

IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) ON SECRETARIAL EFFICIENCY AND ITS CONTRIBUTION TO EDUCATION

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Abstract

Secretarial practices have transformed the efficiency of administrative and productivity of various sectors in Ogun state as a result of the incorporation of information and communication technology. This study examines the various impact of ICT adoption on secretarial operations and its contribution to education in Ogun state. The study employed descriptive research design method. Four research questions guided the study. The population consist of 60 secretaries working with Tai Solarin Federal University of Education and Olabisi Onabanjo University in Ogun state. Census sampling techniques was adopted, because all the secretaries were used for the study. The theory of Technological Acceptance Model was adopted. A structured 32 items questionnaire tagged "ICT Impact on Secretarial Efficiency Questionnaire" (IISEQ) designed by the researcher was used to gather data for the study. Three experts validated the instrument, and Cronbach Alpha method was used to determine its reliability. Coefficient of 0.80 alpha showed the instrument was reliable. Research questions were analysed using mean and standard deviation. The findings reveals that ICT has totally improved secretarial efficiency through automated task management, electronic filing system, making editing and collaboration effective using Microsoft office and google document. As a result of these improvement, appointment and scheduling have become easy through digital calendar. The implication of the study shows a direct secretarial efficiency and productivity among professionals in Ogun state owned universities. The study concluded that ICT-enabled secretarial professionals played an important role by facilitating the growth of service within the state-owned institutions. The study recommends continued investment in ICT infrastructures, capacity building, and seminar for secretarial professionals and policy that would support digital efficiency in administrative processes.

Keywords: Information and Communication Technology, Secretarial Efficiency, Ogun State Education

Introduction

Secretarial efficiency plays an important factor in organizational productivity, particularly in business environment characterized by diverse challenges and dynamic demands. The role of secretaries as an administrative professional has evolved greatly in the last few decades (Abiola, 2023). In a rapidly expanding and more complex economic, there is an increased emphasis on the

importance of secretarial efficiency. According to Okwori and Nwankwo (2022), integrating technology into office practices is important to enhancing secretarial efficiency. The authors argued that the adoption of digital tools such as cloud-based software and communication platforms has assisted administrative processes in many organizations.

Secretarial efficiency are the ability of administrative professional to carry out

their duties effectively and within the required time frames, making use of available resources to achieve the organization goals (Akinwumi, 2023). Secretarial efficiency encompasses a range of competencies like time management, organizational skills, technological proficiency, communication skills, and the capacity to adapt to changing work environments. Secretarial efficiency is not only about speed and accuracy in task performance but also includes abilities to solve problems and make decision in administrative roles as these are what the fast growing economic demands (Abiola, 2023).

Information and communication Technology (ICT) serves as a transformative force in today's business world as it structures and enhances operational efficiency. Traditionally, secretarial profession marked by tasks such as scheduling, correspondence, and file management has grown as a result of advancement in ICT tools. Information and Communication Technology of this modern world has contributed to improving the professional competence of the secretary because job can now be carried out accurately and have also increased employee's skill (Fasae & Ajayi, 2019). In Ogun state, Nigeria, the incorporation of ICT in secretarial functions not only improves efficiency but also contributes to the wider goal of providing a way from dependency on oil and towards a more varied economic base.

Ogun state has acknowledged the importance of diversifying its economy, thereby making use of its strategic location and rich resources to promote development in various sectors like agriculture, manufacturing and information technology. To this end, secretarial roles have become important as they serve as backbone for administrative, businesses and institutions by facilitating communication, improving productivity and enhancing the overall organizational effectiveness. As the

adoption of ICT tools by businesses increases from emails and cloud storage to advances project management software, secretaries are expected to take on more strategic roles that is geared towards growth and innovation.

By analyzing the benefits and challenges associated with ICT adoption in secretarial work, along with its implications for local businesses and for the economic at large, this study aims to highlight the role that technology plays in the education future of Ogun state.

Statement of the Problem

Observation has revealed the role of Information and Communication Technology (ICT) in enhancing the efficiency of secretarial practice across various sectors. However, despite the revealed potential of ICT to simplify processes and improve productivity, there remains a considerable gap (like integration policies, training needs, long-term impacts and organizational culture) in understanding its specific impact on secretarial efficiency in Ogun state owned universities, Nigeria. This gap poses a challenge to the broader objective of education in the region, as secretarial roles are essential for effective communication, administrative support and organizational management.

Ogun state known as gateway to Lagos has been observed to experience rapid transformation in its educational programme, yet the full integration of ICT in administrative practices has not been fully realized. Observation has revealed that the use of outdated systems and manual methods of processing, can result to inefficiencies in task performance. Furthermore, inadequate training in the use of ICT tools among secretarial professional hinders effectiveness of secretarial practices. Therefore, the study seeks to examine how ICT impact secretarial efficiency and the potential contribution to Ogun state education.

Objectives of the Study

The main objective of the study is to examine impact of Information and Communication Technology on secretarial efficiency and its contributions to education, specifically, the study sought to:

- a) examine the adequacy of ICT adoption in secretarial functions across state institutions;
- b) examine the role of ICT in enhancing secretarial efficiency;
- c) to investigate the long-term sustainability of ICT integration;
- d) to find out the impact of ICT on skill development.

Research Questions

The following research questions guided the study:

1. What is the adequacy of ICT adoption in secretarial functions in Ogun state owned universities?
2. What is the role of ICT in enhancing secretarial efficiency?
3. What is the long-term sustainability of ICT integration?
4. What is the impact of ICT on skill development?

ICT and Secretarial Efficiency

Integration of Information and Communication Technology (ICT) into secretarial operations has greatly transformed the administrative aspect of business world. The transformation has been particularly in enhancing efficiency, productivity and service delivery in many economic sectors. The secretarial profession that was traditionally based on manual processes and paper-based documentation has become a profession characterized by digital tools and technologies that can enhance better productivity. In Adebayo and Ogundimu (2020), adoption ICT into secretarial duties has made a tremendous shift in how administrative tasks are performed in many Nigerian organizations. This change is not

merely based on technological upgrade but it is evident in how secretarial roles and responsibilities are done in the digital age.

Okafor and Ugwu (2021) observed that the integration of digital tools to secretarial profession has drastically reduced the time required for document processing and retrieval. Olufemi et al. (2022) revealed that organization with high ICT adoption can demonstrate superior performance metrics when it comes to rates at which tasks are completed, accuracy levels and client satisfaction. Akinwale (2021) emphasized that electronic documents management systems have eradicated the physical storage constraints that previously reduced organizational capacity. The further argued that digital document management systems has reduce the rate at which documents are loss and improve documents accessibility among secretarial professional.

Oyekanmi and Babatunde (2022) highlighted that email management systems, video conferencing platforms and instant messaging applications have improved communication efficiency thereby enable reduction in communication processing and time.

Theoretical Review

Technological Acceptance Model (TAM)

TAM originated from Fred Davis in 1989 and was extended by Venkatesh and Davis in 2000. The theory provides a fundamental framework for understanding how secretaries adopt ICT tools and the factors that influence their acceptance. In the context of this study, TAM explains:

1. Perceived usefulness. This shows how secretaries perceive ICT tools to improving their job performance and the contribution to organizational efficiency.
2. Perceived ease of use. This shows the degree to which secretaries believes ICT tools are free from effort, affecting adoption rats.

3. Behavioural intention. That is the willingness to use ICT tools, which directly impact secretarial efficiency.

Relevance to the study

TAM is relevant to the study as it explains the reason why some secretaries in organization readily adopt ICT while other resist. This shows that adoption affects the general secretarial efficiency and the state of economic diversification efforts. Organization with higher ICT acceptance among secretaries can process business registrations, permits and administrative tasks more efficiently thereby attracting more investments for the business.

Previous Empirical Studies

There are literatures on usage, adoption and implementation of ICT. However, most studies focused on the use of ICT in general, but studies on how ICT influences economic diversification and efficiency is still under studied. Researchers like Buseni (2013), examine effects of ICT on the performance of public sector secretaries' in Bayelsa state. The study revealed that the usage of computer, telecommunication and video techniques positively influenced the performance of public sector secretaries in Bayelsa. Amadi and Echomgbe, (2023), studied model office technologies and job productivity of secretaries in Rivers State universities. 165 secretaries from Rivers State University and Ignatus Ajaru university of Education were used for the study. The findings showed that there is a relationship between the use of computer and the job productivity of secretaries in Rivers State universities. Okafor et al. (2024), examined digital skills and economic diversification: the role of administrative professional in Nigeria's transformation agenda. 300 respondents from various economic sectors including oil and gas, agriculture, manufacturing were used for the study. The findings revealed that ICT competencies among secretarial staff contributed to improvement

of economy, increase small business support and enhance data management for economic planning. Nwosu et al. (2023), studied the impact of ICT implementation on secretarial and administrative efficiency within Nigerian government agencies. 75 government department across six states, measuring productivity metrics before and after ICT system implementation. The finding revealed that proper ICT integration led to reduction in paper-based processes, improvement in inter-departmental communication and increase in overall administrative performance. Adebayo and Ogundimu (2022), investigated ICT adoption and secretarial efficiency in 150 Nigerian organizations across Lagos and Abuja. The findings showed that organizations with comprehensive ICT adoption have improvement in secretarial task completion rates, reduction in document processing time and enhanced communication efficiency.

Methodology

The study adopted descriptive survey research design. The population for the study comprised of 60 secretaries (made up 25 secretaries from Tai Solarin Federal University of Education, Ijagun, Ijebu-Ode and 35 secretaries from Olabisi Onabanjo University, Ago-Iwoye in Ogun state. Census sampling techniques was adopted as the population is of a manageable size. The instrument used for data collection was a 40 structured items questionnaire tagged "ICT Impact on Secretarial Efficiency" (IISEQ) divided into 4 sections on ICT Adoption, ICT Adequacy, ICT skill Development and ICT Impact. A 4-point rating scale on Strongly Agreed (SA) =4 points with boundary limit of 3.50-4.00, Agreed (A) =3 point with boundary limit 3.00-3.49, Disagreed (D) =2 points with boundary limit of 2.50-2.99 and Strongly Disagreed (SD) =1 point with boundary limit of 1.50-2.49 for both research question 1 - 4. Arithmetic Mean and Standard Deviation was used in analyzing

collected data. A minimum of 2.50 mean score was set as standard for relevance or otherwise of the research question raised on the study. Any research question scored below the set standard was not rejected.

Research Question One: What is the adequacy of ICT adoption in secretarial functions in Ogun state owned universities (TASUED and OOU) N=60

Table 1: Mean Rating of adequacy of ICT adoption in secretarial functions

Items	Mean	SD	Remarks
Secretarial staff have easy access to ICT resources like computers, printers and communication tools	3.84	0.48	Strongly Agreed
Accesses are provided for training programs in the uses of ICT tools	3.82	0.47	Strongly Agreed
Digital communication channels (email, instant messaging etc) facilitate internal and external communication	3.60	0.41	Strongly Agreed
Document management system is effective for organizing, storing and retrieving documents	3.51	0.33	Strongly Agreed
ICT adoption has improved the speed and accuracy of data entry	3.52	0.70	Strongly agreed
Remote work arrangement is fully support by ICT tool	2.44	0.29	Strongly Disagreed
Adoption of ICT has created awareness on data protection	3.50	0.61	Strongly agreed
Organizing tasks and schedule become effective through ICT adoption	3.50	0.61	Strongly agreed

Source: Field Work,2025

Table 1 showed that the respondents indicated 'strongly agreed' for seven (7) item constructs, one (1) for strongly disagreed. Mean ranging from 2.44 to 3.84. The table showed that the respondents indicated that most of the items listed were adequate for ICT adoption in Ogun state owned universities. It was noted that adequacy of ICT adoption has created awareness on data protection, organizing tasks and schedule has become effective in

the state-owned universities. The mean of the responses was all above 2.50 implying that the constructs were adequate for ICT adoption. All the items have standard deviations ranging from 0.29 to 0.48.

Research Question 2: What is the role of ICT in enhancing secretarial efficiency in Ogun state owned universities? (TASUED and OOU) N=60

Table 2: Mean Rating on the role of ICT in enhancing secretarial efficiency

Items	Mean	SD	Remarks
Secretarial role become efficient through the use of communication tools for email, zoom and skype	3.64	0.41	Strongly Agreed
Editing and collaboration has become effective using Microsoft office and google document	3.64	0.41	Strongly Agreed
Appointment and scheduling become easy through digital calendar	3.60	0.41	Strongly Agreed
Data analysis become effective using spreadsheet and google sheets	3.52	0.34	Strongly Agreed
Mobile technologies make tasks and project management easy	3.57	0.36	Strongly agreed
Enhanced secretarial role in social media	2.34	0.26	Strongly Disagreed
Using AI-driven chatbots for scheduling	3.50	0.61	Strongly agreed
Accessing communication Apps for effective secretarial role	3.50	0.61	Strongly agreed

Source: Field Work,2025

Table 2 showed that the respondents indicated 'strongly agreed' for seven (7) item constructs, one (1) for strongly disagreed. Mean ranging from 2.34 to 3.64. The table showed that the respondents

indicated that most of the items listed were role of ICT for enhancing secretarial efficiency in Ogun state owned universities. It was noted that role of ICT has enhanced secretarial role through the use of

communication tools in the state-owned universities. The mean of the responses was all above 2.50 implying that the constructs were adequate for ICT adoption. All the items have standard deviations ranging from 0.26 to 0.41.

Research Question 3: What is the long-term sustainability of ICT integration in Ogun state owned universities? (TASUED and OOU) N=60

Table 3: Mean Rating on the long-term sustainability of ICT integration

Items	Mean	SD	Remarks
Government policy support ICT sustainability	3.54	0.40	Strongly Agreed
Provision for use and expansion	3.52	0.39	Strongly Agreed
Providing strategies for addressing digital divide issues among secretarial professional	3.54	0.40	Strongly Agreed
Provision for supporting long-term through budgeting for technology	2.44	0.28	Strongly Disagreed
Providing educational programs that can promote digital literacy and skills	3.57	0.42	Strongly Agreed
Upgrading ICT equipment	3.52	0.39	Strongly Agreed
Constant training for users and secretarial professionals	3.50	0.61	Strongly Agreed
Resistance to change by the secretarial professionals	2.45	0.29	Strongly disagreed

Source: Field Work, 2025

Table 3 showed that the respondents indicated 'strongly agreed' for six (6) item constructs, two (2) for strongly disagreed. Mean ranging from 2.44 to 3.57. The table showed that the respondents indicated that most of the items listed could sustain long-term ICT integration for secretarial professional in Ogun state owned universities. It was noted that constant upgrading of technology equipment can sustain ICT integration in the state-owned

universities. The mean of the responses was all above 2.50 implying that the constructs were adequate for long term sustainability of ICT integration. All the items have standard deviations ranging from 0.28 to 0.42.

Research Question 4: What is the impact of ICT on skill development in Ogun state owned universities? (TASUED and OOU) N=60

Table 4: Mean Rating on skill development of ICT integration

Items	Mean	SD	Remarks
Available online courses and other learning platform	3.74	0.72	Strongly Agreed
Provide technical/digital skills for secretarial professionals	3.72	0.71	Strongly Agreed
Life-long learning for development	3.78	0.74	Strongly Agreed
Provide opportunity to use social media and professional networks for skills development	3.54	0.58	Strongly Agreed
Online communities and forums supporting skills development	3.56	0.60	Strongly Agreed
Skill development through webinar	3.00	0.48	Agreed
Improvement in organizational performance and productivity	3.50	0.54	Strongly Agreed
ICT skills into formal education curricula	3.00	0.47	Agreed

Source: Field Work, 2025

Table 4 showed that the respondents indicated 'strongly agreed' for five (5) item constructs, two (2) for agreed. Mean ranging from 3.00 to 3.78. The table showed that the respondents indicated that all of the items have impact on ICT skill

development for secretarial professional in Ogun state owned universities. It was noted that organizational performance and productivity are enhance through the impact of ICT skill development in the state-owned universities. The mean of the

responses was all above 2.50 implying that the constructs were adequate as impact of ICT skills development. All the items have standard deviations ranging from 0.47 to 0.74.

Discussion of Findings

- ❖ On the adequacy of ICT adoption for secretarial function in Ogun state owned universities the listed items were strongly agreed by the respondents to be adequate for secretarial functions. Having access to ICT resources like computers, printers, communication tool and access to training programs in the use of ICT tools support secretarial functions. This is in line with the findings of Adebayo and Ogundimu (2022) that organizations with comprehensive ICT adoption have improvement in secretarial task completion rates, reduction in document processing time and enhanced communication efficiency.
- ❖ Research question 2 on the role of ICT in enhancing secretarial efficiency in Ogun state owned universities, the finding revealed that Secretarial role become efficient through the use of communication tools for email, zoom and skype. This corroborate with the finding Buseni (2013), that the usage of computer, telecommunication and video techniques positively influenced the performance of public sector secretaries in Bayelsa.
- ❖ Research question 3 on long-term sustainability of ICT integration in Ogun state owned universities, the findings revealed that Upgrading ICT equipment for secretarial professionals would sustain ICT integration for long-term. This is in line Okafor et al. (2024), which revealed that ICT competencies among secretarial staff contributed to improvement of economy, increase

small business support and enhance data management for economic planning which is as a result of the provision of digital skills acquisition.

- ❖ Research question 4 on impact of ICT on skill development in Ogun state owned universities, the finding revealed that providing technical/digital skills for secretarial professionals has been one of the impact of ICT on skill development among secretarial professionals. This is in line with the study of Nwosu et al. (2023), that the impact of ICT integration led to reduction in paper-based processes, improvement in inter-departmental communication and increase in overall administrative performance.

Conclusion

From the findings of the study, it was concluded that ICT integration impacts the secretarial professionals' efficiency in government owned universities. The adoption and integration can provide a long term expansion for skill development of secretarial professionals and that upgrading through various channel of training is necessary for skill development among professionals. The study further concluded that ICT-enabled secretarial professionals played an important role in supporting Ogun state's economic diversification through facilitating the growth of service oriented sectors, and promoting the state's competitiveness in digital economy.

Recommendations

The study recommended the followings:

1. For secretarial professional to function effectively in universities, the management must provide adequate infrastructure for ICT adoption and implementation.
2. Secretarial professionals should be versatile in the use of digital office equipment so as to enhance their roles

- and efficiency in universities in Ogun State.
3. Management of institutions in Ogun State should make continued investment in ICT infrastructures, capacity building, and seminar for secretarial professionals and policy that would support digital efficiency in administrative processes for secretarial professionals.
 4. Secretarial professionals should be ready to take advantage of the impact of ICT on developing their skills, either by attending seminar or capacity building in order to contribute to the development of the institutions and Ogun state in general.

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