making the model very significant. Based on this result, the null hypothesis two (H_{02}) is rejected.

DISCUSSION OF FINDINGS

The findings in this study explore the awareness, availability, receptivity, and utilization of digital technologies, and their effects on secretaries' job performance in state-owned universities post-COVID-19. The results provide insight into how these dimensions individually and collectively contribute to job performance, while also relating to the theoretical framework of the Dreyfus Model of Skill Acquisition.

Secretaries' Awareness of Digital Technology

The findings indicate that the level of awareness of digital technology among secretaries is rather limited, with a grand mean score of 1.63, which is notably below the benchmark of 2.5. This suggests that secretaries lack sufficient knowledge about essential digital tools and technologies necessary for effective performance in the post-COVID-19 era. The low awareness could be attributed to a scarcity of structured training programmes tailored to familiarise secretaries with emerging digital tools, leaving many inadequately equipped to integrate new technologies into their daily work.

According to the Dreyfus Model of Skill Acquisition, most secretaries appear to be at the novice or advanced beginner stages, where exposure to digital tools is minimal, and reliance on basic instructions is high. At these initial stages, the application of digital technology in a job-specific context is challenging, as secretaries lack the discretionary judgement required for proficient use. Enhancing secretaries' awareness through targeted training could promote their progression to higher skill levels, enabling them to make informed decisions and adapt digital tools to improve job performance.

These findings resonate with prior research, which underscores the significance of digital literacy for technology adoption and use in the workplace. For instance, Kayode (2016) found that technological adoption in educational institutions positively influences communication efficiency, information retrieval, and the effective use of digital tools for office tasks. Such studies affirm the correlation between higher digital technology awareness and improved job performance, suggesting that increased awareness may lead to better technology integration and utilisation.

The transition from traditional secretarial tasks to digital alternatives, such as replacing typewriters with computers and manual filing with electronic data management, underscores the evolving nature of the profession. This transformation aligns with observations by Subuola (2018), who noted that a lack of digital literacy among many secretaries hinders their ability to fully utilise new technologies. Secretaries' preference for manual systems, due to unfamiliarity with digital alternatives, highlights a gap in technology adoption and reinforces the need for continuous professional development in digital tools.

Moreover, as Atakpa (2010) observed, rapid technological advancements in secretarial roles demand the acquisition of new skills to stay competitive. Despite the benefits of digital technology, such as time savings and increased precision in tasks, the skills gap persists, affecting secretaries' productivity across diverse workplace settings. The shift towards digital technologies has redefined secretarial duties, making digital skills like networking, desktop publishing, and office software proficiency essential for effectiveness.

Availability of Digital Technologies for Secretaries' Job Performance

The study revealed that digital technology availability is inadequate, with a grand mean score of 1.68, below the benchmark of 2.5. This suggests that state universities have not sufficiently invested in the necessary digital resources and infrastructure to support secretarial duties. The lack of access to digital tools presents a significant barrier to secretaries' skill development and restricts their progression beyond the early stages of the Dreyfus Model of Skill Acquisition, where continuous exposure to digital tools is necessary for mastery.

Without adequate resources, secretaries cannot engage in experiential learning, which is crucial for refining their skills and adapting to the evolving demands of the digital workplace. This restriction not only limits their ability to utilise technology efficiently but also hampers their overall job performance. The findings are consistent with previous studies that highlight the impact of digital technology availability on employees' efficiency and adaptability. For example, Oyerinde et al. (2023) noted that despite the availability of digital gadgets in government offices in Ekiti State, their impact was limited due to insufficient training and organisational support.

Adoption of Digital Technologies' Dimensions as Predictors of Secretaries' Job Performance in Post-COVID-19 Era in State Universities in Southwest Nigeria

Similarly, Maliki (2021) found that although digital tools enhanced productivity among administrative staff in a cement factory in Ogun State, challenges such as inadequate training and limited organisational support persisted. These insights emphasise that simply making digital tools available is not enough; organisations must also provide appropriate training and support to ensure effective use. Olore and Adepoju (2019) corroborated this by showing that access to contemporary office technologies improved secretarial productivity in tertiary institutions, particularly when accompanied by training.

Receptivity to Digital Technologies

The secretaries' receptivity to digital technologies was found to be low, with a mean score of 1.74, below the expected benchmark. This suggests a general reluctance to adopt new digital tools, possibly due to inadequate training or limited access to resources, which affects secretaries' confidence and willingness to embrace technology. The Dreyfus Model implies that individuals with low receptivity are more likely to remain in the novice stages, focusing on rote tasks without progressing towards higher proficiency levels involving intuitive understanding.

The significant positive correlation between digital receptivity and job performance ($r = .860, p < .05$) highlights the importance of fostering openness to technology to enhance secretarial efficiency. A supportive organisational culture that promotes continuous learning and digital transformation could improve secretaries' receptivity, positively impacting job performance. The role of communication in shaping receptivity is vital; Frahm and Brown (2006) argue that effective communication strategies can alleviate change resistance and fatigue, fostering a more positive attitude toward technology adoption.

Utilisation of Digital Technologies

Despite the availability of some digital tools, the study found that their utilisation by secretaries remains low, with a mean score of 1.66. This indicates that even when digital tools are present, they are not being fully leveraged for job tasks. Factors such as inadequate training, poor infrastructure, or resistance to change may contribute to this low utilisation. Consequently, secretaries are restricted from advancing to higher levels of expertise, where they could effectively apply digital tools across various job contexts. The relevance of the Dreyfus Model in this finding is clear, as regular use of digital tools is essential for developing the advanced skills required for higher performance. Liu et al. (2023) noted that frequent engagement with technology enhances digital skills and improves job effectiveness. Thus, institutions should implement structured training programmes that promote meaningful use of technology, enabling secretaries to integrate digital tools into their daily tasks.

The study aligns with previous research highlighting the role of digital technology in secretarial job performance. Asogwa and Agusiobo (2022) pointed out that while digital tools can enhance job execution, they also pose challenges such as the need for continuous training. The study emphasised the need for private institutions to invest in modern office technology to boost productivity. Moreover, Olaniyi and Mukoro (2020) found that effective ICT use is critical for organisational success, with significant differences in utilisation across sectors.

In summary, the findings suggest a need for targeted interventions to improve digital technology access and training for secretaries in state universities. By fostering a culture that encourages frequent and purposeful use of technology, secretaries can develop the skills necessary for higher job performance, ensuring they remain competitive in the evolving digital landscape.

CONCLUSION

The study examined the role of digital technologies, specifically awareness, availability, receptivity, and utilization, as predictors of secretaries' job performance in state universities in Southwest Nigeria. The findings revealed a high level of job performance among secretaries despite low scores in adoption of digital technology metrics. Among the four dimensions, receptivity emerged as the most significant predictor, suggesting that openness and willingness to engage with technology are critical factors in enhancing administrative efficiency in higher education. Although awareness, availability, and utilization had weak or insignificant relationships with job performance, these results underscore a vital insight: without proper orientation, training, and change readiness, digital technologies may not fulfill their potential.

These results established that successful digital transformation must go beyond mere infrastructure deployment. Universities need to embed digital literacy, motivation, and organizational support into their strategic development agenda. Such transformation will lead to improved administrative efficiency, enhanced academic service delivery, and overall institutional effectiveness.

RECOMMENDATIONS

1. Institutions should organize continuous professional development initiatives tailored to improve secretarial staff competencies in using digital tools effectively.
2. Universities must invest in reliable digital infrastructure, including hardware, software, and high-speed internet, to support the seamless integration of technology into administrative workflows.

Adoption of Digital Technologies' Dimensions as Predictors of Secretaries' Job Performance in Post-COVID-19 Era in State Universities in Southwest Nigeria

3. Management should create an enabling environment that encourages openness to technological change through leadership support, peer mentorship, and incentivized adoption.
4. Policies promoting digital literacy and competency development should be embedded into the operational frameworks of higher institutions.
5. Given the observed performance difference, universities should promote inclusive digital adoption strategies by leveraging the adaptability of female staff as change agents.

REFERENCES

- 1) Adegbite, M. A., Alabi, S. T., & Fagbohun, O. J. (2022). Adoption of digital innovations in Nigerian universities: Constraints and prospects. *African Journal of Education and Technology*, 12(1), 45–59.
- 2) Adetunji, F. O., & Bello, R. T. (2023). Gender and technology adoption in Nigerian higher education. *Journal of Organizational Studies in Africa*, 8(2), 101–118.
- 3) Ajayi, T. A., Adebayo, M. F., & Eze, N. (2021). Digital competence and administrative efficiency in higher institutions. *International Journal of Educational Management*, 35(4), 312–326.
- 4) Akinyemi, B. A., & Uche, A. C. (2020). Barriers to ICT integration in Nigerian tertiary institutions. *Nigerian Journal of Educational Technology*, 10(2), 55–70.
- 5) Davenport, T. H., & Ronanki, R. (2018). Artificial intelligence for the real world. *Harvard Business Review*, 96(1), 108–116.
- 6) Eze, S. C., & Nwankwo, U. O. (2023). Institutional readiness and digital transformation in Nigerian universities. *Journal of Digital Learning*, 17(3), 233–250.
- 7) Hassan, R. A., & Omar, T. A. (2021). The influence of digital transformation on administrative performance in higher education. *Educational Review Journal*, 14(1), 88–102.
- 8) Ibrahim, A. S., Lawal, O. A., & Oladele, D. B. (2023). University governance and technology: Bridging the digital divide in African institutions. *African Journal of Educational Administration and Planning*, 25(1), 59–77.
- 9) Johnson, S. P., & Brown, K. E. (2020). Enhancing workplace productivity through digital tools. *Journal of Human Resource Development*, 19(2), 142–160.
- 10) Kim, J., & Kang, H. (2022). Post-pandemic remote work and digital competency in academic institutions. *Asian Journal of Educational Research*, 28(4), 305–325.
- 11) Nguyen, Q., Lee, J., & Zhang, Y. (2021). Technology-enhanced learning and administrative transformation in global education. *Educational Technology and Society*, 24(3), 98–115.
- 12) Oladipo, S. K., Ogunlade, A. T., & Salami, K. A. (2023). Embracing digital office practices in Nigerian universities: Pathway to sustainable administration. *Journal of Contemporary Education in Africa*, 9(1), 67–84.
- 13) Oseni, M. O., Fakunle, R. A., & Dada, A. K. (2021). Readiness of university staff for digital transformation post-COVID-19. *African Journal of Higher Education*, 19(2), 124–139.
- 14) Salami, A. T., & Lawal, M. F. (2022). Building digital capacities in higher education: Policy perspectives. *Journal of Educational Policy Analysis*, 13(2), 207–223.
- 15) Wang, Y., Sun, J., & Yu, M. (2020). Digital technology adoption in universities: A global perspective. *International Journal of Educational Technology*, 18(1), 25–39.