

Chapter One

Introduction

1.1 Background to the Study

The work space is changing faster than ever, and organizations are constantly adapting to remain competitive by equipping their workforce with a new set of skills. The range and levels of skills required in the workplace are rapidly changing due to many reasons including advances in technology. It is becoming increasingly necessary for administrative staff to be consistently learning new and additional skills in order to remain employable, keep up to date with the fast-paced evolution of digital technology and maintain high job performance within the workplace. Administrative staff must improve a combination of skillset for increased productivity and organisational transformation. This is where work-related skills development comes in. The essence of skills development is for employees to become more effective and efficient at a task or set of tasks.

Organisations including universities consider skills as a form of strategic resource. Hence the imperative of investing in skills development to boost organisational productivity and performance cannot be over-emphasized. Skills development is key to productive employment because it provides learning opportunities for individual employees. Skills development refers “to the productive capabilities acquired through all levels of learning and training, occurring in formal, non-formal, informal and on-the-job settings”¹. Skills development is the systematic acquisition of dynamic capabilities required to undertake predetermined organisational activities or job functions satisfactorily. The concept of skills development is usually job-specific.

Skill development is the process of bringing about social change that allows people to achieve their human potential; it is a process rather than an outcome: it is dynamic in that it involves a change from one state or condition to another. Ideally, such a change is a positive one - an improvement of some sort (for instance, an improvement in digital skill to enhance job performance). Furthermore, development is often regarded as something that is done by one group (such as a development agency) to another. Again, this demonstrates that development is a process, because it raises questions about who has the power to do what to whom. Skill development is the policies, practices, and procedures used to develop the knowledge, skills and competencies of employee to improve the effectiveness and efficiency in institutions. It is the learning process to earn or maintain professional credentials such as academic degrees to formal coursework, attending conferences and informal learning opportunities situated in practice.

Skill development is the preparation for an occupation or for specific skills which is job or task oriented rather than personal². Skill development could also be seen as a process that seeks a relatively permanent change in an individual that will improve his or her ability to perform on the job, which the skill is required. This is a form of specialized education aimed at giving employee (secretary) a particular or specialized knowledge, skill and attitude which he must possess to effectively perform in a given position. Skill development is non-stop progressions that affect the objectives and goals of an academic institution as its purpose is individuals' growth and improve secretarial performance. Money, time and knowledge invested in skill development is well invested and human resource practices is important tactical tools for stimulating favorable behavior of workforces and providing skills, knowledge, innovation, creativity, increased production and abilities which should increase secretaries' performance³. It is for this reason that skill development has been recognized as the first activity of the human resource system.

Human resource is an intellectual property of an academic institution and is a source of competitive advantage to the institution which can be enhanced more through building the competencies of secretaries. Secretaries are professionals who are responsible for providing various administrative, clerical and confidential support services to heads of units, departments and directorates in corporate organisations⁴. Professional secretaries must continuously develop their skills through up skilling, reskilling and cross-skilling to ensure effective and efficient performance of their job⁵. The individuals involved in this study are public universities' secretaries. Secretaries in the university setting who want to attain upward mobility must be competent, trust their competence and be up-to-date in digital skills. Secretaries should obtain necessary skills, training (Information Communication Technology), and also attend conferences through up skilling, reskilling and cross skilling to enhance their job performance.

Up skilling of secretaries is the process of up skilling secretaries to keep relevant and updated with the digital ways of the digital world. Digital up skilling is not limited to information technology up skilling anymore, every aspect of secretarial is under its purview, right from processes, strategy, to the workforce which involves acquiring knowledge to think, act, and thrive in a digital world⁵. Reskilling of secretaries for digital transformation involves acquiring new competencies and knowledge to navigate the complexities of the digital age. It requires individuals to embrace change, challenge existing norms, and actively seek growth opportunities in secretarial duties digitally⁵. Cross skilling refers to a situation where organisations onboard and train secretaries in multiple job functions and skill sets, it led to increase the number of secretaries who can perform certain tasks, and it mitigates the risk of lapses in operations and stalls in the supply chain in an academic institution⁵. Non-availability of information technology equipment and poor training facilities has been observed to be the issue of secretaries upgrading

their skills and acquiring more skills in public universities in Oyo State, Nigeria. In the context of this study, the skill development will be measure using cognitive stage, associative stage and autonomous stage as propounded in Skill Development Theory⁶.

The first phase of skill development is called the cognitive stage, during which learners make conscious, purposeful attempts to comprehend and complete the task. They use problem-solving techniques, feedback, and clear instructions to understand the underlying ideas and processes. Learners go into the associative stage, which is marked by improved efficiency and skill refinement, as they become more proficient and experienced with the activity. They start automating regular processes and concentrate on practice, error repair, and efficiency gains to maximize performance. The last phase of skill development is the autonomous stage when people get to the point where they can perform a task with little conscious thought, practically automatically and fluently. Performance improves to the point of extreme proficiency, consistency, and adaptability to diverse situations and obstacles⁶.

The development of universities' secretaries at global level is premised on the quality of digital skills and knowledge acquired to meet up with global standard in secretarial duties which is also an application standard for academic institutions in Nigeria. However, observation have shown that lack of provision for training that enhance skill development creates problems for secretaries and it is reflected in poor facilities for teaching, poor infrastructure (ICT), learning delivery and disposition to work. Secretaries of tertiary institutions in Oyo State especially public universities are noticeably not operating at optimum capacity. Factors such as inadequate infrastructure and less opportunity for training have been identified to affect skill development, these challenges

raise the question of what is the relevance of digital adoption and secretaries' self-efficacy in addressing the problem⁷.

Digital skills are essential to professional development in different work environments and, as a result, forward-looking individuals and organisations are going digital. No doubt, digital revolution is taking place around the world and transforming all aspects of life and work, such as education, economy and religion in an unprecedented speed. The fundamental driver for the digital revolution is new digital technology. Digital technology is a reality of contemporary world. This technology is evolving rapidly, with countless innovations emerging every day and providing efficiency and empowering employees and organisations⁸.

The Coronavirus pandemic (Covid-19), which erupted in China in the late 2019 and spread like wildfire around the whole world within the first quarters of 2020, has accelerated the pace of the use of digital technology⁹. It is clear now more than ever that academic institutions have to solidify a digital operating model and ensure agility across board, however being digital is not a one-off project to check off as complete but an ongoing process which affects employees at all levels including the entire leadership. Organisations today, including Universities are adopting digital technology to seize new opportunities and meet the challenges of change brought about by the digital revolution. Adopting technology to its fullest extent will essentially allow an organisation to take full advantage of acquired digital assets and get all the maximum benefits¹⁰.

Digital adoption involves leveraging digital technologies like the internet, big data analytics, cloud computing, mobile devices, and social media to transform existing organizations through improved productivity and operational efficiency¹¹. Digital technology adoption means accepting and utilizing new digital assets such as digital tools, apps and software confidently and

competently. organizations, whether for-profit or non-profit, including universities have begun to treat digital technology as a strategic resource. The adoption of digital technology in universities exploded in the aftermath of the Covid-19 pandemic. Today, universities across the world are seizing digital opportunities to deliver their mandates more efficiently and effectively, and hence to remain relevant in the provision of education and training for the development of high-level intellectuals and professionals¹².

The digital transition has inevitably enhanced both the academic and administrative functions of universities. Universities are increasingly encouraging skills development among their academic and administrative staff and equipping them with digital technology including computers with internet access. Digital technology brings many significant benefits for universities. For example, universities are deploying digital tools to improve teaching and learning, stakeholder engagement and experience, and operational efficiency and effectiveness. They are leveraging digital assets to boost their academic capabilities and brand reputation. Digital adoption empowers universities to broaden their reach and horizons. Perceived usefulness, perceived ease of use, behavioural intention to use and actual system use are measures to be used for digital adoption of secretaries in public universities in Oyo State as adapted from Technology acceptance model (TAM)¹³.

Perceived usefulness is described as the prospective user's subjective probability that using a specific application system will increase his or her performance; perceived ease of use in TAM, is described as the degree to which a person believes that using a particular system would be free of effort; behavioral intention to use is conceptualized as the individual's positive or negative feeling about using the new technology; whereas behavioral intention refers the individual's

conscious plans to perform or not perform some specified future behavior while behavioral intention strongly influences usage behavior, external factors such as system accessibility and organisational support also play a role; actual system use: the extent to which users actually use the technology in their work or daily activities¹⁴.

Self-efficacy is about the confidence of an individual that they are sufficient in their competencies to execute a specific task, and the concept of self-efficacy has an influence on how people feel, think and behave in different situations¹⁵ Research has shown that self-efficacy has effect on job performance of an individual. It is one's belief of his/her capabilities in organizing, handling and executing tasks. Self-efficacy belief for long term goals is a promising construct being recently used in the extant employee and academic performance literature. For example, based on self - efficacy theory, it was observed that self-efficacy is an indirect predictor of organisation performance through goal difficulty under the condition of self-control¹⁶. Similarly, self-efficacy belief is the significant conditional factor on the relationship between adaptive and proactive behaviours and employee performance in the administrative sector. Mastery experience, vicarious experience and social persuasion of secretaries are factors to be considered when measuring self – efficacy of secretaries in public universities in Oyo State, Nigeria¹⁷.

Mastery experiences: mastering a task or controlling an environment, will build self- belief in that area whereas a failure will undermine that efficacy belief. To have a resilient sense of self-efficacy requires experience in overcoming obstacles through effort and perseverance. Vicarious experience is observation of people around us, seeing people succeeding by their sustained effort raises beliefs that capabilities to master the activities needed for success by secretaries in public universities in Oyo State, Nigeria while social persuasion is a deliberate attempt on the part of

management of public universities in Oyo State, Nigeria to persuade the secretaries to possess the capabilities to master certain activities which means that they are more likely to put in the effort and sustain it when problems arise¹⁷.

Self-efficacy of secretaries also enhance their job performance. Job performance refers to job-related behaviours and actions of an individual at work that are measured against multiple criteria or standards such as work quality, work quantity and productivity. Job performance is concerned with individual actions that contribute to the organisation's goals and thus, it is what the individual actually does that support or detract from the organisation's goal to varying degrees, not the determinants or outcomes even though researchers often conflate the three constructs¹⁸. Despite the inherent opportunities and challenges associated with digital technology adoption and the obvious digital imperative for university system, there seems to be the dearth of research to find out the impact of digital adoption and digital self-efficacy on the skills development of both academic and non-academic staff of universities, including secretaries. The study also will provide empirical evidence on digital adoption and digital self - efficacy taken together as factors that could have significant influence on skill development of secretaries in Public Universities in Oyo State, Nigeria.

1.2 Statement of the Problem

Skills are a cornerstone for digital transition. Development of skills can contribute to information processing transformation and academic growth among secretaries in public universities in Oyo State. A secretary is an important office staff in an academic institution whose roles are pivotal to the growth and increased performance of the institution. Many higher echelons of management have a secretary who acts as a gatekeeper as well as a care-taker of complex but time-consuming tasks, that freeing the boss up. Therefore, development of secretaries' digital

skills has not only come to stay but also proved to be the future of work. Digital skill development and fully leveraging its features is imperative for public universities secretaries that want to experience true modernity and organisational transformation. Observably, many Nigerian Public Universities have gone digital in delivering education and other academic activities including research works, some are yet to adopt digital technology in performing their administrative functions. And those that have gone digital in their administration are still lethargic about the true value of digital adoption. Secretaries of public universities in Oyo State are not exempted from these challenges, hence this has led to poor documentation, delay in students' results collation, delay in students' certificate and transcript issuance, delay in posting students for National Youth Service Corps and so on.

It has been observed that general adoption of digital skill in all academic and administrative activities will proffer a lasting solution to this issue, it is therefore compulsory for secretaries in public universities in Oyo State to acquire essential digital skills for administrative transformation. Also, secretaries' self-efficacy in the acquisition and implementation of digital skills in performing secretarial duties will put an end to these issues. The work of secretaries is at the center of universities' administration system. Hence secretaries have critical roles to play in the successful adoption of digital technology in universities.

1.3 Aim and Objectives of the Study

The aim of this study is to investigate the influence of digital adoption and self-efficacy on the skill development of secretaries in public universities in Oyo State, Nigeria. The objectives are to:

- i. identify the level of skill development for secretaries in public universities in Oyo State, Nigeria.

- ii. identify the level of digital adoption of secretaries in public universities in Oyo State, Nigeria.
- iii. identify the level of self-efficacy of secretaries in public universities in Oyo State, Nigeria.
- iv. ascertain the influence of digital adoption on skill development of secretaries in public universities in Oyo State, Nigeria.
- v. ascertain the influence of self-efficacy on skill development of secretaries in public universities in Oyo State, Nigeria.
- vi. determine the combined influence of digital adoption and self-efficacy on skills development of secretaries in public universities in Oyo State.

1.4 Research Questions

The following research questions guided this study:

1. What is the level of skill development of secretaries in public universities in Oyo State, Nigeria?
2. What is the level of digital adoption of secretaries in public universities in Oyo State, Nigeria?
3. What is the level of self-efficacy of secretaries in public universities in Oyo State, Nigeria?

1.5 Hypotheses

The following hypotheses were formulated and tested at 0.05 level of significance:

- H₀₁** - There will be no significant influence of digital adoption on skills development of secretaries in public universities in Oyo State, Nigeria.
- H₀₂** - There will be no significant influence of self-efficacy on skills development of secretaries in public universities in Oyo State, Nigeria.

H₀₃- There will be no combined significant influence of digital adoption and self-efficacy on skills development of secretaries in public universities in Oyo State, Nigeria.

1.6 Significance of the Study

The outcome of this study would be of benefit to the following stakeholders: secretaries, tertiary institutions managements, government, researchers, community and inventors of technological gadgets.

Secretaries: Digital adoption, self-efficacy and skill development will significantly affect in the positive way the work of confidential secretaries if positively enhanced in the institution which will project the image of such institution to the world.

Tertiary institutions managements: The result of this study would significantly influence the management of the institution in one way or the other by enhancing the creating of strategic plans for incorporating digital technologies into administrative processes and improving secretarial staff skill sets, allowing them to remain competitive, increase efficiency, and adapt to changing technological trends. The institution management can create focused training programs that address the specific needs indicated in the study, with the goal of enhancing secretaries' digital adoption, self-efficacy, and skill development. This can improve the overall efficiency of administrative processes at the university. Understanding the factors that influence self-efficacy and skill development can help institutions recruit and retain skilled secretaries who can effectively use digital tools and technologies.

Government: The government would be positively affected to formulate good policy on educational system and as a means of improving Internally Generated Revenue of the

government in the state. Government entities in charge of education and technology development can better allocate resources based on the requirements and challenges indicated by secretaries at public institutions, enabling efficient use of funding for training and infrastructure development.

Researchers: The findings of this study would have ample effect on the researcher as it creates rooms for further research areas of interest and bring about better way of life to the populace via new discovery. This is a stakeholder who would benefit from the social responsibility of Institution of learning if the activities of such is producing successful implementation that lead to goals and objectives achievement and attainment. This outcome of this study would be an eye opener to further areas of improvement in the innovativeness and creativity of the investors that can lead to further technological invention which would lead to easy life for humanity.

Investors in technology: Companies can use the findings of the study to identify market demand for digital solutions tailored to the needs of secretarial staff in public universities. This can guide the development of products and services that address specific challenges and requirements identified in the study.

1.7 Scope of the study

This study scope covers the digital adoption, self-efficacy and skill development of secretaries in the public universities in Oyo State. The indices for measuring skill development are cognitive stage, associative stage and autonomous stage while the indicators for digital adoption are perceived usefulness, perceived ease of use, behavioural intention to use. Measures for self-efficacy are mastery experience, vicarious experience and social persuasion. These measures were adapted from theories because it has been found relevant to the objectives of this research work. The geographical scope of the study is Oyo State and the study covers all the public universities in Oyo State. The four public universities in Oyo State are University of Ibadan,

Ibadan; First Technical University, Ibadan; Emmanuel Alayande University of Education, Oyo; and Ladoke Akintola University of Technology, Ogbomoso. The office settings in the various universities include the offices of principal officers and of the head of departments, faculties, directorate, institutes, centres, and colleges. The research targets secretaries for interview because of their critical roles in overall university administration concerning both academic and non-academic office and information management.

1.8 Limitation to the Study

The major issues or challenges the researcher encountered were retrieving information from respondents, who in this regard are secretaries of public universities in Oyo State, Nigeria. The nature of their work makes it less receptive towards advancing research. Also, the ingenuity of respondents who filled the questionnaires for accurate data analysis, time factor for retrieval of information, and the financial implications of carrying out this study were all a big challenge. However, due to the persistency and determination of the researcher, the respondent were implored to fill the questionnaire as it is meant for academic purpose and not to implicate them.

Operational Definition of Terms

Skill Development: Skill development is the process whereby secretaries of public universities in Oyo State, Nigeria acquires, to improve and enhance a wide range of their digital skill.

Cognitive Stage: it is the stage in which the secretaries in the public universities in Oyo State, Nigeria makes deliberate effort to understand and perform the tasks relying on instructions.

Associative Stage: this is the stage where the secretaries in public universities in Oyo State, Nigeria start to make use of the skills acquired to optimize their performance.

Autonomous Stage: this is the final stage whereby the secretaries in the public universities in Oyo State, Nigeria reached the level of fluency and become more proficient, consistent with their performance.

Digital Adoption: It is the process by which the secretaries integrate the digital technologies into their administrative work in public universities in Oyo State, Nigeria to enhance their secretarial duties.

Perceived Usefulness: it is the perception of the secretaries in public universities in Oyo State, Nigeria to which extent they believe a digital adoption can enhance their performance and make their tasks easier to achieve.

Perceived Ease of Use: the perception of public universities secretaries in Oyo State, Nigeria towards the easy way they can learn and use the digital skill in executing secretarial duties.

Behavioral Intention to Use: this is the willingness of the secretaries in the public universities in Oyo State, Nigeria to use the digital skill; communication applications and networks to access and manage information such as student academic records, admission processing, certificate issuance and so on.

Self – Efficacy: Self-efficacy of secretaries in public universities in Oyo State, Nigeria is the belief of his/her capabilities in organising, handling and executing secretarial tasks digitally.

Mastery Experiences: these are the successes and accomplishments of the secretaries in public universities in Oyo State, Nigeria which they build on their past experience that improve their confidence and increase their self-efficacy.

Vicarious Experiences: these are the experiences acquired by secretaries in the public universities in Oyo State, Nigeria through the observation of others performing the tasks either by succeeding or failing in the same task.

Social Persuasion: it is a deliberate attempt on the part of management of public universities in Oyo State, Nigeria to influence the attitude or behavior of secretaries in the institutions so as to adopt and use digital assets to execute their secretarial duties through the provision of necessary platform for the secretaries to acquire digital skills.

Lead City University Ibadan DO NOT COPY

Endnotes

1. M. N. Koko & G. F. Okogun, *Perceived Influence of Modern Office Automation on Administrative Performance of Staff of Private Business organisations in Port Harcourt Rivers State*, **International Journal of Innovative Information Systems & Technology Research**, 8(1), 2021, 44-53.
2. N. P. Okpokwasili, *Information Systems Application Skills Required of Secretaries for Job Performance in e-World Parastatals in Rivers State*, **International Journal of Innovative Information Systems & Technology Research**, 6(3), 2018, 16-24.
3. B. L. Onoja, *Office Automation and Secretarial Productivity in Rivers State University*, **American International Journal of Nursing Education and Practice**, 1(1), 2020, 22-34.
4. A. O. Ovbiagbale, D. C. Mgbonyebi, & V. Olaniye, *Electronic Records Management Competencies Required of Polytechnic Office Technology and Management Graduates in South-South Nigeria*, **Nigerian Journal of Business Education (NIGJBED)**, 6(1), 2019, 464-472.
5. International Labour organisation, *Skilling, Upskilling and Reskilling of Employees, Apprentices & Interns During the Covid-19 Pandemic*, Findings from a Global Survey of Enterprises. Geneva: ILO, 2021.
6. Anderson, *Skill Development Theory*, 1985.
7. O. David, *Assessment of Staff ICT Literacy Proficiency in Nigerian Federal University Libraries*, **Journal of Information and Knowledge Management**, 8(2), 2018, 77-89.
8. S. Odu, *Workplace Virtual Environment and organisational Health Of Tertiary Institutions In South-South*, Re. Unpublished Ph.D Thesis, Ignatius Ajuru University of Education, 2021.
9. International Labour organisation, *Skilling, Upskilling and Reskilling of Employees, Apprentices & Interns During the Covid-19 Pandemic*, Findings from a Global Survey of Enterprises. Geneva: ILO, 2021.
10. S. A. Otamiri, & C. Amirize, *Social Media-Based Interactivity and Work-Life Balance of Broadcast Stations in South-South, Nigeria*, **Journal of Accounting, Management Science and Information Technology**, 7(1), 2021, 106-116.
11. U. Osita, *Database Management: Concepts and Design*, **Journal of Database Management Systems**, 3(2), 2018, 14-26.

12. M. S. Abdullahi & U. R. Shehu & M. B. Usman, "*Impact Of Information Communication Technology On organisational Productivity in the Nigeria Banking Industry: Empirical Evidence*," **Noble International Journal of Business and Management Research**, Noble Academic Publisher, vol. 3(1), 2019, 1-9.
13. Davis, *Technology Acceptance Model*, 1989.
14. V. Venkatesh, & F. D. Davis, *A theoretical extension of the technology acceptance model: Four longitudinal field studies*, **Management Science**, 46(2), 2000, 186-204.
15. A. U. Akwu, A. E. Duke, & V. U., Inuaesiet, *Impact of Information and Communication Technology (ICT) on the Development of Nigeria: A Critical Overview*, **International Journal of Public Administration and Management Research**, 7(1), 2021, 56-78.
16. A. Bandura, & N. E. Adams, *Analysis of Self-Efficacy Theory of Behavioral Change*, Cognitive Therapy and Research, in Press, 1977.
17. envisionyourevolution.com/psychology/positive-psychology/albert-banduras-concept-of-self August 11, 2019.
18. H. Higgins, & A. Gulliford, *Understanding Teaching Assistant Self-Efficacy in Role and in Training: Its Susceptibility to Influence*, **Educational Psychology in Practice**, 30(2), 2014, 120– 138.

Chapter Two

Literature Review

This chapter deals with the review of related literature. This will be done both theoretically and empirically and the following sub-headings was discussed:

2.1 Conceptual Review

2.1.1 Concept of Skill Development

2.1.2 Concept of Digital Adoption

2.1.3 Concept of Self - Efficacy

2.2 Theoretical Framework

2.2.1 Skills Development Theory (Anderson 1985)

2.2.2 Technology Acceptance Model

2.2.3 Bandura Self – Efficacy Theory

2.3 Review of Empirical Studies

2.3.1 Digital Adoption and Skill Development

2.3.2 Self - Efficacy and Skill Development

2.4 Conceptual Model

2.5 Summary in Literature Reviewed

2.1 Conceptual Review

2.1.1 Concept of Skill Development

A secretary is an assistant executive who demonstrates initiative, uses judgment, and takes decisions within the parameters of his or her authority. They also have an exceptional command of office skills and the capacity to take on responsibilities without direct supervision. Similarly, with regard to information processing, management, office productivity, work retention, job success, and job happiness, secretaries today need new sets of skills and competences in the execution of office activities. Without these skills, knowledge, and abilities, secretaries will quickly become outdated, redundant, or possibly fired¹.

It is crucial to remember that secretaries will struggle to carry out their designated office responsibilities efficiently if they do not comply with learning these necessary information application skills. The conventional method of performing secretarial duties is rapidly disappearing. In order to improve their job performance, secretaries now need to learn specific information systems skills due to the introduction and development of advanced office machinery and equipment. The stereotype picture of the secretary of the past completely with traditional office competencies is beginning to fade and the image of the new secretary with electronic competencies is emerging.

Today's secretaries are required to use sophisticated office machines/equipment in setting up an information system architecture that would enable them to carry out their office duties efficiently in order to enhance their productivity. Automated office information systems in today's workplace have fundamentally transformed the skills necessary for effective job performance. Every secretary has the task of up-dating and obtaining appropriate skills that are relevant for office information generation and dissemination. Organization-specific information is generated,

created, organized, and disseminated by individuals (secretaries) via information systems, which are technical creations.

An information system is a collection of interrelated technology elements used to gather, process, store, and distribute data in order to assist in decision-making inside any organization². Since no organization can function without information, information systems drive productivity in all kinds of organizations. Information systems technically is a set of interrelated components that are used to collect (or retrieve), process, store, and distribute information to support decision making, coordination and control, in any organisation. Supporting this, information systems is a term used to describe hardware and software elements that allow an individual to access, retrieve, store, organize manipulates and present information by electronic means³.

Information systems application skills are the skills that enable users to operate and manipulate all the equipment and machines that can enhance and accelerate the collection of data, its processing, analysis, transmission and presentation as facts to aid rational decision making, planning and control of business operations. It includes the capacity to carry out daily office tasks using a variety of office technology. The ability to use computer programs like Microsoft Suites for the gathering, organizing, and administration of office data related to client management, sales records, and employee payroll is another aspect of information systems application abilities. It also involves the capability of using the Internet to receive, process, and distribute information that will improve the organization's performance. Effective instruction in the use of office technology, computer programs like Microsoft suites, and Internet resources, among other things, can help people acquire the aforementioned skills.

Secretaries' need for information system skills varies across organizations. This is due to the fact that their job responsibilities vary in line with their various organizations' objectives and goals. Therefore, even though secretaries generally are information managers, the type and nature of information they receive, generate, process, maintain and disseminate differ significantly. While some handle only text inclined information, others may be required to handle text-numeric and graphic information. However, whatever type of information or data a secretary may be handling or have to handle, it is ideal that the secretary be well equipped with wide-range of information systems applications skills to enable easy mobility across jobs and have edge over others in this era of scarcity of job opportunities. Many information systems application tools, such as Microsoft suites, Internet services, and graphic application tools like CorelDraw, are frequently used in different offices within public parastatals. Using these tools is not easy; it requires a certain level of skill development that will allow users to do their jobs effectively and efficiently, which will improve the achievement of the public establishment objectives⁴.

Secretarial skills are skills acquired by graduates of secretarial studies in tertiary institutions during and after training to enable them perform their office jobs effectively and efficiently as well as being self-employed hence, in business education, it is described as education for the world of work and education for entrepreneurship. These skills are also needed for the success of every organisation. Those possessing professional secretarial skills pass through the process of human capital development. Communication skill is part of secretarial skills needed by individual to excel in office work likewise as an entrepreneur. These skills have to do with written, verbal and listening skills. The ability to listen, write, and speak clearly and fluently are by far some of the communication skills that employers most frequently mention. It is undeniable that effective communication is essential in today's organizations. Another type of

secretarial skill is analytical/research skills, which are in the area of thinking with demonstrated talent for identifying, scrutinizing, improving, and streamlining complex work processes. Computer-technical literacy: with the advent of Information and Communication Technology (ICT) and consequently the use of the computer, practically all office jobs now require some basic comprehension, application, and use of computer hardware and software, particularly word processing, data processing, spreadsheets, and e-mail. Secretarial skills such as flexibility/adaptability/managing multiple priorities relates today's goal-driven leaders, including the graduates of secretarial studies who maintain a productive climate and confidently motivates, mobilizes, mentors and coaches subordinates to meet and sustain high performance standards require these skills.

Multicultural sensitivity/awareness also relates to secretarial skills needed for youth gainful employment or self-employment. There is possibly no bigger issue in the work place today than the subject of diversity. Such diversities include language, religion, the concept of federal character as in the case of Nigeria, gender, individual characteristics and dispositions, among others. The job seekers, particularly the secretaries, require demonstrating a conscious and deliberate awareness and understanding of other people. Planning/organizing skills, in these areas, the skills and ability to design, plan, organize and implement projects and tasks within a stipulated time frame are very important. The subject of goal-setting is not isolated – the graduates should be able to set measurable and achieving goals, taking into consideration, all known and unforeseen constraints. Teamwork, in modern-day organisations, teamwork requiring working in one or more work groups is inevitable. It thus becomes necessary for the individual to

develop and sustain the ability to work with others in a professional manner in the course of attempting to achieve organisational and individual goals.

Secretarial skills are a prerequisite for both national and individual development, especially on the part of practitioners, despite the attendant or associated problems, such as funding. Result-driven skills: graduates of secretarial studies should be result-driven and achievers with exemplary planning and organizational skills and a high degree of detail orientation⁵. Self-improvement skills: these skills include the ability to solve problems using the power of creative reasoning of past experiences along with the information and resources available. These undoubtedly contribute to the development of secretaries' general personalities and the breadth of the human intellect. Gaining secretarial skills through the idea and process of human capital development increases an individual's productivity, which helps them reach their personal and organizational objectives⁶. Regulations and ethics about ICT so as to get the most out of technology. In addition, they involve thinking and the valuable use of the data obtained through the use of technology.

Digital skills are characterized as tasks or communications performed on digital devices where information is accessed and managed. There are three categories of digital skills: basic, moderate, and advanced. While intermediate digital skills help someone make important and worthwhile use of online apps and services, basic digital skills are the entry-level practical skills required to use digital devices and programs in a fundamental manner. Similarly, the set of abilities that serve as the foundation for specialized (ICT) jobs and professions is known as advanced digital skills. Paper may become obsolete in the workplace in the future, as many employees may choose laptops and mobile devices. The concept of the office of the future is more than just the

space in which employees work - it includes the culture and vibe of the office as well as the cognizance of the health and well-being of all employees. This means, offices of tomorrow will consist of multifunctional spaces that can be utilized together for different purposes.

The future work will be influenced by technological, generational and social shifts. Thus, the office of the future would encourage learning through unusual methods, appealing to all ages and adjusting to the changing times. This will allow for creativity, increased performance and encourage innovation. The future of employment will be a hybrid mix of office and home-working. Workers will spend less time commuting and more time collaborating. This means people in the future will split their time between working from home and going into the office⁷. The primary focus of a training needs assessment is to determine performance requirements and the skills and abilities needed by the institution. A successful training need assessment will facilitate resources to fill the gap of an organisation. The assessment must deal with the need to fulfill the institutions mission and vision, improve efficiency, and raise quality output and services. Assessment is the method of identifying the “gap” between the performances required and achieved performance.

As the gaps are recognized, they are evaluated to verify the method in which the gaps can be bridged. The outcome of the training needs analysis will aid in the preparation of modules and facilitate the development of a training program to close or eliminate the “gaps⁸. In fact, there are many research and studies that will prove that skill development is a must for any employees in the corporate as well as in academic environment. One of the definitions of employee skill development is learning to earn or maintain professional credentials such as academic degrees to formal coursework, attending conferences, and informal learning opportunities situated in

practice. It has been described as intensive and collaborative, ideally incorporating an evaluative stage. A school setting is a matter of learning because secretaries are exposed to different scenario and situations where in they have to overcome.

Secretaries are the frontline of the management to implement the school academic policies to achieve the students' objectives. They have to provide fast and efficient service to them otherwise it will give negative impressions. It is a way to identify the learning needs of the employee for the future development program to promote a high level of job performance. The performance of secretaries can be seen on how they cope with their day-to-day work in an academic work environment. All organisation can select the most accurate method, taking into account such factors as organisation size, technology, organisational structure, training staff, facilities, and budget. Commonly, decision making is very crucial in human life. Most especially if someone belongs to professional environment, so it is very important to obtain outputs with functional use of decision-making skills⁹.

Secretaries' skill development is the process of behavioural modification or moulding of workers to integrate organisational needs with their characteristics. Skills development aims at developing competencies such as technical, human, conceptual and managerial skill for the furtherance of individual and organisation growth. The time of technological change and innovation both new and old employees need to be trained to update their knowledge, creative and communication skills and abilities and keep them abreast of the new development in the techniques and methods of carrying out their jobs in order to achieve individual and organisational objectives. Skills development is the process of aiding employees in their present or future worth through the development of appropriate habit of thought and action,

communication, knowledge and creativity. The process of development is a continuous one. It is an avenue to acquire more and new knowledge and develop further the skills and abilities in secretarial and ICT to function effectively¹⁰.

In reassessing and reviewing the submissions of some researchers, as postulated above it shows that development is a course of action designed to enable the individual to realize his potentials for self-growth and organisational development. Training is a calculated efforts aimed at increasing secretaries' skill and creativity for doing a particular job and developing person's knowledge for vocational purpose. In correlation with the above stipulations the wordings of another scholar can be reiterated, he maintains that development is a process that aims to bring up individuals up to a desire standards for present or potential assignment. In a similar line of development, it is seen as a systematic process of altering the behaviour, knowledge and motivation of secretaries in a direction to increase organisational achievement. Development is any organisational planned efforts to change the behaviour of secretaries so that they can perform to an acceptable and standard result on the job.

The increasing competition that organizations face as a result of globalization, technological advancements, and changes in the political and economic landscapes has made it necessary for them to train their workforce in order to prepare them to adapt to changing circumstances and improve their performance. It is crucial to take into account the evidence that is currently available regarding the maturation of knowledge in the corporate world, which has been facilitated not only by technological advancements or a combination of factors of production but also by increased efforts to develop organizational human resources. Therefore, it is the responsibility of every organization to improve the business performance of its employees, and

most firms need to implement development and growth as one of the key stages to achieve this. It is clear that employees are an essential resource, so in order to maintain a successful public image, it is critical to maximize their contribution to the company's objectives. Managers are required to verify that there is a suitable supply of secretaries who are technically and socially competent and who have the potential to advance into prestigious departments or management roles.

It is important to note that human resources practices work to develop individual knowledge, skills, and creativity as well as employee attitude and behaviors. Development is not just a means of providing secretaries with the abilities and creativity they need to perform their jobs; it is frequently seen as a sign of an employer's commitment to their workforce if it is sponsored by their employers. If these effects are prevalent enough in the employees' population, then the collective changes in human capital, attitudes, behaviors and associated organisational climate would be substantial enough to influence organisational performance. Development not only build up the capacities of the secretaries, but sharpen their thinking ability and creativity in order to create more beneficial decisions in time and in a more productive manner. Moreover, it also enables secretaries to deal with the students in an effective manner and respond to their complaints in time. The training develops self-efficacy and results in superior performance on jobs by substituting the traditional employment practices by efficient and effective work-related practices¹¹. Training refers to a planned intervention aimed at enhancing the factors of individual task performance.

Organizations can improve and increase the quality of their current secretaries by providing thorough preparation and growth. Development is crucial not only to increase productivity but

also to propel and inspire workers by letting them realize how important their tasks are and providing them with all the data they need to do those jobs¹². It is beneficial to both employers and employees of an organization. It is important and an imperative tool for the organization to revamp the operation of all personnel for organizational growth and success. Increased motivation, job satisfaction and morale, increased process efficiencies that lead to financial gain, increased capacity to adopt new technologies and methods, increased innovation in strategies and products, and decreased employee turnover are the overall benefits of skills development. All human resources development activities are intended to either improve an individual's performance on their current job, train new skills for a new job or a new position in the future, and promote general growth for both individuals and the organization so that it can meet its current and future objectives.

Organizations can choose from two different methods for training and skill development. These are on-the-job training given to organizational employees while taking their regular study at the same working venues and off-the-job training involves taking employees away from their usual work environments and therefore the trainees concentrate on the preparation. Models of the on-the-job training include, but are not limited to, job rotations and transfers, coaching and mentoring. On the other hand, off-the-job training examples include conferences, role playing, and many more. On-the-job training may consist of teaching or coaching by more experienced people or trainers at the desk or at the bench. Different organizations are motivated to carry on different training methods for a number of reasons for example; depending on the organisation's strategy, goals and resources available, depending on the needs identified at the time, and the target group to be trained which may include among others individual workers, groups, teams, department or the integral system¹³.

The factors listed above should be taken into account in order to ensure that training is successful and has a good impact on employee performance. When employees perceive a sense of organizational commitment to them, they feel more invested in the company and perform better. Effective development programs are positively correlated with employee productivity; however, in order to make this possible, managers must identify the factors that hinder the effectiveness of training programs and take the necessary steps to counteract their impact on employee performance. High levels of employee commitment are also attained if training enhances public presentation and meets learning objectives at the organizational and private levels. Generally speaking, it can be said that the training program's outcomes regarding employee concerns like motivation, work satisfaction, and organizational loyalty have not received much attention up to this point¹⁴.

Development sessions help employees become more proactive, capable, and creative while preventing human resource obsolescence caused by demographic factors like age, attitude, or an inability to adapt to change. Development is the methodical process of improving knowledge, communication, creativity, skills, and attitude, which results in employees performing satisfactorily at work. Since training increases employees' effectiveness and efficiency, it is essential to improved organizational management. It was further explained that, according to a different scholar, training procedures are closely related to all other human resources activities; they allow employees to develop within the company and increase their market value. Additionally, training aids in molding employees' work-related conduct and enables them to contribute to the organization's success, which ultimately results in increased profits for the company because of the improved performance of its workforce. An actor with a high level of education can make the most use of organizational resources while wasting as little as possible.

Organizations can assign authority and responsibility to well-trained personnel with complete assurance that they will ensure the success of the company¹⁵.

Employee job performance and development are instantly correlated. An additional researcher had proposed similar results. Although education plays a role in task performance, it was suggested that a variety of elements, such as the workplace environment, employee skills and knowledge, incentives and motivation, communication style, and organizational culture, greatly enhance employees' overall performance. Employee education gives workers the skills they need to become more productive and effective workers. Furthermore, because they believe the organization has invested in their skills and development, highly talented employees are often more motivated and have higher morale. This also results in lower turnover costs, which showed that skilled workers tend to perform better in groups as everyone knows what is expected of them and can easily meet them. Employees who have received training and development are also more confident in their abilities to perform and make decisions. Additionally, staff members who have access to regular education are far more inclined to welcome change and provide you fresh perspectives because they have demonstrated their ability to absorb, retain, and apply facts, employees who acquire new skills through training and development are attractive candidates for promotions. Reliable, competent staff members can also be given the authority to train other staff members, which eases the management crew's workload¹⁶. Powerful education is essential because of the actual consequences of education. Research has shown that more expensive but effective education can save money that would otherwise be spent on less expensive but ineffective education. The development of an effective preparation program is significantly influenced by four subscales. According to the poll, four factors are necessary for a training to be effective: trainee satisfaction, training material satisfaction, training session satisfaction, and

learning transfer. Job performance is affected by the frequency of training received.

Development can be viewed as the process of learning new things and developing the skills necessary to perform tasks in a work environment. Development is a purposeful process that organizations use to equip their employees with the necessary attitudes, knowledge, and mindset in order to fulfill their responsibilities and tasks in a sufficient and effective manner¹⁵. Training and reskilling secretaries leads to development; training is the process of obtaining technology that enables workers to operate in accordance with the necessary standard. It might be a discipline, an experience, or a planned activity that leads to people learning new things and developing predetermined behaviors. The process of improving a worker's performance and correcting their behavior is called training and development. Few studies have included training and development as a means of enhancing workplace performance. Employee performance and efficiency are thought to be quickly predicted by training and development. According to additional research, training and development is a learning strategy that can help employees increase their skills and knowledge for better performance. It provides the basis for self-possession, which enables workers to work under pressure and with little guidance or instruction.

Employee performance is also impacted by training, which also fosters a genuine logic that increases employee engagement. According to a more recent study, training helps employees identify their unhappiness and will, in fact, improve their ability to carry out the association's mission. One of the most important human resource managements (personnel) tasks in a company is staff development. Since employees (human resources) are thought to be the most active and crucial component in achieving an organization's objectives, managers must pay close attention to their development in order to maximize their potential at work¹⁷. Among the four components of production in organizations, they are the most crucial because of their knowledge,

skills, and abilities, which promote productivity, resourcefulness, and the overall well-being of societies or organizations. An organization's human resource value increases with the number of informed, talented, and resourceful people it employs. The amount, quality, and production environment all affect the value of human resources; nevertheless, having a large number of human resources does not always translate into having a high value. To increase the potential to an active human resource that satisfies desired goals, significant inputs and efforts are necessary.

A good staff development or education program is one of the inputs. One of the most crucial facets of leadership positions in organizations is staff development. A well-trained workforce is essential to every organization's success. Even when employees are carefully chosen, satisfactory performance is not guaranteed. This is because, without training and development, a staff member with great performance potential might not always carry out his duties effectively. For this reason, organizational orientation is the first step in training newly hired employees. The importance of staff development in achieving organizational objectives has made this research necessary, and as a result, the following study-related concepts were explained and examined. Job performance, staff development, the process of staff development, and its goals.

The overall goal of staff development initiatives is to maintain, update, or enhance employees' skills and competencies. Staff development is a methodical effort to balance the needs of the organization where employees are expected to work with their own interests, desires, and carefully evaluated needs for advancing their careers. Any learning activity that focuses on future demands rather than current ones and prioritizes career advancement over performance right away is considered staff development.

Staff development is the process by which a leader identifies the performance needs of their employees and the degree to which they are interested in making sure that those needs are satisfied through initiatives that enhance the employees' qualitative and quantitative contributions to the organization's overall objectives¹⁷. These programs would be designed to help people in the system do their jobs more efficiently or to get them ready for increasing responsibility. Human resource development, or staff development, is the process of giving employees in an organization opportunity for training, growth, and learning in order to enhance organizational performance. In keeping with the idea that an organization's employees are the primary source of competitive advantage, it focuses on improving resource capabilities. Therefore, staff development entails both creating the intellectual capital that an organization needs and making sure that the proper kind of people are generated to meet its present and future needs.

In contrast to training, which aims to help employees gain the fundamental skills necessary for the efficient completion of their tasks, staff development focuses on teaching or equipping people with the abilities they will need for future employment. Different academics have defined training differently and confirmed the difference between staff development and training. Another scholar saw training as a methodical process of changing employee behavior to further organizational goals, which includes improving an employee's skill level to the point where he or she can perform the current job for organizational performance¹⁸. Training is defined as any learning activity that is directed towards the acquisition of specific knowledge and skills for the purpose of an occupation or task. According to the Manpower Services Commission, training is a systematic procedure that aims to improve behavior, attitude, and knowledge or skills through educational experiences in order to perform well in a given task or series of related activities.

Another way to describe training is the process by which a person learns particular abilities in order to carry out a given task.

Training is typically applied immediately and finished in a shorter amount of time. Despite the fact that academics have distinguished training and development as two distinct ideas, there is "considerable overlap" between the two because it is difficult to distinguish between them and both are allegedly intentionally focused on enhancing performance and skill sets. In order to perform well in a particular activity or set of related tasks, training is a methodical process that seeks to enhance behavior, attitude, and knowledge or skills through educational experiences, according to the Manpower Services Commission.

Training may also be defined as the process by which an individual acquires certain skills to perform a task. Usually, training is implemented right away and completed in less time. Although scholars have distinguished between training and development, there is "considerable overlap" between the two concepts since they are hard to separate and both are purportedly purposefully aimed at improving performance and skill sets to foster a climate that facilitates personal self-fulfillment, institutional effectiveness, human creativity and system renewal, to serve the school system's primary goals, enhancing and achieving quality teaching and learning for students, it saves money as it is costly to hire and then dismiss employees who do not work according to expectations while it is also costly to lose good employees because they are frustrated by lack of opportunity for professional growth and also wasteful to accept barely satisfactory work as the norm or not to provide opportunities that lead towards the objective of optimal development on the part of each individual, to establish viable and meaningful programmes, that enables personnel to work cooperatively towards achieving the system's goals

and their own personal goals in the areas of achievement, satisfaction and self-fulfillment, technological developments and organisational change have gradually caused some employers to realise that success lies in the skills and abilities of their employees and this implies considerable and continuous investment in training and development, achieving suitable human resources to introduce and implement new programmes, ensuring rapid and suitable replacement for any staff that leaves the organisation¹⁸.

Employee training needs to receive more attention because it can lower expenses and improve performance in organizations. Numerous studies have demonstrated the close connection between different training and development methods. Training has been identified by research as a method for organizations to create value and save costs. Similar to this, training enhances organizational performance and makes it easier to accomplish business strategy, particularly for learning organizations. Therefore, in order to achieve high performance in those organizations, training needs to be in line with organizational strategy. Additionally, written research that examines how training affects organizational performance finds that only off-the-job training enhances performance; on-the-job training has no effect. However, general training has a positive impact on firm performance, whereas firm-specific training does not¹⁹. Often in implicit findings, it was argued that training increases employees' propensity to perform and subsequently contributes to the firms' performance. For example, a scholar was of the view that those companies that integrated training and development practices into their business planning enhances their own performance.

A brief explanation of these modes which can be used in most organisations is given as On -the - Job Training which is the most widely used training method, as it is simple and cheaper to adopt,

and it places the employee in actual work situations. There are many different kinds of on-the-job training, such as orientation, which is typically given to new hires in order to help them quickly adjust and become interested in their job. Orientation typically focuses on the following topics: the organization's history and mission, key personnel, and employee rules and regulations.

Coaching: A coach serves as a cheerleader and typically works one-on-one with individuals, focusing on their present and future needs. They may assist them in creating and implementing worthwhile goals, offering or receiving feedback, helping them think through potential solutions, setting priorities, and providing career information. Coaches can be either internal or external to the company where they work. Mentoring is the process of assigning a more experienced employee to work alongside or mentor a new or relatively inexperienced employee. Quality circles are a new idea that originated in Japan and allows small groups to actively plan, design, and implement work procedures in business and industry. The use of quality circles for staff development in education is a technique that places the primary responsibility for personal growth on individuals linked together for the improvement of secretarial duties²⁰. Supervisory assessments help to improve future performance of the staff.

Job rotation is the process of moving workers from one position to another so they can gain more experience and become acquainted with different facets of working for a company. The practice of transferring managers and staff to different roles in order to improve organizational effectiveness and employee development has been documented as a success in several industries. Although the method is not widely used in education, some people support it as a constructive development strategy for school administrators. The understudy approach involves teaching

someone to take on a role in the future by having them observe the tasks and responsibilities of the person who is currently in that position.

When a superior officer is transferred, retires, or is promoted to a higher position, the trainee takes over. Therefore, a group or individual may be assigned to help him perform his duties related to the position and occasionally left to handle problems and solve them on their own²¹

Job instruction training is a series of instructional procedures used by the trainer to train employees while they are working in their assigned job. The four-step processes in the job instruction training technique help the trainer prepare the worker, present the task, allow practice time, and follow up. Giving workers a training handbook, handouts, or other reference materials is one way to get them ready for work. Planned work and activities entail assigning trainees' significant tasks to advance their expertise and skills. Trainees might be asked to lead a committee or attend significant committee meetings, for example. This is typical in educational settings where instructors serve on a variety of committees. Such experience can enhance their interpersonal skills and provide them a better understanding of how their organization functions.

People are relieved of the pressures and tensions of the workplace by using off-the-job methods, which are carried out outside of the typical work environment. There are various benefits to conducting training apart from the workplace. It gives trainees the chance to interact with individuals from different departments or organizations, exposing them to fresh perspectives and experiences. Lectures, discussions, vestibule training, case studies, role-playing, simulation, and computer-based or preprogrammed training are examples of off-the-job methods and classroom education. When combined with visual aids like slides, charts, maps, and handouts, the lecture method which entails a subject expert presenting information orally to a group of listeners can be

a useful tool for helping people understand theories, concepts, procedures, and other factual information.

The discussion approach entails two-way communication between the trainees and the trainer as well as between the trainees. It promotes trainees' active involvement and gives them a chance to share their opinions, get clarification, and get feedback. Vestibule Training: In this training approach, employees are taught how to operate machinery or carry out tasks that are comparable to those they would encounter in the workplace. Under this training approach, a qualified instructor oversees a training program that is delivered off-site at a location distinct from the workplace. After going through the vestibule training for a specified period of time, the trainees are expected to apply their newly acquired skills when they are assigned to their real job. Behaviour Modeling- The use of behaviour modeling is based on social theory, and it is an effective method for interpersonal or social skills training. This method of training incorporates the use of videos to clearly demonstrate the way things ought to be done and what behaviours are to be avoided. Behaviour modeling is often based on the demonstration of the right and effective way to behave and as a result, trainees are provided with facilities to practice such.

Behaviour modeling is where target behaviour is selected and videos on each behaviour produced, key points are displayed on screen and are backed by trainer-led discussions. Learning here is trainer enforced through role play²². Back to industry (attachment) programmes- In order to maintain the knowledge of technology and practices commonly used, the use of professional leave is used in order for employees to replenish and update their skills and knowledge. Case study – it is a training approach in which trainees study information provided on a case and then make decisions based on it.

Cases can be studied by individuals or groups. Business Games and Simulations- The game requires participants to role play decision makers using data to make a variety of decisions. Business organizations are the primary users of them. In-basket training is a management development simulation that evaluates learners' capacity for planning, prioritization, and decision-making. The trainees make decision by acting out a manager's role using information contained in the manager's in-basket such as telephone messages, notes, memo, letters and reports. Role playing- participants are expected to act on specific problems they may face on their jobs. It therefore involves learning by doing.

Self-Paced /Computer- Based Training Methods can be conducted off the job, that is, in the classroom or in an individual self-paced format. Increased availability of networked computers has led to a limitless interplay between instructor led and individual based computer training²³. In many organizations, computers are becoming more and more essential for providing training. According to estimates, computer-based training is being used in training programs by 55% of organizations. Computer-based training (CBT) can be used in three different ways. Intranet training, intelligent computer-assisted education, and computer-aided instruction are these. Computer-aided instruction (CAI)-The programmes of computer-aided instruction include electronic workbooks, compact disc and read-only memory (CD-ROM) presentations.

The CAI software packages have a wide range of materials from many subject areas. Many companies have replaced instructor-led courses with CD-ROMS. Research has also shown that trainees using CAI take less time to learn same amount of material using conventional methods. Because this approach is economical, tertiary institutions might potentially utilize it to teach lecturers. Intranet-Based Training via the Internet Millions of computers connected by modems and phone cable lines form computer networks known as the internet. Intranets are computer

networks that locate, manage, produce, and disseminate information inside an organization using internet and World Wide Web technology and software applications. Trainers can thus contact with students, carry out needs assessments, do other administrative duties, and distribute course materials via the intranet. Because it can qualitatively assess learner performance, intelligent computer-assisted instruction is a more sophisticated form of computer-assisted instruction.

This kind of technology-based training is known as e-learning (electronic learning). It can determine the capacity of the learners based on their mistakes and response patterns. The aforementioned training methods have demonstrated that an organization can employ a range of training methods for staff development. Though they might be accepted by educational institutions, the majority of them are utilized in corporate organizations.

Programs for higher education training give secretaries the opportunity to pursue additional education or advanced degrees, such master's and doctoral degrees, in their fields of expertise. Universities both inside and outside of Nigeria offer the programs. Additional training is acknowledged as a strategy for improving worker performance and efficiency²⁴. Universities and other formal educational institutions offer a structured learning environment that facilitates assimilation. He adds that there are a few benefits to formal education, including the ability to easily evaluate student performance through testing, standardize ideas and concepts, provide a forum for interaction between students with different backgrounds and experiences, and centralize resources for optimal use. Both the organization and the people who will be trained should be aware of the training's contents, duration, and other specifics. Employees can participate in these programs and courses while fully off the clock, or they can work part-time.

Tertiary institutions may have realized the benefits of staff's participation in higher degree programmes and could have been supporting or sponsoring them through various methods as stated earlier. The sponsorship is seen as an investment of some sort that brings forth dividends. It is believed that when such sponsored secretaries complete their courses their job performance would improve and they will be able to take up new responsibilities and occupy more demanding positions. Many staff are said to be enthusiastic about participating in higher education qualification programmes because a higher degree is also a basis for promotion to a higher level. Furthermore, the Tertiary Education Technical Fund (TETFund), formerly known as the Education Trust Fund, established academic staff training and development programs in 2008 to support tertiary educational institutions for the higher education of lecturers, particularly at the Master's and Doctoral levels both domestically and abroad, in addition to sponsoring her non-academic staff. The beneficiary institutions normally recommend their academics for sponsorship in compliance with the TETFund requirements. This funding has also helped many lecturers; by March 2010, 2,068 lecturers from tertiary institutions had benefited, 385 of whom were studying abroad.

Development plays an important role in group improvement, enhancing productivity and overall performance, and ultimately placing groups in a position to thrive in the face of competition. According to this method, there is a significant difference between organizations that teach their employees and those that don't²⁵. Training is a purposeful, methodical interest that results in a higher level of proficiency, knowledge, and ability that may be required to execute paintings successfully. There is a strong correlation between employee performance and education. Employee expertise, skills, capacity, communication, and creativity are all improved through training, which benefits both the employee and the business.

These goals have made it necessary for any organization, including public universities in Oyo State, Nigeria, to have a systematic and planned program for their secretaries in order to promote the attainment of their goals. In the real world, worker education plays a crucial role in improving overall performance in addition to increasing productivity, which ultimately puts organizations in a position to stand up to opposition and live at the top. This implies the lifestyles of an enormous distinction between agencies that educate their employees and organizations that do not. Existing literature provides evidence of the effects of schooling and development on worker overall performance. According to a number of academics, developing secretaries in an organization requires a methodical process that typically consists of a series of steps that include needs analysis, design, implementation, and evaluation.²⁶ Needs assessment is the process by which an organization's gaps or needs are addressed through development. These gaps or needs may be a new challenge that requires a change in the organization's operations (such as new laws or more competition) or a current deficiency, such as subpar employee performance. For instance, a new law on the professionalization of information management in Nigeria's public institutions in Oyo State has made it mandatory for all employees to learn the subject.

Training needs analysis aims to fill the gap between what people know and can do and what they should know and be able to do. An organization's learning needs as well as those of groups and individuals must be identified and analyzed in order for training to be in line with its purpose. To do this, the following factors must be taken into account. Training should focus on identifying and meeting learning and development needs, such as multiskilling, preparing individuals to take on additional responsibilities, improving overall competence, and preparing them to take on higher levels of responsibility in the future, rather than just fixing things right, training needs analysis areas; training needs analysis should reflect organisation needs, group or units needs and

individual employee needs. The three areas are however interconnected, sources of information where the identification of training needs, the sources of information must be considered.

Programs for training and staff development must be carried out with the best possible means. Depending on the types of individuals to be trained and the primary goals of training, an organization can use a range of training approaches²⁷. New hires must pick up new talents, and since they are probably highly motivated, they can get used to the abilities and conduct required of them in their new role rather quickly. Training seasoned workers can be challenging since it can be difficult to assess their training requirements and they may object to being asked to alter their long-standing work practices. However, other academics clarify that the most common training and development techniques employed by organizations can be divided into two categories: computer-assisted instruction and on-the-job training. Workshops, teacher conferences and seminars, interest study groups, exchange trips, mentoring, higher education, collaborative networks, and research are the most often utilized approaches in the educational system. Depending on the program's goals, several techniques are employed in postsecondary institutions to conduct training courses. Therefore, a workshop could be the best way to instruct staff members on computers, which were used as an example throughout the design phase.

The last stage of the training and development process is the evaluation of secretaries' progress. Program evaluation gauges how well the staff development intervention worked. It is a crucial but frequently overlooked activity. Many public universities in Oyo State, Nigeria, are in this predicament, with no systems in place to evaluate the development activities of their secretaries. Yet, evaluation can be very helpful to an organization in a number of ways, such as assessing whether a program is meeting its goals, highlighting the development programs' shortcomings

and strengths, calculating the program's cost-benefit ratio, choosing who should be involved in future programs, identifying which participants benefitted the most or least from the programme and establishing a data base to assist management in making decisions²⁵. Many different frameworks for development programmes evaluation have been proposed but the most widely used approach is that of Kirkpatrick²⁸.

The Kirkpatrick stages or processes for evaluating training efficacy include The phrase "Reaction Level" describes how the trainers feel about the program's structure, content, and techniques. In addition to discouraging others from participating, trainees who disliked the program would be unwilling to apply the skills and knowledge they had learned. Job behavior and performance level determine whether the trainee applied what they learned in training back on the job; organizational level evaluates whether the development programs have increased organizational effectiveness; and learning level comprises the concepts, information, and methods that the trainees learned in relation to the human resource development objectives.

The cognitive stage is the initial phase of skill development. Here, secretaries will concentrate on tasks that require attention. At this point, questions like "what should I do?" are crucial. For instance, a lawn tennis player could ask, "How long should my serves be to maintain that perfect length?" The player will listen to his coach's advice in order to achieve his goal. The secretary attempts to acquire a skill at the cognitive stage by absorbing information either visually or verbally. He will be carefully following his instructions, which contain details about the mistakes he has been making and his inconsistent behavior, because the feedback is important. Verbal feedback is crucial to attaining desired outcomes, this learning stage is sometimes referred to as the verbal motor stage. Understanding what to do is the first step in the cognitive stage, which is

all about processing the relevant data. It entails the verbal transmission of new knowledge as well as its acquisition or cognition. The key to achieving significant progress in the aforementioned scenario is the trainer, who attempts to make the input appear more like a cognitive task than a mechanical intervention.

It would have been a drawn-out process, but the experimentation, trial and error, creative learning, and problem-solving abilities would have been beneficial. However, simply taking advice from an expert and acting on it to save time and accomplish objectives is the feedback. Because a secretary attempts to analyze information in order to cognitively comprehend the parameters, needs, and requirements of the necessary skill movement, the cognitive stage is crucial. Let's take the scenario where some kids went to a tennis academy to take instruction. They observed a contest between two players after arriving early. They got visual information about the game in this way. The instructor now went over the nuances of the actions with them. They also received verbal instructions regarding the game in this way. They will be able to relate to the game and play appropriately with the support of both spoken and visual instructions. In order to create a motor program, the learner takes the information and arranges it in a meaningful way. The cognitive stage leads to significant performance improvements.

Cognitive skills development is defined as "the acquisition of general intellectual or cognitive competencies and skills, which if they are not so directly tied to a particular curriculum or course of study, are nevertheless thought to be salient outcomes of postsecondary education"²⁹, in addition to other skill development (such as social, emotional, and physical). Many terms are used to describe these cognitive abilities, including "critical thinking, reflective judgment, epistemological development, and so on." Furthermore, a range of concepts and methods, including intelligence, scientific problem-solving, metacognition, learning motivation, and

learning styles, are included in the development of cognitive skills. Given its "applicability and utility in secretarial skills," it becomes evident that the development of cognitive skills is one of the key objectives for secretaries, even though the concepts and applications of each of those phrases vary slightly.

The associative stage is the second phase of skill development, awkward movement, making changes, taking a long time to finish tasks, conscious performance, modest advances in the performance graph, and less verbal information are all essential features of this stage. After a great deal of work, the secretary begins to improve his or her performances at this point. He links particular indicators to the issues he encounters and makes an effort to respond appropriately in order to resolve them. Now is the moment to tweak and expand upon the foundation that has already been constructed. To reduce performance variability, the learner actively works to move their body throughout the associative stage. Since the problem is learning how to execute the skill, the term "motor stage" also refers to the associative stage. It is the learner's responsibility to modify his movements and abilities. From a cognitive standpoint, the learner is now more concerned with how to do something rather than what to do, and he is making positive efforts to convert declarative information into procedural knowledge.

Every athlete on the planet will not be able to score a perfect ten each and every time they compete. There is no denying that even when you are at your best, you can always do better. This is true for many kinds of sports; for instance, a tennis player will want to get better at serving for an ace, a basketball player would attempt to get better at shooting, a softball player will try to get better at pitching, a swimmer will try to get better at swimming, etc. An indication of a good player and his trainer is that they are constantly seeking ways to grow and get better.

Since it is a crucial component of the relearning process, a learner will always go over the cognitive and associative stages of motor learning and control. No matter how effective or accomplished you become, every expert in the world has stressed the importance of going over the first and second stages of motor acquisition again on a regular basis. This also holds true if an athlete experiences a setback and his performance begins to deteriorate. One of the main causes of this situation is that he is making basic blunders, and the reason for his lack of growth is that he urgently needs remedial work. Explaining that the athlete will need to make significant adjustments in order to improve his performance is the best course of action for a coach. This is only possible if he is able to let go of his old habits and acquire new fundamentals by going over the motor learning and control stages once more. Relearning entails practicing and learning during the associative stage³⁰ and gaining additional knowledge during the cognitive stage.

It is difficult to persuade players to re-learn in fact, it's a real problem, particularly if the athlete is successful because it will have to modify his perspective. It's only a negative stage that will pass. Most players do not want to put in the extra effort required by the new movements, which feel awkward and uncomfortable. Verbal knowledge of the most recent methods and the motor learning process aids in creating a learning plan and provides a clear viewpoint for implementing and sustaining the change. After that, the coach works with the player in the most basic ways possible until the skill is mastered and integrated into the player's mind and body, becoming an automatic and spontaneous part of it.

The independent stage is the third stage of skill development. At this point, the player has acquired knowledge and diligent practice has become second nature, because it is engrained in his actions, the student may perform it without giving it any conscious thought. It takes years of

practice and dedication to reach this step of the motor learning paradigm. It is only available to top athletes whose motor skills have become second nature and whose mental processes are minimal. At this point, a player can simultaneously attend and analyze information. the stage where there is less thought and instinctive responses, which appear to be the result of natural flow without excessive effort. In the autonomous stage, self-learning is essential since proficient actors are able to recognize mistakes and correct them on their own. The fact that few people make it to the third stage is a fact. It is the instructions, practice structure, and the task variables that help to determine whether a player will be able to achieve the autonomous stage or not.

There are both good and bad case scenarios and outcomes associated with an autonomous stage. This phase has the advantage of requiring less cognitive demands, effort, and attention, which allows the player to focus on another task without sacrificing their mental freedom. For instance, a mathematician can listen to music while working on a challenging problem without it interfering with either task. The drawback of this stage is that there is much opportunity for unnecessary and distracting ideas because activities are typically routine due to lower cognitive demands. This occurs because the player begins to consider possible outcomes rather than the task at hand. The autonomous stage also has the drawback of reinforcing wrong movement due to automatic performance. The players overlook a crucial point: just because they are proficient at a particular action and it has become second nature to them does not imply that it is the right one. It is possible for a player to repeatedly do an incorrect action automatically.

Technical, managerial, and inventive skills are among the several aspects of skill development. The abilities required to create the company's product or service are known as technical skills, and they include industry-specific operations, communications, design, research and

development, and environmental observation³¹. Technical skills are abilities developed by application and mastery of digital or physical tasks. People who work in information technology, computer science, mechanics, and mathematics typically employ a variety of technical talents. However, a lot more industries now depend on workers with technical expertise. For instance, employees in the food service and retail industries frequently need to be proficient with point-of-sale (POS) software. Programming languages, common operating systems, software expertise, technical writing, project management, and data analysis are a few particular examples of technical abilities. Technical skills differ greatly depending on the business and type of work. Understanding several coding languages is regarded as a technical talent for computer programmers. Technical expertise in telephone systems and customer management may be required of customer care agents. Technical abilities ranging from information monitoring and implementation to instructional technologies and software programs may be required of secretaries.

Since almost every work requires the use of various tools, programs, and procedures, technical skills are crucial. Planning, organizing, directing, and controlling a corporation's operations to achieve predetermined goals^{32,33} are all crucial managerial abilities for the day-to-day management and administration of a corporate endeavor. Managers need to employ a wide range of abilities to successfully plan, organize, lead, and control. The capacity to perform a task effectively is referred to as a skill. Technical, interpersonal, and conceptual skills are the three fundamental areas of managerial abilities. Technical skills are those required to manufacture the company's goods or services, which are industry-specific operations. Technical skills differ greatly depending on the business and type of work. Understanding several coding languages is regarded as a technical talent for computer programmers.

Technical expertise in telephone systems and customer management may be required of customer care agents. In contrast to conceptual skill, which is the cognitive ability to see the business as a whole and the relationships among its parts, human relation skill is the capacity to work with others with empathy and understanding; the willingness to listen to staff issues; and the ability to inspire cooperation, confidence, and loyalty. The ability to use novel concepts for the benefit of society or the economy is referred to as innovation skills³⁴. The ability to think creatively, solve problems, and have functional and/or technical skills are all components of innovation capabilities. To be fair, the capacity to apply a combination of knowledge, skills, and traits in a particular environment is essentially what is meant by innovation skills. Innovation-skilled employees are typically identified by their capacity to think creatively in the face of difficulties and to mold their own or others' ideas with dedication and self-action. The ability to conceive and execute something novel, unusual, or enhanced that adds unique value to the organization is known as innovation in business. It involves modifying or enhancing current goods, procedures, services, or solutions either boldly or gradually. An organization must consistently innovate in order to realize its full potential and thrive, but many organizations lack this vital ability. The good news is that all members of the organization can become more capable of being creative. Innovation-skilled employees are typically identified by their capacity to think creatively in the face of difficulties and to mold their own or others' ideas with dedication and self-action.

The ability to conceive and execute something novel, unusual, or enhanced that adds unique value to the organization is known as innovation in business. It involves modifying or enhancing current goods, procedures, services, or solutions either boldly or gradually. An organization must consistently innovate in order to realize its full potential and thrive, but many organizations lack

this vital ability. The good news is that all members of the organization can become more capable of being creative. Without relevant information, skill development through seminars cannot be successful. Effective skill development must be grounded on curriculum and instructional practices that are likely to impact secretarial duties. As a result, the goal of skills development activities like seminars should be to: a. Increase secretaries' ICT proficiency. b. Develop your secretarial abilities. c. Stay abreast of advancements in both the specialized professions and education in general. d. Create and share fresh information. a. Improve the capacity to keep an eye on students' records so that students can receive helpful criticism.

The above issues will therefore have a major impact on secretaries' job performance if they are the focus of seminars at higher education institutes. Workshops and seminars are comparable; however, the focus of a workshop is on practical skills or laboratory work. An interactive and participatory group exercise intended to reinforce, imprint, and empower participants to apply and practice the actual concepts and procedures is called a workshop. Workshops' primary goal is to introduce participants to useful techniques for operating machinery or equipment³⁵. Workshops are typically more intense and smaller than seminars, and they frequently entail participants trying out new abilities while the instructors keep an eye on them. Professionals from within or outside the school are frequently invited to conduct workshops in higher education institutions, particularly universities and polytechnics. These workshops might span a few hours, days, or weeks. Higher education institutions must upgrade the abilities of their secretaries who use new technology whenever it is introduced, such as computerized equipment. As a result, they can set up training sessions to teach secretaries how to operate these computers. Professionals (resource persons) are asked to present papers and respond to participant questions during these programs. Pre-program tests or questionnaires are typically offered by the

organizers to gauge participants' prior knowledge or abilities, and a post-program test is administered at the conclusion of the program to gauge participants' knowledge gained. All of these actions are taken to improve their professional proficiency. It is necessary to ascertain the effect of workshops on enhancing the skills of tertiary institution secretaries.

A group of scholars discussing and debating an issue or topic on a college campus might be referred to as a conference. A conference is "a large official meeting at which people with the same work or interests come together to discuss their views," according to the Oxford Advanced Learners Dictionary. A meeting of people who have been summoned together to discuss a certain task in a limited amount of time is termed a conference. It is also thought of as a formal way to validate social programs and influence people to change. A group of scholars discussing and debating an issue or topic on a college campus might be referred to as a conference. A conference is "a large official meeting at which people with the same work or interests come together to discuss their views," according to the Oxford Advanced Learners Dictionary. A meeting of people who have been summoned together to discuss a certain task in a limited amount of time is termed a conference. It is also thought of as a formal way to validate social programs and influence people to change.

A single subject, and occasionally a single topic within that subject, is the focus of the majority of academic conferences, one of the various conference kinds. The structure allows the scholars to present their theories and findings, defend them, and then modify or add to them in response to comments and critiques from their peers. Conferences may be held annually in various cities and are frequently sponsored by the professional associations of the discipline in question. Many professors at postsecondary educational institutions belong to professional societies and are expected to participate in these events. Academic conferences facilitate networking among

attendees in addition to idea sharing, which fosters cooperation, funding, job opportunities, and other professional advantages. Conference of Professional Associations. They resemble academic conferences in certain aspects, but they usually focus on practical topics pertaining to participants' real work as well as issues like funding, laws, and issues that impact the profession. State, national, and even international professional societies for secretaries exist in Nigeria, and as part of their members' continuing education, they typically host yearly conferences. These conferences typically feature presentations of research findings, discussions on current issues, and speeches by prominent experts³⁶.

The chance for members to network and exchange experiences with other professionals is one of the primary advantages. Professional associations also help its members stay current by disseminating ideas and practices in the field through the publication of journals, magazines, and newsletters. Websites are used by several professional associations to update their members. Being a member of a professional body is a requirement for lecturers to advance in higher education. As a result, secretaries are expected to attend conferences hosted by their respective professional associations. Training conferences can be arranged by municipal, state, federal, industrial, or professional associations. The primary goal is to teach participants new methods and procedures, inform them of new rules, or just facilitate the sharing of knowledge and approaches between individuals from various backgrounds. Summit Meeting - Any association, group, institution, or government is welcome to organize this meeting.

These conferences could cover everything from education to any social topic. The goal is to educate and inspire others to address an issue. This kind of seminar is rarely attended by secretaries³⁷. Professional associations, governmental organizations, academic institutions, private organizations, and social activist groups all organize conferences for a variety of

purposes. This includes addressing an issue and offering fresh data that helps participants stay up to date on the most recent advancements in their domains, opening doors for fresh research findings, or information to be exchanged and evaluated, as is the case in universities where secretaries are expected to attend yearly conferences. The proof of attendance is used to advance them in their careers and raise an organization's reputation, credibility, or credentials. In higher education, holding a conference can elevate the status of both the organizers and the institution. It also provides a forum for both new and returning participants to engage and exchange ideas and practices³⁸. Any organization can profit from conferences in a number of ways. They facilitate the quick spread of fresh information, which helps to reduce stereotyped hostilities and encourage contact across national, international, and disciplinary boundaries. Additionally, it offers a venue for prompt concept correction, challenge, and redefinition in front of all participants. Whether or not a person talks throughout the conference process, everyone benefits, and attending a small conference is a type of apprenticeship learning experience. When it comes to employees' ongoing education, the staff department unit of every organization has three different tasks to play: monitor, resource supplier, and enabler. The administration of the school is supposed to act as an enabler by putting in place rules and guidelines that facilitate a fair and efficient allocation of staff development opportunities. Therefore, the staff development manual contains the policies and principles for staff development in higher education. As a resource provider, the management supports employees' attendance at various development programs, which may include paying for professional organization dues, educational leave, tuition reimbursement, and travel expenses to off-the-job staff development programs.

Secretaries may also be granted leave by school administration, which allows them to pursue further study or research while still getting paid for a maximum of 12 months. The policy in

higher institutions stipulates that individuals who have been approved to pursue a course of study would receive fees and allowances each year. b. Funding employees' conference attendance. Aside from this, a good staff development program also requires the availability of teaching and learning facilities. It is necessary to give both human and material resources for secretaries to learn on the job and for administrative effectiveness. Secretaries cannot keep up with the latest developments in their field without access to modern teaching resources such as textbooks, journals, workshops, labs, and internet access. Therefore, when lecturers are unable to access new and pertinent texts to read and do research, their development is impeded³⁹.

Organizations are tasked with preserving employee productivity through a variety of tactics meant to foster their growth. Employee development is hampered by several issues, though. According to a survey, instructors cited a number of barriers to their interest and active involvement in staff development trainings. Additional workload, lack of time, lack of incentives in staff development trainings, a heavy focus on theory rather than practice, family obligations, teachers' conservatism, ignorance of the training's value, and conflicts with their work schedules were the factors that were found to be responsible. Furthermore, it was mentioned that the following organizational problems limit training and development in tertiary institutions: inadequate funding, personnel, and time to execute the training; a lack of support from upper management for the training and development; and a failure to recognize the training needs.

The following issues with staff development in the Nigerian Federal Service have been listed by a researcher: There is the absence of systematic training despite the various reforms that emphasise this since late 1960s in Nigeria. Poor funding - This is reflected in the differences between budgetary provisions and actual funds released for staff training over several years. The

curricula and methods remain insufficiently attuned to job requirements⁴⁰. Poor utilization of trained workers. Many public servants sent for training hardly utilise their skills and knowledge. Lack of proper consideration for training needs. Some public officers are sent for training without consideration of the relevance to present job or future posting. Lack of adequate training facilities. Use of quack consultants. Most training programmes have not produced the desired results. The ability of secretaries to acquire and critically develop the knowledge, skills, and emotional intelligence necessary for sound professional thinking, planning, and practice with their students and colleagues throughout their teaching careers is thought to be somewhat impacted by their participation in staff training and development programs. Furthermore, staff development affects teachers' capacity to choose and carry out worthwhile modifications in their leadership and teaching styles in order to better educate their pupils and strike a balance between the demands of the individual, the school, and the country. Teacher staff development programs are crucial practices that improve classroom management, teaching methodology, and subject mastery. The goal of staff development programs is to address specific demands, keep teachers up to date on new information, enhance pedagogical skills, and guarantee the promotion of professional growth⁴¹.

Employees that receive training and regular, scheduled feedback produce more work overall. This phenomenon is known as the "Pygmalion Effect." Because employees who undergo training typically become more productive in their work, staff development also lowers operating costs. Additionally, an organization can reap exponential benefits from development strategies that incorporate train the trainer. Workers who value training may be more likely to stick with the company and possibly lower employee turnover. Programs for employee development that cover everything from certifications to reimbursement for educational costs and training in

fundamental job skills can increase job satisfaction and employee loyalty to the company. The following are some ways that training influences work performance: Meeting and exceeding expectations: Because they have the skills to complete the duties, trained personnel are more likely to enjoy their jobs and provide the intended outcomes.

Employees that receive cross-training may gain more experience and be better equipped to implement innovative ideas into their work procedures. Employees who receive training are better equipped to work at a higher level since they have previously gained the specialized information and abilities required for the position, which prepares them for promotion. Error reduction: Well-trained staff members not only make fewer mistakes but are also able to identify preventable mistakes while doing their duties. Boost efficiency and productivity. Increase both the amount and caliber of work. Improve the atmosphere within the company and the morale of the staff. Gain new abilities, information, comprehension, and dispositions. Numerous training and development strategies and organizational success are strongly correlated, according to research.

They also confirm that training improves organizational effectiveness and helps companies reach their goals. Therefore, they believe that in order to produce high performance, training needs to be in line with organizational strategy⁴³. However, many organizations have found it challenging to evaluate staff skill development programs based solely on the aforementioned outcomes, especially when it comes to behavior and results levels. Data gathering is necessary for the evaluation of development programs in order to give decision makers facts, and there are a number of ways to gather data for training evaluation. Some of these techniques were mentioned, including surveys (feedback forms) and tests or exams that are typical in official educational

programs, particularly those that lead to certification, like a word processing abilities diploma. After non-certificate short courses, project work, organized exercises and case studies, trainee interviews, and the use of archive performance data, end-of-course examinations can also be used to assess trainee development. Furthermore, it was said that a controlled experiment is the most effective way to assess how well secretaries are developing their skills. Training efficacy can be measured in academic institutions by conducting evaluations. Therefore, it can be said that when staff members have received computer literacy training, the efficiency of the instruction can be evaluated by assessments. Based on the aforementioned, it can be concluded that public universities in Oyo State, Nigeria, can greatly benefit from using the training and development process to create training programs that are organized, systematic, and successful⁴⁰. Low competitiveness is linked to a workforce's lack of training, although it is also noted that higher productivity and higher wages are linked to a larger human capital stock⁴⁰. Furthermore, according to some academics, skill development increases employees' dedication and productivity and inspires them. It is true that skill development in organizations tends to significantly increase organizational competence, which in turn greatly enhances innovativeness. The majority of recent research backs up the idea that skill development techniques have a favorable effect on an organization's success. From the aforementioned, it can be concluded that skill development helps achieve the objectives of higher education since it improves employee productivity, organizational performance, and student quality. The importance of staff development in postsecondary institutions lies in the fact that the knowledge and skills a staff member gains while still employed increase his efficiency, dedication, and diligence. A school's teaching and non-teaching staff undoubtedly needs training or development if they exhibit a lack of enthusiasm in their profession or a bad attitude toward it⁴⁴.

A key factor in achieving the objectives of higher education in Nigeria may be employee development. A well-trained workforce is necessary to accomplish the goal of higher education, which was created to develop professional and skilled secretaries. Given the tremendous advances in science and technology as well as the deep breakthrough in information and communications technology (ICT), the training has grown in importance. Human resources are now highly valued in the creation of products and services, and societies and organizations are more knowledge-driven than ever before. Their worth is what makes society or an organization function better. Employees will thus be able to learn and advance their abilities thanks to skill development in postsecondary institutions. Additionally, globalization has made it necessary to make the best use of newly acquired knowledge, technologies and innovations to help tertiary institutions accomplish their goals by enhancing organizational performance and competitiveness in the global community. Secretaries, who play a vital role in the educational system, might learn new concepts and ICT techniques through skill development, which would prevent them from using antiquated techniques to carry out their duties.

Public university secretaries are essential to the creation, acceptance, and application of any innovation. As information and communication technology (ICT) is used and incorporated into secretarial tasks, this function becomes increasingly more crucial. It has been demonstrated that proficiency with ICT enhances human potential in all spheres of human endeavor, including corporate dealings, industrial processes, educational initiatives, and daily living⁴⁵. Information and communication technology (ICT) includes the processing and upkeep of information as well as the transmission of information using all types of computer, communication, network, and mobile technologies⁴¹. All media used to transmit music, video, data, or multimedia, including cable satellite, fiber optics, and wireless devices (radio, infrared, Bluetooth, and Wi-Fi), are

considered communication technologies. Personal Area Networks (PAN), Campus Area Networks (CAN), intranets, extranets, and the internet are examples of network technology.

Proficiency in ICT has been shown to improve human capacity in every aspect of human activity, including business transactions, industrial operations, educational programs, and day-to-day activities. The processing, maintenance, and transfer of information through various computer, communication, network, and mobile technologies are all included in information and communication technology (ICT). Communication technologies include any forms of media that are used to send data, multimedia, audio, or video, such as fiber optics, cable satellite, and wireless devices (such as Bluetooth, Wi-Fi, infrared, and radio). Network technology includes the internet, intranets, extranets, campus area networks (CAN), and personal area networks (PAN). Anybody who wants knowledge or information can get it at any time, from any location, thanks to the technology. Due to the importance of ICT programs in educational institutions, the majority of governments worldwide have implemented a number of measures to make ICT education more accessible, including improving ICT training programs and creating an environment that supports ICT development. The adoption of ICT in Nigerian educational institutions at all levels⁴⁶ has been financed by a number of governmental and non-governmental organizations, banks, and private citizens. Among these are the Tertiary Education Trust Fund (TET Fund), which is targeted at universities and polytechnics, and the Nigerian Communications Commission (NCC). ICT has the potential to accelerate, enrich, and deepen skills, motivate and engage students in learning, help connect school experiences to work practices, create economic viability for future leaders, contribute to radical changes in education, strengthen teaching, and create opportunities for connections between the school and the outside world.

The benefits of ICT for education cannot be overstated. As a result, it can increase the effectiveness and productivity of the school. Therefore, ICT literacy is essential for tertiary institution secretaries in order to investigate the advantages of expanded secretarial responsibilities. Therefore, in public institutions in Oyo State, Nigeria, a well-trained and informed ICT secretary will contribute to the provision of the much-needed high-quality education. Since secretaries are essential to facilitating learning, they are the ideal place to start when developing a nation's ICT policy. They contend that this is the case because secretaries who are successful in integrating ICT into their work processes not only help their pupils achieve better learning outcomes, but they may also gain personally from higher productivity, a decrease in social isolation, and a rise in job satisfaction. In order to provide teachers and students with the computer technology they need to succeed in the twenty-first century, the federal government established the National Policy on Computer Literacy at all educational levels in 1987. This has been done because of the usefulness of computer in teaching and learning process. ICT can provide a convenient technique for designing and developing a course of instruction.

2.1.2 Concept of Digital Adoption

The advent of the digital world as a result of digital technology has greatly advanced all spheres of life, particularly education. Digital technologies have advanced quickly in recent years, altering human interactions and communication as well as how people obtain information. Most significantly, it has changed a number of occupations, which has benefited society and the economy. Teaching and learning have surely been impacted in every way by the usage of digital tools for pedagogical delivery. Teachers and students may be encouraged to acquire and use new abilities if these technologies are incorporated into the educational system. Digital technologies have the potential to enhance education and create employment opportunities for citizens,

according to educational practitioners⁴⁷. Nonetheless, it is clear that the conventional approach to education is ineffective in equipping students to work efficiently in the modern digital environment. In order to meet changing occupational profiles and skill requirements, educational institutions must respond to the challenges of automation and digitization by adopting a highly practical approach and accelerating improvements in vocational training. Furthermore, as employees will need to pursue lifelong learning in order to be able to react to changes brought about by digitization as quickly and efficiently as possible, additional training and retraining will also be crucial.

From using computers to using mobile devices and embedded technologies, digital skills have changed with time. Although digital skills can be divided into three levels-basic, intermediate, and advanced learning them speeds up development. Basic skills, for instance, include entry-level competency; intermediate skills include using ICT abilities in beneficial and useful ways; and advanced skills are necessary to carry out specific ICT and professional duties. In order to participate and achieve the objectives of the organization, it is necessary to take into account the kind and degree of digital skills that are needed. One of the five pillars of the World Bank's Digital Economy for Africa program is digital technology skills, which are essential for transforming African economies, society, and governments and for mobilizing digital innovations. Digital technology platforms, digital technology infrastructure, digital technology financial services, and digital technology entrepreneurship⁴⁴ are the other fundamental foundations. For African economies to profit from the advantages of the digital society, they need both a workforce with digital skills and citizens who are literate in the technology.

The ability to use digital devices, communication apps, and networks to acquire and handle information from simple web searches to specialized programming and development is referred to as digital skills. Digital skills are a range of abilities to solve problems, communicate, and work together for efficient and innovative self-fulfillment in social, professional, educational, and life activities. The term "digital technologies" refers to a broad category of tools, services, applications, and technologies that use different kinds of hardware and software. Digital technology, on the other hand, refers to electronic tools, resources, and equipment that produce, process, or store data. Anywhere in the world, these abilities facilitate problem-solving, communication, teamwork, and sharing of digital content. They make it easier to generate, store, process, send, and display information through electronic means. Furthermore, these are the abilities required to learn and work in our ever-changing digital environment⁴⁸. It entails the ability to efficiently locate, examine, arrange, and distribute information using digital devices, apps, and software. Additionally, these abilities are required for daily tasks including online job applications, online banking, online work, online research, online e-mailing, online chat, and online shopping, among others. It is impossible to overstate how crucial digital technology skills are to the growth of both individuals and the country since they provide efficient communication, boost productivity, foster creativity, enhance security, and assess information, among other things. One's confidence in using technology for business, education, and everyday tasks can be increased with digital skills. Having digital skills entails having a mix of digital competency, knowledge, research skills, practical aptitude, inventiveness, digital learning, and communication.

The ability to use a variety of devices for activities, obtain information online, connect professionally and socially via email and social media platforms, bank, shop, access services, and apply for jobs online are all examples of essential digital skills. Because of the speed at

which technology is developing, digital technology is present everywhere, and the education sector must determine how digital skills may be learned within the teaching and learning process. The teaching and learning processes as well as job patterns have been profoundly altered by digital technology. Digital technology integration in the classroom can enhance instruction and learning and facilitate productive teacher-student interactions and making space for the development of digital knowledge and abilities. In a similar vein, the use of digital technology in the classroom promotes autonomous learning and serves as a catalyst for change in the area, guaranteeing successful individual and group learning. Technology is the study, creation, usage, and application of equipment for productive purposes. In order to accomplish desired goals, it entails the use of tools, machines, and procedures.

Technology is the application of machines to accomplish tasks. The use of scientific knowledge and instruments to address real-world issues is known as technology in education. Furthermore, and making space for the development of digital knowledge and abilities. In a similar vein, the use of digital technology in the classroom promotes autonomous learning and serves as a catalyst for change in the area, guaranteeing successful individual and group learning. Technology is the study, creation, usage, and application of equipment for productive purposes. In order to accomplish desired goals, it entails the use of tools, machines, and procedures.

Technology is the application of machines to accomplish tasks. The use of scientific knowledge and instruments to address real-world issues is known as technology in education. Therefore, skill acquisition is the ability an individual acquires through training, education or experience, which enables individual to function effectively for the benefit of all and sundry. Acquisition of skills in any learning environment requires various training which invariably enables students to learn by improving their knowledge, skills and attitudes.

Lecturers do not adequately care if their students are actually learning new relevant skills and behaviours rather, they laid emphasis on theory instead of practical. This implies that lecturers should inculcate the knowledge and skills required of students by employers of labour in today's digital world rather than concentrating on theory. Office Technology and Management (OTM) is a recent nomenclature for Secretarial Studies programme in Nigeria⁴⁹. As the name suggests, using new technology in the workplace has become more important than using traditional tools. The program is a thorough, activity-based training program that focuses on developing the information technology skills, knowledge, attitudes, work habits, and competencies necessary for success in office management and secretarial careers. As a result, OTM students' maximal skill acquisition tends to support both economic and personal growth. A database is a structured set of information pertaining to a specific field. It is a cohesive grouping of files or information that make sense together and are combined into a single pool that may be used for one or more purposes. It is an inherently meaningful set of data that makes sense.

A database is created, constructed, and filled with information with a specific goal in mind. A functional database must also be able to be rapidly and easily accessed in addition to appropriately storing a huge number of records. A general-purpose program called a database management system (DBMS) makes it easier for different users and applications to define, build, manipulate, and share databases. It is a group of applications that let users build and manage databases. Additionally, database digital skills are technical knowledge or the capacity to store, retrieve, and access structured data collections relevant to a specific field. Convenient, fast, and efficient storage, maintenance, and retrieval of database data is the core objective of a DBMS. The ability to recognize fields, records, and data attributes; to insert, delete, and update records; to use structured query language; to program web databases; to recognize primary and foreign

keys; to establish relationships; to extract database objects; and to understand disk storage, file systems, and file structures are just a few of the digital skills needed to succeed in the digital world.

Any process that combines traditional manual procedures with computer and communication technology is referred to as digital adoption. All of the distinct office information processing technologies, such as word processing, data processing, micrographics, reprographics, and telecommunications, are combined into digital adoption. Additionally, it refers to the different automated electronic techniques used to collect, process, reproduce, communicate, store, protect, and retrieve information. This encompasses more than just how office data is processed via the tools used to gather, process, distribute, and/or store office data. Secretaries are essential to improving the achievement of organizational objectives. Today's secretaries are expected to have some understanding of the importance and efficient handling of the letters, reports, and instructions that typically pass through their desks, even though they may not be expected to know as much about the business at hand as their executives. Despite the current economic challenges in Nigeria, it is anticipated that the skilled secretaries equipped with cutting-edge tools and materials can find profitable employment in the labor markets, or possibly start their own businesses and become self-sufficient.

The goal of digital adoption is to increase the productivity and efficiency of an organization by using efficient and effective management techniques, such as electronic correspondence at the organizational level, easy data searching, prompt and timely client responses, eliminating paper from the administrative correspondence cycle, and appropriate user control. maintaining and recording data efficiently and improving communications within the organization; increasing non-productive activities such as physical document archiving; maintaining operation records in

smaller volumes; producing necessary reports with various diagrams; reducing the responsibilities of office managers, secretaries, and typists; allowing for telephone supervision of tasks and activities at any time; controlling classified data; being precise in conducting operations and recording all affairs; eliminating paper entirely from work processes; providing facilities and speed in operation flow; and having high security in maintaining documents and the ability to access them quickly⁵⁰.

Modern offices today place a strong emphasis on paperless offices as a means of streamlining operations and handling correspondence. For example, database management and other accessories are being utilized more and more in offices to regulate and organize documents. These days, secretaries must be able to utilize a computer with Dbase, Excel, Corel Draw, and word processing programs like Word Perfect, Microsoft Word, Power Point, and Adobe Page Maker. Dexterity in utilizing the majority of the application packages is especially important. Information may now be sent and retrieved from anywhere in the world with relative ease thanks to computer internet. Many organizations have completely shifted their operations to digital skills Electronic switch boards, computers, electronic typewriters, photocopiers, teleprinters, fax recorders, phones with cellular and GSM/mobile attachments, laminating machines, scanners, dictaphones, and magnetic and non-magnetic tapes are examples of educational institutions that have a variety of electronic equipment. The secretarial function of the secretaries⁴⁸ is not replaced by any of these devices; rather, they are employed to expedite the processing of letters.

Digital technology use is viewed as a means of advancing educational reform, enhancing secretaries' abilities, and preparing them for the information age and global market. The usage of digital skills enhances the delivery of and access to efficient office and organizational

administration. Focusing on digital skills for secretaries tends to enhance their comprehension of secretarial practices and functions, improve the caliber of their work attitude, and boost their influence on office management. Although advances based on digital skills can essentially improve secretarial activities, their connection to office management is crucial to achieving an organization's goals⁵¹.

The rapid and constant improvement in secretarial performance of both computing and communications, the explosion of bandwidth capacity in fixed and mobile networks, and the emergence and development of the internet and internet-based applications⁴⁹ are the digital developments rather than specific breakthrough technologies. From the standpoint of development, digital technology is a vital tool for achieving the Millennium Development Goals (MDGs), which are associated with efficient service delivery. In this regard, the growing use of digital technology by both the public and private sectors in developing nations' educational institutions has been a positive trend that everyone must follow in order to stay relevant in the fast-paced economic world. In order to facilitate management, streamline surveillance, and improve service delivery, governments worldwide are dedicating and combining an increasing amount of their resources to the development of digital tools and systems.

One of the 21st century's wealthiest resources and sources of success is digital proficiency. Every part of our life is dominated by digitalization, which has a significant effect on businesses, workers, economies, and societies. Understanding media, doing information searches, and using a range of digital tools and applications to interact with people are all examples of 21st century digital skills. In order to fulfill evolving market and consumer expectations, digital skills refer to the ability to use digital technology to create new business processes and services and to transform old traditional and non-digital ones. In this sense, 21st century digital skills are the

abilities required to use modern technologies successfully and efficiently for both personal and professional duties in a digital setting. Accordingly, any ability associated with digital literacy is considered a digital skill. Working remotely has become commonplace thanks to digital abilities, which are also improving corporate quality and efficiency.

All jobs, from entry-level jobs to managerial roles, as well as workers and job seekers looking to enter the workforce, require digital capabilities. For job searchers, it serves as protection against the growing demand in the workplace. Secretaries with digital skills will have access to a wealth of information and be able to manage, integrate, and assess it. Rapid knowledge development and growing reliance on automation, big data analytics, and computerization were transforming the developed world's economy to become less reliant on the manufacturing process and more reliant on skills and intellectual capital. Organizations all around the world are starting to digitize their services, which is upsetting the public since they feel left out. Digital skills are essential for secretaries in the modern workplace because of the emergence of new tasks rather than the evolution of old ones. Despite the significance of digital skills, secretaries continue to face a skill gap that, if left unchecked, may develop into a full-blown problem exclusion of secretaries from digital economy and extinction of the profession from global trends.

The capacity to determine information needs from digital technology sources, as well as the ability to appropriately use digital tools and facilities for input, access, organization, integration, and assessment of digital resources, as well as for creating new knowledge, are all examples of digital skills. The ability to comprehend, use, locate, assess, navigate, share, and produce content while utilizing digital technology and the Internet with minimal help is known as digital skills. Digital abilities are crucial in today's contemporary business climate and the workplace of the

future. To get the most out of technology, digital skills encompass not only learning and improving technical abilities but also gaining knowledge, values, attitudes, rules, and ethics related to ICT. They also entail critical thinking and the wise application of data gathered via technological means. Tasks or communications carried out on digital devices where information is accessed and managed⁵¹ are referred to as digital skills.

Secretaries urgently need to improve and expand their technological abilities in order to enhance work quality, foster creativity, and maintain employability as the digital revolution changes traditional office functions and creates new positions. With a growth attitude, a secretary may bridge the skills gap and open up more new career prospects for themselves in the future. Increased revenue, improved client interactions, a competitive advantage over rivals, and the development of innovative working methods are all reasons why digital skills are crucial. Increasing efficiency and productivity, fostering improved communication, and advancing the careers of those who wish to take advantage of the freedom of freelancing by developing both professional and personal skills that increase employment opportunities.

Since 21st-century digital skills encompass much more than just technology, generalizations may not be applicable in some contexts. Digital competencies encompass more than just abilities; they also focus on the cognitive, social, and emotional elements of working and living in a digital world. Digital skills are the abilities required to access and handle information using digital devices, networks, and communication apps from simple emailing and web surfing to complex programming and development⁵². One's ability to communicate digitally depends on the level of digital skills they have learned. Therefore, a secretary with digital abilities will be able to handle problems anywhere in the world and generate, communicate, collaborate, and share digital

content. Digital skills in the twenty-first century are mostly focused on computers, but with the advent of the internet and social media, some of that concentration has shifted to mobile devices.

Modern educational technology must be used and adopted in order to enhance secretary performance and equip them to handle the significant problems that lie ahead. These tools would assist users in communicating with one another, keeping track of updates, and receiving organized notifications by automatically sending information via text, email, and social networks on their behalf based on voice commands, gestures, and other indicators. Digital illiteracy will prevent secretaries from embracing new technology, which will limit their ability to participate in the digital economy. However, digitization is opening up new job prospects for secretaries through the gig labor market. Due to the automation of ordinary activities, the digitization of markets has resulted in a shortage of labor, a rise in the demand for highly trained people, and a decrease in the demand for low-skilled workers. The new technologies have a lot of potential to open up new doors and prospects for a more successful future. Voice software is already showing promise in its use, and in the coming years, computers will be wearable, keyboard less, and smaller. persons with digital skills can virtually connect instantly with persons who speak different languages by using voice translation tools. Digital skills for the twenty-first century are essential for both closing the digital divide and obtaining or retaining employment. Adaptive continuous intelligent systems may eventually replace humans in the workplace, posing a threat to human existence. Because secretaries may now employ algorithms to make knowledgeable decisions in a matter of seconds, the way office workers make decisions has changed.⁵³.

The behavioral intention to utilize a particular technology is directly and strongly influenced by an individual's mindset. How well digital skills are applied in administration, teaching, and learning is greatly influenced by the mindset of the implementers. Therefore, it was concluded

that a negative attitude toward the use of digital skills was the primary obstacle to the successful implementation of an e-learning project. Furthermore, it is critical to investigate and ascertain the extent to which user attitudes impact the usage of digital skills in learning, teaching, and administration. The adoption and use of computers in the workplace and in the classroom to manage work is significantly influenced by the administrators' attitudes.

The degree to which individuals believe they have control over endorsing their desired behavior is known as perceived behavioral control. Therefore, the person has the opportunity to participate in activities they believe they have control over as well as to refrain from behaviors they feel they have no control over. As a result, someone who feels they are capable of exhibiting a given behavior will act in a manner consistent with their behavioral intention to do so. The intention of an individual's behavioral intention to use or embrace technology may be determined and predicted by their perception of behavioral control. Secretaries' acceptance of using digital skill for secretarial duties is seen behavioral control⁵⁴. The perceived behavioral control is reported to be a good predictor of digital adoption and use. A user will display a comparable behavioral intention to adopt and utilize the aforementioned technology if they feel they can use the application⁵⁵. One of the elements affecting secretaries' decisions to utilize digital skill is their perception of behavioral control.

Digital skills encompass the ability to identify information needs from digital technology sources, as well as the knowledge and skills to use digital tools and facilities to construct new knowledge, create media expressions, and communicate, as well as to input, access, organize, integrate, and evaluate digital resources. The critical and safe use of information technology for communication, business, and play is a component of digital skills. They cover a range of

abilities, know-how, dispositions, and tactics necessary for utilizing digital media, information, and communication. It is impossible to overstate the importance of digital skills. Teachers with digital abilities can offer a variety of learning methods and the chance to work together virtually with people from all over the world. The issue of digital skills has emerged as a societal dilemma as the digital transition continues. In order to effectively utilize the new technology in their work, secretaries should possess the necessary abilities. This is because technological advancements are causing labor markets to shift⁵⁵. To improve secretaries' active participation, digital skills include understanding how to use digital technology for professional development, communication, and teamwork. Digital tools for secretarial work include locating, producing, and disseminating digital materials; they also improve evaluation by empowering secretaries to utilize digital tools ethically and creatively for information, communication, content production, wellbeing, and problem solving⁵⁵.

One of the digital talents employed by secretaries is word processing, which is the electronic processing of alphanumeric and alphabetic data. A keyboard, electronic memory, a display device, and a printer make up a word processor. Due to their versatility, word processors can be helpful to anyone who wishes to create any kind of word-based document, including novels, letters, scientific papers, advertising copy, term papers, legal briefs, and more. According to their list, word processors can be used for storing, altering, and retrieving text, as well as for insertion and deletion of text, highlighting with different fonts, moving text, page numbering, and saving and retrieving texts. However, the unique features of the application software determine a word processor's capabilities. The ability to use word processing software has added appeal to secretaries' employment. Significant changes have also occurred in the status and working conditions of secretaries. To achieve good results in office operations, today's secretaries need to

possess the necessary knowledge, abilities, attitude, and word processing capabilities. Secretaries benefit from word processing in the following ways: the position of the secretary is no longer determined by the success or failure, status or lack thereof, of a manager or boss. It makes document production less tiresome by relieving secretaries of the strain of repetitive typing. It allows secretaries to contribute more significantly to office duties⁵⁶.

The manipulation or computation of numerical data (numbers) in order to attain a desired outcome⁵⁶ is known as data processing. Alpha numeric data can be sorted, filed, and arranged for later use. It can also be edited, subtracted, and recorded. In order for secretaries to plan, oversee, manage, and facilitate organizational activities, data processing is the conversion of all types of data used in an organization into information. There are two ways to process data: manually and automatically. Input, manipulation, and output are the three processes of data processing, regardless of the approach taken. huge amounts of accounting data pertaining to repetitive, normal tasks like payroll, inventory, accounts payable, accounts receivable, and posting to huge accounts are processed by computers. The type of activities an organization conducts depends on the data processing abilities that organization employs. They also listed batch processing, demand processing, interactive processing, real-time processing, and time-stating processing as data processing methods.

The technology of transmitting signals, pictures, and messages over large distances via satellite⁵⁷, television, radio, and telephone is known as telecommunication. Telecommunication is becoming an essential part of office information systems due to the convergence of information technology and technology. Meeting or conversing with persons who live far away is known as telecommunication. Electronic mail, teleconferencing, video conferencing, word

processors, telex machines, televisions, public address systems, internet and intranet services, satellite radios and satellite phones, electronic organizers, global positioning systems, and computer voice recognition are a few examples of telecommunications equipment. Obtaining the appropriate information in the appropriate quantity at the appropriate moment is a challenging undertaking in this information-explosion era. The only organizations that will endure are those that have managed information well. Any means of communicating by phone or telegraph is referred to as telecommunication. Telecommunication is the process of meeting or communicating with people who reside far away. Examples of telecommunications equipment include satellite radios and satellite phones, electronic organizers, global positioning systems, word processors, telex machines, televisions, public address systems, internet and intranet services, electronic mail, teleconferencing, video conferencing, and computer voice recognition.

In this age of information explosion, it might be difficult to get the right information in the right amount at the right time. Organizations that have effectively managed information are the only ones that will survive. Telecommunication is the term used to describe any method of communication by telephone or telegraph. Inadequate or nonexistent contemporary facilities and equipment: The automated office makes use of advanced equipment that delivers information more quickly. However, because of the high cost, many public organizations are unable to purchase enough of the facilities. 2. Erratic power supply: Computers, projectors, scanners, printers, smartphones, and other technological devices are utilized. These require a power source to operate. For those technologies to be used to their full potential, a steady power source is therefore required. In Nigeria, electricity power has been inconsistent, making it difficult for equipment to operate as intended. 3. A lack of financing is another issue that prevents some

governmental agencies from purchasing new technology equipment, making full digitalization impractical 4.

Insufficient instruction and retraining: A large number of business educators lack sufficient instruction in the use of digital tools. The acquisition of new skills and competences required for operating modern equipment will be hampered by the inability of many business instructors to start self-development programs. Therefore, learning new abilities is necessary for developing new technologies. As a result, refresher courses are crucial for using new technology. 5. Lack of understanding of new technologies: Secretaries' ability to effectively acquire new technologies may be impacted by their lack of understanding of the integration of new technology into secretarial tasks⁵⁸.

The phrase "perceived usefulness" refers to the secretaries' perceptions of whether or not they believe a particular system can improve their performance. It was discovered that the element known as perceived usefulness had a significant impact on behavioral intention to use. Another important factor that has been shown to influence end users' happiness with ERP (enterprise resource planning) systems is perceived usefulness. The ability of digital technology to make technology equipment easily accessible to secretaries is linked to its perceived usefulness. The tools offer the ability to analyze information at any time and from any location, frequently offering opportunities for customized performance. The advantages of technological equipment extend beyond improved access to educational services; they can also help alter performance modalities, which can improve secretarial procedures. Secretaries benefit from technological tools because they enable them to make efficient use of "dead time." Therefore, waiting for a bus, meeting to begin, or information can offer opportunities for meaningful engagement with information content while traveling.

The phrase "perceived ease of use" describes secretaries' perceptions of how simple or effortless a particular system is to use. This phrase describes the secretaries' opinions about using this system, which can improve their performance and experiences with information processing. According to the argument, information technology has an operating system that is simple to use and controls both its hardware and software. The operating systems are made to be intuitive to use and operate through experience. To utilize the interface, the user doesn't need any official training. A user can easily navigate through the graphical user interface in around thirty (30) minutes of operation.

The term "behavioral intention to use" refers to the secretaries' decision over whether or not to continue using the technology, and it is seen to be a determining element in technology use. Therefore, it is presumed that behavioral intention is used in connection with digital systems to enhance a secretary's secretarial performance. Because digital systems are essential to the development of technology usage models, their application in this study is considered significant. All of these ideas and models are said to have their roots in the fundamentals of the technology acceptance model, which holds that attitudes about using information technology are influenced by subjective standards and individual behaviors. It was discovered that the most likely outcomes of both perceived usefulness and simplicity of use were high levels of user satisfaction and continuance intention. Additionally, secretaries have been observed to exhibit high levels of behavior related to information technology use and high levels of contact with the system because they find it enjoyable.

2.1.3 Concept of Self-Efficacy

From the second half of the 20th century, when educators and researchers turned their focus from curricula and the teaching process to more learner-centered programs, learners were examined in

light of their individual differences in personality, cognition, and affect, and human characteristics and considerations were given more weight in order to support the learning process. Since then, the interpretation of human learning in general and language learning in particular has been greatly influenced by individual variances. The social constructivism school of thought, which emphasizes the value of socializing and the individual production of knowledge, is where the present trend toward socialization originated and sharing of the cognition (knowledge) with the peers thereby making learning more effective and more social rather than a cognition-based individualistic struggle as the cognitivists suggest. The creation of significant factors of human functioning⁶⁰ is a major factor in the acceleration and dependence of scientific advancements.

"Belief in one's own ability to succeed in a given situation is known as self-efficacy." It dictates how people feel, act, and think. Motivation, behavior, and psychological states are all impacted by self-efficacy. In education, self-efficacy beliefs have also drawn more attention. Numerous studies demonstrate that self-efficacy affects learning, academic motivation, and achievement⁵⁹. Given the importance of efficacy beliefs in people's lives, it is essential to have a solid grasp and assessment of this component in order to comprehend and forecast highly contextualized and conditionally manifested human behavior. Self-efficacy is reliant on task demands and domains of functioning that reveal patterns of perceived capability limitations and strengths.

The influence of perceived collective efficacy on group functioning is supported by an increasing amount of research. Using experimental manipulations to induce varying levels of perceived collective efficacy, several of this research have evaluated the behavioral and motivational implications of perceived collective efficacy. Self-efficacy has a significant impact on how people approach tasks, goals, and obstacles. Individuals who have a high sense of self-efficacy

see difficult difficulties as tasks that they can master; they become more interested in the activities they engage in; they become more committed to their interests and activities; and they bounce back from setbacks and disappointments fast. On the contrary, people who lack self-efficacy shy away from tough activities, think that they are incapable of handling them, concentrate on their own shortcomings and unfavorable results, and rapidly lose faith in their own talents⁶².

Self-efficacy, gender, and information and communication technology (ICT) user profiles are related. The use of computers, software, and applications has made it easier to monitor, evaluate, and resource oneself and one's peers as well as to interact online. It is generally acknowledged that new discoveries in learning science and information technology offer chances to establish well-designed, learner-centered, interactive, cost-effective, effective, and adaptable e-learning environments. Additional criteria for organizing experiences are provided by understanding how to create a sense of efficacy in recently established learning contexts, aided by proficiency in the use of digital media and its operation. People can then achieve the social and personal changes they have always wanted, which boosts their self-efficacy in the online and digital world. In an online learning environment, students must conduct research on the topic and build their foundational knowledge base. Later, when the learners participate in the virtual discussion rooms and forums, they will discuss the freshly taught subject with their classmates. Because various students may have used different digital resources and hyperlinks, their input data may differ. This diversity in the input data's reference system may result in the acquisition of more advanced knowledge and information from peers that is disseminated via social networking to a wider audience of interested parties, improving cognition sharing through web-based media and promoting further learning.

The goal of this study was to determine whether proficiency with computers and networks may improve language acquisition, which is primarily computer and web supported and heavily influenced by technology. Self-efficacy is the belief in one's own ability to plan and carry out the actions necessary to achieve a particular result⁶¹. By this definition, one's choice of conduct is influenced by their level of self-efficacy. If one believes that he or she is incapable of performing a particular action, then he or she may not attempt to carry out said action. In comparison to other countries, Australian have high levels of access to digital technologies, both inside and outside of the academic environment. Nevertheless, it appears that simple access to technology is not sufficient to improve digital literacy. Instead, “digital literacies need to be taught”. Digital skills of vocational education graduates were lacking, and that their training was only addressing basic digital literacy and skills that are not current enough to meet industry requirements. This is mirrored in Australian schools, with reports of the system failing to provide the required ICT learning needed by students to progress to further education or into the workforce⁶². Within today’s context, remote learning due to the COVID-19 pandemic is expected to exacerbate these deficiencies, with many students likely unable to use technology without guidance, and therefore suffering from further impacts to both their digital skill development and general learning capacity due to their inability to engage.

Computer self-efficacy examines users’ beliefs regarding their ability to perform specific tasks using a software package. Computer self-efficacy is “a judgment of one’s capability to use a computer”⁶⁴. It has a major impact on individual’s expectations of the outcomes of using computers, their emotional reactions to computers (affect and anxiety), as well as their actual computer use. Computer self-efficacy provides an important psychological construct that is specially related to computer usage and is a belief in one’s capability to use computer and

participants with little confidence in their ability to use computers might perform more poorly on computer-based tasks.

Self-efficacy is one's belief of his/her capabilities in organizing, handling and executing tasks. Self-efficacy belief for long term goals is a promising construct being recently used in the extant employee and entrepreneurial performance literature. Self-efficacy has been studied in a variety of research areas, including the acceptance of technology learning, mobile commerce, health, e-learning, banking systems, and health. Self-efficacy has therefore been researched from several perspectives, but more research is required to determine how it affects lecturers' behavioral intentions with regard to the usage of ICT. Whether tools or capacities are required to complete a job depends on one's level of self-efficacy. Furthermore, the theoretical perspective on ICT adoption has acknowledged that users' perceived self-efficacy is influenced by their computer knowledge, experience, and skill. Users' personal opinions collide with their professional expertise and related skills, and these encounters lead to unintentional or habitual acts. Personal habits influence learners' self-efficacy and show competence. Therefore, when a secretary's self-efficacy rises, so do their principles and behaviors, as well as their confidence and associated proficiency when using technology for secretarial tasks. Consequently, studies indicate that a secretary's behavioral intention to use digital skills may be influenced by their level of self-efficacy.

Examining the variables that influence self-efficacy and desired behaviors is valuable in upholding this idea of self-efficacy and understanding its predictive effect on behavior. Therefore, knowing the secretary's self-efficacy in relation to different digital skills is important from an educational standpoint. However, examining secretary self-efficacy broadly might not

give educators and decision-makers the knowledge they need to make informed choices. Since people with high levels of self-efficacy are more likely to embrace change and select the best option⁶⁴, it is necessary to concentrate on particular facets of the secretary's self-efficacy, such as the secretary's technology self-efficacy. The focus of secretary's overall ideas about their ability to execute any of a variety of jobs can be narrowed to their beliefs about their ability to perform specific types of tasks by particularly analyzing their technology self-efficacy. Educational stakeholders can learn about elements that can help instructors advance along the technology integration continuum if specific characteristics influencing secretaries' levels of technology self-efficacy can be discovered.

Self-efficacy is determined by a number of factors, such as verbal persuasion and enactive mastering abilities. These two variables are operationalized as support and prior experience, respectively, based on an analysis of the IS literature. It is hypothesized that computer experience has a favorable impact on self-efficacy expectations, with perceived task performance successes elevating mastery expectations and failures reducing them. He claims that experience's immediate, intimate character⁶⁵ makes it especially powerful. Additionally, he postulated that self-efficacy is positively impacted by social persuasion, whereby efficacy expectations are raised by perceived support and encouragement from others. Additionally, he claims that expectations of self-efficacy that are influenced by social pressure are probably going to be lower than those that come from firsthand experience. According to the self-efficacy paradigm, verbal persuasion does not offer a direct, experiential basis, which explains why social persuasion has a smaller influence on self-efficacy. These two elements might also have a direct bearing on motivation and conduct. In particular, past experience is thought to influence motivation and conduct to the degree that the person can judge the amount of ability displayed in completing the

activity. Self-efficacy, computer anxiety, perceived utility, and ease of use have all been linked to computer experience. Experience with computers is likely to improve a person's views and beliefs about using the technology by lowering any worries they may have and boosting their confidence in their ability to overcome the obstacle. Furthermore, self-efficacy and other mediator variables are likely to be the only ways in which experience influences utilization indirectly.

Experiences of mastery are the primary source of self-efficacy. To boost self-efficacy, however, nothing is more potent than directly experiencing mastery. A failure will erode that effectiveness belief, but a success for instance, mastering a task or managing an environment—will strengthen self-confidence in that area. It takes experience conquering challenges with hard work and persistence to develop a robust sense of self-efficacy. The interpreted outcome of secretaries' prior performance or mastery experience is the most significant source. When discussing mastery experiences, this refers to the experiences that one has after successfully overcoming a new difficulty. Since mastery experiences offer the most genuine proof of a person's ability to muster the necessary resources for success, they are the most significant source of efficacy data. A strong belief in one's own abilities is cultivated via success. It is undermined by failures, particularly when they take place before a sense of efficacy is well established. Practice is one of the best-tested strategies for picking up new skills or for enhancing one's proficiency in a particular task.

How can one be certain that learning new abilities and practice would result in largely positive experiences? Most of the time, people are teaching themselves that they can learn new abilities without even realizing it. This is one of the reasons this works so well. This positive mindset, which holds that one can accomplish the goals they set for oneself, is beneficial because part of

the challenge of improving at anything or learning anything new is ensuring that one believes one can complete the work at hand.

Observing those around us, particularly those we view as role models, is the second source of self-efficacy. When individuals who are similar to us achieve success through perseverance, it strengthens our conviction that we are capable of mastering the skills required for success in that field. The vicarious experiences that social models offer are the second significant source of self-efficacy. Seeing others who are similar to oneself succeed through perseverance makes observers think that they, too, are capable of mastering similar tasks to achieve success. Seeing someone else finish a task effectively is known as a vicarious experience. Positive role models, particularly those who exhibit a healthy degree of self-efficacy, increase the likelihood that an individual will internalize at least some of these self-affirming ideas.

elder siblings, elder friends, parents, grandparents, aunts and uncles, camp counselors, teachers, coaches, and employers are examples of social role models.

Our conviction that we possess the necessary skills for success can be reinforced by significant others in our lives, such as parents, instructors, supervisors, or coaches. We are more inclined to put in the effort and keep going when issues arise if we believe that we are capable of mastering particular tasks. A person is more likely to believe they have the ability and skills to succeed when they receive encouraging verbal feedback while working on a challenging task. Encouragement and discouragement regarding one's performance or capacity to perform have an impact on self-efficacy. Verbal persuasion would be demonstrated, for instance, by telling an elementary school student that they are capable of greatness and should set out to achieve anything they set their minds to. At any age, verbal persuasion is effective but the earlier it is administered, the more likely it is to encourage the building of self-efficacy.

Beliefs, attitudes, and conduct were also thought to be influenced by social persuasion, or encouragement and support⁶⁶. When making assessments of their own abilities, people partially rely on the opinions of others as well as the encouragement and support they receive. Furthermore, it is anticipated that greater organizational support would lead to higher assessments of self-efficacy on the part of individuals as they require more resources to help them become more proficient. The ability of people to complete a task is likely to improve when help is available to them. Furthermore, it was thought that support was a sign of organizational norms around use, which would have a beneficial impact on self-efficacy as well as outcome expectancies and beliefs. Management support has an impact on perceived utility and perceived usability. While a lack of organizational support has been a major obstacle to the efficient use of computers, organizational support has been linked to higher system usage. Perceived ease of use is favorably correlated with management support, whereas computer anxiety is adversely correlated.

Anxiety is defined as "generalized emotional distress" that a person experiences. Bandura asserts that anxiety or emotional arousal has a detrimental effect on self-efficacy. Users who have less anxiety typically feel more effective. However, fears are typically classified into two groups: state anxiety, which is a temporary reaction to a particular event, and trait-based anxiety, which is characterized by personality traits that remain constant over time and situations. State anxiety is most likely brought on by low self-efficacy, even though trait-based anxiety may be thought of as an antecedent to it. When someone uses or considers using computer technology, they may experience illogical emotional anguish known as computer anxiety, which is a type of state anxiety. When people try to accomplish actions they don't feel capable of performing, they get

anxious. Self-efficacy beliefs serve as proximal predictors of motivation (perceived utility and perceived ease of use) and behavior (in this case, computer usage).

2.2 Theoretical Framework

2.2.1 Skill Development Theory (Anderson, 1985)

John R. Anderson's Act Theory of Skill Development describes how people learn and refine skills through a series of stages: The three learning stages of perceptual-motor skill development—cognitive, associative, and autonomous—were further defined by a researcher in 1985. The initial stage of learning was believed to be the cognitive stage, during which the learner tries to create a representation of "what to do" by verbalizing the content of what is practiced and trying out various ways. A student employed evaluative techniques to contrast the intended movement with the actual result during the associative stage, which included some of the same processes as the cognitive stage. The purpose of this evaluation is to make small changes to the tactics employed as well as to enhance and change the task representation. The emphasis in this phase is on "how to do" the task. The last step of skill development is thought to be the autonomous stage. Following the establishment of what needs to be done and how, adjustments take place, resulting in increased stability and efficiency. Non-conscious, extremely automated processes are what define the autonomous stage. Implicit, procedural information takes the role of explicit knowledge about the skill, and the attention requirement is reduced, enabling multitasking.

It seems that there needs to be an intentional component to the learning process in order to achieve the best performance of a skill. In an early investigation on learning telegraphic skills, a

researcher found that performance plateaus could be identified following extended durations of practice. These same scientists showed that learning could be resumed and performance could be enhanced given sufficient motivation. By proving that the plateaus might be avoided with the right learning tactics, learning was shown to be accompanied by them. The plateaus seen in this early study seem to have been a result of the system "settling for" a satisfactory solution and moving toward a more stable state where performance improvements were limited in exchange for increased reliability and decreased variability. Learners' traits throughout the performance plateaus are similar to those of the previously mentioned autonomous stage. As performance stabilizes in a non-maximal condition, an early transition to the autonomous stage of learning encourages halted development. The learning curve frequently flattens out well in advance of any physiological boundaries. As a result, it is clear that performance does not always reach its maximum when learning phases change; rather, it frequently stabilizes before peaking. However, human skill development is also influenced by will and intention, thus these elements may be crucial for high performance and specialization.

The main contention is that many of the phenomena seen in skill growth may be related to increased cognitive strain. Therefore, cognitive effort may act as a mediator for effects observed in contextual interference, the function of augmented feedback, and observational learning. By encouraging stronger and more adaptable memory representations that enable improved retention and transfer of the activities being done, it follows that increases in cognitive effort may aid learning⁶⁷. What likely occurs during this early transition to the independent stage is further shown by analogies to reading and walking. Long-term reading frequently causes the process to become so habitual that one reads words, sentences, and occasionally even paragraphs or pages without being aware of what they have read. Despite being read, the words don't seem to have

any conscious meaning. Automaticity may occur similarly in skill development. The learner is unlikely to make any significant performance corrections after the process becomes automatic because they are no longer conscious of what they are doing. A good illustration of this is walking. Few people need to consider their options before starting a walking pattern. For the majority, walking has become so instinctive that the mere intention to start walking seems to set off a consistent and dependable walking pattern. This does not, however, mean that we are all skilled walkers. It is 'good enough' for our purposes, though most walkers could definitely do better.

Considering that maintaining a high level of cognitive effort One concern that comes up is why elite motor performance is frequently linked to automaticity and effortless execution, even if the extension of the cognitive and associative phases of learning promotes superior performances. The difference between performance and practice may hold the key to the solution. The goal of practicing is to get better over time, which will help you retain and transmit your skills over time. This contrasts with exhibiting enhanced performance right away during the practicing period. Thus, it is best to employ tactics that encourage long-term transfer and retention. The ultimate goal is to give outstanding performances in competitive settings, like athletics, and in real-life scenarios, like surgeries, which should showcase the performer's full potential.

Based on the aforementioned, studies have demonstrated that skill development validates various aspects of learning, including the cognitive stage, the associative stage, the autonomous stage, and the adaptation while performing the task. As a result, the theory gained relevance to the study since it clarifies the many phases of digital skill development that secretaries need to undergo. As the most important tactic to close the skills gap, educational establishments like public colleges in Oyo State, Nigeria, should concentrate on helping their secretaries go through

the cognitive, associative, and autonomous phases of utilizing cutting-edge digital and information technology. Oyo State's public universities might spend money on education and training to hire secretaries' skills gaps by following the following strategies cognitive, associative and autonomous stages in digital skills. Emerging technologies are creating such a disruptive movement that it will impact the labour market by the need for new skills to implement and use these technologies, on the one hand, and skills that are no longer relevant due to the introduction of these technologies.

2.2.2 Technology Acceptance Model (TAM, 1989)

The Technological Acceptance Model (TAM) which was propounded by Davis Fred in 1989 version 2 is a behavioural and cognitive psychology model that predicts how likely a group or organization is to adopt new technology. It is based on the idea that a person's beliefs, attitudes and intentions can explain their use and adoption of technology.

The Technology Acceptance Model (TAM) was created to forecast and explain how users will behave when using technology⁶⁸. TAM is a commonly used model that examines how people's beliefs and biases affect their use of technology. It is derived from the psychological theories of reasoned action and planned behavior. According to the Technology Acceptance Model (TAM), a person's desire to use technology is primarily determined by perceived usefulness (PU) and perceived ease of use (PEU). They have an impact on how attitudes and behavioral intentions about the adoption of technological breakthroughs evolve. The degree to which a person feels that utilizing a tool would improve his or her performance is known as perceived usefulness. Both PU and PEU are known to be impacted by prior information, bias, and anxiety.

The possible demands of users should be taken into account when producing technical gadgets. Perceived utility Gender, education level, experience, support/training services, peer pressure, organizational rules, perceived risk, job relevance, perceived enjoyment, subjective norms, social pressure, and system characteristics⁶⁹ are some of the external factors that affect PU.

The degree to which a person feels that utilizing a system would require little effort is known as perceived ease of use. PU is significantly impacted by perceived simplicity of usage. Furthermore, it has been demonstrated to have a greater impact on attitude⁶⁹ than PU. Benefits, educational views, and other external variables on PEU have been examined in earlier research. delight, subjective norm, self-efficacy, experience, and topic knowledge. The researcher uses indicators of information technology, such as work speed, job performance, increased productivity, effectiveness, ease of use, controllability, clarity and understandability, flexibility, ease of skill development, and ease of use⁶⁹, when developing measurement scales for PU and PEU. A person's favorable or negative inclinations toward a concept, an item, or a symbol are referred to as their attitude, and they have a direct impact on how consumers perceive and behave. Human relationships and prior experiences have a significant impact on how an attitude about an object⁷⁰ is formed. There are behavioral, cognitive, and emotional aspects to attitude. Emotional, cognitive, and behavioral components are involved in an object's tendencies, beliefs, and reactions, respectively. Another element influencing behavior is intention, which is influenced by attitude. Sometimes people may make bad decisions as a result of their intention combined with their mindset.

TAM is a behavior-focused paradigm that examines the connections between PU, PEU, attitude, and behavioral intention to use a certain technology. Numerous research have been carried out to determine how people react to information and communication technologies. For technology

developers, assessing services and products from the viewpoint of users is a crucial prerequisite. An underpinning foundation for these user trend investigations can be the Technology Acceptance Model. For instance, a researcher recently investigated how secretaries' personalities affected their use of tablet PCs⁷¹. The findings lead the authors to the conclusion that encouraging secretaries to use tablet PCs may be accomplished by emphasizing the benefits of doing so and providing them with the necessary skills.

The Technology Acceptance Model is pertinent to the study because, as previously mentioned, it would improve administrative and secretarial efficacy if it is effectively applied to account for the adoption of information technology among secretaries in Oyo State's public universities. For instance, tertiary schools that make a favorable technical environment to do away with paper secretarial practices have shown an improvement in secretarial performance as a result of the deployment of TAM. Their success was dependent on matching incentive systems, such as awarding continuing education credits to interested secretaries and rolling out the new system in tiny pilots to improve performance. Similarly, the theory would also encourage an examination of digital adoption initiative to combine information technology and administrative services among secretaries in public universities in Oyo State, Nigeria.

2.2.3 Bandura Self – Efficacy Theory (1977)

Self-Efficacy theory by Bandura 1977 is the theory (SET) is a theory that focuses on the importance of personal agency and cognition in shaping behavior. It suggests that a person's belief in their ability to perform a task is a key factor in their motivation and decision-making, Bandura theory has had a significant impact on research, education, and clinical practice. For example, in the field of health psychology, self-efficacy has been applied to behaviours like

smoking cessation, exercise and paid control. In 1977, Albert Bandura, a Canadian American psychologist, first introduced the term 'self-efficacy' in his paper. Self-efficacy theory implies that individuals tend to engage in tasks or activities to an extent to which they perceive themselves to be capable.⁷²

The idea of self-efficacy then refers to a person's conviction that he or she has control over the circumstances that impact his or her life⁷⁰. Four distinct methods are used to achieve these self-efficacy beliefs. These include behavioral (the perceived efficiency of dealing), cognitive (thinking about goals), motivational (deciding on goals and striving toward achieving them), and selective (preference and setting up surroundings and activities).⁷¹. Self-efficacy compares an individual's needed performance and capacity to ascertain their thinking styles, emotions, and motivating states. People who have higher levels of self-efficacy and efficiency are more determined to succeed and view challenges as opportunities to manage and overcome rather than avoid. On the other hand, it can be challenging for those who lack sufficient self-efficacy to deal with failure. They are prone to depression and stress. People's beliefs in their own abilities can be impacted by a variety of circumstances. These sources include the individual's prior experiences with the behavior (mastery experience), observing the experiences of others with the behavior (vicarious experience), the environment's support for the behavior, and the individual's psychological state with regard to the behavior (social persuasion).

The conviction that one can do a specific activity is known as self-efficacy. Self-efficacy is the belief in one's ability to control and execute the steps required to achieve a particular goal. It then dictates the actions a person can take to accomplish the objectives. A higher performance rank might be attained via self-efficacy, which could also affect individual performance, encourage participation more quickly, and endure longer periods of time. Decisions on what actions to take

are often influenced by beliefs of self-efficacy. Because computers are so common, there has been a recent surge in interest in computer self-efficacy. The capacity to use particular computer skills to complete computer-related tasks is known as computer self-efficacy. Positive learning outcomes and processes, such as training effectiveness, perceived ease of use, and computer-use intentions, are linked to computer self-efficacy. 102 music teacher candidates' views about digital technology and computer self-efficacy were examined by a researcher⁷². The degree of computer self-efficacy was found to be significantly correlated with both general and specialized computer expertise. Additionally, it was shown that computer self-efficacy and attitudes toward digital technology were substantially connected. To increase educational efficacy and foster good attitudes toward digital technology, the author advises educators to design classes that include technology.

The self-efficacy hypothesis is relevant to this study since it compares an individual's needed performance and capacity to ascertain their thinking patterns, emotions, and motivational states. People who have higher levels of self-efficacy and efficiency are more determined to succeed and view challenges as opportunities to manage and overcome rather than avoid. Building secretaries' computer self-efficacy could boost their usage of digital skills in the most efficient ways. From their point of view, computer self-efficacy is linked to technology integration. A number of elements, such as secretaries' computer self-efficacy views, digital skill levels, past experience, intention, and technological pedagogical subject knowledge, are linked to their usage of technology. Additionally, there is proof that well-planned professional development can raise secretaries' computer self-efficacy and pedagogical proficiency with digital tools. Research has demonstrated a substantial correlation between secretaries' computer self-efficacy and their ability to integrate technology into their administrative skills⁷³. Previous studies indicate that pre-

service secretaries with higher levels of technology self-efficacy are more confident about integrating technology in their future administrative work. Therefore, public universities in Oyo State, Nigeria with higher self – efficacy could also improve the confidence in the use of digital skills by learning more about digital skills and getting used to the skills in accordance with administrative work while on duty.

2.3 Review of Empirical Studies

2.3.1 Digital Adoption and Skill Development

Forty contemporary business organizations in Port-Harcourt, Nigeria, and the surrounding area were chosen at random by a scholar. For the study, 40 secretaries were used. Three tools were created and utilized for the study: the Modern Office Technology Availability (MOTA), the Modern Office Technology and Secretary's Productivity (MOTSP), and the Modern Office Technology and Secretary's Usage (MOTSU). The acquired data was analyzed using the mean and chi-square. The study's conclusions showed that contemporary office technology devices are available in private companies, and secretaries' usage of them boosts productivity.

The equipment in an automated office and how it has truly guaranteed the secretary's high-quality performance were severely reviewed by a scholar. The study's population consisted of 360 Office Technology and Management graduates who were chosen from both public and commercial organizations in the Delta South Senatorial District. 108 Office Technology and Management grads made up the study's sample. Simple percentages were used for a meaningful analysis of the data after the information gathered from the respondents was pooled together. The greatest way for an Office Technology and Management graduate to benefit from an automated office was suggested. 67 middle- and upper-level corporate managers in Durban, KwaZulu-Natal,

were given questionnaires as part of a quantitative study. They found that contemporary office technology has a big impact on the workplace. Only after the office is outfitted with pertinent and necessary technologies can one observe how office technologies improve performance. They also emphasized that effective usage of office technology is strongly associated with improved managerial performance.

One study looked at how office automation affected the productivity of secretaries in Ogun State's state-owned universities. In keeping with the study's goal, four (4) research issues were addressed. A verified structured questionnaire was created. Regression analysis was used to examine the acquired data at the 0.05 level of significance. The results showed that office automation had no discernible impact on secretaries' professional behavior, interpersonal skills, personal qualities, or job-related abilities. Among other things, it was suggested that secretaries should go to conferences, seminars, and workshops to learn more about Microsoft Office products and information technology. A manager and his team are the source of value, according to a study on the subject of technical training's worth. The influence of collective vision, knowledge, and skill sets is greater than that of any single technology. Because managers must be ready to use technology to the fullest extent that it helps their organization, the training and development role is becoming more and more crucial for enterprises.

Today's managers can handle time management and resource problems using a range of tools and strategies. To manage the business within the boundaries of job quality, timing, and resource usage, these tools must be completely linked with the management system as a whole. According to a survey, the pace and scope of technological advancements and changes in management practices over the past several years have been astounding⁷⁴. The key problem is to use this newly emerging technology for business purposes since technology management can

make a difference and there is no reason to think that the current rate of development will slow down. Our quality of life is positively impacted by technological advancements, and this tendency is predicted to continue growing. It was stated that new technology advancement is reshaping business industries where every business will need technology to compete successfully. In recent years, we have seen many of these technological changes; some are merely evolutionary, while others are more revolutionary becoming firmly entrenched in the way our organisations will need to deal with the social world. A researcher found that many secretaries lack the communication technology skills required in the various offices and this has greatly affected their performance⁷⁵. The effect of office automation is to increase organisational productivity by redefining the office work and improve the quality and accuracy of output.

A scholar submit that administrative efficiency and job performance of secretaries and other office personnel rely heavily on the availability of modern technologies and user's competence and expertise, recent development in technological innovations is characterized by reliance on fast-growing capabilities and increasing use of ICT tools for organisational performance and service delivery⁷⁶. Hence, corporate organisations and government sectors are acquiring and incorporating digital-based technological devices for providing services and there is growing interest in technological innovations for secretarial functions and office management related activities. Digital competency not only deals with technical skills, but also involves cognitive and social and emotional attributes to use technologies for working and living in a digital environment.

The indicators of digital competence include mastery and proficiency in information processing and data literacy, communication and collaboration, creation of digital content, safety skills in

the use of ICT and problem-solving abilities. Information processing and data literacy involves “browsing, searching and filtering data, information and digital content; evaluating data, information and digital content; and managing data, information and digital content”. Communication and collaboration imply “abilities to interact, sharing, engaging in citizenship and collaborating through digital technologies as well as managing digital identity”. Digital content creation involves “developing digital content, integrating and re-elaborating digital content”. Safety skill component includes “protecting devices, personal data and privacy, health and well-being as well as the environment” while problem solving means “solving technical problems, identifying needs and technological responses, and identifying digital competence gaps”⁷⁷.

A scholar that dealt on ICT and sustainable development in Nigeria, it has been observed globally that ICT is essential both to eradicate poverty and improving human capacity, ICT advances economic, social, cultural and political initiatives in ways that affect all stakeholders positively when done correctly⁷⁸. Therefore, it is the aim of this study to determine how ICT assist in sustainable development. This paper used the secondary method of data collection. Many literatures were reviewed. It was concluded that ICT can create cost competitiveness among nations. It helps to bring technology to remote areas where traditional technology would have been costly. It was therefore recommended that if Nigeria intends to meet up with sustainable development, it must encourage its citizens on the use of ICT to advance innovation and eco-friendly solutions to on-going problems. During the investigation of the effects of information technology on organisational Performance in Nigerian Banking Industries Nigerian banks have benefited from global technology innovation⁷⁹. Introduction of Information and Communication Technologies (ICT) have affected employee performance and customers’

responses. This thesis examined customer's and employee's responses to technology innovation, and their effects on the performance of the Nigerian banks. Fifteen (20) major banks were selected for the research. Two null hypotheses based on sets of questionnaires distributed to selected banks' employees and customers were formulated to test whether there is no significant relationship between technology innovation and customer's satisfaction; and between technological innovation and Nigerian banks employee's performance. Four hundred and fifty (450) questionnaires were distributed to customers to test the first hypothesis out of which 400 were collected which is 88.88% of the distributed questionnaires, Chi square was used to test the hypothesis. Findings revealed that technological innovation influenced banks employee's performance, customer's satisfaction and improvement in banks profitability. The study recommends effective management of technological innovation for improved employees performance, customer's satisfaction, sustainable profit, increased return on investment, returns on equity, and to promote competitiveness in the Nigerian banking industry.

A study investigated the influence of information and communication technology skills on office managers' performance in private industries in Port Harcourt Metropolis⁸⁰. The study adopted a descriptive survey design. The population for the study consisted of 134 oil and Gas private industries in Port Harcourt Metropolis, in River State. The sample for the study was 145 respondent's male and female office managers, 30% was used to select one hundred (100) private industries from the population to get the sample size, purposive simple random sample techniques was used to get 145 office managers as sample size. Two research questions were posed while four null hypotheses were formulated. The instrument used for data collection in the study was titled "Influence of Information and Communication Technology Skills on Office Managers' Performance in Private Industries in Port Harcourt. (ICTOMP)". A test re-test method

was used to obtain and to establish coefficient of stability of 0.77. The data collected for the study were analyzed using frequency, percentage, mean and standard deviation to answer the responses of the research questions, while the null hypotheses were tested using z-test. The findings revealed that computer appreciation skills, database management skills greatly influence office managers' performance in private industries in Port Harcourt. Based on the findings; some recommendation were made: Training in the use of office equipment should be carried out on a quarterly basis to increase the knowledge level of managers and subsequently their performance; There is need for equipping and keeping other staff of the industry on the "know" of the use of modern technological gadgets for easy communication with management staffs.

A scholar examined the impact of information technology on corporate organisations performance in Nigeria⁸¹. The research explores the significance of information technology on corporate organisation effectiveness and efficiency. The study is empirical as questionnaire was the primary source of data while results were presented on average, variance and standard deviation. The target respondents constitute specialist in the field of information technology, specifically Lagos state. To achieve the primary aim of this research, forty-five questionnaires were administered to the IT specialist, forty was received which were analyzed with the one-way ANOVA technique. Findings from the research depicted information technology have a significant impact on corporate organisations performance in Nigeria. It was recommended; corporate organisations must prioritize training of personnel and invest massively on IT for efficiency in operations. Information Communication Technology has been acknowledged as the building block for any organisation in order to maximize profit, ensure customer satisfaction and minimize cost⁸². This study was aimed to determine the impact of information communication technology on organisational productivity in the Nigeria banking industry. Questionnaire was

employed as a method of data collection of the study, while multiple regression analysis was used to test the hypotheses under study. The result of the study indicates that hardware component, software component and network have significant and positive impact on organisational productivity in the Nigeria banking industry. The study recommends that banks should acquire or make use of modernized and 21st century software, hardware, and network in order to increase organisational productivity and customer satisfaction which will eventually resulted to diversification of the organisation.

A scholar assessed technological innovation and digital competence of secretaries and their impact on job performance of the secretaries in public tertiary institutions in Ogun State, Nigeria⁸³. A survey of secretaries in public tertiary institutions selected from the three senatorial districts in the State was conducted. Data were collected with the use of questionnaire and analysed with descriptive and inferential statistics. The result indicated remarkable level of technological innovations and digital competence of secretaries in the surveyed institutions. It was found that technological innovations and digital competence of the secretaries have significant bearings on the performance of the secretaries in the face of technology-driven office and secretarial functions. Thus, it was concluded that effective and efficient functioning of secretaries and office administrators requires the availability of technological tools, adoption and use of innovative technologies and essentially, the competence and up-skilling of the secretaries for the ever-changing secretarial functions, office methods, approaches and tools. It is recommended, among others, that public tertiary institutions in Ogun State and similar organisations should make the acquisition and adoption of technological innovation a policy and culture issue to enhance the performance.

A researcher examined holistically the effects of Information Communication Technology on employee performance in an organisation⁸⁴. This paper reviews some related literature alongside theoretical framework which have bearing on the subject matter. This paper adopts the descriptive survey design in achieving the stated objective. The population of this study consists of 50 staff of the study organisation with the sample size of 34 drawn via simple random sampling technique. The questionnaire method was used in collecting the data. The data obtained was analyzed with particular reference to the research questions using descriptive statistical tools such as tables and frequencies. The findings show that out that Information and Communication Technology has improved the skills of workers in the bank thereby improving the employee's performance, that Information and Communication Technology has bought new techniques in all Areas of the Banks by improving the banking operation. Based on the findings, the researcher recommended that banks should improve more on its information technology so as to enhance its productivity, the use of (ICT) in the banking sector should not only be restricted to the cities alone, rural banking should also be improved upon.

In a research on the use of ICT in private universities in Nigeria, it was found that practically all of the private institutions employed ICT to manage administrative activities⁹⁰. The research found that ICT was used for student enrollment, student record keeping, accounting, general administration, and library upkeep. It was claimed that those who used ICT for administrative reasons said it was dependable, convenient, and efficient. On the other side, a researcher looked at the elements that influence faculty members at tertiary institutions to use ICTs in their instruction⁸⁵. They are greatly influenced by factors including computer self-efficacy, relative benefit, compatibility, and past experience when determining how easy a technology is to use and how it will be received. In a study on the use of ICT for facilitating teaching and learning in

Nigerian universities, it was observed that a variety of internet-based applications can be used by students to complete tasks like course applications, course and examination registration, viewing exam results, accessing the timetable, and paying university fees⁸⁶. The usage of ICT by staff employees for services like leave requests, e-forms for different purposes, and personal financial information pertaining to the institution was also noted.

2.3.2 Self – Efficacy and Skill Development

A scholar investigated the link between technology adoption and business success. They conducted a survey on 161 business enterprises in Lagos, Nigeria⁸⁷. The results indicated a promising relationship between adopting technology and the success of micro-entrepreneurs. Thus, higher technology use increases the chances of entrepreneurial businesses to succeed. In another study, it was examined that success factors for online business in Bangkok, Thailand. The respondents consisted of 180 online netizens⁸⁸. This prior study indicated that advertising using social media as the platform is vital for business success. Furthermore, they also revealed that the relationship between technology adoption and business success would be mediated by self-efficacy. A scholar performed a study to identify the elements that small business owners will find successful. They gathered information via questionnaires from 199 small business owners who participated in the Federal Land Development Authority (FELDA) scheme in Malaysia⁸⁹. Utilising the partial least square (PLS) technique, the findings showed that the usage of technology is associated with small-business success. Additionally, earlier studies showed that self-efficacy mediates the relationship between technology adoption and firm success.

In a study of the adoption of data-driven decision-making technologies find that complementarities matter for technology choice, with firms with better educated workers being

more likely to adopt the new technology⁹⁰. However, in an analysis of Spanish manufacturing firms, it was observed that firms that are more skill-intensive ex ante are less likely to introduce robots than less skill-intensive firms⁹¹. The difference across these two papers suggests that no universal patterns can be drawn, but that the relationship between human capital and technology adoption might depend on institutional settings that differ across countries or on the nature of new technologies. In fact, there is a recent literature that argues that the effects of technological change are heterogeneous across tasks, and thus across workers' occupations, and across industrial sectors. It was also stressed that technology is the systematic application of scientific knowledge in order to achieve practical results. It entails a combination of different approaches to solve a problem. It implies that technology is all about methods and the way people apply them in order to get results. Therefore, we live in a competitive environment where things are changing fast and for the better technologically and due to the growing complexity of modern day management, the office is also changing. Secretarial functions such as typing, mailing a letter that usually takes minutes or hours has to be carried out in seconds with high speed, accuracy and perfection. The advent of information and communication technology which has revolutionized secretarial functions and the office. The secretary has to be well equipped to meet the present challenges and the challenges of the future in a contemporary office.

Many experts in the Secretarial profession have concluded that there will be changes, dramatic changes that will reshape the office, and work environment with information and communication technology, work habits, impact on the personal lives of professionals and the way they work⁹². The information and communication technology has revolutionized the work of the office, changing work patterns and attitudes of employees and this people are now working towards an acceptance of change. The objective of this study therefore, is to examine the effect of

information and communication technology on secretaries in contemporary organisations. To achieve this objective, the paper is divided into five interconnected sections. The next section presents the review of relevant literature. Section three examines the materials and methods used in the study. Section four presents the results and discussion and the final section examines the conclusion and recommendations.

A scholar also examined the extent of use of IT in various small and medium business organisations in Brunei Darussalam⁹³. Their study attempted to assess the depth and breadth of IT usage in business. They concluded that the chief executive's computer knowledge is positively associated with the use of IT and that businesses in different sectors have different information processing needs. Calhoun et al. also studied the impact of national culture on information technology usage in organisations and reported the association between some organisational characteristics and use of IT. On the other hand, culture, control and competition as the constitution of subjectivity, determine the locus of IT application in organisations⁹⁴. These studies do not consider the relationship between types of software used in organisations and their internal operations. It is evident from previous studies that types of IT tools in HRM functions were given due consideration. Elliott and Tevavichulada bring some data that shed light on the types of software applications taking place in HRM and their integration to HRM activities.

Digital competency not only deals with technical skills, but also involves cognitive and social and emotional attributes to use technologies for working and living in a digital environment¹⁰⁰.

The indicators of digital competence include mastery and proficiency in information processing and data literacy, communication and collaboration, creation of digital content, safety skills in the use of ICT and problem solving abilities. Information processing and data literacy involves “browsing, searching and filtering data, information and digital content; evaluating data,

information and digital content; and managing data, information and digital content”. Communication and collaboration imply “abilities to interact, sharing, engaging in citizenship and collaborating through digital technologies as well as managing digital identity”. Digital content creation involves “developing digital content, integrating and re-elaborating digital content”⁹⁵. Safety skill component includes “protecting devices, personal data and privacy, health and well-being as well as the environment” while problem solving means “solving technical problems, identifying needs and technological responses, and identifying digital competence gaps”.

A scholar examined the extent to which programme on skills acquisition could enhance youth employability in Anambra State while another investigation on the impact of ICT skills on graduates on secretarial studies employability in Rivers State⁹⁶. Likewise, a scholar reviewed the extent to which acquisition of OTM skills could act of predictors towards graduate self-reliance in Nigeria using content analysis. A researcher look into how secretarial skills and education could enhance graduates’ self-reliance for the solving the challenges of unemployment in the country. However, the author adopted content analysis. A scholar examined the inclusion and relationship between employability competencies and OTM curriculum in Nigeria. They authors based the study on content analysis. In an examination on the interaction between secretarial studies or OTM and graduates job demands for self-employment in Ekiti-State. However, despite those related studies have received significant attention from the body of literature, most of these studies were based on contents analysis which failed to capture individual opinions on the issues discussed and that studies on the relationship between secretarial skills and the challenges of youth unemployment among tertiary institutions in Ogun State have received less attention.

In a research, the lecturers' attitudes about the use of ICT in the classroom were examined¹⁰⁵. The results demonstrate that the lecturers' attitudes have a favorable impact on ICT. Similar research was conducted on the variables that influence teachers' attitudes about using ICT in teaching and learning⁹⁷. The authors discovered that attitude is the greatest predictor of the teacher's adoption of ICT and that attitude has a favorable impact on the teacher's decision to utilize ICT. It was discovered that a favorable and substantial link between attitude and behavioral intention to use. Therefore, in order to create a new method of management and lecture delivery to students, attitude would have a good impact on the behavioral intention of lecturers and administrative personnel to utilize ICT in Bayelsa state tertiary institutions.

A scholar attempted to determine the relationships between mathematics teachers' self-efficacy in technology integration and TPACK⁹⁸. They administered a survey questionnaire to 66 secondary school mathematics teachers, and the results indicated that the mathematics teacher's self-efficacy with technology integration and TPACK were strongly associated. A study examined the correlation between teachers' self-efficacy and ICT infrastructure in schools with 400 teachers from 100 schools in India⁹⁹. The findings showed that teachers' overall ICT self-efficacy in three domains identified as technological efficacy, pedagogical efficacy, and integration efficacy was moderately low. It was also found that teachers' perceptions about ICT infrastructure in schools identified as training, ICT equipment, and management were also low. Significant and positive correlations were detected between all three domains of self-efficacy and three domains of ICT infrastructure. The authors suggested that training and ICT infrastructure play a vital role in improving teachers' ICT self-efficacy. A study involved 928 high school teachers to explore predictors that independently contribute to the technology used for different teaching purposes, either teacher-led presentations or student-centered teaching¹⁰⁹. A series of

multilevel models were used to determine the independent effect of teachers’ pedagogical beliefs, teachers’ attitudes and beliefs towards technology and teachers’ perceived teaching effectiveness. The results indicated that teachers’ technology self-efficacy was significantly related to teachers’ use of technology.

2.4 Conceptual Model

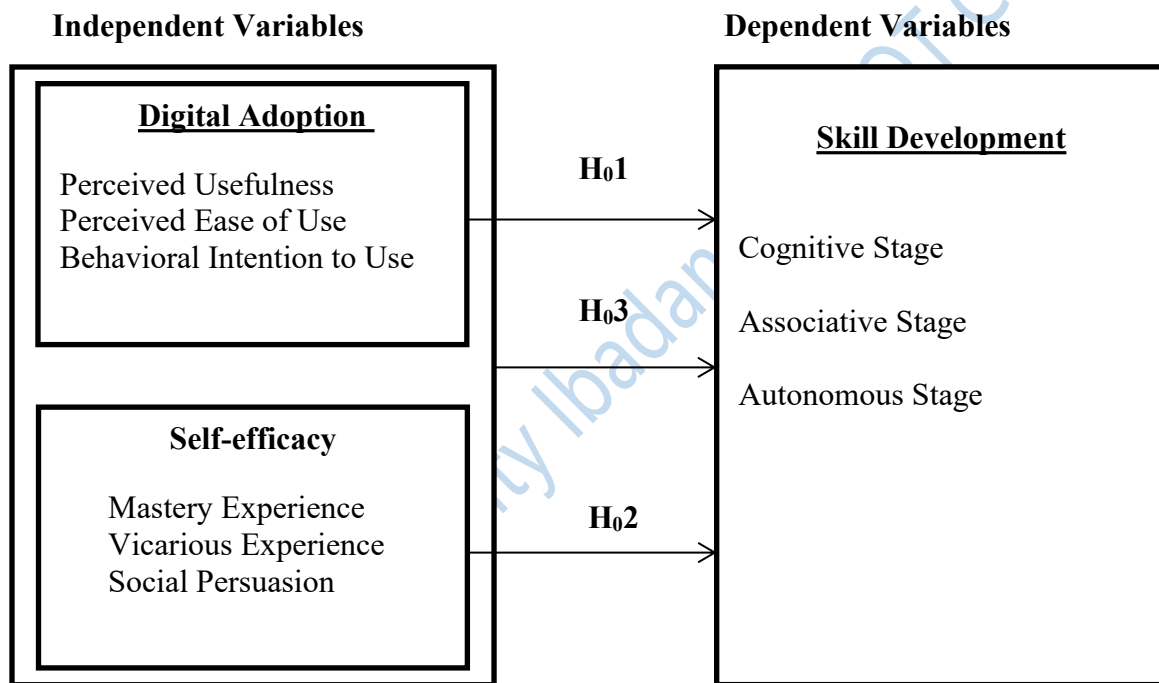


Fig. 2.1: Conceptual Model: Digital Adoption, Self-Efficacy and Skill Development of Secretaries in Public Universities in Oyo State Nigeria.

Source: Researcher, 2024

It is pertinent to explain the conceptual model given for this study so as to ensure a crystal and a precise reading that will lead to a consequent deeper comprehension of the utility of the research under study. The model proposed links or interactions between the independent and dependent variables of the study. Digital adoption and self - efficacy are the independent variables while skill development is the dependent variable. The model suggests that Cognitive stage, associative

stage and autonomous stage (adopted from Anderson Skill Development Theory, 1985) are the measures that could determine skill development of secretaries in public universities in Oyo State, Nigeria. The components of digital adoption are perceived usefulness, perceived ease of use, behavioral intention to use, while the components of self – efficacy are mastery experience, vicarious experience and social persuasion.

The conceptual framework also illustrates the combine influence of digital adoption and self-efficacy on skill development of secretaries of public universities in Oyo State, Nigeria. With the variables this study will look at the influence of digital adoption on skill development; the hypothesis two will examine the influence of self-efficacy on skill development while the third hypothesis will examine the combined influence of digital adoption and self-efficacy on skills development of secretaries in public universities in Oyo State. The conceptual model of the study will be anchored on Skill Development Theory which was used to explain skill development; Technology Acceptance Model used to explain digital adoption and Bandura self-efficacy theory was used for self-efficacy.

2.5 Summary of Reviewed Literature

The review shows that there have been a number of studies conducted on digital adoption, self - efficacy and skill development of secretaries in public universities in Oyo State, Nigeria. Factors that hinder skill development of secretaries in Africa, most especially Nigeria have also received attention. Some of the literature that was revealed that some of the problems of skill development are lack of motivation, non – availability of digital infrastructure, poor incentive among others. Some of the literature that were reviewed revealed that the skill development of secretaries could be poor if the organisations are not ready to encourage the secretaries.

One significant literature gap is the limited amount of empirical research specifically focusing on the skill development of secretaries in public universities in Nigeria. While there is a substantial body of literature on skill development and administration in Nigeria, few studies have directly examined this specific group. The influence of contextual factors on the skill development of secretaries in universities, such as institutional policies, management practices, and resource availability, remains understudied. Understanding how these factors affect skill development can help in designing effective interventions. With the increasing integration of technology into education, there is a gap in research exploring how the use of technology and innovative administrative methodologies impact the skill development of secretaries in universities. This includes the assessment of e-learning platforms and their effectiveness.

Some of the literature that were reviewed may lack specific studies that focus exclusively on secretaries in universities in Nigeria. Many studies may be generalized to various academic disciplines, and there may be a need for research that specifically examines this group. Nigerian universities may have unique contextual factors that affect digital adoption and skill development among secretaries, such as inadequate technological resources, poor incentives, government policies, funding challenges, or regional differences. Research may not adequately address these specific contextual factors. The literature may lack standardized and validated measures for assessing the digital adoption in Nigerian universities. Developing and validating such measures could be a valuable contribution to the field. There may be variability in how skill development is measured in different studies, with some relying on training and retraining of secretaries. Identifying a standardized and reliable metric for assessing skill development in this context could be a gap in the literature. Many existing studies may be cross-sectional, providing a snapshot of the relationship between digital adoption and skill development at a single point in

time. Longitudinal studies that track changes over time could offer deeper insights. Comparative studies that assess the digital adoption and skill development of secretaries in Nigerian public universities relative to other countries or academic settings may be limited.

The literature suggests a significant gap in comprehensive studies focusing specifically on secretaries in Nigerian universities. Most research on self - efficacy in administrative tends to be broader in scope, making it challenging to draw specific conclusions about this particular group. While there is research on self - efficacy in administrative sector of academic institutions, there is a need for more detailed studies identifying digital self – efficacy specifically among secretaries. These self – efficacy might differ from those in other academic disciplines and could require unique strategies. The literature often highlights the importance of coping mechanisms for acquiring more skills in digital sector, but few studies delve into the specific skills strategies that secretaries use or need. Understanding which strategies are most effective for this group is essential.

Technology Acceptance Model, bandura self-efficacy and Anderson Skill Development theory were used as theoretical framework for this study for the three variables. Anderson Skill Development theory was used to anchor the study for the dependent variable (skill development); Technology Acceptance Model backed up the independent variable (digital adoption), and bandura self-efficacy was used to back up the second independent variable (self-efficacy). However, while some researchers have conducted many studies on skill development among secretaries, few, in a systematic way, have investigated the impact of digital adoption, self-efficacy and skill development of secretaries in public universities in Oyo State, Nigeria. From the available literature, it is apparent that majority of the studies were conducted outside Africa.

A few of these studies were carried out in Nigeria but not specifically in the public universities in Oyo State, Nigeria. This is the gap to be filled in this study.

Endnotes

1. C. C. Okolocha, & E. I. Baba, *Assessment of Extent of Skills Possessed by Secretaries for Effective Electronic Records Management in Polytechnics in North-Central, Nigeria*, **Nau Journal of Technology and Vocational Education**, 2(1), 2019, 1-16.
2. N., Timya, M. P. Wetnwan, & Y. Bewaran, *Identification of New Technology Skills Required by Teachers of Office Technology and Management for Teaching In Polytechnics In North Central Nigeria*, **Nigerian Journal of Business Education (NIGJBED)**, 6(2), 2019,382-391.
3. T. A. Umaru, *Effect of Questioning Teaching Method on the Academic Achievement of Students in Business Studies in Oyo State, Nigeria*, (**Doctoral dissertation, Kwara State University (Nigeria)**), 2020.
4. D. Li, W. Xi, Z. Jia, & X. Zhang, *Information Literacy and Team Building of University Administrative Secretary*, 2019.
5. P. Sicherl, *Different Statistical Measures Create Different Perceptions of the Digital Divide*, **The Information Society**, 35(3), 143-157.
6. S. Nisar, & A. Danish, *A survey on the Role of Fringe Benefit in Employee Satisfaction*. **International Journal of Human Resource Studies**, 9(1), 2019, 232-252.
7. M. M. Dosunmu, A. O. Bukki, & A. A. Akintola, *Influence of Office Automation on Secretarial Administrators' Effectiveness in Ogun State-Owned Universities*, **Kampala International University Journal of Social Sciences**, 4(3), 2018, 57–64.
8. M. N. Koko, & G. F. Okogun, *Perceived Influence of Modern Office Automation on Administrative Performance of Staff of Private Business organisations in Port Harcourt Rivers State*, **International Journal of Innovative Information Systems& Technology Research**, 8(1), 2020, 44-53.
9. N. P. Okpokwasili, *Information Systems Application Skills Required of Secretaries for Job Performance in e-world Parastatals in Rivers State*, **International Journal of Innovative Information Systems & Technology Research**, 6(3), 2018, 16-24.
10. B. L. Onoja, *Office Automation and Secretarial Productivity in Rivers State University*. **American International Journal of Nursing Education and Practice**, 1(1), 2020, 22-34.

11. A. O. Ovbiagbale, D. C. Mgbonyebi, & V. Olaniye, *Electronic Records Management Competencies Required Of Polytechnic Office Technology And Management Graduates in South-South Nigeria*. **Nigerian Journal of Business Education (NIGJBED)**, 6 (1), 2019, 464-472.
12. P. Obanya, A Technology-Driven and Technology Run-Through Education Model for Nigeria, **A Paper Presented at the Seventh Annual Conference of the Faculty of Education, Ambrose Alli University, Ekpoma Edo State**, on March 10-13, 2020.
13. F. O. Ohiwerei, *Business Education: A Departure from Original Curriculum in Nigerian Universities*, **Journal of Multidisciplinary Engineering Science and Technology (JMEST)**, ISSN: 2458-9403 vol. 6 issue 10, 2019, 10797-10805.
14. N. P. Okpokwasili, *Information Systems Application Skills Required of Secretaries for Job Performance in e-world Parastatals in Rivers State*, **International Journal of Innovative Information Systems & Technology Research**, 6(3), 2018, 16-24.
15. Corporate Finance Institute. Knowledge economy. Retrieved June 2022 from: <https://corporatefinanceinstitute.com/resources/knowledge/other/knowledge-economy/>
16. N. C. Emeasoba, C. A. Akudolu, & R. C. Agbo, *Utilization of Digital Skills for Teaching and Learning of Business Education in Public Universities in the South-South, Nigeria* **Association of Business Educators of Nigeria Conference Proceedings**, 9(1), 2022, 79-90.
17. P. C. Eze, N. L. Ezeahurukwe, & A. O. Ameh, *Digital Employability Skills Required by Future Secretaries for Optimum Productivity in Business organisations*, **Nigerian Journal of Business Education (NIGJBED)**. 8(2), 2021, 187-198.
18. I. C. Ezeabii, F. O. Nwokike, & E. U. Jim, *Competencies Required of Secretaries in Small Scale Business organisations in Enugu State for National Development*, **Nigerian Journal of Business Education**, 5(1), 2018, 143-153.
19. H. A. Odia, & E. Iyamu, *Influence of Information and Communication Technology Skills on Secretaries' Job Retention in Tertiary Institutions in Delta State*, **Nigerian Journal of Business Education**, 8(2), 2021.
20. O. O. Taiye, & A. E. Modupe, *Synergy and Collaboration of Institution-Industry: A Panacea to Development of Quality Office Technology and Management Curriculum in Polytechnics*. **Nigerian Journal of Business Education**, 7(1), 2020, 93-105.
21. N. V. Usman, *Secretary as Manager: Roles and Duties*, Association of Business Educators of Nigeria Conference Proceedings, 8(1), 2021, 556-560.
22. D. C. Zuin, & P. Findlay, *Reflections on Secretarial Work and Issues for Further Studies: A Conceptual Contribution*, Revista de Gestao e Secretarial do, 5(3), 2014, 28- 48.

23. A. L. Adamu, A. S. Bappah, A. Ahmad, & B. S. Aibu, *Need Analysis for Development and Validation of a Framework for Integration of Employability Skills into Office Technology and Management Curriculum in Nigerian Polytechnics*, **Multidisciplinary Journal of Vocational Education and Research**, 4(1), 2021, 134 – 141.
<https://www.gojehms.com/index.php/MJVER/article/view/99>
24. M. A. Aina, *Training of office technology and management education students for job demands and self-employment in Ekiti State, Nigeria*, **European Journal of Training and Development Studies**, 6(4), 2019, 14-22.
25. C. B. Okolocha, C. R. John-Akamelu, & U. S. Muogbo, *Effect of Skill Acquisition on Youth Employability in Nigeria*, **International Journal of Research in Finance and Management**, 3(1), 2019, 33-37.
26. A. Onoyase, *Causal Factors and Effects of Unemployment on Graduates of Tertiary Institutions in Ogun State South West Nigeria: Implications for Counselling*, **Journal of Educational and Social Research**, 9(4), 2019, 119-127.
27. W. J. Ubulom, & J. J. West, *Modern Office Skills and Employability of Secretaries amongst Graduating Office Technology and Management Students in Rivers State Tertiary Institutions*. **International Journal of Innovative Information Systems and Technology Research**, 9(4), 2021, 61-69.
28. M. A. Aina, *Towards Effective Skill Acquisition in Business Education Programmes. Ekiti State University*, **TVET – International Journal of Research and Design in Technical, Vocational Education and Training (IJORAD)**, 2(1), 2018, 183-189.
29. C. E. Okoli, *Office Technology and Management Curriculum Contents and the Use of Modern Information Communication and Technology Facilities among Students of Polytechnics in Nassarawa State, Nigeria*, **Association of Business Educators of Nigeria Conference Proceedings**, 6(1), 2019, 624-631.
30. F. O. Nnaji, & F. Okoro, *Determination of the Adequacy of Practical Elements Office Technology and Management Programme as Perceived by Graduate Secretaries in Taraba State*, **Association of Business Educators of Nigeria Conference Proceedings**, 6(1), 2019, 72-80.
31. O. T. Oyinloye, & E. M. Asonibare, *Synergy and Collaboration of Institution-Industry: A Panacea to Development of quality Office Technology and Management curriculum in Polytechnics*, **Association of Business Educators of Nigeria Conference Proceedings**, 6(1), 2019, 491-500.

32. T. A. Umoru, *Plotting Pathways across Transformational Changes in Business Education: A Desideratum for Empowering Learners to Engage the World*, **Nigerian Journal of Business Education (NIGJEBD)**, 7(1), 2020, 1-20.
33. M. K. Abas, R. A. Yahaya, & M. S. Feeding, *Digital Literacy and its Relationship with Employee Performance in the 4IR*, **Journal of International Business, Economics and Entrepreneurship**, 4(2), 2019, 2550-1429.
34. Z. M. Dahkoul, *The determinants of employee performance in Jordanian organisations*. **Journal of Economics, Finance and Accounting**, 5(1), 2018, 11-17.
35. A. J. Ghayth, & A. S. Mundher, *Assessment of Digital Competence of Employees and Teaching Staff at the Technical College of Management, Kufa*, **International Journal of Innovation, Creativity and Change**, 12(12), 2020.
36. C.B. Iro-Idoro, & T. A. Jimoh, *Knowledge Management in Technological Innovation: Correlate of Job Performance of Non-Teaching Staff of the Federal Polytechnic, Ilaro, Nigeria*, **Nigerian Communication and Information Technology Journal**, 1(1), 2019, 180-192.
37. C.B. Iro-Idoro, A. F. Osore, & T. A. Jimoh, *Knowledge and Use of Computer Application Packages by Office Managers/Secretaries in Higher Institutions in Ogun State, Nigeria: Implication on Performance Enhancement*, **World Academy of Science, Engineering and Technology International Journal of Humanities and Social Sciences**, 12 (8), 2018.
38. T. Sengewald, J. Boha & A. Roth, *How does the User Type Affect the Acceptance of Digital Innovation on the Job*, Proceedings of the 2020 on Computers and People Research Conference, June 2020.
39. United Nations, *Building Digital Competencies to Benefit from Frontier Technologies*. **United Nations Conference on Trade and Development**, 2019.
40. A. Urbinati, D. Chiaroni, V. Chiesa, & F. Frattini, *The Role of Digital Technologies in Open Innovation Processes: An Exploratory Multiple Case Study Analysis*, **R & D Management**, 50(1), 2018.
41. A. J. Chigbuson, N. Timya, & T. N. Silas, *Information and Communication Technology Skills Needed by Office Technology and Management Students for Self-Sustenance and National Development*, **Nigerian Journal of Business Education**, 5(2), 2018, 206 – 213.
42. E. F. Idele, & V. S. Paul-Mgbeafulike, *Strategies for Improving Quality Use of ICT Tools in Office Technology and Management Programme in Polytechnics in Delta State for National Development*, **Nigerian Journal of Business Education**, 5(2), 2018, 206 – 213.

43. O. David, *Assessment of Staff ICT Literacy Proficiency in Nigerian Federal University Libraries*, **Journal of Information and Knowledge Management**, 8(2), 2018, 77-89.
44. S. Odu, *Workplace Virtual Environment and organisational Health of Tertiary Institutions in South-South*, Re. Unpublished Ph.D Thesis, Ignatius Ajuru University of Education, 2021.
45. U. Osita, *Database Management: Concepts and Design*, **Journal of Database Management Systems**, 3(2), 2018, 14-26. S. A. Otamiri, & C. Amirize, *Social Media-based Interactivity and Work-Life Balance of Broadcast Stations in South-South, Nigeria*. **Journal of Accounting, Management Science and Information Technology**, 2021, 7(1), 106-116.
46. M. S. Abdullahi & U. R. Shehu, & M. B. Usman, "Impact Of Information Communication Technology On organisational Productivity In The Nigeria Banking Industry: Empirical Evidence," **Noble International Journal of Business and Management Research**, Noble Academic Publsiher, vol. 3(1), 2019, 1-9.
47. T. E. Adenekan, & T. A. Jimoh, *Technological Innovation, Digital Competence and Job Performance of Secretaries in Public Tertiary Institutions in Ogun State, Nigeria*, **International Journal of Innovative Science and Research Technology**, 5(12), 2021, 5-12.
48. A. U. Akwu, A. E. Duke, & V. U. Inuaesiet, *Impact of Information and Communication Technology (ICT) on the Development of Nigeria: A Critical Overview*. **International Journal of Public Administration and Management Research**, 7(1), 2021, 56-78.
49. E. U. Okey-Colbert, & C. N. Ukandu, *ICT and Sustainable Development in Nigeria*, **International Journal of Sustainable Development**, 6(1), 2019, 31-44.
50. F. O. Olaoye, M. O., Olaofe-Obasesin, & W. Akanni, *Impact of Information Technology on Corporate organisations Performance in Nigeria*, **International Journal of Engineering Applied Sciences and Technology**, 4(8), 2019, 84-88.
51. F. J. Oni, & M. N. Koko, *Influence of Information and Communication Technology Skills on Office Managers' Performance in Private Industries in Port Harcourt Metropolis*. **International Journal of Innovative Information Systems & Technology Research**, 8(4), 2020, 22- 31.
52. I. A. Onikoyi, A. Q. Adebayo, J. O. Adenuga, B. H. Babalola, & W. A. Lamidi, *Analysis of the Impact of Information and Communication Technology on Nigeria Bottling Company's organisational Performance*. **ACTA Universitatis Danubius**, 8,(1), 2022, 153-16.
53. Onoja, & B. Lesi, *Office Automation and Secretarial Productivity in Rivers State University*, **American International Journal of Nursing Education and Practice**, 1(1), 2020, 22–34.

54. M. Mohammad, A. Mohammad, & A. Ahmad, *Cloud Computing in Higher Educational Institutions*, **An International Journal of Advanced Computer Technology**, 8(12), 2020, 3507- 3513.
55. Y. A. Qasem, R. Abdullah, Y. Y. Jusoh, R. Atan, & S. Asadi, *Cloud Computing Adoption in Higher Education Institutions: A Systematic Review*, **IEEE Access**, 7, 2019, 63722- 63744.
56. G. T. Sogbeye, F. S. Ekpu, & H. I. Udoh, *Cloud Computing in Nigerian Universities: Benefits, Challenges and Prospects*, **World Educators Forum: An International Journal**, 11(1), 2019, 1-15.
57. M. Akpomi, & C. Ordu, *Modern Office Technology and The Secretary's Productivity in Private Business organisations*, **African Journal of Business Management**, 3(8), 2019, 333-339.
58. S. U. Basse, *Information Communication Technologies in the Management of Education for Sustainable Development in Africa*, **An International Multi-Disciplinary Journal**, 3, 2019, 414- 428.
59. M. Christina, *Information and Communication Technology for Administration and Management for secondary schools in Cyprus*, **Journal of Online Learning and Teaching**. 4(3), 2018, 11-21
60. G. C. Chux-Nyeche, *Infopreneurship Implications and Employment Sustainability of Small and Medium Scale Enterprise in Rivers State*, An unpublished Masters Thesis. Rivers State University Port Harcourt, 2020.
61. E. R. Dulek, & J. S. Fielden, *Introduction to a Modern Business Office*, Macmillian Publishing Company, 2019.
62. H. Zainally, *Administration of Faculties by Information and Communication Technology and its Obstacles*, **International Journal of Education and Information Technologies**. 2(1), 2018, 12-81.
63. C. A. Akudolu & R. C. Agbo, *Utilization of Digital Skills for Teaching and Learning of Business Education in Public Universities in the South-South, Nigeria*. **Journal of Business Educators of Nigeria Conference Proceedings**, 8(1), 2021, 367-377.
64. S. D. Gidado, & R. Daramola, *Evaluation; A Catalyst for Skill Acquisition in Business Education*, **Nigerian Journal of Business Education**, 8(1), 2021, 94-103.
65. E. P. Grace, *Extent of Skills Acquisition Needed for Effective Business Enterprises*, **Journal of Business Education Book of Reading**, 5(4), 2018, 34-38.

66. Edeh, F., Ogbu, N., Ugwu, L., Adama, N., I., Achilike, C.G., & Chimeziem, *organisational Learning: COVID-19 Strategy for Human Resource Skill Adjustment*, **International Journal of Knowledge & Learning**, in press, 2021.
67. Anderson, *Skill Development Theory*, 1985.
68. J. R. Anderson, *Learning and memory*. **New York: Wiley**. 1999.
69. Davis, *Technology Acceptance Model*, 1989.
70. F. Abdullah, R. Ward, & E. Ahmed, *Investigating the influence of the most commonly used external variables of TAM on students' perceived ease of use (PEOU) and perceived usefulness (PU) of e-portfolios*. **Computers in Human Behavior**, 63, 2016, 75–90.
71. I. Ajzen, & M. Fishbein, *Attitude–behavior relations: A theoretical analysis and review of empirical research*. **Psychological Bulletin**, 84(5), 1977, 888–918.
72. A. Bandura, & N. E., Adams, *Analysis of Self-Efficacy Theory of Behavioral Change*. *Cognitive Therapy and Research*, in press, 1977.
73. A. L. Umar, *Leveraging on New Technologies for Skill Acquisition of Business Education in Tertiary Institutions in Nigeria for the e- world*, **Nigeria Journal of Business Education**, 6(1), 2019, 331-337.
74. N. E. Umeano, *Digital Skills Required of Business Education Graduates for Employability in North-East Nigeria*, **Journal of Business Educators of Nigeria Conference Proceedings**, 8(1), 2021, 400-406.
75. C. U. Iwhuoha, & E. Chiwen, *Impact of Teaching Innovations on the Academic Performance of Office Technology and Management Undergraduates in Tertiary Institutions in Imo State*, **Nigerian Journal of Business Education**, 5(2), 2018, 150 – 156.
76. R. Iordeiche, B. Marien, & P. K. Badden, *Situated Learning and Teachers' Digital Competence*, **Education & Information Technologies**, 13(4), 2017, 279-290.
77. P. Norris, *Digital Divide? Civic Engagement, Information Poverty & the Internet in Democratic Societies*. **New York: Cambridge Press**. 2019.
78. O. O. Onwukwe, & R. E. Aliche, *Digital Skills Gap Among Business Education Graduates of Tertiary Institutions in Anambra State: Implication for Programme Re-adjustment*, **Journal of Business Educators of Nigeria Conference Proceedings**, 8(1), 2021, 379-389.
79. organisation for Economic Cooperation and Development – OECD, *Bridging the Digital Gender Divide-Include, Upskill, Innovate*, 2018.

80. J. Thomas, *Digital Skills where Universities Matter*, **Brussels, EUA**, 2019.
81. P. Barbaroux, *Disruptive Technology and Defence Innovation Ecosystems*, Newark: John Wiley & Sons, Incorporated, 2019.
82. Badiru & A. Bodunde, *Innovation: A Systems Approach (version First edition.) First ed. Analytics and Control*, Boca Raton: CRC Press, Taylor & Francis Group, 2020.
83. N. Kyunga, "The Effect of On-the-Job Training and Education Level of Employees on Innovation in Emerging Markets", **Journal of Open Innovation: Technology, Market, and Complexity**, 7.1, 2021, 47.
84. R. Romain, & M. Agogu , "Developing Radical Innovation Capabilities: Exploring the Effects of Training Employees for Creativity and Innovation," **Creativity and Innovation Management**, 30.1, 2021, 211-227.
85. Roberts, S. Patrick, & J. Schmid, "Government-Led Innovation Acceleration: Case Studies of US Federal Government Innovation and Technology Acceleration organisations", Review of Policy Research, 2022.
86. T. Shalini, M. Talwar, P. Kaur, & A. Dhir, "Consumers' Resistance to Digital Innovations: A Systematic Review and Framework Development", **Australasian Marketing Journal (AMJ)**, 28, no. 4, 2020, 286-299.
87. T. Joe, & R. John, *Managing Innovation: Integrating Technological, Market and organisational Change*, John Wiley & Sons, 2020.
88. D. Acemoglu, & P. Restrepo, "Automation and New Tasks: How Technology Displaces and Reinstates Labor", **Journal of Economic Perspectives**, 33(2), 2019, 3–30.
89. E. Brynjolfsson, D. Rock, & C. Syverson, "The Productivity J-Curve: How Intangibles Complement General Purpose Technologies", **American Economic Journal: Macroeconomics**, 13(1), 2021, 333-72.
90. A. Feng, & A. Valero, "Skill Biased Management: Evidence from Manufacturing Firms", Working Paper, 2019.
91. P. Fouskas, & C. Robinson, "Should I Stay or Should I Go? Firm Heterogeneity in the Post-crisis Period", *The Manchester School*, 87(3), 2019, 367-402.
92. M. I. Koch, I. Manuylov, & M. Smolka, "Robots and Firms", **The Economic Journal**, 131(638), 2021, 2553–2584

93. K. Morikawa, “*Heterogeneous Relationships between Automation Technologies and Skilled Labor: Evidence from a Firm Survey*”, RIETI Discussion Paper Series, 20-E- 004, 2020.
94. F. K. Aprilya, & S. Suryanto, *Competency Development for the Secretaries of the Board of Directors of PT Pelabuhan Indonesia III (Persero) in Industrial Revolution 4.0 Era*, **STRADA Jurnal Ilmiah Kesehatan**, 10(1), 2021, 473-480.
95. F. Li, *The Digital Transformation of Business Models in the Creative Industries: A Holistic Framework and Emerging Trends*, **Technovation**, 92, 2020, 102012.
96. I. Pihir, K. Tomičić-Pupek, & M. Tomičić Furjan, *Digital Transformation Playground- Literature Review and Framework of Concepts*, **Journal of Information and organisational Sciences**, 43(1), 2019, 33-48.
97. V. Sima, I. G. Gheorghe, J. Subić, & D. Nancu, *Influences of the Industry 4.0 Revolution on the Human Capital Development and Consumer Behavior: A Systematic Review*, *Sustainability*, 12(10), 2020, 4035.
98. S. Mohd, S. F., Abdul Halim, S. A., Mohamad Khudzari, & N. E. Yusoff, *Comparative Analysis on the Requirement, Qualification and Responsibility of Company Secretaries in United Kingdom, Malaysia and India*, **Journal of Administrative Science**, 16(1), 2019, 1-9.
99. N. Ramya, A. Kowsalya, & K. Dharanipriya, *Service Quality And Its Dimensions*, **International Journal of Research and Development**, 4(2), 2019.
100. D. R. Alake, *Extent of Adoption of Electronic Records Management Practices in Polytechnics in Edo and Delta State*, (Unpublished doctoral dissertation) Nnamdi Azikwe University, Awka, 2018.
101. A. Aderogba, A. Onojah, & C. Olumorin, *Correlational Studies between Secondary School Teachers’ Access to and Utilization Of Internet Facilities for Instruction in Ilorin, Nigeria*, **International Journal of Education and Development Using Information and Communication Technology**, 17(1), 6–20.
102. O. E. Afolabi, O. E. Afolabi, & M. O. Aragbaye, *Information Literacy Skills, Teachers’ Self-Efficacy and Use of Information Resources by Secondary School Teachers in Selected Secondary Schools in Ijebu Ode Local Government, Ogun State*, **Library Philosophy and Practice (E-Journal)**, 2022, 7001.
103. G. A. Aladesusi, A. I., Issa, S. O., Abodunrin, O. A. Boris, E. O. Babalola, & K. M. Nuhu, *Perception of Undergraduate Students on the Utilization of Social Media to Enhance Learning in University of Ilorin*. **ASEAN Journal of Science and Engineering Education**, 1(3), 2021, 183–192.

104. Y. Aladwan, *The Effects of Using Word Processor in Teaching and Writing Skill among Secondary Students in Schools in Jordan*, **Educational Research and Review**, 16(7), 2021, 272-278.
105. U. O. Amaechina, & S. C. Alaubi, *Revitalizing Secondary Schools through Entrepreneurship Education in Nigeria*, **UNIZIK Journal of Educational Management and Policy**, 2(1), 2021, 69–77.
106. K. S. Ameen, S. M. Adeniji, & K. Abdullahi, *Teachers' and Students' Level of Utilization of Ict Tools for Teaching and Learning Mathematics in Ilorin, Nigeria*, **African Journal of Educational Studies in Mathematics and Sciences**, 15(1), 2019, 51–59.
107. I. M. Castillo-Martínez, & M. S. Ramírez-Montoya, *Research Competencies to Develop Academic Reading and Writing: A Systematic Literature Review*, *Frontiers in Education*, 2021, 5.
108. X. N. Deng, & Z. Yang, *Digital Proficiency and Psychological Well-Being in Online Learning: Experiences of First-Generation College Students and Their Peers*, **Social Sciences**, 10(6), 2021, 192.
109. C. Egbunefu, E. A. Amadi, & A. Nwobike, *Microsoft Word Application Skills Need of Business Education Graduates for Job Performance and Economic Diversification in Rivers State*, **International Journal Of Innovative Education Research**, 6(3), 2018, 58-65.

Chapter Three

Methodology

This chapter presents the method employed in carrying out this study. It gives a detailed research description of design, the study location and population, the sampling technique employed, the sample size, the research instrument, validity and reliability of the research instrument, method of data collection and the method of data analysis.

3.1 Research Design

Descriptive research design survey was used for the study. This is considered useful for this study as it accurately and systematically described a population, or phenomenon. This research design specifies types and volume of data to be collected, methods of data collections, sampling methods to be used and statistical tools of analysis to be adopted and generalize the findings on the population. The descriptive research design was considered suitable in carrying out the study as it tends to investigate the influence of digital adoption and self-efficacy on skill development of secretaries in public universities, Oyo State, Nigeria.

3.2 Population of the Study

The population of this study comprised of two hundred and twenty-seven (227) secretaries in Public Universities in Oyo State, Nigeria. The Universities include; University of Ibadan, Ibadan;

First Technical University, Ibadan; Emmanuel Alayande University of Education, Oyo; and Ladoke Akintola University, Ogbomosho.

The table below presents the population distribution based on the Public Universities in Oyo State, Nigeria.

Table 3.1: Population of study

S/N	Name of the Public Universities in Oyo State, Nigeria	Population of Secretaries
1	University of Ibadan, Ibadan	91
2	First Technical University, Ibadan	54
3	Emmanuel Alayande University of Education	19
4	Ladoke Akintola University, Ogbomosho	63
	Total	227

Sources:

3.3 Sample and Sampling Techniques

The sample size for the study was 227. Since the population is moderate in size and relatively small, the total enumeration sample size was used in the study. The population remains the sample size, 227 secretaries in Public Universities in Oyo State, Nigeria was used. One of the main benefits of this method is that it allows the researcher to prevent sampling errors. When the sample population is not too large, the complete enumeration or census method is used, which helps the researcher to conduct a thorough population study, collect data with high precision, and eradicate errors and bias in sampling¹.

3.4 Description of the Research Instrument

The instrument that was used for data collection in this study is structured questionnaire because of the high literacy level of the study population. Questionnaire is chosen as the instrument because it is appropriate in getting to large number of respondents and their dispersion time and this was adapted and was modified to suit the study. The questionnaire is tagged “Digital Adoption, Self – Efficacy and Skill Development Questionnaire” (DASESDQ). The study follows the likert scale design to measure the various constructs of the research model. The instrument will be divided into four (4) sections with focus on the variables of the study. The sections are: A, B, C and D.

Section A: this section elicited information on demographic characteristics of the respondents which includes; name of institution, gender, age, highest academic qualification and work experience.

Section B: this is information on skill development of secretaries using standardized scale which was adapted for the study^{2,3}. This section has three (3) sub-scales representing each measure for the variable with a total of eleven (11) items. The first sub-scale will be used to measure Cognitive Stage and it contains four (4) items. The second sub-scale will be used to measure Associative Stage and it contains three (3) items. The third sub-scale will be used to measure Autonomous Stage and it consists of four (4) items. The scale has a four-point Likert scale with ranked options: 4 = Very High; 3 = High; 2 = Low; 1 = Very Low. Example of the questions are: (i) the design for digital experiment motivates me to participate, (ii) ability to adapt smoothly to new technology, (iii) ability to apply digital tools to enhance secretarial work.

Section C: this section contained information on digital adoption using standardized scale adapted for this study^{4,5}. This section has three (3) sub-scales with a total of twelve (12) items. The first sub-scale will be used to measure Perceived Usefulness and it contains four (4) items.

The second sub-scale will be used to measure Perceived Ease of Use and it contains four (4) items. The third sub-scale will be used to measure Behavioural Intention to Use and it consists of four (4) items. The scale has a four-point Likert scale with ranked options: 4 = Very High; 3 = High; 2 = Low; 1 = Very Low. Example of the questions are: (i) Using digital tool reduces the time I spend on unproductive secretarial activities, (ii) It is easy for me to remember how to perform tasks using digital tools, (iii) The knowledge I acquire using digital tools remain superficial.

Section D: this section elicited information on self-efficacy which was adapted for the study^{6,7}. This section has three (3) sub-scales. The first sub-scale measured mastery experience and it contains four (4) items. The second sub scale measured vicarious experience and it contains three (3) items while the third sub scale measured social persuasion and it contains four (4) items. The scale has a four-point Likert scale with ranked options: 4 = Very High; 3 = High; 2 = Low; 1 = Very Low. Example of the questions are: (i) Confidence in using digital tools to improve my administrative skills, (ii) Observing my boss boosts my ability to use web database programming effectively, (iii) Aid from my manager has made the use of digital tools easy to retrieve document.

3.5 Validity of the Research Instrument

To establish the validity of the instrument that was used for the study, the face and content validity structures of the questionnaire was established by the Thesis supervisor and two other experts from Osun State University. Copies of the instrument was given to the project supervisor and to two other experts who are in the fields of Information Management and Measurement and Evaluation. These experts examined the instrument in order to point out the researcher's

statement that are poorly worded and those that do not agree with the purpose of the study. They examined the instrument for comprehensiveness, relevance of contents, clarity of instructions and statements, possible ambiguities, errors and/or omission. The project supervisor and the two experts also examined the instrument to ensure that the data to be collected using the questionnaire is useful in answering the research questions and in testing the hypotheses that was employed for this study. Comments and all the observations made was incorporated in constructing the final draft of the questionnaire.

3.6 Reliability of the Research Instrument

The reliability of the measuring instrument was done through a pilot study. The pilot study helps to ensure consistency and dependability of the scale and the ability to elicit data that answer the research question of the study. This was carried out by using 20 copies of the questionnaire which was administered on secretaries in Osun State University, Osogbo, who are outside the scope of the study. The data obtained was subjected to Cronbach's alpha test to establish the internal consistency of the items in each of the scale. The result of the Cronbach alpha coefficient value is skill development; 0.843, digital adoption; 0.743 and self-efficacy; 0.712.

3.7 Method of Data Collection

An introductory letter was collected from the Head of Department of Information Management, Lead City University, which was addressed to the authorities of the Public Universities where the secretaries are working by introducing the survey and the researcher. The letter also described the reasons for the survey and soliciting the secretaries' help in promptly filling and returning the

questionnaire. The promise of anonymity of the respondents and confidentiality of the results was the content of the questionnaire cover page. The secretaries were properly informed on the essence of the study, as the data to be collected from them was only to be used for academic purpose. The two hundred and twenty-seven copies of the questionnaire were administered by the researcher and with the help of two trained research assistants to the secretaries of the public universities in Oyo State, Nigeria, that were selected for the study. Forty-seven out of the questionnaire were not returned and one hundred and eighty (180) out of the two hundred and twenty-seven were returned.

3.8 Method of Data Analysis

The data collected for this study was analyzed using Statistical Package for Social Sciences (SPSS) version 29. Descriptive statistics of frequency counts and percentages was used to analyze the demographic information of respondents. Frequency counts, percentages, mean and standard deviation was used to analyze data to answer research questions 1-3. For the testing of the null hypotheses, inferential statistics of simple linear regression was used to test hypotheses 1-2, while multiple regression analysis was used to test hypothesis 3. All the hypotheses was tested at 0.05 level of significance.

Endnotes

1. International Telecommunication Union, *Digital skills insights*, Geneva: ITU Publication, 2020.
2. Y. Boladele, *Secretarial Efficiency in an Automated Office*, **Journal of The School Vocational and Technical Education (THE VAS JOURNAL)**, 7 (1), 2002, 123-134.
3. L. F. Ademiluyi, & P. J. Emode, *Computer Application and Microsoft Access Competencies Needed by Polytechnic Office Technology and Management Students for Computer Aided Instructions*, **African Journal of Applied Research**, 5(1), 2019, 33-45.
4. N. Heinz, *Influence of Digital Skills on Students Socio-Economic Background*, **Journal of Sociology of Education**, 6(2), 2020, 36-48.
5. V. Karen, *Digital Technology in the Global World*, **Journal of Digital Learning in Education**, 2(1), 2021, 76-88.
6. R. A. Atakpa, *Office Practice and Management: Practical Approach*, Royal Pace Publications, Agbor, 2012.
7. A. Oganvo, *The Third Millennium Secretary and Information and Communication Technology: Nigerian Experience*, **International Journal of Management and Information System**, 13(2), 2015, 39-48.

Chapter Four

Results and Discussion of Findings

This chapter dealt with data presentation, analysis and the interpretation of the results. The analysis is guided by the specific objectives and the hypotheses that were formulated in the study. The first section shows the presentation of the descriptive analysis using tables showing percentages and interpretation below the tables. Section two presents inferential statistics and discussion of findings comes at the later end of the chapter. The results presented were based on the research questions and hypotheses, which the study set out to answer and examine. Data was analyzed using SPSS version 29.

4.1 Data Presentation

A total of two hundred and twenty - seven (227) copies of questionnaire were administered, and two hundred and one (201) copies were returned. After sorting the questionnaires one hundred and eighty (180) copies were certified as duly filled and considered usable. The useable questionnaire represented 79.30% response rate. The high response rate was recorded as the researcher administered the instruments with the help of research assistants who put concerted efforts in reaching out to the secretaries to request them to participate in the study. The response results are presented in Table 4.1.

Table 4.1: Response Rate

Response Rate:	Frequency	Per cent (%)
Returned and used	180	79.30%
Not Returned/Returned but not used	47	20.70%
No of distributed Questionnaire	227	100%

Source: Field Survey Data (2024)

Table 4.2 Demographic Characteristics of Respondents

Variable	Category	Frequency	Percentage
Gender	Male	59	32.5%
	Female	121	67.5%
Age	20-25	5	2.8%
	26-30	19	10.8%

	31-35	49	27.4%
	36-40	43	24.1%
	41-45	31	17.0%
	46 and above	33	17.9%
Qualification	HND/BSc	106	58.9%
	MSc.	22	12.2%
	PhD.	30	16.7%
	Others.	22	12.2%
Work Experience	< 1yr	35	19.4%
	1 – 10yr	67	37.2%
	11 – 20yr	64	35.6%
	21yr and above	14	7.8%

Source: Field Survey Results (2024)

This section consists of background and respondents' information that describes basic characteristics such as gender of the respondents, age of the respondents, academic qualification, and years of experience. Table 4.2 presents the demographic and personal profile of respondents used for this study. Demographic and personal profile of respondents as shown in table 4.2. Profile of gender indicated that 59 respondents representing 32.5% were male while 121 respondents representing 67.5% were female, indicating that most of the respondents were female. Demographic and personal profile of respondents as shown in table 4.2 by age revealed that 5 respondents representing 2.8% were between the ages of 20-25years, 19 respondents representing 10.8% were between 26-30 years, 49 respondents representing 27.4% were between 31-35years, 43 respondents representing 24.1% were between 36-40years, 31 respondents representing 17.0% were between the ages of 41-45years, and 33 respondents representing

17.9% were between 46 years and above, indicating that most of the respondents were between 31-35years.

Also, 106 respondents representing 58.9% had HND/BSc. for their education level, 22 respondents representing 12.2% had MSc, 30 respondents representing 16.7% had PhD while 22 others respondents had 12.2%. Furthermore, 35 respondents representing 19.4% had less than 1years of work experience, 67 respondents representing 37.2% had 1-10 years of experience, 64 respondents representing 35.6% had 11-20 years of experience, while 14 respondents representing 7.8% had 21years and above experience.

4.2 Research Question

Research Question One: What is the level of skill development of secretaries in public universities in Oyo State?

Table 4.3: Descriptive Analysis of Responses on the level of skill development of secretaries in public universities in Oyo State

Cognitive Stage	VH	H	L	VL	MEAN
The design of digital skills motivate me to participate well as a secretary	97 (53.8%)	66 (36.8%)	15 (8.5%)	2 (0.9%)	3.43
Digital skills facilitate my understanding of my duties as a secretary	70 (38.7%)	87 (48.6%)	21 (11.8%)	2 (0.9%)	3.25

There are enough tools for instructor's feedback, on digital skills as a secretary	104 (58.0%)	67 (37.3%)	7 (3.8%)	2 (0.9%)	3.52
There are enough options to improve my digital skills as a secretary.	133 (74.1%)	40 (22.2%)	7 (3.8%)	-	3.70
Associative Stage	VH	H	L	VL	MEAN
Ability to adapt smoothly to new technology and to integrate it into secretarial work	101 (56.1%)	56 (31.1%)	15 (8.5%)	8 (4.2%)	3.39
Ability to build meaningful knowledge through interaction with digitally available resources	104 (58.0%)	38 (21.2%)	17 (9.4%)	20 (11.3%)	3.26
Technological potentials to solve information processing problems	37 (20.3%)	7 (3.8%)	25 (14.2%)	111 (61.8%)	1.83
Autonomous Stage	VH	H	L	VL	MEAN
Ability to apply digital tools to enhance secretarial work	73 (40.6%)	76 (42.0%)	20 (11.3%)	11 (6.1%)	3.17
Ability to use digital tools to enhance secretaries' professional development	121 (67.0%)	49 (27.4%)	10 (5.7%)	-	3.61
Ability to use digital skills to disseminate information	98 (54.7%)	75 (41.5%)	5 (2.8%)	2 (0.9%)	3.50
Ability to use digital skills to implement communication within the university system	106 (64.2%)	56 (31.1%)	8 (4.7%)	-	3.59
Weighted for Skill Development					3.35

Decision rule 1.00 – 1.49= Very Low, 1.50 – 2.49= Low, 2.50 – 3.49 = High, 3.50-4.00= Very High.

Source: Field Survey Data (2024)

According to results in Table 4.3. 53.8% of the respondents rated very high that the design of digital skills motivates them to participate well as a secretary, 36.8% high, 8.5% low and 0.9% very low. On average, the respondents indicated that the design for digital experiment motivate them to participate well as a secretary has a mean of 3.43. Results also indicated that 38.7% of the respondents rated very high that digital skills facilitate the understanding of their duties as a secretary, 48.6% high, 11.8% low, and 0.9% very low. On average, the respondents indicated that digital skills facilitate my understanding of my duties as a secretary has a mean of 3.25. Results also indicated that 58.0% of the respondents rated very high that there are enough tools for instructor's feedback, on digital skills as a secretary, 37.3% high, 3.8% low, and 0.9% very low. On average, the respondents indicated that there are enough tools for instructor's feedback, on digital skills as a secretary has a mean of 3.52. Results also indicated that 74.1% of the respondents rated very high that there are enough options to improve their digital skills as a secretary, 37.3% high, and 3.8% low. On average, the respondents indicated that there are enough options to improve my digital skills as a secretary has a mean of 3.70.

Results also indicated that 56.1% of the respondents rated very high that ability to adapt smoothly to new technology and to integrate it into secretarial work, 31.1% high, 8.5% low, and 4.2% very low. On average, the respondents indicated that ability to adapt smoothly to new technology and to integrate it into secretarial work has a mean of 3.39. Results also indicated that 58.0% of the respondents rated very high that ability to build meaningful knowledge through interaction with digitally available resources, 21.2% high, 9.4% low, and 11.3% very low. On

average, the respondents indicated that ability to build meaningful knowledge through interaction with digitally available resources has a mean of 3.26. Results also indicated that 20.3% of the respondents rated very high that technological potentials to solve information processing problems, 3.8% high, 14.2% low, and 61.8% very low. On average, the respondents indicated that technological potentials to solve information processing problems has a mean of 1.83.

According to results in Table 4.3. 40.6% of the respondents rated very high that ability to apply digital tools to enhance secretarial work, 42.0% high, 11.3% low, and 6.1% very high. On average, the respondents indicated that ability to apply digital tools to enhance secretarial work has a mean of 3.17. Results also indicated that 67.0% of the respondents rated very high that ability to use digital tools to enhance secretaries' professional development, 27.4% high, and 5.7% low. On average, the respondents indicated that ability to use digital tools to enhance secretaries' professional development has a mean of 3.61. Results also indicated that 54.7% of the respondents rated very high that ability to use digital skills to disseminate information, 41.5% high, 2.8% low, and 0.9% very low. On average, the respondents indicated that ability to use digital skills to process and disseminate information has a mean of 3.50. Results also indicated that 64.2% of the respondents rated very high that ability to use digital skills to implement communication within the university system, 31.1% high and 4.7% low. On average, the respondents indicated that ability to use digital skills to implement communication within the university system has a mean of 3.59.

Overall, the weighted mean for skills development is 3.35 and this suggest that the respondents agree with many of the statement representing skills development of Secretaries in public Universities in Oyo State. Despite an overall mean of 3.35 which shows that level of skills

development of Secretaries in public Universities in Oyo State is moderately high, more effort is required by the management of public Universities in Oyo State to ensure that the secretaries operate at an optimum level. This would require consistent training on facilities that would positively enhance their skills, like present the workers with an enabling environment that allow for performing increased number of tasks and be responsive to the institutional need. This should improve the skills development of Secretaries in public Universities in Oyo State.

Research Question Two: What is the level of digital adoption of secretaries in public universities in Oyo State?

Table 4.4: Descriptive Analysis of Responses on the level of digital adoption of secretaries in public universities in Oyo State

Perceived Usefulness	VH	H	L	VL	Mean
Using digital tool saves me time during office activities	144 (80.2%)	25 (13.7%)	9 (5.2%)	2 (0.9%)	3.73
Digital tool enables me to accomplish office tasks more quickly	49 (27.4%)	59 (32.5%)	43 (24.1%)	29 (16.0%)	2.41
Using digital tool reduces the time I spend on unproductive secretarial activities	79 (43.9%)	74 (41.0%)	21 (11.8%)	6 (3.3%)	3.25
Using digital tool enhances my job effectiveness	70 (38.7%)	62 (34.4%)	38 (21.2%)	10 (5.7%)	3.06

Perceived Ease of Use	VH	H	L	VL	Mean
The digital tool(s) provide(s) helpful guidance in performing tasks	28 (15.6%)	58 (32.1%)	61 (34.0%)	33 (18.4%)	2.45
It is easy for me to remember how to perform tasks using digital tools	78 (43.4%)	66 (36.8%)	24 (13.2%)	12 (6.6%)	3.17
My interaction with the digital tools is seamless	92 (50.9%)	55 (30.7%)	28 (15.6%)	5 (2.8%)	3.30
The digital tool(s) is/are flexible to interact with	112 (62.3%)	50 (27.8%)	17 (9.4%)	1 (0.5%)	3.52
Behavioural Intention to Use	VH	H	L	VL	Mean
Digital tools help me to experience things more actively	95 (52.8%)	61 (34.0%)	17 (9.4%)	7 (3.8%)	2.36
The knowledge I acquire using digital tools remain superficial	69 (38.1%)	96 (53.6%)	14 (7.5%)	1 (0.8%)	3.29
The effects of using digital skills are visible in the short term	69 (38.1%)	94 (52.4%)	13 (7.5%)	4 (2.0%)	3.27
Using digital skills encourage me to explore situations	66 (36.9%)	93 (51.2%)	16 (9.1%)	5 (2.8%)	3.22
Weighted Mean for Digital Adoption					3.09

Decision rule: 1.00 – 1.49 = Very Low, 1.50 – 2.49 = Low, 2.50 – 3.49 = High, 3.50 - 4.00 = Very High.

Source: Field Survey Data (2024)

According to results in Table 4.4. 80.2% of the respondents rated very high that using digital tool saves their time during office activities, 13.7% high, 5.2% low, and 0.9% very low. On average, the respondents indicated that using digital tool saves their time during office activities has a mean of 3.73. Results also indicated that 27.4% of the respondents rated very high that digital tool enables me to accomplish office tasks more quickly, 32.5% high, 24.1% low, and 16.0% very low. On average, the respondents indicated that digital tool enables me to accomplish office tasks more quickly has a mean of 2.71. Results also indicated that 43.9% of the respondents rated very high that using digital tool reduces the time I spend on unproductive

secretarial activities 41.0% high, 11.8% low, and 3.3% very low. On average, the respondents indicated that using digital tool reduces the time I spend on unproductive secretarial activities has a mean of 3.25. Results also indicated that 38.7% of the respondents rated very high that using digital tool enhances my job effectiveness, 34.4% high, 21.2% low, and 5.7% very low. On average, the respondents indicated that using digital tool enhances my job effectiveness has a mean of 3.06.

According to results in Table 4.4. 15.6% of the respondents rated very high that the digital tool(s) provide(s) helpful guidance in performing tasks, 32.1% high, 34.0% low, and 18.4% very low. On average, the respondents indicated that the digital tool(s) provide(s) helpful guidance in performing tasks has a mean of 2.45. Results also indicated that 43.4% of the respondents rated very high that it is easy for me to remember how to perform tasks using digital tools, 36.8% high, 13.2% low, and 6.6% very low. On average, the respondents indicated that it is easy for me to remember how to perform tasks using digital tools has a mean of 3.17. Results also indicated that 50.9% of the respondents rated very high that my interaction with the digital tools is seamless, 30.7% high, 15.6% low, and 2.8% very low. On average, the respondents indicated that my interaction with the digital tools is seamless has a mean of 3.30. Results also indicated that 62.3% of the respondents rated very high that the digital tool(s) is/are flexible to interact with, 27.8% high, 9.4% low, and 0.5% very low. On average, the respondents indicated that the digital tool(s) is/are flexible to interact with has a mean of 3.52.

Results also indicated that 52.8% of the respondents rated very high that digital tools help me to experience things more actively, 34.0% high, 9.4% low, and 3.8% very low. On average, the respondents indicated that digital tools help me to experience things more actively has a mean of

2.36. Results also indicated that 38.1% of the respondents rated very high that the knowledge I acquire using digital tools remain superficial, 53.6% high, 7.5% low, and 0.8% very low. On average, the respondents indicated that the knowledge I acquire using digital tools remain superficial has a mean of 3.29. Results also indicated that 38.1% of the respondents rated very high that the effects of using digital skills are visible in the short term 52.4% high, 7.5% low, and 2.0% very low. On average, the respondents indicated that the effects of using digital skills are visible in the short term has a mean of 3.27. Results also indicated that 36.9% of the respondents rated very high that using digital skills encourage me to explore situations 51.2% high, 9.1% low, and 2.8% very low. On average, the respondents indicated that using digital skills encourage me to explore situations has a mean of 3.22.

In all, the weighted mean for digital adoption is 3.09 and this suggest that the respondents rated high with many of the statement representing digital adoption that exist in public Universities in Oyo State. This should improve the digital adoption within the public Universities and consequently affect skills development of secretaries in the institutions.

Research Question Three: What is the level of self-efficacy of secretaries in public universities in Oyo State?

Table 4.5: Descriptive Analysis of Responses on the level of self-efficacy of secretaries in Public Universities in Oyo State

Mastery Experience	VH	H	L	VL	MEAN
Confidence in using digital tools to improve my administrative skills	74 (41.0%)	58 (32.1%)	25 (13.7%)	24 (13.2%)	3.01
Confidence in using computer effectively aids multi-tasking	50 (27.8%)	58 (32.1%)	46 (25.5%)	26 (14.6%)	2.73

Knowledge of file security and security techniques in managing database	68 (37.7%)	38 (20.8%)	46 (25.5%)	28 (16.0%)	2.80
Ability to query different data attributes from a database	51 (28.3%)	62 (34.9%)	48 (26.4%)	19 (10.4%)	2.81
Vicarious Experience	VH	H	L	VL	MEAN
Observing my boss boosts my ability to use web database programming effectively	122 (67.9%)	42 (23.6%)	16 (8.5%)	-	3.59
Successful learning from others aids the use of computer storing files	74 (41.0%)	46 (25.5%)	33 (18.4%)	27 (15.1%)	2.92
Ability to use MS office effectively through observation of colleagues	77 (42.9%)	76 (42.0%)	23 (12.7%)	4 (2.4%)	3.25
Social Persuasion	VH	H	L	VL	MEAN
Aid from my manager has made the use of digital tools easy to retrieved document.	116 (64.6%)	53 (29.2%)	11 (6.1%)	-	3.58
Encouragement from colleagues has made communication easy with the use of electronic media	118 (65.6%)	53 (29.2%)	8 (4.7%)	1 (0.5%)	3.60
People are easily reached in large number and within a short time using phones, e-mails etc	55 (30.7%)	90 (50.0%)	24 (13.2%)	11 (6.1%)	3.05
Persuasion from supervisors on the value of digital adoption has improves usage of digital tools	90 (50.0%)	77 (42.9%)	10 (5.7%)	3 (1.4%)	3.42
Weighted Mean for Self -Efficacy					3.16

Decision rule: 1.00 – 1.49 = Very Low, 1.50 – 2.49 = Low, 2.50 – 3.49 = High, 3.50 - 4.00 = Very High.

Source: Field Survey Data (2024)

According to results in Table 4.5. shows that 41.0% of the respondents rated that confidence in using digital tools to improve their administrative skills, 32.1% high, 13.7% low, and 13.2% very low. On average, the respondents indicated that confidence in using digital tools to improve their administrative skills has a mean of 3.01. Results also indicated that 27.8% of the respondents rated very high that the confidence in using computer effectively aids multi-tasking, 32.1% high,

25.5% low, and 14.6% very low. On average, the respondents indicated that the confidence in using computer effectively aids multi-tasking has a mean of 2.73. Results also indicated that 37.7% of the respondents rated very high that knowledge of file security and security techniques in managing database, 20.8% high, 25.5% low, and 16.0% very low. On average, the respondents indicated that knowledge of file security and security techniques in managing database has a mean of 2.80. Results also indicated that 28.3% of the respondents rated very high that ability to query different data attributes from a database, 34.9% high, 26.4% low, and 10.4% very low. On average, the respondents indicated that ability to query different data attributes from a database has a mean of 2.81.

According to results in Table 4.5. 67.9% of the respondents rated very high that observing their boss boosts their ability to use web database programming effectively, 23.6% high, and 8.5% low. On average, the respondents indicated that observing their boss boosts their ability to use web database programming effectively has a mean of 3.59. Results also indicated that 41.0% of the respondents rated very high that successful learning from others aids the use of computer storing files, 25.5% high, 18.4% low, and 15.1% very low. On average, the respondents indicated that successful learning from others aids the use of computer storing files has a mean of 2.92. Results also indicated that 42.9% of the respondents rated very high that ability to use MS office effectively through observation of colleagues, 42.0% high, 12.7% low, and 2.4% very low. On average, the respondents indicated that ability to use MS office effectively through observation of colleagues has a mean of 3.25.

According to results in Table 4.5. 64.6% of the respondents rated very high that aid from their manager has made the use of digital tools easy to retrieved document, 29.2% high, and 6.1% low. On average, the respondents indicated that aid from their manager has made the use of digital

tools easy to retrieved document has a mean of 3.58. Results also indicated that 65.6% of the respondents rated very high that encouragement from colleagues has made communication easy with the use of electronic media, 29.2% high, 4.7% low, and 0.5% very low. On average, the respondents indicated that encouragement from colleagues has made communication easy with the use of electronic media has a mean of 3.60. Results also indicated that 30.7% of the respondents rated very high that people are easily reached in large number and within a short time using phones, e-mails etc, 50.0% high, 13.2% low, and 6.1% very low. On average, the respondents indicated that people are easily reached in large number and within a short time using phones, e-mails etc has a mean of 3.05. Results also indicated that 50.0% of the respondents rated very high that persuasion from supervisors on the value of digital adoption has improves usage of digital tools, 42.9% high, 5.7% low, and 1.4% very low. On average, the respondents indicated that persuasion from supervisors on the value of digital adoption has improves usage of digital tools has a mean of 3.42.

Overall, the weighted mean for self - efficacy is 3.16 and this suggest that the respondents rated high with many of the statement representing self - efficacy of secretaries in public Universities in Oyo State. Aligning with the issues identified, management should ensure all secretaries go for regular training on self - efficacy, provide financial support for the acquisition of skill to enhance secretary skills development and guaranty a transparent system that ensure training opportunities is reflective of the categories of secretaries in the institutions.

4.3 Test of Hypotheses

The null hypothesis one which states that there will be no significant influence of digital adoption on skills development of secretaries in public universities in Oyo State was tested using

multiple linear regression analysis. In the analysis, the values of skills development were regressed on the values of digital adoption sub-measure. The data for digital adoption (independent variable) was generated by summing responses of all variable items respectively while that of skills development of Secretaries (dependent) was generated by adding responses of all items used to measure the variable. The regression test results are presented in Tables 4.6a-c

Table 4.6a-c: Summary of regression analysis for the influence of digital adoption on skills development of secretaries in public universities in Oyo State

a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.583 ^a	.339	.331	.28384

a. Predictors: (Constant), perceived useful, perceived ease of use and behavioural intention to use

b. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.169	2	3.085	38.287	.000 ^b
	Residual	12.004	210	.081		
	Total	18.173	212			

a. Dependent Variable: Skills Development

b. Predictors: (Constant), perceived useful, perceived ease of use and behavioural intention to use

c. Coefficients

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.851	.186		9.960	.000
	PU	.356	.047	.520	7.637	.000
	PEU	.111	.042	.178	2.615	.010
	BIU	.230	.101	.201	1.167	.000

a. Dependent Variable: Skills Development Note: PU = Perceived Usefulness, PEU = Perceived Ease of Use, BIU = Behavioural Intention to Use

Source: Field Survey Data (2024)

From the results in Table 4.6a, digital adoption has averagely strong-positive and statistically significant relationship with the skill development of Secretaries in public Universities in Oyo State ($R = .583$, $p < 0.05$). The coefficient of determination (Adj. R^2) of 0.331 shows that digital adoption explains 33.1% of the variation in skills development of Secretaries in public Universities in Oyo State, while the remaining 66.9% variation in skills development of Secretaries is explained by other extraneous factors other than those examined in this study. Table 4.6b presents the results of ANOVA (overall model significance) of regression test which revealed that digital adoption has a significant influence on skill development of Secretaries in public Universities in Oyo State. This can be explained by the F-value (38.287) and low p-value (0.000) which is statistically significant at 95% confidence interval. Hence, the result posited that

digital adoption in public Universities in Oyo State significantly influenced the skill development of Secretaries in the institutions.

Furthermore, the results of regression coefficients in table 4.6c, revealed that at 95% confidence level, a unit change in perceived usefulness will lead to a 0.356 increase in skill development of Secretaries in public Universities in Oyo State, given that all other factors are held constant. Also, a unit change in the perceived ease of use will lead to a 0.111 increase in skill development of Secretaries in public Universities in Oyo State, given that all other factors are held constant. Of all the three measures of digital adoption examined in this study, the perceived usefulness has the higher relative influence on skill development of Secretaries in public Universities in Oyo State and the influence is statistically significant. On the strength of this result (Adj. $R^2 = 0.331$, $F(2,210) = 38.287$, $p = 0.000$), this study rejects the null hypothesis one (H_{01}) which states that there will be no significant influence of digital adoption on skill development of Secretaries in public Universities in Oyo State, Nigeria.

The null hypothesis two which states that there will be no significant influence of self-efficacy on skills development of secretaries in public universities in Oyo State was tested using multiple linear regression analysis. In the analysis, the values of skills development were regressed on the values of self - efficacy sub-measure. The data for self - efficacy (independent variable) was generated by summing responses of all variable items respectively while that of skills development of Secretaries (dependent) was generated by adding responses of all items used to measure the variable. The regression test results are presented in Tables 4.7a-c.

Table 4.7a-c: Summary of regression analysis for the influence of self-efficacy on skills development of secretaries in public universities in Oyo State

a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.691 ^a	.478	.467	.25316

a. Predictors: (Constant), Master Experience, Vicarious Experience, Social Persuasion

b. ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.688	3	2.896	45.183	.000 ^b
	Residual	9.486	209	.064		
	Total	18.173	212			

a. Dependent Variable: Skills Development

b. Predictors: (Constant), Master Experience, Vicarious Experience, Social Persuasion

c. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	1.664	.159		10.449	.000
	Master Experience	-.026	.031	-.057	-.840	.402
	Vicarious Experience	.230	.045	.406	5.125	.000
	Social Persuasion	.302	.056	.397	5.375	.000

a. Dependent Variable: Skills Development

Source: Field Survey Data (2024)

From the results in Table 4.7a, self - efficacy has strong-positive and statistically significant relationship with the Skills Development of Secretaries in public Universities in Oyo State ($R = 0.691$, $p < 0.05$). The coefficient of determination (Adj. R^2) of 0.467 shows that self - efficacy predicts 46.7% of the changes in Skills Development of Secretaries in public Universities in Oyo State, while the remaining 53.3% variation in skills development of Secretaries is explained by other external factors other than those examined in this study. Table 4.7b presents the results of ANOVA (overall model significance) of regression test which revealed that self - efficacy has a

significant influence on Skills Development of Secretaries in public Universities in Oyo State. This can be explained by the F-value (45.183) and low p-value (0.000) which is statistically significant at 95% confidence interval. Hence, the result posited that self - efficacy in public Universities in Oyo State significantly influenced the Skills Development of Secretaries in the institutions.

Furthermore, the results of regression coefficients in table 4.7c, revealed that at 95% confidence level, a unit change in mentoring will lead to a 0.230 increase in Skills Development of Secretaries in public Universities in Oyo State, given that all other factors are held constant. Also, a unit change in the social persuasion will lead to a 0.230 increase in skills development of Secretaries in public Universities in Oyo State, given that all other factors are held constant. Of all the three measures of self - efficacy examined in this study, vicarious experience and social persuasion has statistically significant influence on skills development but mastery experience has an insignificant relative influence. More so, social persuasion has the highest relative influence followed by vicarious experience. On the strength of this result (Adj. $R^2 = 0.467$, $F(3,209) = 45.183$, $p = 0.000$), this study rejects the null hypothesis two (H_02) which states that there will be no significant influence of self - efficacy on skills development of Secretaries in public Universities in Oyo State, Nigeria.

The null hypothesis three which states that there will be no significant influence of digital adoption and self - efficacy on skill development of Secretaries in public universities in Oyo State was tested using multiple linear regression analysis. In the analysis, the values of skill development were regressed on the values of digital adoption and self - efficacy. The data for digital adoption and self - efficacy (independent variable) were generated by summing responses

of all variable items respectively while that of skill development of Secretaries (dependent) was generated by adding responses of all items used to measure the variable. The regression test results are presented in Tables 4.8a-c.

Table 4.8a-c: Summary of regression analysis for the influence of Digital Adoption and Self – Efficacy on Skills Development of Secretaries in public Universities in Oyo State

a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.625 ^a	.391	.382	.27265

a. Predictors: (Constant), Digital Adoption, Self – Efficacy

b. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.097	2	3.548	47.733	.000 ^b
	Residual	11.076	210	.074		
	Total	18.173	212			

a. Dependent Variable: Skills Development

b. Predictors: (Constant), Digital Adoption, Self – Efficacy

c. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	1.708	.183		9.355	.000
	Digital Adoption	.234	.068	.279	3.451	.001
	Self - Efficacy	.290	.057	.414	5.113	.000

a. Dependent Variable: Skills Development

Source: Field Survey Data (2024)

From the results in Table 4.8a, Digital adoption and self - efficacy has strong-positive and statistically significant relationship with the skills development of Secretaries in public Universities in Oyo State ($R = 0.691$, $p < 0.05$). The coefficient of determination (Adj. R^2) of

0.382 shows that digital adoption and self - efficacy predicts 38.2% of the changes in skills development of Secretaries in public Universities in Oyo State, while the remaining 61.8% variation in skills development of Secretaries is explained by other external factors other than those examined in this study. Table 4.8b presents the results of ANOVA (overall model significance) of regression test which revealed that digital adoption and self - efficacy has a significant influence on skills development of Secretaries in public Universities in Oyo State. This can be explained by the F-value (47.733) and low p-value (0.000) which is statistically significant at 95% confidence interval. Hence, the result posited that digital adoption and self - efficacy in public Universities in Oyo State significantly influenced the skills development of Secretaries in the institution.

Furthermore, the results of regression coefficients in table 4.8c, revealed that at 95% confidence level, a unit change in digital adoption will lead to a 0.234 increase in skills development of Secretaries in public Universities in Oyo State, given that all other factors are held constant. Also, a unit change in self - efficacy will lead to a 0.290 increase in skills development of Secretaries in public Universities in Oyo State, given that all other factors are held constant. Further analysis shows that self - efficacy has higher contribution to skills development of Secretaries in public Universities in Oyo State than the digital adoption. On the strength of this result ($Adj. R^2 = 0.382$, $F(2,210) = 47.733$, $p = 0.000$), this study rejects the null hypothesis two (H_{03}) which states that there will be no significant influence of digital adoption and self – efficacy on skills development of Secretaries in public Universities in Oyo State, Nigeria.

4.4 Discussion of Findings

This result of the research question one show that despite a weighted mean of 3.35 which shows that level of skills development of Secretaries in public Universities in Oyo State is moderately

high, more effort is required by the management of public Universities in Oyo State to ensure that the secretaries operate at an optimum level. This would require consistent training on facilities that would positively enhance their work, like present the workers with an enabling environment that allow for performing increased number of tasks and be responsive to the institutional need. This should improve the skills development of Secretaries in public Universities in Oyo State.

This result of the research question two show that that level of digital adoption in public Universities in Oyo State is moderately high, the underlining issues discovered suggest a lot of effort is needed to ensure that within public Universities in Oyo State, they consistently provide an enabling digital environment that guarantee skills development improvement. Specifically, management of public universities in Oyo State need to address issues of technological utilization for the secretaries, acquire up-to-date office technology and develop an effective organisational structure that can effectively allocate task to secretaries to avoid overload of work. This should improve the digital environment within the public Universities and consequently affect skills development of secretaries in the institutions. This result of the research question three posited that despite a weighted mean of 2.88 which shows that level of self-efficacy of secretaries in public universities in Oyo State is fairly high.

The findings of hypothesis one reveal that digital adoption have significant influence on skills development of Secretaries in public Universities in Oyo State, Nigeria. Hence, the findings of hypothesis one found support in prior empirical studies. For instance, a scholar covered 40 randomly selected modern business organisations within Port-Harcourt, Nigeria and its environs. 40 secretaries were used for the study¹. 3 instruments namely the modern office technology

availability (MOTA), modern office technology and secretary's usage (MOTSU) and modern office technology and secretary's productivity (MOTSP) were developed and used for the study. Mean and Chi-square were used to analyze the data collected. The findings of the study revealed the availability of modern office technological gadgets in private business organisations, their use by secretaries cause increase in productivity. A scholar examined critically the equipment found in an automated office and how it has actually assured the quality performance of the secretary². A total of 360 Office Technology and Management graduates selected from public and private organisations in Delta South Senatorial District formed the population of the study. The sample of this study consisted of 108 graduates of Office Technology and Management. The information collected from the respondents was grouped together for meaningful analysis of the data using simple percentages. Suggestions were made as to what the Office Technology and Management graduate must do in order to get the best out of an automated office. In a quantitative approach, 67 questionnaires were sent to middle and upper-level business managers in Durban, KwaZulu-Natal. They discovered that modern office technology makes significant difference in a workplace. Office technologies enhance performance and this can only be seen if the office is equipped with relevant and needed technologies. They further stressed that there is a strong correlation between the right use of office technologies and positive change in management performance.

In research during the examination of the influence of office automation on secretaries' effectiveness in the state owned universities in Ogun State³. Four (4) research questions were answered in line with the objective of the study. A structured questionnaire was designed and validated. Data collected were analyzed using regression analysis at 0.05 level of significance.

The result of the findings indicated that there was no significant influence of office automation

on secretaries' interpersonal skills, personal quality, professional behaviour and job-related skills. It was recommended among others that Secretaries should attend seminars, conferences and workshops to develop themselves in the area of information technologies and Microsoft office packages. In a research on the value of technical training mentions that the value lies within a manager and his team⁴. Collective vision, knowledge and skills sets have a wider impact than any technology. The training and development function is becoming increasingly important to have in businesses, because managers need to be prepared to use technology to the extent that it benefits their organisation. Managers today have a variety of tools and techniques for dealing with time management and resource issues. These tools must be fully integrated with the overall management system in order to manage the business within the business performance parameters of work quality, timing and resources' utilization.

It was shown in a study that the magnitude and speed at which technology has advanced and changed in management practice over past years has been stunning⁵. The management of technology can make a difference; there is no reason to believe that the current rate of change will slow down, and therefore, the big challenge is to harness this newly emerging technology for the benefit of business. Technological advances have positive effect on our quality of life, and this trend is expected to keep on increasing. It was stated that new technology advancement is reshaping business industries where every business will need technology to compete successfully. In recent years, we have seen many of these technological changes; some are merely evolutionary, while others are more revolutionary becoming firmly entrenched in the way our organisations will need to deal with the social world. A researcher found that many secretaries lack the communication technology skills required in the various offices and this has

greatly affected their performance⁶. The effect of office automation is to increase organisational productivity by redefining the office work and improve the quality and accuracy of output.

A scholar submit that administrative efficiency and job performance of secretaries and other office personnel rely heavily on the availability of modern technologies and user's competence and expertise, recent development in technological innovations is characterized by reliance on fast-growing capabilities and increasing use of ICT tools for organisational performance and service delivery⁷. Hence, corporate organisations and government sectors are acquiring and incorporating digital-based technological devices for providing services and there is growing interest in technological innovations for secretarial functions and office management related activities. Digital competency not only deals with technical skills, but also involves cognitive and social and emotional attributes to use technologies for working and living in a digital environment. The indicators of digital competence include mastery and proficiency in information processing and data literacy, communication and collaboration, creation of digital content, safety skills in the use of ICT and problem-solving abilities. Information processing and data literacy involves "browsing, searching and filtering data, information and digital content; evaluating data, information and digital content; and managing data, information and digital content". Communication and collaboration imply "abilities to interact, sharing, engaging in citizenship and collaborating through digital technologies as well as managing digital identity". Digital content creation involves "developing digital content, integrating and re-elaborating digital content". Safety skill component includes "protecting devices, personal data and privacy, health and well-being as well as the environment" while problem solving means "solving technical problems, identifying needs and technological responses, and identifying digital competence gaps"⁸.

A scholar that dealt on ICT and sustainable development in Nigeria, it has been observed globally that ICT is essential both to eradicate poverty and improving human capacity, ICT advances economic, social, cultural and political initiatives in ways that affect all stakeholders positively when done correctly⁹. Therefore, it is the aim of this study to determine how ICT assist in sustainable development. This paper used the secondary method of data collection. Many literatures were reviewed. It was concluded that ICT can create cost competitiveness among nations. It helps to bring technology to remote areas where traditional technology would have been costly. It was therefore recommended that if Nigeria intends to meet up with sustainable development, it must encourage its citizens on the use of ICT to advance innovation and eco-friendly solutions to on-going problems. During the investigation of the effects of information technology on organisational Performance in Nigerian Banking Industries Nigerian banks have benefited from global technology innovation¹⁰. Introduction of Information and Communication Technologies (ICT) have affected employee performance and customers' responses. This thesis examined customer's and employee's responses to technology innovation, and their effects on the performance of the Nigerian banks. Fifteen (20) major banks were selected for the research. Two null hypotheses based on sets of questionnaires distributed to selected banks' employees and customers were formulated to test whether there is no significant relationship between technology innovation and customer's satisfaction; and between technological innovation and Nigerian banks employee's performance. Four hundred and fifty (450) questionnaires were distributed to customers to test the first hypothesis out of which 400 were collected which is 88.88% of the distributed questionnaires, Chi square was used to test the hypothesis. Findings revealed that technological innovation influenced banks employee's performance, customer's satisfaction and improvement in banks profitability. The study

recommends effective management of technological innovation for improved employees' performance, customer's satisfaction, sustainable profit, increased return on investment, returns on equity, and to promote competitiveness in the Nigerian banking industry.

A study investigated the influence of information and communication technology skills on office managers' performance in private industries in Port Harcourt Metropolis¹¹. The study adopted a descriptive survey design. The population for the study consisted of 134 oil and Gas private industries in Port Harcourt Metropolis, in River State. The sample for the study was 145 respondent's male and female office managers, 30% was used to select one hundred (100) private industries from the population to get the sample size, purposive simple random sample techniques was used to get 145 office managers as sample size. Two research questions were posed while four null hypotheses were formulated. The instrument used for data collection in the study was titled "Influence of Information and Communication Technology Skills on Office Managers' Performance in Private Industries in Port Harcourt. (ICTOMP)". A test re-test method was used to obtain and to establish coefficient of stability of 0.77. The data collected for the study were analyzed using frequency, percentage, mean and standard deviation to answer the responses of the research questions, while the null hypotheses were tested using z-test. The findings revealed that computer appreciation skills, database management skills greatly influence office managers' performance in private industries in Port Harcourt. Based on the findings; some recommendation were made: Training in the use of office equipment should be carried out on a quarterly basis to increase the knowledge level of managers and subsequently their performance; There is need for equipping and keeping other staff of the industry on the "know" of the use of modern technological gadgets for easy communication with management staffs.

A scholar examined the impact of information technology on corporate organisations performance in Nigeria¹². The research explores the significance of information technology on corporate organisation effectiveness and efficiency. The study is empirical as questionnaire was the primary source of data while results were presented on average, variance and standard deviation. The target respondents constitute specialist in the field of information technology, specifically Lagos state. To achieve the primary aim of this research, forty-five questionnaires were administered to the IT specialist, forty was received which were analyzed with the one way ANOVA technique. Findings from the research depicted information technology have a significant impact on corporate organisations performance in Nigeria. It was recommended; corporate organisations must prioritize training of personnel and invest massively on IT for efficiency in operations. Information Communication Technology has been acknowledged as the building block for any organisation in order to maximize profit, ensure customer satisfaction and minimize cost¹³. This study was aimed to determine the impact of information communication technology on organisational productivity in the Nigeria banking industry. Questionnaire was employed as a method of data collection of the study, while multiple regression analysis was used to test the hypotheses under study. The result of the study indicates that hardware component, software component and network have significant and positive impact on organisational productivity in the Nigeria banking industry. The study recommends that banks should acquire or make use of modernized and 21th century software, hardware, and network in order to increase organisational productivity and customer satisfaction which will eventually resulted to diversification of the organisation.

The findings of hypothesis two reveal that self - efficacy have significant influence on skills development of Secretaries in public Universities in Oyo State, Nigeria. Hence, the findings of

hypothesis two found support in prior empirical studies. For instance, A scholar investigated the link between technology adoption and business success. They conducted a survey on 161 business enterprises in Lagos, Nigeria¹⁴. The results indicated a promising relationship between adopting technology and the success of micro-entrepreneurs. Thus, higher technology use increases the chances of entrepreneurial businesses to succeed. In another study, it was examined that success factors for online business in Bangkok, Thailand. The respondents consisted of 180 online netizens¹⁵. This prior study indicated that advertising using social media as the platform is vital for business success. Furthermore, they also revealed that the relationship between technology adoption and business success would be mediated by self-efficacy. A scholar performed a study to identify the elements that small business owners will find successful. They gathered information via questionnaires from 199 small business owners who participated in the Federal Land Development Authority (FELDA) scheme in Malaysia¹⁶. Utilizing the partial least square (PLS) technique, the findings showed that the usage of technology is associated with small-business success. Additionally, earlier studies showed that self-efficacy mediates the relationship between technology adoption and firm success.

In a study of the adoption of data-driven decision-making technologies find that complementarities matter for technology choice, with firms with better educated workers being more likely to adopt the new technology¹⁷. However, in an analysis of Spanish manufacturing firms, it was observed that firms that are more skill-intensive ex ante are less likely to introduce robots than less skill-intensive firms. The difference across these two papers suggests that no universal patterns can be draw, but that the relationship between human capital and technology adoption might depend institutional settings that differ across countries or on the nature of new technologies. In fact, there is a recent literature that argues that the effects of technological

change are heterogeneous across tasks, and thus across workers' occupations, and across industrial sectors. It was also stressed that technology is the systematic application of scientific knowledge in order to achieve practical results. It entails a combination of different approaches to solve a problem. It implies that technology is all about methods and the way people apply them in order to get results. Therefore, we live in a competitive environment where things are changing fast and for the better technologically and due to the growing complexity of modern-day management, the office is also changing. Secretarial functions such as tying, mailing a letter that usually takes minutes or hours has to be carried out in seconds with high speed, accuracy and perfection. The advent of information and communication technology which has revolutionized secretarial functions and the office. The secretary has to be well equipped to meet the present challenges and the challenges of the future in a contemporary office.

Therefore, many experts in the Secretarial profession have concluded that there will be changes, dramatic changes that will reshape the office, and work environment with information and communication technology, work habits, impact on the personal lives of professionals and the way they work¹⁸. The information and communication technology has revolutionized the work of the office, changing work patterns and attitudes of employees and this people are now working towards an acceptance of change. The objective of this study therefore, is to examine the effect of information and communication technology on secretaries in contemporary organisations. To achieve this objective, the paper is divided into five interconnected sections. The next section presents the review of relevant literature. Section three examines the materials and methods used in the study. Section four presents the results and discussion and the final section examines the conclusion and recommendations.

A scholar also examined the extent of use of IT in various small and medium business organisations in Brunei Darussalam¹⁹. Their study attempted to assess the depth and breadth of IT usage in business. They concluded that the chief executive's computer knowledge is positively associated with the use of IT and that businesses in different sectors have different information processing needs. Calhoun et al. also studied the impact of national culture on information technology usage in organisations and reported the association between some organisational characteristics and use of IT. On the other hand, culture, control and competition as the constitution of subjectivity, determine the locus of IT application in organisations. These studies do not consider the relationship between types of software used in organisations and their internal operations. It is evident from previous studies that types of IT tools in HRM functions were given due consideration. Elliott and Tevavichulada bring some data that shed light on the types of software applications taking place in HRM and their integration to HRM activities.

Digital competency not only deals with technical skills, but also involves cognitive and social and emotional attributes to use technologies for working and living in a digital environment²⁰. The indicators of digital competence include mastery and proficiency in information processing and data literacy, communication and collaboration, creation of digital content, safety skills in the use of ICT and problem-solving abilities. Information processing and data literacy involves “browsing, searching and filtering data, information and digital content; evaluating data, information and digital content; and managing data, information and digital content”. Communication and collaboration imply “abilities to interact, sharing, engaging in citizenship and collaborating through digital technologies as well as managing digital identity”. Digital content creation involves “developing digital content, integrating and re-elaborating digital content”. Safety skill component includes “protecting devices, personal data and privacy, health

and well-being as well as the environment” while problem solving means “solving technical problems, identifying needs and technological responses, and identifying digital competence gaps”.

A scholar examined the extent to which programme on skills acquisition could enhance youth employability in Anambra State while another investigation on the impact of ICT skills on graduates on secretarial studies employability in Rivers State²¹. Likewise, a scholar reviewed the extent to which acquisition of OTM skills could act of predictors towards graduate self-reliance in Nigeria using content analysis²². A researcher look into how secretarial skills and education could enhance graduates’ self-reliance for the solving the challenges of unemployment in the country. However, the author adopted content analysis²³. A scholar examined the inclusion and relationship between employability competencies and OTM curriculum in Nigeria. They authors based the study on content analysis²⁴. In an examination on the interaction between secretarial studies or OTM and graduates job demands for self-employment in Ekiti-State. However, despite those related studies have received significant attention from the body of literature, most of these studies were based on contents analysis which failed to capture individual opinions on the issues discussed and that studies on the relationship between secretarial skills and the challenges of youth unemployment among tertiary institutions in Ogun State have received less attention.

In a research, the lecturers' attitudes about the use of ICT in the classroom were examined²⁵. The results demonstrate that the lecturers' attitudes have a favorable impact on ICT. Similar research was conducted on the variables that influence teachers' attitudes about using ICT in teaching and learning²⁶. The authors discovered that attitude is the greatest predictor of the teacher's adoption of ICT and that attitude has a favorable impact on the teacher's decision to utilize ICT. It was

discovered that a favorable and substantial link between attitude and behavioral intention to use. Therefore, in order to create a new method of management and lecture delivery to students, attitude would have a good impact on the behavioral intention of lecturers and administrative personnel to utilize ICT in Bayelsa state tertiary institutions.

The findings of hypothesis three reveal that digital adoption and self - efficacy have significant influence on skills development of Secretaries in public Universities in Oyo State, Nigeria. Hence, the findings of hypothesis three found support in prior empirical studies. For instance, A scholar assessed technological innovation and digital competence of secretaries and their impact on job performance of the secretaries in public tertiary institutions in Ogun State, Nigeria²⁸. A survey of secretaries in public tertiary institutions selected from the three senatorial districts in the State was conducted. Data were collected with the use of questionnaire and analysed with descriptive and inferential statistics. The result indicated remarkable level of technological innovations and digital competence of secretaries in the surveyed institutions. It was found that technological innovations and digital competence of the secretaries have significant bearings on the performance of the secretaries in the face of technology-driven office and secretarial functions. Thus, it was concluded that effective and efficient functioning of secretaries and office administrators requires the availability of technological tools, adoption and use of innovative technologies and essentially, the competence and up-skilling of the secretaries for the ever-changing secretarial functions, office methods, approaches and tools. It is recommended, among others, that public tertiary institutions in Ogun State and similar organisations should make the acquisition and adoption of technological innovation a policy and culture issue to enhance the performance.

A researcher examined holistically the effects of Information Communication Technology on employee performance in an organisation²⁹. This paper reviews some related literature alongside theoretical framework which have bearing on the subject matter. This paper adopts the descriptive survey design in achieving the stated objective. The population of this study consists of 50 staff of the study organisation with the sample size of 34 drawn via simple random sampling technique. The questionnaire method was used in collecting the data. The data obtained was analyzed with particular reference to the research questions using descriptive statistical tools such as tables and frequencies. The findings show that out that Information and Communication Technology has improved the skills of workers in the bank thereby improving the employee's performance, that Information and Communication Technology has bought new techniques in all Areas of the Banks by improving the banking operation. Based on the findings, the researcher recommended that banks should improve more on its information technology so as to enhance its productivity, the use of (ICT) in the banking sector should not only be restricted to the cities alone, rural banking should also be improved upon.

In a research on the use of ICT in private universities in Nigeria, it was found that practically all of the private institutions employed ICT to manage administrative activities³⁰. The research found that ICT was used for student enrollment, student record keeping, accounting, general administration, and library upkeep. It was claimed that those who used ICT for administrative reasons said it was dependable, convenient, and efficient. On the other side, a researcher looked at the elements that influence faculty members at tertiary institutions to use ICTs in their instruction³¹. They are greatly influenced by factors including computer self-efficacy, relative benefit, compatibility, and past experience when determining how easy a technology is to use and how it will be received. In a study on the use of ICT for facilitating teaching and learning in

Nigerian universities, it was observed that a variety of internet-based applications can be used by students to complete tasks like course applications, course and examination registration, viewing exam results, accessing the timetable, and paying university fees³². The usage of ICT by staff employees for services like leave requests, e-forms for different purposes, and personal financial information pertaining to the institution was also noted.

A scholar attempted to determine the relationships between mathematics teachers' self-efficacy in technology integration and TPACK³³. They administered a survey questionnaire to 66 secondary school mathematics teachers, and the results indicated that the mathematics teacher's self-efficacy with technology integration and TPACK were strongly associated. A study examined the correlation between teachers' self-efficacy and ICT infrastructure in schools with 400 teachers from 100 schools in India³⁴. The findings showed that teachers' overall ICT self-efficacy in three domains identified as technological efficacy, pedagogical efficacy, and integration efficacy was moderately low. It was also found that teachers' perceptions about ICT infrastructure in schools identified as training, ICT equipment, and management were also low. Significant and positive correlations were detected between all three domains of self-efficacy and three domains of ICT infrastructure. The authors suggested that training and ICT infrastructure play a vital role in improving teachers' ICT self-efficacy. A study involved 928 high school teachers to explore predictors that independently contribute to the technology used for different teaching purposes, either teacher-led presentations or student-centered teaching³⁵. A series of multilevel models were used to determine the independent effect of teachers' pedagogical beliefs, teachers' attitudes and beliefs towards technology and teachers' perceived teaching effectiveness. The results indicated that teachers' technology self-efficacy was significantly related to teachers' use of technology.

The findings of this study equally aligned with the expectation of skill development theory where skill acquisition was explained into three phases of development as cognitive stage which was thought to represent the earliest phase of learning in which the learner attempts to formulate a representation of "what to do" by experimenting with different strategies and verbalizing the content of what is practiced. The associative stage also involved some of the same processes seen in the cognitive stage, but in this phase a learner used evaluative methods to compare the desired movement to the actual outcome. This evaluation is carried out to modify and strengthen the representation of the task and make minor adjustments to the strategies used. In this phase there is a focus on "how to do" the task. The autonomous stage is considered to be the final phase of skill development. After establishing what to do and how to do the task, adaptations occur leading to more stability and economy of effort. The autonomous stage is characterized by non-conscious, highly automatic processes.

In addition, the findings aligned with the outcome of Bandura on the concept of self-efficacy which is an individual's beliefs toward his/her control on the events that affect his/her life³⁶. These beliefs about self-efficacy are realized by means of four different processes. These include cognitive (thinking about purposes), motivational (determining aims and working to realize them), behavioral (the perceived dealing efficiencies) and selective (preference and creating environments and activities)³⁷. Self-efficacy/effectively determines the thinking styles, feelings, motivational conditions of individuals by comparing his/her required performance and capacity. Individuals with higher self-efficacy/efficiency are more persistent to reach their goals, and they perceive the difficulties as situations to be managed and overcome rather than situations to be refrained from. Therefore, on the strength of the support found in prior existing studies with this present study's result, the study can conclude that digital adoption and self - efficacy have

positive and significant influence on skills development of secretaries in Public Universities, Oyo State, Nigeria.

Endnotes

1. A. L. Umar, *Leveraging on New Technologies for Skill Acquisition of Business Education in Tertiary Institutions in Nigeria for the e- world*, **Nigeria Journal of Business Education**, 6(1), 2019, 331-337.
2. N. E. Umeano, *Digital Skills Required of Business Education Graduates for Employability in North-East Nigeria*, **Journal of Business Educators of Nigeria Conference Proceedings**, 8(1), 2021, 400-406.
3. C. U. Iwhuoha, & E. Chiwen, *Impact of Teaching Innovations on the Academic Performance of Office Technology and Management Undergraduates in Tertiary Institutions in Imo State*, **Nigerian Journal of Business Education**, 5(2), 2018, 150 – 156.
4. R. Iordeiche, B. Marien, & P. K. Badden, *Situated Learning and Teachers' Digital Competence*, **Education & Information Technologies**, 13(4), 2017, 279-290.
5. P. Norris, *Digital Divide? Civic Engagement, Information Poverty & the Internet in Democratic Societies*. New York: Cambridge Press. 2019.
6. O. O. Onwukwe, & R. E. Aliche, *Digital Skills Gap Among Business Education Graduates of Tertiary Institutions in Anambra State: Implication for Programme Re-adjustment*, **Journal of Business Educators of Nigeria Conference Proceedings**, 8(1), 2021, 379-389.
7. organisation for Economic Cooperation and Development – OECD, *Bridging the Digital Gender Divide-Include, Upskill, Innovate*, 2018.
8. J. Thomas, *Digital Skills where Universities Matter*, Brussels, EUA, 2019.
9. P. Barbaroux, *Disruptive Technology and Defence Innovation Ecosystems*, Newark: John Wiley & Sons, Incorporated, 2019.

10. Badiru & A. Bodunde, *Innovation: A Systems Approach (version First edition.) First ed. Analytics and Control*, Boca Raton: CRC Press, Taylor & Francis Group, 2020.
11. N. Kyunga, "The Effect of On-the-Job Training and Education Level of Employees on Innovation in Emerging Markets", **Journal of Open Innovation: Technology, Market, and Complexity**, 7.1, 2021, 47.
12. R. Romain, & M. Agogu , "Developing Radical Innovation Capabilities: Exploring the Effects of Training Employees for Creativity and Innovation," **Creativity and Innovation Management**, 30.1, 2021, 211-227.
13. Roberts, S. Patrick, & J. Schmid, "Government-Led Innovation Acceleration: Case Studies of US Federal Government Innovation and Technology Acceleration organisations", Review of Policy Research, 2022.
14. T. Shalini, M. Talwar, P. Kaur, & A. Dhir, "Consumers' Resistance to Digital Innovations: A Systematic Review and Framework Development", **Australasian Marketing Journal (AMJ)**, 28, no. 4, 2020, 286-299.
15. T. Joe, & R. John, *Managing Innovation: Integrating Technological, Market and organisational Change*, John Wiley & Sons, 2020.
16. D. Acemoglu, & P. Restrepo, "Automation and New Tasks: How Technology Displaces and Reinstates Labor", **Journal of Economic Perspectives**, 33(2), 2019, 3–30.
17. E. Brynjolfsson, D. Rock, & C. Syverson, "The Productivity J-Curve: How Intangibles Complement General Purpose Technologies", **American Economic Journal: Macroeconomics**, 13(1), 2021, 333-72.
18. A. Feng, & A. Valero, "Skill Biased Management: Evidence from Manufacturing Firms", Working Paper, 2019.
19. P. Fouskas, & C. Robinson, "Should I Stay or Should I Go? Firm Heterogeneity in the Post-crisis Period", The Manchester School, 87(3), 2019, 367-402.
20. M. I. Koch, I. Manuylov, & M. Smolka, "Robots and Firms", **The Economic Journal**, 131(638), 2021, 2553–2584
21. K. Morikawa, "Heterogeneous Relationships between Automation Technologies and Skilled Labor: Evidence from a Firm Survey", RIETI Discussion Paper Series, 20-E- 004, 2020.

22. F. K. Aprilya, & S. Suryanto, *Competency Development for the Secretaries of the Board of Directors of PT Pelabuhan Indonesia III (Persero) in Industrial Revolution 4.0 Era*, **STRADA Jurnal Ilmiah Kesehatan**, 10(1), 2021, 473-480.
23. F. Li, *The Digital Transformation of Business Models in the Creative Industries: A Holistic Framework and Emerging Trends*, **Technovation**, 92, 2020, 102012.
24. I. Pihir, K. Tomičić-Pupek, & M. Tomičić Furjan, *Digital Transformation Playground- Literature Review and Framework of Concepts*, **Journal of Information and organisational Sciences**, 43(1), 2019, 33-48.
25. V. Sima, I. G. Gheorghe, J. Subić, & D. Nancu, *Influences of the Industry 4.0 Revolution on the Human Capital Development and Consumer Behavior: A Systematic Review*, *Sustainability*, 12(10), 2020, 4035.
26. S. Mohd, S. F., Abdul Halim, S. A., Mohamad Khudzari, & N. E. Yussoff, *Comparative Analysis on the Requirement, Qualification and Responsibility of Company Secretaries in United Kingdom, Malaysia and India*, **Journal of Administrative Science**, 16(1), 2019, 1-9.
27. N. Ramya, A. Kowsalya, & K. Dharanipriya, *Service Quality And Its Dimensions*, **International Journal of Research and Development**, 4(2), 2019.
28. D. R. Alake, *Extent of Adoption of Electronic Records Management Practices in Polytechnics in Edo and Delta State*, (Unpublished doctoral dissertation) Nnamdi Azikwe University, Awka, 2018.
29. A. Aderogba, A. Onojah, & C. Olumirin, *Correlational Studies between Secondary School Teachers' Access to and Utilization Of Internet Facilities for Instruction in Ilorin, Nigeria*, **International Journal of Education and Development Using Information and Communication Technology**, 17(1), 6–20.
30. O. E. Afolabi, O. E. Afolabi, & M. O. Aragbaye, *Information Literacy Skills, Teachers' Self-Efficacy and Use of Information Resources by Secondary School Teachers in Selected Secondary Schools in Ijebu Ode Local Government, Ogun State*, **Library Philosophy and Practice (E-Journal)**, 2022, 7001.
31. G. A. Aladesusi, A. I., Issa, S. O., Abodunrin, O. A. Boris, E. O. Babalola, & K. M. Nuhu, *Perception of Undergraduate Students on the Utilization of social media to Enhance Learning in University of Ilorin*. **ASEAN Journal of Science and Engineering Education**, 1(3), 2021, 183–192.
32. Y. Aladwan, *The Effects of Using Word Processor in Teaching and Writing Skill among Secondary Students in Schools in Jordan*, **Educational Research and Review**, 16(7), 2021, 272- 278.

33. U. O. Amaechina, & S. C. Alaubi, *Revitalizing Secondary Schools through Entrepreneurship Education in Nigeria*, **UNIZIK Journal of Educational Management and Policy**, 2(1), 2021, 69–77.
34. K. S. Ameen, S. M. Adeniji, & K. Abdullahi, *Teachers' and Students' Level of Utilization of Ict Tools for Teaching and Learning Mathematics in Ilorin, Nigeria*, **African Journal of Educational Studies in Mathematics and Sciences**, 15(1), 2019, 51–59.
35. I. M. Castillo-Martínez, & M. S. Ramírez-Montoya, *Research Competencies to Develop Academic Reading and Writing: A Systematic Literature Review*, *Frontiers in Education*, 2021, 5.
36. X. N. Deng, & Z. Yang, *Digital Proficiency and Psychological Well-Being in Online Learning: Experiences of First-Generation College Students and Their Peers*, **Social Sciences**, 10(6), 2021, 192.
37. C. Egbunefu, E. A. Amadi, & A. Nwobike, *Microsoft Word Application Skills Need of Business Education Graduates for Job Performance and Economic Diversification in Rivers State*, **International Journal Of Innovative Education Research**, 6(3), 2018, 58-65.

Chapter Five

Conclusion

This chapter presents and discusses the summary of findings, conclusions and provides useful recommendations, contributions to knowledge and suggestions for further studies.

5.1 Summary of Findings

The main objective of this study is to investigate the influence of digital adoption, self – efficacy on skills development of secretaries in Public Universities in Oyo State. The study has five chapters so as to achieve its main objective. The chapter one presented the background to the study which affirms that investment in digital technology and training motivate secretaries of Public Universities in Oyo State to be satisfied with their job and eventually to yield seamless skills development. Several studies have been done on digital adoption, self – efficacy and skills development. Also, empirical submission has been made about digital adoption and self-efficacy to enhance skills development of secretaries in tertiary institutions and to be motivated to work diligently however scholars have recommended the need for more studies on digital adoption and self-efficacy in tertiary institutions especially to tackle the matters arising from technological handling of secretaries.

The data generated were sorted, coded, and analyzed to establish the statistical significance of the influence of digital adoption and self-efficacy on skills development of secretaries of public universities in Oyo State, Nigeria, and final acceptance of the hypotheses were made. From the interpretation of analyses of data collected and findings of the study, the following can be summed up as the main empirical findings of this study:

1. The level of skills development of Secretaries is moderately high in public Universities in Oyo State.
2. The level of digital adoption in public universities in Oyo State is moderately high.
3. The level of the self-efficacy of Secretaries is moderately in public universities in Oyo State.
4. Digital adoption (perceived usefulness, perceived ease of use and behavioural intention to use) used by public universities in Oyo State significantly influenced the skills development of secretaries in the institutions.
5. Self - efficacy (mastery experience, vicarious experience and social persuasion) of secretaries in public universities in Oyo State significantly influenced the skills development of secretaries in the institutions.
6. Digital adoption (perceived usefulness, perceived ease of use and behavioural intention to use) and self - efficacy (mastery experience, vicarious experience and social persuasion) of secretaries in public universities in Oyo State significantly influenced the skills development of secretaries in the institutions.

5.2 Conclusion

Many institutions regardless of their size have in principle that development of the staff is important for success and for skill update especially in digital technology. The essence of skills development is significant when it comes to defining success of an institution, the need to enhance digital skilling among secretaries and improve their efficacy is critical because it is key to improved productivity. On the other hand, self-efficacy influence skills development by helping to enhance employee skills, knowledge and abilities in order to achieve the institutions set out objectives. Improving digital skills make them to be attractive to work and will eventually result in improved productivity among secretaries of public universities in Oyo State, Nigeria.

5.3 Recommendations

Based on the findings in this study, the following recommendations were made:

1. Management of public universities in Oyo State need to ensure that all factors that aid quality of job and timely completion of job by secretaries should be made available so as for the secretaries to improve their performance.
2. Factors that would enhance digital technology skills among secretaries of public universities in Oyo State, Nigeria should be made available by the management.
3. Management of public universities in Oyo State should encourage secretaries of the institutions to improve their self-efficacy attributes by orientating them on the importance of digital technology.
4. Since digital adoption positively and significantly influence skill development of secretaries, the management of public universities in Oyo State should make their environment digitally attractive for the secretaries.

5. Since self-efficacy positively and significantly influence skill development of secretaries in public universities in Oyo State, management of these universities should focus on organizing and sponsoring secretaries for more training on secretarial skills to enhance administrative performance of the secretaries.
6. With a strong positive of digital adoption and self-efficacy on skill development of secretaries, management of public universities in Oyo State must continue to adopt appropriate measures towards improving the technological equipment and also organize training programmes for them to development their secretarial skills.

5.4 Contribution to knowledge

This study offers significant contribution to literature conceptually, theoretically, and empirical.

Conceptually, the study focused on identifying gaps in literature pertaining to digital adoption, self-efficacy and skill development. The conceptual framework of this study equally offers conceptual contribution as it was constructed by the researcher to analyze the gaps identified in literature. The model combined independent variables (digital adoption and self-efficacy) and dependent variable (skill development) with measures ranging from dimensions of digital adoption (perceived usefulness, perceived ease of use and behavioural intention to use), self - efficacy measures (mastery experience, vicarious experience and social persuasion) and skill development (cognitive stage, associative stage and autonomous stage). The model also can be adapted to suite future studies.

Empirically, the study was able to add to recent literature on the interaction among digital adoption, self-efficacy and skill development. Though, studies on digital adoption, self – efficacy and skill development abound in develop economy context, however empirical study from

developing countries like Nigeria seems to be few in this regard. This mean not much is known about using training digital adoption and self – efficacy to reinforce skill development of secretaries in public universities in Oyo State, Nigeria. Hence by the findings of the three null hypotheses examined, the study become a basis for reference for future study on digital adoption, self – efficacy and skill development. Moreover, the study provides findings which later scholars can use to buttress the empirical submissions in their study.

Overall, these above-mentioned points lay emphasis on the fact that this study offers significant contribution to knowledge and has practical implication for the management of public universities in Oyo State, Nigeria.

5.5 Suggestions of Further Research

This study focused on influence of digital adoption, self – efficacy on skill development of secretaries in public universities in Oyo State, Nigeria. Nevertheless, to further broaden the frontiers of knowledge, the following areas of studies are suggested for further research.

1. The present study was carried out in only public universities in Oyo State, further studies in the area of digital adoption, self – efficacy and skill development can as well be carried out in private universities in Oyo State also so as to be able to extend the knowledge gained from this work to all universities in the State and possible the southwestern part of the country.
2. This study investigated digital adoption and self – efficacy and on development of secretaries of public universities in Oyo State, Nigeria, a comparative study with tertiary institutions in Oyo State and among other staff may be considered in the nearest future.

3. A cross-sectional survey design was used in the course of the study, and this means evidence of causality cannot be established hence, future study may consider the longitudinal survey design to explain causality on a long period of time.

Bibliography

Books

- Anderson J. R., *Learning and memory*. New York: Wiley. 1999.
- Anderson, *Skill Development Theory*, 1985.
- Davis, *Technology Acceptance Model*, 1989.
- Dulek E. R., & Fielden J. S., *Introduction to a Modern Business Office*, Macmillian Publishing Company, 2019.
- International Labour organisation, *Skilling, Upskilling and Reskilling of Employees, Apprentices & Interns During the Covid-19 Pandemic*, Findings from a Global Survey of Enterprises. Geneva: ILO, 2021.

Conferences/ Proceedings

- Abdullah F., Ward R., & Ahmed E., *Investigating the influence of the most commonly used external variables of TAM on students' perceived ease of use (PEOU) and perceived usefulness (PU) of e-portfolios*. **Computers in Human Behavior**, 63, 2016, 75–90.
- Ajzen I., & Fishbein M., *Attitude–behavior relations: A theoretical analysis and review of empirical research*. **Psychological Bulletin**, 84(5), 1977, 888–918.
- Bandura A., & Adams N. E., *Analysis of Self-Efficacy Theory of Behavioral Change*. *Cognitive Therapy and Research*, in press, 1977.
- Eneasoba E. C., Akudolu C. A., & Agbo R. C., *Utilization of Digital Skills for Teaching and Learning of Business Education in Public Universities in the South-South*, **Nigeria Association of Business Educators of Nigeria Conference Proceedings**, 9(1), 2022, 79-90.

- Higgins H., & Gulliford A., *Understanding Teaching Assistant Self-Efficacy in Role and in Training: Its Susceptibility to Influence*, **Educational Psychology in Practice**, 30(2), 2014, 120– 138.
- Li D., Xi W., Jia Z., & Zhang X., *Information Literacy and Team Building of University Administrative Secretary*, 2019.
- Nnaji F. O., & Okoro F., *Determination of the Adequacy of Practical Elements Office Technology and Management Programme as Perceived by Graduate Secretaries in Taraba State*, **Association of Business Educators of Nigeria Conference Proceedings**, 6(1), 2019, 72-80.
- Odu S., *Workplace Virtual Environment and organisational Health Of Tertiary Institutions In South-South*, Re. Unpublished Ph.D Thesis, Ignatius Ajuru University of Education, 2021.
- Okoli C. E., *Office Technology and Management Curriculum Contents and the Use of Modern Information Communication and Technology Facilities among Students of Polytechnics in Nassarawa State, Nigeria*, Association of Business Educators of Nigeria Conference Proceedings, 6(1), 2019, 624-631.
- Onwukwe O. O., & Aliche R. E., *Digital Skills Gap Among Business Education Graduates of Tertiary Institutions in Anambra State: Implication for Programme Re-adjustment*, **Journal of Business Educators of Nigeria Conference Proceedings**, 8(1), 2021, 379-389.
- Oyinloye O. T., & Asonibare E. M., *Synergy and Collaboration of Institution-Industry: A Panacea to Development of quality Office Technology and Management curriculum in Polytechnics*, Association of Business Educators of Nigeria Conference Proceedings, 6(1), 2019, 491-500.
- Sengewald T., Boha J. & Roth A., *How does the User Type Affect the Acceptance of Digital Innovation on the Job*, Proceedings of the 2020 on Computers and People Research Conference, June 2020.
- United Nations, *Building Digital Competencies to Benefit from Frontier Technologies*. **United Nations Conference on Trade and Development**, 2019.
- Usman N. V., *Secretary as Manager: Roles and Duties*, Association of Business Educators of Nigeria Conference Proceedings, 8(1), 2021, 556-560.

Internet Sources

- Corporate Finance Institute. Knowledge economy. Retrieved June 2022 from: <https://corporatefinanceinstitute.com/resources/knowledge/other/knowledge-economy/>

Envisionyourevolution.com/psychology/positive-psychology/albert-banduras-concept-of-selfAugust 11, 2019.

Journals

Abas M. K., Yahaya R. A., & Feedin M. S., *Digital Literacy and its Relationship with Employee Performance in the 4IR*, **Journal of International Business, Economics and Entrepreneurship**, 4(2), 2019, 2550-1429.

Abdullahi M. S. & Shehu U. R. & Usman M. B., "Impact Of Information Communication Technology On organisational Productivity in the Nigeria Banking Industry: Empirical Evidence," **Noble International Journal of Business and Management Research**, Noble Academic Publsiher, vol. 3(1), 2019, 1-9.

Acemoglu D., & Restrepo P., "Automation and New Tasks: How Technology Displaces and Reinstates Labor", **Journal of Economic Perspectives**, 33(2), 2019, 3–30.

Adamu A. L., Bappah A. S., Ahmad A., & Aibu B. S., *Need Analysis for Development and Validation of a Framework for Integration of Employability Skills into Office Technology and Management Curriculum in Nigerian Polytechnics*, **Multidisciplinary Journal of Vocational Education and Research**, 4(1), 2021, 134 – 141.
<https://www.gojehms.com/index.php /MJVER/article/view/99>

Ademiluyi L. F., & Emode P. J., *Computer Application and Microsoft Access Competencies Needed by Polytechnic Office Technology and Management Students for Computer Aided Instructions*, **African Journal of Applied Research**, 5(1), 2019, 33-45.

Adenekan T. E., & T. A. Jimoh, *Technological Innovation, Digital Competence and Job Performance of Secretaries in Public Tertiary Institutions in Ogun State, Nigeria*, **International Journal of Innovative Science and Research Technology**, 5(12), 2021, 5-12.

Aderogba A., Onojah A., & Olumorin C., *Correlational Studies between Secondary School Teachers' Access to and Utilization Of Internet Facilities for Instruction in Ilorin, Nigeria*, **International Journal of Education and Development Using Information and Communication Technology**, 17(1),6–20.

Afolabi O. E., Afolabi O. E., & Aragbaye M. O., *Information Literacy Skills, Teachers' Self-Efficacy and Use of Information Resources by Secondary School Teachers in Selected Secondary Schools in Ijebu Ode Local Government, Ogun State*, **Library Philosophy and Practice (E-Journal)**, 2022, 7001.

- Aina M. A., *Towards Effective Skill Acquisition in Business Education Programmes. Ekiti State University, TVET – International Journal of Research and Design in Technical, Vocational Education and Training (IJORAD)*, 2(1), 2018, 183-189.
- Aina M. A., *Training of office technology and management education students for job demands and self-employment in Ekiti State, Nigeria, European Journal of Training and Development Studies*, 6(4), 2019, 14-22.
- Akpomi H., & Ordu C., *Modern Office Technology and The Secretary's Productivity in Private Business organisations, African Journal of Business Management*, 3(8), 2019, 333-339.
- Akudolu C. A. & Agbo R. C., *Utilization of Digital Skills for Teaching and Learning of Business Education in Public Universities in the South-South, Nigeria. Journal of Business Educators of Nigeria Conference Proceedings*, 8(1), 2021, 367-377.
- Akwu A. U., Duke A. E., & Inuaesiet V. U. *Impact of Information and Communication Technology (ICT) on the Development of Nigeria: A Critical Overview, International Journal of Public Administration and Management Research*, 7(1), 2021, 56-78.
- Aladesusi G. A., Issa A. I., Abodunrin S. O., Boris AO. A., Babalola E. O., & Nuhu K. H., *Perception of Undergraduate Students on the Utilization of Social Media to Enhance Learning in University of Ilorin. ASEAN Journal of Science and Engineering Education*, 1(3), 2021, 183–192.
- Aladwan Y., *The Effects of Using Word Processor in Teaching and Writing Skill among Secondary Students in Schools in Jordan, Educational Research and Review*, 16(7), 2021, 272- 278.
- Alake D. R., *Extent of Adoption of Electronic Records Management Practices in Polytechnics in Edo and Delta State, (Unpublished doctoral dissertation) Nnamdi Azikwe University, Awka, 2018.*
- Amaechina U. O., & Alaubi S. C., *Revitalizing Secondary Schools through Entrepreneurship Education in Nigeria, UNIZIK Journal of Educational Management and Policy*, 2(1), 2021, 69–77.
- Ameen K. S., Adeniji S. U., & Abdullahi K., *Teachers' and Students' Level of Utilization of Ict Tools for Teaching and Learning Mathematics in Ilorin, Nigeria, African Journal of Educational Studies in Mathematics and Sciences*, 15(1), 2019, 51–59.
- Anderson, *Skill Development Theory*, 1985.
- Aprilya F. K., & Suryanto S., *Competency Development for the Secretaries of the Board of Directors of PT Pelabuhan Indonesia III (Persero) in Industrial Revolution 4.0 Era, STRADA Jurnal Ilmiah Kesehatan*, 10(1), 2021, 473-480.

- Bandura A., & Adams N. E., *Analysis of Self-Efficacy Theory of Behavioral Change*, Cognitive Therapy and Research, in Press, 1977.
- Bassey S. U., *Information Communication Technologies in the Management of Education for Sustainable Development in Africa*, **An International Multi-Disciplinary Journal**, 3, 2019, 414- 428.
- Boladele Y., *Secretarial Efficiency in an Automated Office*, **Journal of The School Vocational and Technical Education (THE VAS JOURNAL)**, 7 (1), 2002, 123-134.
- Brynjolfsson E., Rock D., & Syverson C., “*The Productivity J-Curve: How Intangibles Complement General Purpose Technologies*”, **American Economic Journal: Macroeconomics**,13(1), 2021, 333-72.
- Chigbuson A. J., Timya N., & Silas T. N., *Information and Communication Technology Skills Needed by Office Technology and Management Students for Self-Sustenance and National Development*, **Nigerian Journal of Business Education**, 5(2), 2018, 206 – 213.
- Christina M., *Information and Communication Technology for Administration and Management for secondary schools in Cyprus*, **Journal of Online Learning and Teaching**. 4(3), 2018, 11-21
- Dahkoul Z. M., *The determinants of employee performance in Jordanian organisations*. **Journal of Economics, Finance and Accounting**, 5(1), 2018, 11-17.
- David O., *Assessment of Staff ICT Literacy Proficiency in Nigerian Federal University Libraries*, **Journal of Information and Knowledge Management**, 8(2), 2018, 77-89.
- Dosunmu M. M., Bukki A. O., & Akintola A. A., *Influence of Office Automation on Secretarial Administrators’ Effectiveness in Ogun State-Owned Universities*, **Kampala International University Journal of Social Sciences**, 4(3), 2018, 57–64.
- Edeh, F., Ogbu, N., Ugwu, L., Adama, N., I., Achilike, C.G., & Chimeziem, *organisational Learning: COVID-19 Strategy for Human Resource Skill Adjustment*, **International Journal of Knowledge & Learning**, in press, 2021.
- Egbunefu C., Amadi E. A., & Nwobike A., *Microsoft Word Application Skills Need of Business Education Graduates for Job Performance and Economic Diversification in Rivers State*, **International Journal Of Innovative Education Research**, 6(3), 2018, 58-65.
- Eze P. C., Ezeahurukwe N. L., & Ameh A. O., *Digital Employability Skills Required by Future Secretaries for Optimum Productivity in Business organisations*, **Nigerian Journal of Business Education (NIGJBED)**. 8(2), 2021, 187-198.

- Ezeabii I. C., Nwokike F. O. , & Jim E. U., *Competencies Required of Secretaries in Small Scale Business organisations in Enugu State for National Development*, **Nigerian Journal of Business Education**, 5(1), 2018, 143-153.
- Ghayth A. J., & Mundher A. S., *Assessment of Digital Competence of Employees and Teaching Staff at the Technical College of Management, Kufa*, **International Journal of Innovation, Creativity and Change**, 12(12), 2020.
- Gidado S. D., & Daramola R., *Evaluation; A Catalyst for Skill Acquisition in Business Education*, **Nigerian Journal of Business Education**, 8(1), 2021, 94-103.
- Grace E. P., *Extent of Skills Acquisition Needed for Effective Business Enterprises*, **Journal of Business Education Book of Reading**, 5(4), 2018, 34-38.
- Heinz H., *Influence of Digital Skills on Students Socio-Economic Background*, **Journal of Sociology of Education**, 6(2), 2020, 36-48.
- Idele E. F., & Paul-Mgbeafulike V. S., *Strategies for Improving Quality Use of ICT Tools in Office Technology and Management Programme in Polytechnics in Delta State for National Development*, **Nigerian Journal of Business Education**, 5(2), 2018, 206 – 213.
- International Telecommunication Union, *Digital skills insights*, Geneva: ITU Publication, 2020.
- Iordeiche R., Marien B., & Badden P. K., *Situated Learning and Teachers' Digital Competence*, **Education & Information Technologies**, 13(4), 2017, 279-290.
- Iro-Idoro C. B., & Jimoh T. A., *Knowledge Management in Technological Innovation: Correlate of Job Performance of Non-Teaching Staff of the Federal Polytechnic, Ilaro, Nigeria*, **Nigerian Communication and Information Technology Journal**, 1(1), 2019, 180-192.
- Iro-Idoro C. B., Osore A. F., & Jimoh T. A., *Knowledge and Use of Computer Application Packages by Office Managers/Secretaries in Higher Institutions in Ogun State, Nigeria: Implication on Performance Enhancement*, **World Academy of Science, Engineering and Technology International Journal of Humanities and Social Sciences**, 12 (8), 2018.
- Iwhuoha C. U., & Chiwen E., *Impact of Teaching Innovations on the Academic Performance of Office Technology and Management Undergraduates in Tertiary Institutions in Imo State*, **Nigerian Journal of Business Education**, 5(2), 2018, 150 – 156.
- Joe T., & John R., *Managing Innovation: Integrating Technological, Market and organisational Change*, John Wiley & Sons, 2020.

- Karen V., *Digital Technology in the Global World*, **Journal of Digital Learning in Education**, 2(1), 2021, 76-88.
- Koch M. I., Manuylov I., & Smolka M., “*Robots and Firms*”, **The Economic Journal**, 131(638), 2021, 2553–2584
- Koko M. N., & Okogun G. F., *Perceived Influence of Modern Office Automation on Administrative Performance of Staff of Private Business organisations in Port Harcourt Rivers State*, **International Journal of Innovative Information Systems & Technology Research**, 8(1), 2020, 44-53.
- Kyunga N., "The Effect of On-the-Job Training and Education Level of Employees on Innovation in Emerging Markets", **Journal of Open Innovation: Technology, Market, and Complexity**, 7.1, 2021, 47.
- Li F., *The Digital Transformation of Business Models in the Creative Industries: A Holistic Framework and Emerging Trends*, **Technovation**, 92, 2020, 102012.
- Mohammad M., Mohammad A., & Ahmad A., *Cloud Computing in Higher Educational Institutions*, **An International Journal of Advanced Computer Technology**, 8(12), 2020, 3507- 3513.
- Mohd S., Abdul Halim S. F., Mohamad Khudzari M. G., & Yussoff N. E., *Comparative Analysis on the Requirement, Qualification and Responsibility of Company Secretaries in United Kingdom, Malaysia and India*, **Journal of Administrative Science**, 16(1), 2019, 1-9.
- Morikawa K., “*Heterogeneous Relationships between Automation Technologies and Skilled Labor: Evidence from a Firm Survey*”, RIETI Discussion Paper Series, 20-E- 004, 2020.
- Nisar S., & Danish A., *A survey on the Role of Fringe Benefit in Employee Satisfaction*. **International Journal of Human Resource Studies**, 9(1), 2019, 232-252.
- Obanya P., *A Technology-Driven and Technology Run-Through Education Model for Nigeria*, **A Paper Presented at the Seventh Annual Conference of the Faculty of Education, Ambrose Alli University, Ekpoma Edo State**, on March 10-13, 2020.
- Odia H. A., & Iyamu E., *Influence of Information and Communication Technology Skills on Secretaries’ Job Retention in Tertiary Institutions in Delta State*, **Nigerian Journal of Business Education**, 8(2), 2021.
- Odu S., *Workplace Virtual Environment and organisational Health of Tertiary Institutions in South-South*, Re. Unpublished Ph.D Thesis, Ignatius Ajuru University of Education, 2021.

- Oganvo A., *The Third Millennium Secretary and Information and Communication Technology: Nigerian Experience*, **International Journal of Management and Information System**, 13(2), 2015, 39-48.
- Ohiwerei F. O., *Business Education: A Departure from Original Curriculum in Nigerian Universities*, **Journal of Multidisciplinary Engineering Science and Technology (JMEST)**, ISSN: 2458-9403 vol. 6 issue 10, 2019, 10797-10805.
- Okey-Colbert E. U., & Ukandu C. U., *ICT and Sustainable Development in Nigeria*, **International Journal of Sustainable Development**, 6(1), 2019, 31-44.
- Okolocha C. B., John-Akamelu C. R., & Muogbo U. S., *Effect of Skill Acquisition on Youth Employability in Nigeria*, **International Journal of Research in Finance and Management**, 3(1), 2019, 33-37.
- Okolocha C. C., & Baba E. I., *Assessment of Extent of Skills Possessed by Secretaries for Effective Electronic Records Management in Polytechnics in North-Central, Nigeria*, **Nau Journal of Technology and Vocational Education**, 2(1), 2019, 1-16.
- Okpokwasili N. P., *Information Systems Application Skills Required of Secretaries for Job Performance in e-World Parastatals in Rivers State*, **International Journal of Innovative Information Systems & Technology Research**, 6(3), 2018, 16-24.
- Olaoye F. O., Olaofe-Obasesin M. O., & Akanni W., *Impact of Information Technology on Corporate organisations Performance in Nigeria*, **International Journal of Engineering Applied Sciences and Technology**, 4(8), 2019, 84-88.
- Oni F. J., & Koko M. N., *Influence of Information and Communication Technology Skills on Office Managers' Performance in Private Industries in Port Harcourt Metropolis*. **International Journal of Innovative Information Systems & Technology Research**, 8(4), 2020, 22- 31.
- Onikoyi I. A., Adebayo A. Q., Adenuga J. Q., Babalola B. H., & Lamidi W. A., *Analysis of the Impact of Information and Communication Technology on Nigeria Bottling Company's organisational Performance*. **ACTA Universitatis Danubius**, 8,(1), 2022, 153-16.
- Onoja B. L., *Office Automation and Secretarial Productivity in Rivers State University*, **American International Journal of Nursing Education and Practice**, 1(1), 2020, 22-34.
- Onoja, & B. Lesi, *Office Automation and Secretarial Productivity in Rivers State University*, **American International Journal of Nursing Education and Practice**, 1(1), 2020, 22–34.
- Onoyase A., *Causal Factors and Effects of Unemployment on Graduates of Tertiary Institutions in Ogun State South West Nigeria: Implications for Counselling*, **Journal of Educational and Social Research**, 9(4), 2019, 119-127.

- Osita U., *Database Management: Concepts and Design*, **Journal of Database Management Systems**, 3(2), 2018, 14-26.
- Otamiri S. A., & Amirize C., *Social Media-based Interactivity and Work-Life Balance of Broadcast Stations in South-South, Nigeria*. **Journal of Accounting, Management Science and Information Technology**, 2021, 7(1), 106-116.
- Ovbiagbale A. O., Mgbonyebi D. C., & Olaniye V., *Electronic Records Management Competencies Required Of Polytechnic Office Technology And Management Graduates in South-South Nigeria*. **Nigerian Journal of Business Education (NIGJBED)**, 6 (1), 2019, 464-472.
- Pihir I., Tomičić-Pupek K., & Tomičić Furjan M., *Digital Transformation Playground-Literature Review and Framework of Concepts*, **Journal of Information and Organisational Sciences**, 43(1), 2019, 33-48.
- Qasem Y. A., Abdullah R., Jusoh Y. Y., Atan R., & Asadi S. S., *Cloud Computing Adoption in Higher Education Institutions: A Systematic Review*, **IEEE Access**, 7, 2019, 63722-63744.
- Ramya N., Kowsalya A., & Dharanipriya K., *Service Quality And Its Dimensions*, **International Journal of Research and Development**, 4(2), 2019.
- Roberts, S. Patrick, & J. Schmid, "Government-Led Innovation Acceleration: Case Studies of US Federal Government Innovation and Technology Acceleration organisations", Review of Policy Research, 2022.
- Romain R., & Agogué M., "Developing Radical Innovation Capabilities: Exploring the Effects of Training Employees for Creativity and Innovation," **Creativity and Innovation Management**, 30.1, 2021, 211-227.
- Shalini T., Talwar M., Kaur P., & Dhir A., "Consumers' Resistance to Digital Innovations: A Systematic Review and Framework Development", **Australasian Marketing Journal (AMJ)**, 28, no. 4, 2020, 286-299.
- Sicherl P., *Different Statistical Measures Create Different Perceptions of the Digital Divide*, **The Information Society**, 35(3), 143-157.
- Sogbeye G. T., Ekpu F. S., & Udoh H. I., *Cloud Computing in Nigerian Universities: Benefits, Challenges and Prospects*, **World Educators Forum: An International Journal**, 11(1), 2019, 1-15.

- Taiye O. O., & Modupe A. E., *Synergy and Collaboration of Institution-Industry: A Panacea to Development of Quality Office Technology and Management Curriculum in Polytechnics*. **Nigerian Journal of Business Education**, 7(1), 2020, 93-105.
- Timya N., Wetnwan M. P., & Bewaran Y., *Identification of New Technology Skills Required by Teachers of Office Technology and Management For Teaching In Polytechnics In North Central Nigeria*, **Nigerian Journal of Business Education (NIGJBED)**, 6(2), 2019,382-391.
- Ubulom W. J., & West J. J., *Modern Office Skills and Employability of Secretaries amongst Graduating Office Technology and Management Students in Rivers State Tertiary Institutions*. **International Journal of Innovative Information Systems and Technology Research**, 9(4), 2021, 61-69.
- Umar A. L., *Leveraging on New Technologies for Skill Acquisition of Business Education in Tertiary Institutions in Nigeria for the e- world*, **Nigeria Journal of Business Education**, 6(1), 2019, 331-337.
- Umaru T. A., *Effect of Questioning Teaching Method on the Academic Achievement of Students in Business Studies in Oyo State, Nigeria*, **(Doctoral dissertation, Kwara State University (Nigeria))**, 2020.
- Umeano N. E., *Digital Skills Required of Business Education Graduates for Employability in North-East Nigeria*, **Journal of Business Educators of Nigeria Conference Proceedings**, 8(1), 2021, 400-406.
- Umoru T. A., *Plotting Pathways across Transformational Changes in Business Education: A Desideratum for Empowering Learners to Engage the World*, **Nigerian Journal of Business Education (NIGJEBD)**, 7(1), 2020, 1-20.
- Urbinati A., Chiaroni D. Chiesa V., & Frattini F., *The Role of Digital Technologies in Open Innovation Processes: An Exploratory Multiple Case Study Analysis*, **R & D Management**, 50(1), 2018.
- Venkatesh V., & Davis F. D., *A theoretical extension of the technology acceptance model: Four longitudinal field studies*, **Management Science**, 46(2), 2000, 186-204.
- Zainally H., *Administration of Faculties by Information and Communication Technology and its Obstacles*, **International Journal of Education and Information Technologies**. 2(1), 2018, 12-81.
- Zuin D. C., & Findlay P., *Reflections on Secretarial Work and Issues for Further Studies: A Conceptual Contribution*, *Revista de Gestao e Secretariado*, 5(3), 2014, 28- 48.

Appendix 1

SPSS OUTPUT FOR REGRESSION AND RELIABILITY

Hypothesis One

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.583 ^a	.339	.331	.28384

a. Predictors: (Constant), Digital Adoption B, Digital Adoption P

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.169	2	3.085	38.287	.000 ^b
	Residual	12.004	149	.081		
	Total	18.173	151			

a. Dependent Variable: Skill Development

b. Predictors: (Constant), Digital Adoption B, Digital Adoption P

Coefficients^a

Model	Unstandardized Coefficients	Standardized	t	Sig.
-------	-----------------------------	--------------	---	------

				Coefficients		
		B	Std. Error	Beta		
1	(Constant)	1.851	.186		9.960	.000
	Digital Adoption B	.356	.047	.520	7.637	.000
	Digital Adoption P	.111	.042	.178	2.615	.010

a. Dependent Variable: Skill Development

Hypothesis 2

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.691 ^a	.478	.467	.25316

a. Predictors: (Constant), Self-Efficacy T, Self-Efficacy S, Self-Efficacy M

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.688	3	2.896	45.183	.000 ^b
	Residual	9.486	148	.064		
	Total	18.173	151			

a. Dependent Variable: Skill Development

b. Predictors: (Constant), Self-Efficacy T, Self-Efficacy S, Self-Efficacy M

Coefficients^a

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
-------	-----------------------------	---------------------------	---	------

		B	Std. Error	Beta		
1	(Constant)	1.664	.159		10.449	.000
	Self-Efficacy S	-.026	.031	-.057	-.840	.402
	Self-Efficacy M	.230	.045	.406	5.125	.000
	Self-Efficacy T	.302	.056	.397	5.375	.000

a. Dependent Variable: Skill Development

Hypothesis 3

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.625 ^a	.391	.382	.27265

a. Predictors: (Constant), Digital Adoption, Self-Efficacy

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.097	2	3.548	47.733	.000 ^b
	Residual	11.076	149	.074		
	Total	18.173	151			

a. Dependent Variable: Skill Development

b. Predictors: (Constant), Digital Adoption, Self-Efficacy

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

1	(Constant)	1.708	.183		9.355	.000
	Digital Adoption	.234	.068	.279	3.451	.001
	Self-Efficacy	.290	.057	.414	5.113	.000

a. Dependent Variable: Skill Development

Reliability

Skill Development

Reliability Statistics

Cronbach's Alpha	N of Items
.843	14

Digital Adoption

Reliability Statistics

Cronbach's Alpha	N of Items
.743	9

Self-Efficacy

Reliability Statistics

Cronbach's Alpha	N of Items
.712	16

Appendix II

Lead City University, Ibadan
Faculty of Communication and Information Management
Department of Information Management

Questionnaire

Dear Respondent,

I am a student in the Department of Information Management of Lead City University, pursuing the MSc. in Office and Information Management. At present, I am conducting research on: Digital Adoption, Self – Efficacy and Skill Development of Secretaries in Public Universities in Oyo State, Nigeria. This questionnaire is designed to gather data for the thesis. Be rest assured that this is an academic exercise and the researcher shall be guided by research ethics of anonymity and confidentiality. Kindly provide a response that appropriately reflects your personal opinion about the issues under investigation as it affects your organisation.

Thank you

Abu Helen Bamidele

Section (A): Demographic Data of Respondents

This section intends to gather data on the respondents to assist the Researcher on the varied employees in the public organisations under study.

Instruction: Please, tick (√) at the appropriate answers to the questions asked below.

1. Name of institution: -----
2. Gender: a. Male () b. Female ()
3. Age: a. 20–25 years () b. 26 – 30 years () c. 31- 35years () d. 36 – 40 years e. 41 - 45 f. 46 and above ()
4. Qualification: a. HND/B.Sc. () b. M.Sc. () c. Ph.D. () d. Other.....
5. Work Experience: a. less than 1 year () b. 1–10 years () c. 11– 20years () d. 21 years and above ()

Section (B): What is the level of skill development of secretaries in public universities in Oyo State, Nigeria?

The statement in this section concerns Skill Development of secretaries as applicable to your university. Please indicate the extent to which you agree or disagree with each statement in relation to your institution. (Answer by selecting one of the alternatives)

4 = Very High; 3 = High; 2 = Low; 1 = Very Low

I	Cognitive Stage	VH 4	H 3	L 2	VL 1
1	The design of digital Skills motivates me to participate well as a secretary				
2	Digital skills facilitate my understanding of my duties as a				

	secretary				
3	There are enough tools for instructor's feedback, on digital skills as a secretary				
4	There are enough options to improve my digital skills as a secretary.				
II	Associative Stage	VH 4	H 3	L 2	VL 1
5	Ability to adapt smoothly to new technology as a secretary				
6	Ability to build meaningful knowledge through interaction with digitally available resources				
7	Technological potentials to solve information processing problems				
III	Autonomous Stage	VH 4	H 3	L 2	VL 1
8	Ability to apply digital tools to enhance secretarial work				
9	Ability to use digital tools to enhance secretaries' professional skill development				
10	Ability to use digital skills to disseminate information				
11	Ability to use digital skills to implement communication within the university system				

Section (C): What is the level of digital adoption of secretaries in public universities in Oyo State, Nigeria?

The statement in this section concerns digital adoption as applicable to your university. Please indicate the extent to which you agree or disagree with each statement in relation to your university. (Answer by selecting one of the alternatives).

4 = Very High; 3 = High; 2 = Low; 1 = Very Low

I	Perceived Usefulness	VH 4	H 3	L 2	VL 1
1	Using digital tool saves me time during office activities				
2	Digital tool enables me to accomplish office tasks more quickly				
3	Using digital tool reduces the time I spend on unproductive secretarial activities				
4	Using digital tool enhances my job effectiveness				
II	Perceived Ease of Use	VH 4	H 3	L 2	VL 1
5	The digital tool(s) provide a helpful guidance in performing tasks				
6	It is easy for me to remember how to perform tasks using digital tools				

7	My interaction with the digital tools is seamless				
8	The digital tool will be flexible to interact with				
III	Behavioural Intention to Use	VH 4	H 3	L 2	VL 1
9	Digital tools help me to experience things more actively.				
10	The knowledge I acquire using digital tools remain superficial				
11	The effects of using digital skills are visible in the short term.				
12	Using digital skills encourage me to explore situations .				

Section (D): What is the level of self-efficacy of secretaries in public universities in Oyo State, Nigeria?

The statement in this section concerns self - efficacy as applicable to your organisations. Please indicate the extent to which you agree or disagree with each statement in relation to your university. (Answer by selecting one of the alternatives).

4 = Very High; 3 = High; 2 = Low; 1 = Very Low

		VH 4	H 3	L 2	VL 1
I	Mastery Experience				
1	Confidence in using digital tools to improve my administrative skills				
2	Confidence in using computer effectively aids multi-tasking				
3	Knowledge of file security helps in managing database efficiently				
4	Ability to query different data attributes from a database				
II	Vicarious Experience	VH 4	H 3	L 2	VL 1

5	Observing my boss boosts my ability to use web database programming effectively				
6	Successful learning from others aids the use of computer storing files				
7	Ability to use MS office effectively through observation of colleagues				
III	Social Persuasion	VH 4	H 3	L 2	VL 1
8	Aid from my manager has made the use of digital tools easy to retrieved document.				
9	Encouragement from colleagues has made communication easy with the use of electronic media				
10	People are easily reached in large number and within a short time using phones, e-mails etc.				
11	Persuasion from supervisors on the value of digital adoption has improves usage of digital tools				

Appendix III

Biodata

A. Personal Data

1. Full Name: **ABU HELEN BAMIDELE (NEE EDIBO)**

Address: No 11, Adelola Estate,
Arulogun Road, Ajobo, Ojoo, Ibadan.
E-mail address: helenabu68@gmail.com
Phone no: 08029185588, 08146061791

2. Date of Birth and Place of birth: 24 August, 1968, Arigidi Akoko
3. SEX: Female
4. Marital Status: Married
5. Nationality: Nigerian
6. No of Children & their Ages: 5 Children, 29, 29, 28, 23, & 19
7. Name and Address of Spouse: Abu Adekunle Stephen, Address: No 11, Adelola Estate, Arulogun Road, Ajobo, Ojoo, Ibadan.
8. Date of Assumption of Duty in current Establishment: January, 1998
9. Status on first appointment in current

- Establishment:** Confidential Secretary
10. **Present Position:** Manager
11. **Date of Last Promotion:** 2021
11. **Date of confirmation of appointment:** June 1998
12. **Faculty:** U.I. Ventures Limited, University of Ibadan
13. **Department:** U.I. Printing Press, University of Ibadan, Ibadan

B. Educational Background

1. Educational Institutions Attended with Dates and Qualification:

- i. **Primary Education:** Baptist Day Primary School, Arigidi Akoko (1976 – 1980)
- ii. **Secondary Education:** (a) Mount Carmel Secondary School Ikare Akoko (1980 -1986)
(b) Okota High School Arigidi Akoko, (1987 -1988)
- iii. **Higher Educational Institutions Attended with Dates & Qualification**
- | | |
|--------------------------------|--|
| The Polytechnic Ibadan, Ibadan | 1989-1991 OND Secretarial Administration |
| Ondo State Polytechnic Owo | 1994 – 1996 HND Secretarial Administration |
| University of Ibadan, Ibadan | 2005-2007 Masters in Managerial Psychology |
| Lead City University Ibadan | 2018 -2020 B.Sc Office and Information Management |
| Lead City University Ibadan | 2021-till date M.Sc. in view Office and Information Management |

C. Award and Fellowship

- (1.) Fellow, National Institute of Office Administrators and Information Managers (NIOAIM)
- (2.) Member International Professional Managers Association (IPMA) UK
- (3.) Graduate member, Institute of Personality Development and Customer Relationship Management IPD-CRM

Work Experience with Dates:

- (1) Akoko North Local Government Secretariat, Ikare-Akoko (3 months Industrial Attachment 1990)
- (2) Ogsaco Steel Construction Company, 107, Fadeyi Bus Stop, Igbobi Yaba Lagos 1991-1992

Position: Secretary/Receptionist

Duties: Typing of Document
Attending to visitors/making and receiving calls
Making arrangement for various meetings in the company
In-charge of the business centres unit of the company

- (3) Finance and Communication Ltd 37, Princes Street, Jankara, Lagos January, 1993 – December, 1993

Position: Secretary/Marketing Assistant

Duties: Typing of Document
Receiving visitors/Telephone calls
Sourcing for jobs for the Company

- (4) U.I. Consultancy Services Unit, University of Ibadan, (N.Y.S.C.) 1997
- (5) U.I. Consultancy Services Unit, University of Ibadan 2005 - 2008

Position: Confidential Secretary
Status: Assistant Manager

Duties: Coordinating of various Seminars/Workshop of the unit
 Administering of training programme
 Prepare training proposals
 Carry out all Secretarial duties among which are

- (i) Typing of documents
- (ii) Attending to visitors
- (iii) Filing of documents
- (iv) Receiving Telephone calls

- (6) U.I. Ventures Ltd, Consultancy Services Unit, University of Ibadan

Position: Manager 2008 – May 2024
Duties: Sourcing for Contract on behalf of the Company,
 Coordinating the Activity of Consultancy Services Unit
 Distributing the Unit's annual brochure and calendar
 Supervising various training programmes in the Unit.
 Supervision of various project and contract of the Unit
 Represent the Company in and outside Nigeria

- (7) U.I. Printing Press, University of Ibadan, Ibadan

Position: Manager June 2024 till date
Duties: Overseeing the affairs of all printing work in the University for quality work and timely delivery
 Coordinating the staff of the factory and ensuring the quality of work done by each staff
 Safeguarding the Equipment and all the machines in the printing house and coordinating the security to ensure that no theft of any kind in the factory and in the premises of the printing press.

C. Publications:
Thesis/Dissertations

1. The Role of Secretarial Staff in an Organisation, A case study of Akoko North Local Government Secretariat, Ikare Akoko, to the Department of Secretarial Studies in partial fulfilment of National Diploma in Secretarial Studies. 1991.
2. Factors Influencing Effective Job Performance of Secretaries. A case Study of Institute of Tropical Agriculture (I I T A), Ibadan. In partial fulfilment of Higher National Diploma in Secretarial Administration, 1996.

3. The Influence of Participatory Management Style and Organizational Communication Climate on the Performance of Employee in U.I. Ventures Limited. A thesis submitted in partial fulfilment of the Requirement for the award of the Masters in Managerial Psychology Degree.
4. Secretarial Profession and Career Growth in the Civil Service in Oyo State. A research project submitted to the Department of Office and Information Management, Lead City University, Ibadan. October, 2020.

D. Publications:

- (1) Motivational Strategies and Job Performance of Office Managers in Federal Polytechnics in South West Nigeria

International Journal of Office Administration and Information Management (IJOAIM) Vol 3, issues 2, December, 2023 ISSN: 2955-1269 (Print) and ISSN: 2955-1277 (online)

E. Books/Monographs:

Authoried Books:	Nil
Edited Books:	Nil
Contribution to Books	Nil
Published Refereed Conference Proceedings:	Nil
Book Reviews and Commentaries in Scholarly Journals:	Nil
Technical Reports	Nil
F. Creative Work	Nil
G. Notable Scholarly or Professional Accomplishments	Nil

H. Major Conference/Workshops attended

1. The Roles of Supervisors in an Organisation, A two-day work shop organized by U.I. Consultancy Services Unit, U.I. Ventures Limited. 14 – 15 March, 2002
2. 2004 Staff Development Programme in-house training organized by U.I. Ventures Limited November 30 – December 4, 2004
3. Workshop on Managing Consultancy Assignment organized by Centre for Management Development (CMD) Nov. 08 – 12, 2010
4. General Supervisory Management Workshop organized by Centre for Management Development (CMD) June 25 – 29, 2007
5. IFRS & IPSA Workshop organized by KPMG at Sarova White Sands Hotel Mombasa Kenya 17 – 21 September, 2012
6. Office Technology and Management Curriculum and ICT Human Capacity Building for Sustainability organized by Institute of Business and Office Administrators of Nigeria 7-8 September, 2016
7. Southwest Business Summit organized by the 100/10 Academy: Theme Personal Development and Wealth Creation October 1st, 2019
8. National Conference of National Institute of Office Administrators December 2021
9. Mandatory Professional Trainers' Development Workshop 25 -27 April, 2022

I. Service in Lead City University	Nil
J. Service within the Faculty	Nil

- K. Service outside the University (Local, State, National or International) Nil
L. Extra-Curricular Activities Travelling and Reading
M. Others

N. Names and Addresses of Referees

- (1) Mr. Philip O. Areo,
Former Managing Director,
U.I. Ventures Limited,
University of Ibadan
- (2) Mr. C.O. Akinnayajo,
Management Consultant,
University of Ibadan,
Ibadan.
- (3) Professor A. Olatunbosun,
Department of Electrical Electronics,
University of Ibadan,
Ibadan.

Abu H. Bamidele
November, 2024

Appendix IV

University Compliance Certificate

This is to certify that this thesis written by **Helen Bamidele ABU**, matric number **LCU/PG/002601** in the department of Information Management, Lead City University, Ibadan is in full compliance with the University format and style.

Signature

Lead City University Ibadan DO NOT COPY