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UTILIZATION OF TASK AUTOMATION TECHNOLOGIES BY PROFESSIONAL SECRETARIES FOR IMPROVED JOB PERFORMANCE IN PUBLIC ORGANIZATIONS IN EBONYI STATE

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Abstract
This study examined the utilization of digital task automation technologies by professional secretaries for improved job performance in public organizations in Ebonyi State. One research question and one null hypothesis guided the study. The study adopted survey research design. A population of 527 professional secretaries in the 32 Ministries in Ebonyi State was studied using census survey method. A10-item structured questionnaire was used for data collection. Face and content validity of the instrument was ascertained using three experts in the field of education. The reliability of the instrument was established using pilot testing method and Cronbach alpha formula was used to calculate the internal consistence of the instrument with a reliability coefficient of .72 obtained. Mean, standard deviation and two-way analysis of variance (ANOVA) were used for data analysis. Findings revealed that professional secretaries in public organizations in Ebonyi State rarely utilized digital task automation technologies for improved job performance. It was also found that gender was not a significant factor on the extent professional secretaries utilize digital task automation technologies for improved job performance while years of working experience was a significant factor in this regard. The research concluded that professional secretaries in Ebonyi State's public organizations utilize digital automation technologies task for improved job performance at a low extent despite the potential improved utilization of digital task automation technologies. It was recommended that directors of public organizations in Ebonyi State should provide their professional secretaries with regular training in digital task automation technologies and access to these technologies. Organizing periodic workshops and seminars can help professional secretaries understand how automation can reduce repetitive tasks and improved job performance.

Keywords: Utilization, Digital Task Automation, Professional Secretaries, Job Performance

Introduction

Public organizations are established by governments to serve the public interest, and play a vital role in Nigeria, contributing around 30% to the GDP. They encounter challenges such as outdated systems, inadequate infrastructure, and poor data management, compounded by corruption, lack of transparency, and skills gaps (World Bank, 2020). These issues particularly impact secretaries and service delivery. To enhance productivity and streamline tasks, public organizations worldwide are adopting digital technologies for digital organizations.

Digital task automation technologies are essential for enhancing office performance by reducing the need for human labor in repetitive administrative tasks. These systems automate workflow management and streamline information retrieval through tools such as document management systems, email and calendar automation, and robotic process automation (RPA) (Kuteyi & Fasoranti, 2020). Powered by AI, tools like Zapier, ChatGPT, and Slack, assist with tasks like memo drafting, email management, and appointment scheduling, which boosting productivity and service delivery when implemented effectively (Arnott, 2024; Onwubuya, 2025; Pavitra, 2024).

Digital task automation technologies are increasingly essential in frontline administrative roles, particularly impacting professional secretaries, who play a vital role in administration, records management, correspondence, and executive support (Kuteyi & Fasoranti, 2020). Modern professional secretaries are viewed as skilled knowledge workers rather than mere typists or clerical assistants.

Their functions involve managing information systems, coordinating office procedures, handling confidential communications, and utilizing digital technologies to enhance organizational efficiency (Eleni, 2022; Kwagbo, 2022; Lewis, 2024). This evolution highlights the growing importance of secretaries in facilitating organizational operations and supporting executives effectively.

With the advancement of digital technologies, the role of professional secretaries has evolved significantly, expanding into complex areas like communication management and decision-making support, thereby becoming essential organizational gatekeepers (Sharma, 2020). Originally a clerical position, the modern secretary has transformed into a sophisticated administrative role. Essential skills now include proficiency in electronic document management, record-keeping, communication, and office information systems. Kwagbo (2022) reported that the advancement of information and communication technologies (ICTs) has redefined job tasks and increased the demand for digital competencies among professional secretaries. Failure to adapt to these changes can compromise the effectiveness of secretarial services and overall organizational performance.

Nigeria's public sector, including those in Ebonyi State is undergoing significant digitization, with initiatives like e-governance and e-procurement aimed at enhancing transparency and service delivery (Olayinka-Agboola et al., 2025). Ebonyi State is part of Nigeria's South-East Geo-Political Region, comprising 13 local government areas and possesses a growing public sector. However, World Bank (2020) noted that organizations in this region encounter challenges such as inefficiency, bureaucratic hurdles, and limited resources, impacting the performance of secretaries who provide crucial administrative support. The utilization of digital task automation technologies in secretarial work could significantly improve productivity, governance and public service delivery. Nonetheless, traditional practices may limit effectiveness, necessitating innovative solutions for better job performance and service outcomes in public organizations.

The utilization of digital task automation technologies tools by professional secretaries in public organizations in Ebonyi State is a growing trend aimed at improving job performance and productivity. Nwachukwu (2022) defined utilization as the use of technology and services to achieve specific goals. Despite enthusiasm for digitalization, Mikalef, et al. (2019) indicated limited understanding of the status in public organizations, where slow deployment hampers effectiveness compared to the private sector. Improved job performance refers to an individual's capacity to complete tasks with high quality, efficiency, and productivity. It encompasses achieving objectives and meeting deadlines among others.

Gender differences influence digital technology adoption among professional secretaries globally, with male secretaries (75%) outpacing female secretaries (70%) in usage rates (Gartner, 2019). Factors contributing to gender disparity include digital illiteracy, cyber insecurity, and cultural attitudes limiting women's access to ICT. In Nigeria, female secretaries face additional barriers, with a lower literacy rate and a perception of ICT as less useful. Research indicates that years of work experience may not significantly impact the adoption of AI tools, highlighting the importance of interest and support instead. This study aims to inform organizational policies to promote equal access and training for secretaries, enhancing their job performance and productivity. The effectiveness of these digital strategies is closely linked to how well professional secretaries utilize them in their office functions. For Ebonyi State's public organizations to modernize effectively, it is crucial to ascertain how professional secretaries utilize digital task automation technologies to improve their job performance.

Statement of the Problem

Digital task automation technologies are critical for enhancing administrative efficiency and service delivery in public organizations. In developed countries, professional secretaries utilize automated systems for scheduling, workflow management, and task automation to minimize errors and improve responsiveness. In Nigeria, public organizations are beginning to adopt these tools to improve public service performance. However, in Ebonyi State, it appears that many professional secretaries still rely on manual processes. This situation may be attributed to such barriers as inadequate training, low digital literacy, poor ICT infrastructure, and resistance to technological changes. This reliance on manual methods results in slow processing and frequent errors. These

inefficiencies raise concerns about job performance and hinder timely service delivery, as well as accurate record-keeping. There is a lack of empirical studies on the extent of digital task automation usage among professional secretaries in Ebonyi State for improved job performance. This knowledge gap complicates the ability of government agencies and policymakers to implement effective interventions aimed at enhancing professional secretary productivity and supporting digital transformation within Ebonyi State. Therefore, this study specifically investigated the utilization of digital task automation technologies by professional secretaries for improved job performance in public organizations in Ebonyi State.

Research Question

The following research question guided the study;

1. To what extent do professional secretaries in public organizations in Ebonyi State utilize digital task automation technologies for improved job performance?

Null Hypothesis

The following null hypothesis was tested at 0.05 level of significance;

1. Professional secretaries in public organizations in Ebonyi State do not differ significantly in their mean ratings on the extent of utilization of digital task automation technologies for improved job performance based on their gender and years of working experience.

Method

This study adopted a descriptive survey research design. It was conducted in public organizations in Ebonyi State in South-East Nigeria. The population of the study comprised of 527 professional secretaries in the 32 Ministries in Ebonyi State (Ebonyi State Government, Office of the Secretary to the State Government, October, 2025). The entire population was studied because the size was manageable; thus, a census survey was adopted. A structured questionnaire titled "Utilization of Task Automation Technologies by Professional Secretaries for Improved Job Performance (UTATPSIJP)" and was divided into two sections, A and B used for data collection. Section A contains two items of the respondent's demographic data, which are gender and years of job experience as a secretary. Section B contained 10 items structured on a 5-point rating scale of Very Frequently Utilized (VFU), Frequently Utilized (FU), Occasionally Utilized (OU), Rarely Utilized (RU) and Not Utilized (NU).

Face and content validity of the instrument was ascertained using three experts, two experts from the Department of Business Education, Faculty of Technology and Vocational Education and one expert from Measurement and Evaluation from the Department of Educational Foundations, Faculty of Education, Nnamdi Azikiwe University, Awka. The reliability of the instrument was established using a pilot test. Data obtained from the pilot study was analyzed with Cronbach Alpha using SPSS Version 27 to determine the reliability of the instrument which yielded a reliability coefficient of .72**.** The researcher personally administered the instrument to the respondents in the offices with the help of 12 research assistants adequately briefed on the procedure. Out of 527 copies of questionnaire distributed, 513 (94%) were correctly filled and returned, which were used for data analysis. Data collected were analyzed using mean to answer the research question, standard deviation to determine the homogeneity or otherwise of the respondents' mean ratings and two-way analysis of variance (ANOVA). The null hypotheses were tested at 0.05 level of significance using SPSS Version 27 for analysis. A null hypothesis was accepted where the p-value is equal or greater than the alpha level of 0.05, and rejected where the p-value is equal to or less than 0.05.

Results

Research Question 1:

To what extent do professional secretaries in public organizations in Ebonyi State utilize digital task automation technologies for improved job performance?

Table 1 Mean ratings and standard deviation on the extent professional secretaries in public organizations in Ebonyi State utilized digital task automation technologies for improved job performance

S/N	Utilization of Digital Task Automation Technologies I utilize:	$\bar{x}$	SD	Remarks
1	Zapier to automate emails syncing with records.	1.71	.46	Rarely Utilized
2	Zapier to automate document creation.	1.63	.50	Rarely Utilized
3	IFTTT (If This Then That) to automate networking with other apps.	1.98	.69	Rarely Utilized
4	IFTTT (If This Then That) to automate data entry.	1.97	.61	Rarely Utilized
5	DocuSign to sign documents digitally without the need for physical signature.	2.57	.55	Occasionally Utilized
6	UiPath to automate repetitive tasks thereby reducing errors.	1.80	.68	Rarely Utilized
7	Trello to send reminders automatically.	1.78	.69	Rarely Utilized
8	Slack to facilitate instant communication between dispersed teammates.	1.89	.63	Rarely Utilized
9	ChatGPT to summarize vast amount of information into concise executive summaries.	3.98	.56	Frequently Utilized
10	ChatGPT to generate first drafts of documents.	3.50	.72	Frequently Utilized
	Cluster Mean	**2.28**		**Rarely Utilized**

Data in Table 1 shows that out of 10 digital task automation technologies listed for improved job performance, professional secretaries frequently utilized items 9 and 10 with mean scores of 3.50 and 3.98. Item 5 is occasionally utilized with mean score of 2.57 while the remaining seven items are rarely utilized with mean scores ranging from 1.63 to 1.98. The cluster mean score of 2.28 shows that overall; professional secretaries in public organizations in Ebonyi State rarely utilized digital task automation technologies for improved job performance. The standard deviation for all the items is within the same range, indicating that the respondents are not far apart in their mean ratings.

Null Hypothesis 1

Professional secretaries in public organizations in Ebonyi State do not differ significantly in their mean ratings on the extent of utilization of digital task automation technologies for improved job performance based on their gender and years of working experience

Table 2: Two-way ANOVA analysis of significant difference in the mean ratings of secretaries on extent of utilization of digital task automation technologies for effective job performance based on gender and years of job experience

Source	Type III SS	df	MS	F	Sig.	Decision
Corrected Model	532.19[a]	3	133.05	8.42	.00	
Intercept	10143.09	1	10143.09	641.97	.00	
Gender	5.91	1	5.91	.37	.54	Not Significant
Years of experience	391.60	2	195.80	12.39	.00	Significant
Error	1817.01	509	15.80			
Total	44762.00	513				
Corrected Total	2349.20	512				

a. R Squared = .227 (Adjusted R Squared = .200)

Table 2 shows that the main influence of gender on the extent secretaries utilized digital task automation technologies for effective job performance was not significant, **F(1,509) = 0.37, p = .54, ηp^2 = .003.** However, the main influence of years of working experience was significant**, F(2,509) =**

12.392, p < .001, ηp² = .177, indicating that utilization levels differed across experience groups. This means that experience, but not gender significantly influences respondents' mean ratings on the extent of utilization of digital task automation technologies among secretaries in public organizations in Ebonyi State.

Discussion

Findings of the study revealed that professional secretaries in public organizations in Ebonyi State rarely utilized digital task automation technologies for improved job performance. Findings of the study could be attributed to inadequate digital skills among surveyed professional secretaries working in public organizations in Ebonyi State. Probably due to poor capacity in-service training and development programmes offered to secretaries by public organizations to enable them update their digital skills in line with technological changes in modern organizations. Findings of this study showed the extent of digital skill gap among professional secretaries in public organizations in Ebonyi State despite the importance of digital technologies such as task automation systems in improving job performance (Kuteyi & Fasoranti, 2020). The utilization of *digital office task automation* technologies according to Onoja (2020) led to higher secretarial productivity and reduced task completion time. Similarly, Kuteyi and Fasoranti (2020) found that the application of digital task automation technologies in modern offices significantly improved secretaries' efficiency, accuracy of output and communication skills. Kim (2022) regretted that many public organizations provide little or no technical assistance and digital training for their secretaries to update their digital skills for enhanced use of digital technologies for job performance. In addition, Adakole and Lasisi (2018) found that professional secretaries faced multiple barriers to utilizing digital automation technologies for improved job performance.

Findings of the study revealed that male and female secretaries in public organizations in Ebonyi State did not differ significantly in their mean ratings on extent of utilization of digital task automation technologies for improved job performance. It was further revealed that secretaries in public organizations in Ebonyi State differed significantly in their mean ratings on the extent of utilization of digital task automation technologies for improved job performance based on years of working experience. Adakole and Lasisi (2018) found that low utilization of digital technologies by employees was a function of the organizational environment, not a gender-specific trait. In addition, that secretaries differed significantly in their utilization of task automation tools based on years of working experience suggests that experience is a determining factor in digital task automation technology utilization. Onoja (2020) reported that newly employed office workers show higher rates of utilization of modern technologies because they are digital natives and are more comfortable utilizing digital technologies into their office functions.

Conclusion

The findings revealed that professional secretaries rarely utilized the listed digital task automation technologies. Based on the findings, the study concluded that professional secretaries in Ebonyi State's public organizations utilize digital task automation technologies for improved job performance at a low extent despite their potential to enhance job performance.

Recommendations

Based on the findings of the study, the researcher makes the following recommendations;

1. Directors of public organizations in Ebonyi State should provide their professional secretaries with regular training in digital task automation technologies and access to these technologies. Organizing periodic workshops and seminars can help professional secretaries understand how automation can reduce repetitive tasks and improved job performance.
2. Professional secretaries in public organizations in Ebonyi State should be re-trained and encouraged to integrate digital task automation technologies into their daily office routines.

Management of public organizations in the state should include the use of digital task automation technologies as part of ICT proficiency benchmarks for secretarial performance appraisals.

3. The administrators of OTM programme in Nigerian tertiary institutions should introduce training on digital task automation to enable their students acquire relevant skills needed to utilize digital task automation technologies for improved job performance in public organizations.

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