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## EDITORIAL DESK

Volume 3 of the West African Journal of Educational Administration and Planning (WAJEAP) has a total of ten articles that were the products of well researched papers presented at the international conference held in May 2024 at the Presbyterian University of East Africa in Kikuyu, Nairobi, Kenya. The conference had well over 100 participants that gathered at the ambiance of PUEA environment, which was well attended by over 25 universities across the globe including Nigeria, Serra Leone, Kenya, South Africa, Australia and University of South Alabama in United States of America. All the articles have been peer reviewed and plagiarism checks conducted on them before publication.

I, therefore, want to deeply appreciate the management team of the Presbyterian University of East Africa for making this publication a reality. All the writers and authors are congratulated for passing the stringent measures set by the guild of editors.

Congratulations to everyone, and I wish you a prosperous Christmas celebration in advance.

**Prof. M. O. B. Mohammed** FNAEAP,  
*Head, Editorial Team*

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# THE ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN THE DIGITAL AGE: A CATALYST FOR ENHANCING INNOVATION IN EDUCATIONAL ADMINISTRATION

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## ABSTRACT

*Innovation is very important for digital-age educational administration, yet most institutions are not utilizing it to its full potential. Many educational institutions are yet to embrace Information and Communication Technology (ICT) in enhancing Innovation in educational administration probably because they have not realised the impact of ICT in stimulating Innovation in administration. This paper therefore examines the role of Information and Communication Technology (ICT) in a digital age: A catalyst in enhancing innovation in educational administration. A qualitative research method was used. Both primary and secondary sources of data were collected. The paper answered two research questions on the role of ICT in enhancing Innovation in educational administration and the hindrances to the use of ICT in educational administration. It was recommended that ICT as a digital technology should be harnessed by the educational administration to stimulate innovation or change in the previous way of administration.*

**Keywords:** Catalyst, Information and Communication Technology (ICT), Innovation

## INTRODUCTION

The increasing development of the educational administration system at all levels whether secondary or tertiary educational level brings greater demand on educational administrators in their bid to move along with the trend of the digital age. As the world changes steadily, information and knowledge also change rapidly (Anikweze&Kanu, 2018). Rapid technological, socio-economic and environmental changes, together with corresponding challenges today call for an innovative educational administration approach. Innovation which is an unusual, significant and discontinuous change that consists of a new idea, which does not agree or succumb with the existing idea of an institution is important for digital age educational administration. However, the inconsistent understanding of how to enhance innovation could make it difficult to build innovative educational administration in the nation (Rekleitis in Gerasimos, 2021; Runco, 2014).

There are numerous methods that educational administrators can employ to improve creativity in the current digital era (Caena, 2014). One possible approach could involve the utilisation of Information and Communication Technology (ICT). ICT, or Information and Communication Technology, is a digital technology that aids in administrative tasks related to communication and the management of information, including its creation, storage, and manipulation. The utilisation of ICT has resulted in the development of various types of microelectronic and telecommunications devices, including laptops, computers, computer networks, the Internet, digital printers, and mobile technology. These tools allow educational administrators to effectively record, store, process, retrieve, and transmit information (Adebayo in Kayiwa, Abu & Che, 2016; Kokt & Koelane, 2013). Moreover, in the field of educational administration, ICT has consistently been associated with increased efficiency,

productivity, and positive outcomes in educational administration. These outcomes encompass the enhancement of cognitive abilities, as well as the promotion of creative and inventive thinking (Anikweze & Kanu, 2018). Nevertheless, the existing body of literature demonstrates a scarcity of research conducted in the specific field of interest. This article examines the impact of ICT on improving creativity in school administration during the digital era, focusing on the following objectives:

### **Research Objectives**

1. To identify the role of ICT in enhancing innovation in Educational administration in the digital age and
2. To identify the hindrances to the adoption of ICT in enhancing Innovation in Educational administration in the digital age.

### **Research Questions**

- i. What are the roles of ICT in enhancing Innovation in Educational administration in the digital age?
- ii. What are the hindrances to the adoption of ICT in enhancing Innovation in Educational administration in the digital age?

## **LITERATURE REVIEW**

### **Educational Administration**

Administration is the systematic management of activities and the effective use of people and material resources to achieve the aims and objectives of a certain organisation or institution. The successful achievement of planned goals requires administrators to possess the capacity to make timely and appropriate judgements. Educational administration is a service activity that aims to optimise the fundamental objectives of the educational institutional process by efficiently allocating human and material resources, as well as making the most effective use of existing resources (Opara & Onyije in Kayiwa, Abu & Che, 2016). Educational administration refers to the range of actions undertaken to strategically plan, efficiently arrange, and effectively manage a school or any other type of educational institution. Education management refers to the systematic organisation and coordination of teaching and learning activities in educational institutions, playing a crucial role in ensuring their efficient operation (Onyije & Oparain Bosu, 2019).

Within the context of the school system, educational administration refers to the systematic coordination and integration of human and material resources in order to achieve the objectives of the school system. Educational administration is an ongoing and dynamic process that involves the management of both human and material resources. It is focused on achieving specific objectives and is closely connected to the activities of coordinating, planning, leading, organising, and controlling an educational institution (Akpan, 2016).

### **Innovation**

Innovation is perceived as the act of modifying an organization's objectives in order to adapt to the evolving demands of the environment, as well as reconfiguring the organization's structure, function, and production processes (Basaran in Akin, 2016). Innovation, as described by Rogers in Akin (2016), refers to a novel idea, action, or goal that is considered innovative by the individuals it impacts. Innovation refers to the introduction of new elements into current habits, regulations, and systems (Noone in Akin, 2016). In accordance with Akin (2016), innovation refers to the action of introducing novel elements into a situation and modifying established customs or traditions. Innovation is intricately linked to change; yet, whereas change can occur spontaneously and lack specificity, innovation is typically a

deliberate endeavour with a clear forward direction. Innovation is characterised by change, although not all changes may be considered as innovation (Akin, 2016).

Innovation is a purposeful endeavour that seeks to bring forth new and original ideas or concepts within a certain setting (Adriana, 2015). Innovation encompasses the process of converting an idea into a product or service that can be sold in the market. It also includes the commercial strategies for producing or distributing new or improved products, as well as the development of novel approaches to providing social services. Moreover, innovation refers to the exploration of new possibilities and the use of novel approaches or techniques, resulting in significant transformation, substantial alteration, and reformation (Gerasimos, 2021). Innovation is defined as a remarkable and abrupt transformation that introduces a new idea, diverging from and not conforming to the established ideas of an institution or organisation. This process necessitates institutional intelligence as it leads to modifications in existing conceptual frameworks, institutional capabilities, applied theories, and cognitive models (Rekleitis in Gerasimos, 2021).

### **Digital Age**

The digital era denotes the epoch in human history distinguished by the extensive utilisation and incorporation of digital technology in diverse facets of existence. The subject matter pertains to a notable transition from conventional analogue systems to digital ones, resulting in a transformation of how individuals communicate, work, and engage with the world. In the present age, information is no longer confined to tangible formats but is rather stored, processed, and sent as digital data. This era covers a diverse array of technology, including as mobile devices, computers, software applications, the internet, and digital media (CitizenSide.Com, 2024). The digital age refers to the specific era in human history that is influenced by digital information and communication technologies. The term "digital age" refers to the current era in which digitalization and digital transformation have advanced to the point where digital technologies significantly shape people's life (Lengsfeld, 2023). In the modern era, computers and machinery are employed to convey information.

### **Innovation in the Educational Administration Process in the Digital Age**

In the current era of digital technology, characterised by the worldwide connectivity facilitated by the internet, there is a significant demand for innovation to enhance administrative procedures in the field of education. Innovation in educational administration refers to the discovery and use of a new administrative procedure, structure, or technique that deviates from the current state in order to advance the aims, goals, and objectives of an educational organisation (Birkinshaw, Hamel, & Mol in Akin, 2016). Innovation in educational administration involves the application of administrative abilities, as well as the willingness and bravery to take on the responsibility of implementing changes that promote advancement and effectiveness in educational administration (Adriana, 2015).

In educational administration, innovation refers to the effective implementation and utilisation of novel concepts or those borrowed from other sectors or institutions, which has practical significance. Educational administration involves the generation and implementation of effective ideas by administrators in the field of education. Additionally, it encompasses the ongoing and fluid process in which educational administrators convert concepts into worth. Innovation enables administrators to effectively implement novel services, products, processes, business models, and work methodologies in school administration. Moreover, it facilitates individuals in the process of developing, generating, and adapting novel ideas or behaviours. By employing innovation, educational

administrators have the ability to incorporate novel components into an organisation, encompassing services, knowledge, and abilities (Taylor, 2017).

Innovation refers to a deliberate and planned change that involves taking risks, implemented in educational administration to enhance efficiency and production. The process entails the use of novel methodologies, strategies, concepts, and approaches in educational administration with the aim of enhancing the efficiency of both internal and external aspects of the administrative system. Innovation refers to the use of technology, namely ICT, ideas, and processes, in novel ways to achieve a competitive edge in the economy (Akpan, 2016). Innovation refers to the implementation of new techniques or programmes within the educational administration system to replace outdated or ineffective ones (Uchendu, 2015). Notable advancements in educational administration encompass the subsequent:

- a) **Process Innovation:** This is the adoption of a novel or enhanced service delivery aimed at decreasing the cost per unit of service delivery and enhancing or augmenting the quality in educational administration, including computer-based examinations, innovative teaching techniques, utilisation of ICT technologies, and so on.
- b) **Marketing Innovation:** This is the implementation of a new marketing method involving significant changes in product design product promotion or even pricing in educational administration.
- c) **Service Innovation:** This is the introduction of a new service that greatly improves the administration practices in education such as the introduction of e-payment for workers, and online payment of school charges by students.
- d) **Incremental innovation:** This involves a systematic improvement of previous and existing knowledge in educational administration (Akpan, 2016).
- e) **Radical Innovation:** This leads to significant alterations in services or procedures in educational administration. It is the outcome of meticulous study and development focused on a particular problem or novel approaches to solving educational administration issues. It often utilises cutting-edge technology to address these difficulties. Implementing this form of innovation has the potential to fundamentally transform the operations of the organisation, leading to the development of novel services and processes inside the work organisation (Akpan, 2016; Uchendu, 2015).

### **Information and Computer Technology (ICT)**

Information and communication technologies (ICT) were defined by Khan, Khan, Siraj-u-Din, Ismail, Khattak, and Jan (2015) as digital tools that provide communication-based access to information. This term encompasses a wide range of communication tools, from television and radio to mobile phones, computer and network hardware, satellite systems, and a variety of services and applications like audio and video conferencing, remote learning, and video conferencing. Internet, wireless local area networks (WLANs), audiovisual systems, enterprise software, and middleware are all examples of information and communication technology (ICT) that Talukder, Alam, and Apu (2015) illustrated. These technologies enable data management, storage, transmission, and user engagement. Integrating telecommunication, computers, software, storage, and audio-visual systems is a key component of information and communication technology (ICT). Users are able to electronically access, store, retrieve, organise, transfer, manipulate, and display information thanks to this integration.

The acronym "ICT" stands for "information and communication technology," a broad discipline that includes engineering, science, and technology. Data management and usage are part of it, as are the links to societal, economic, and cultural factors (Ratheeswari, 2018). The term "information and communication technology" (ICT) describes the merging of

computer systems with telecommunications networks, including voice, data, and image networks. Teleconferencing, email, TV lessons, radio broadcasts, IVRs, audiocassettes, and CD ROMs are just a few examples of the many ways in which these systems can work together to facilitate communication and the sharing of information. According to Whitten and Bentley (2018) and Deebom and Zite (2016), these technologies make it easier to process, exchange, and manage data, information, and knowledge. Information and communication technology, or ICT, is a means of communication that facilitates the exchange of data, ideas, and context between people in order to inspire and direct their actions (Kuusimäki, Uusitalo-Malmivaara & Tirri, 2019).

Use of modern forms of communication known as information and communication technology (ICT) can simplify bureaucratic processes. According to Hussain, Suleman, Naseerud Din, and Shafique (2017), educational administrators rely on these tools and resources to manage, store, and transmit data. Others regard them as a wide variety of technological tools and methods used to create, transmit, disseminate, monitor, and store administrative data and instructions. In this view, information and communication technologies are the product of human intervention in the information transmission process, which has led to faster transmission, wider distribution, and longer storage. In an educational context, the phrase describes the tools that school administrators use to collect data, which might be in the form of visuals, text, audio, or a combination of these (Sunanih & Novikasari, 2019).

## **METHODOLOGY**

This paper was based on primary sources which involve expert opinion from lecturers at educational administration, Emmanuel Alayande University of Education and secondary sources such as books, articles, journals, theses and online/internet sources. The research method was qualitative and the responses were analysed using thematic analyses.

## **FINDINGS AND DISCUSSION**

**Research Question One:** What are the Roles of ICT in Enhancing Innovation in Educational Administration in the Digital Age?

An expert noted that ICT itself is an innovative technology in the sense that it boosts creativity in individuals. He further noted that digital technologies such as ICT have a way of facilitating thinking and innovative processes. Technologies such as ICT provide access to vast databases of information and resources online thus exposing people to diverse perspectives and ideas that can fuel their innovative thinking and cause them to create immersive experiences that were previously unimaginable. Technology also offers a variety of online brainstorming tools and platforms that can help anyone boost their innovative minds. Therefore, through contact and access to digital technology such as ICT, educational administrators can arouse their creative minds which helps them to develop, create, generate and/or adapt new ideas or behaviours in the field of educational administration. With this digital technology, ICT therefore enhances innovation among educational administrators.

Two educators replied that ICT, being a novel and cutting-edge technology, inherently compels educational administrators to embrace innovation and adapt to new ways of doing things. Kapur (2019) observed that the adoption of ICT technology has led to significant advancements and transformations in administration and management. The implementation of Information and Communication Technology (ICT) leads to transformations and enhancements in the quality of educational administration. It also broadens the scope of educational administrative possibilities and facilitates universal access to education

(Oyedemi, 2015). Administrators can utilise many forms of media, such as print media, electronic media, telephone, fax, email, and computers, to create articles, reports, letters, documents, notices, and more. This enables them to easily rectify faults and implement new modifications (Kapur, 2019; Oyedemi, 2015).

Innovation involves the process of addressing and resolving issues by utilising developed concepts and ideas. ICT implementation in educational administration leads to enhanced efficiency in everyday operations, enhanced assessment of school programmes, and effective problem-solving for educational administrators. In the present era of digitalization, school administrators heavily rely on technology to effectively perform their administrative jobs and operations. Kapur (2019) and Oyedemi (2015) argue that during the fulfilment of administrative responsibilities, certain administrators may struggle to fully comprehend certain aspects of administration. Therefore, in such instances, individuals utilise ICT technology to address their issues and surmount any obstacles that may develop during the execution of administrative responsibilities.

It was posited that since administrative work is all about communication and also the process of managing, storing, maintaining and distributing files, sending and receiving information for the members of an educational institution and innovation is about change in the previous way work is done, then ICT brings about innovation (change) in the traditional method of educational administration. The use of ICT such as e-mails, facsimiles, mobile phone calls, text messages, social media facilities, etc. enhances effective communication and speed in information delivery and feedback in educational administration, which is better than the previous way of doing so (Umoinyang, 2018). For instance, minutes of previous meetings, students' results, other messages can be sent through their e-mails (Akpan, 2016). ICT tools are now used to prepare examination questions, administer computer-based examinations, and even in the grading of candidates. The advantages of its adoption include the computation of students' results, and the speedy release of results shortly after the examinations (Umoinyang, 2018).

Another expert noted that ICT allows prompt and instant response to school and students' administrative needs. With its speed of handling students' information or records, educational administrators have lots of time on their hands to be able to innovate, think and create. The customary way of working makes some educational administrators work all day during office hours and even continue to work at home. This not only impacts stresses on them but also does not afford them the time to think, innovate and make creative changes in their line of work. However, with ICT, they can handle administrative duties faster with less stress thus affording them time to innovate and create ideas in line with their work. This response is in line with Kayiwa et al. (2016) who revealed that ICT as a digital tool and electronic application helps in the administration of administrative transactions and records, prompt information services (that is, electronic curriculum, electronic register, electronic monitoring of school progress, and digital lesson material) within educational administration.

Few experts noted that ICT through computerized databases helps to reduce the inordinate delays in file processing and also movement from office to office, place to place caused by multiple levels in the departments/educational institutions. However, with the use of ICT, these inordinate delays brought to a minimum as file movement from the lowest level of receipt of application to the highest level of action is done online. Once an official concerned does nothing about the file or is unable to attend to the file received, it is sent online through ICT to the next official thus reducing wasted time and unnecessary physical movements. This

also affords educational administrators the time to be innovative as mundane work is brought to a drastically low level.

A lecturer believes that ICT allows administrators to be innovative especially in areas of admission of students to payment of tuition fees. According to him, in this present digital age where education has become 'a must' and valuable among many, there is an increased influx of students into both secondary and especially higher education. The use of manual procedures for admitting students and collecting tuition reduces the efficiency of the school and increases the workload of educational administrators. ICT such as electronic media and electronic mode of payment of fees thus creates innovative means of admission of students and collection of tuition from the students. This implies that administrators are therefore urged to take advantage of digital technologies such as ICT in this digital age to change or innovate the way they admit students and collect tuition. Mwalongo, Ukanwa, and Chiemeka (2021) found that administrators utilise ICT apps to create school announcements, reports, and letters for parent meetings, student registration, and the hiring of teachers and staff. ICT applications are utilised in the decision-making process, and information is stored along with online apps (Selwood in Ukanwa and Chiemeka, 2021). ICT facilitates the use of novel approaches, tactics, concepts, and methodologies in educational administration, hence enhancing the overall effectiveness of the administrative system both internally and externally (Akpan, 2016).

The use of ICT (information and communication technology) has the potential to improve school productivity and simplify administrative tasks. Computers and the Internet allow administrators to efficiently handle school-related matters and carry out their regular duties. Among these measures is the implementation of an efficient information system and the use of information and communication technologies to lessen the burden on administrators and personnel, especially when it comes to analysing students' academic performance. This allows for substantial time savings. With the help of ICT, admissions, student records, and exam records may all be more easily managed. Curriculum development, personnel evaluation, school activity planning, financial management, and information dissemination can all benefit from it as well. Oboegbulem and Ugwu (2013) cited in Kayiwa et al. (2016) further note that this facilitates creative and effective communication amongst school units, parents, and the administration of the principal.

Information and communication technology (ICT), which includes infrastructure, software, databases, and other resources for handling data processing, storage, retrieval, and dissemination, can improve administrators' efficiency, according to an expert. In order to streamline administrative operations like student, staff, and general administration, ICT makes better use of current resources and eliminates paperwork by replacing manual record-keeping with electronic solutions. Students' and employees' records, as well as general information, can be quickly and easily retrieved in this way (Alam, 2016; Onije & Opara in Bosu, 2019).

The previous statement aligns with Kapur's (2019) assertion that ICT influences the operational context of the administrative department and amplifies the knowledge, creativity, innovation, and skills necessary for school administrators. It enables organisational learning and adjustment to the evolving global environment through innovation, collaboration, involvement, information exchange, and delegation, which represents a significant departure from the functional characteristics of traditional administration. ICT revolutionises administrative processes, replacing old administration with new ways and fostering the deployment of creative approaches in educational administration and governance across all

levels. Studies have shown that administrators have the ability to utilise information and communication technology (ICT) tools such as interactive whiteboards, smart boards, and multimedia projectors for various purposes within an educational institution. These purposes include conducting meetings, providing in-house training for staff, engaging in video conferencing, and delivering presentations. By incorporating these technologies, educational institutions can adapt to the evolving demands of the global digital environment (Mwalongo in Ukanwa & Chiemeka, 2021).

An expert noted that with the use of ICT services, educational administrators thus have access to the internet which allows them to a variety of information that could be a stepping stone for innovation and subsequent improvement in their work and educational institution. Through the internet and online services which ICT as a digital technology provides, today's educational administrators will not only be able to communicate with the internet but also have access to tons of creative information that will improve their creative and innovative abilities in educational administration. Africa and Nigeria are still seen as third-world continents and countries respectively because the first-world nations and continents seem to have been completely digitalized and become innovative with the adoption of digital technologies such as ICT, Artificial Intelligence, and the Internet of Things, and so on.

Toro and Joshi in Bosu (2019) stated that ICT allows educational administrators to successfully introduce new and better services that support students which thus improves their ways of working with the students. Students no longer have to queue in the hot and scorching sun to pay school fees, get lesson materials and contact their project supervisors and lecturers because of ICT. Furthermore, educational administrators can use ICT such as PowerPoint presentations to give instruction and training in a more innovative way that arouses the interests of listeners.

Mwalongo, Ukanwa, and Chiemeka (2021) found that administrators utilise ICT apps to create school announcements, reports, and letters for parent meetings, student registration, and the hiring of teachers and staff. ICT applications are utilised in the decision-making process, and information is stored along with online apps (Selwood in Ukanwa and Chiemeka, 2021). ICT facilitates the use of novel approaches, tactics, concepts, and methodologies in educational administration, hence enhancing the overall effectiveness of the administrative system both internally and externally (Akpan, 2016). The use of ICT (information and communication technology) has the potential to improve school productivity and simplify administrative tasks. Computers and the Internet allow administrators to efficiently handle school-related matters and carry out their regular duties. Among these measures is the implementation of an efficient information system and the use of information and communication technologies to lessen the burden on administrators and personnel, especially when it comes to analysing students' academic performance. This allows for substantial time savings. With the help of ICT, admissions, student records, and exam records may all be more easily managed. Curriculum development, personnel evaluation, school activity planning, financial management, and information dissemination can all benefit from it as well. Oboegbulem and Ugwu (2013) cited in Kayiwa et al. (2016) further note that this facilitates creative and effective communication amongst school units, parents, and the administration of the principal.

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keeping with electronic solutions. Students' and employees' records, as well as general information, can be quickly and easily retrieved in this way (Alam, 2016; Onije & Opara in Bosu, 2019).

Experts noted that within the school, teachers as administrators are able use ICT such as Microsoft Office, Databases and various software applications like "Education Management Information System (EMIS) to admit, classify and register students, collect money, chase absences, file and analyze attendance data, participate in students' welfare services, keep records adequately, photocopy in bulk, copy typing, produce standard letters, and class lists, invigilate examinations, process examination results, collate students' reports, order supplies, coordinate and submit bids and even innovatively give personnel advice. This is supported by Bosu (2019) who noted that ICT helps educational administrators to organise information, compute and process paperwork, enhance communication and planning, improve monitoring and manage teaching and learning activities thus allowing them to be more effective and efficient.

ICT technology can process voluminous records quickly, meticulously and impeccably. As a digital technology, it can generate reliable and consistent records. Also, records and data produced are searchable and quickly retrievable. This allows innovative changes to be made to any organisation thus saving space and cost for the institutions (Krishnaveni & Meenakumari in Kayiwa et al., 2016). A respondent noted that attributes of ICT such as accuracy, high-speed performance, reliability and capability to store very large amounts of data aid administrative activities in this digital age in that administrators can meet up with the present global innovative digital world. ICT as a digital technology thus saves human resources (in this case, educational administrators) for data entry and servicing student admission and registration. With its advanced scanning technology, completed application forms can be read into the databases in a matter of seconds which also brings change to the old way of carrying out such functions in the past before the digital age (Krishnaveni & Meenakumari in Kayiwa et al., 2016).

**Research Question Two:** What are the Hindrances to the Use of ICT in Enhancing Innovation in Educational Administration in the Digital Age?

Experts have observed that the resistance of administrative staff to embrace information and communication technology (ICT) is a significant obstacle to fostering innovation in educational administration throughout the digital era. Another argument suggests that the administrative staff's lack of capabilities in operating the facilities leads them to persist in using traditional and customary methods of administration. According to Okebukola in Anikweze & Kanu (2018), a brief examination of educational institutions in Nigeria reveals that a significant number of administrative professionals continue to heavily depend on conventional methods of administration instead of adopting ICT.

The aforementioned discovery is consistent with survey study that confirmed the lack of competence among administrative staff of Federal Unity Colleges in the North-Central geopolitical zone of Nigeria in utilising ICT. It is possible that many administrative staff members in educational institutions in Nigeria will not possess the necessary abilities to effectively utilise technology in administrative tasks. This lack of proficiency hinders innovation in the digital era (Amuche, 2010). The administrative staff lacks the necessary expertise to effectively integrate technology, such as computers and the internet, with creative teaching methods that benefit users. A significant number of administrative personnel lack the requisite IT proficiency and experience unease. Furthermore, they lack the specialised training required to effectively utilise the new technological tools within their organisation (Carnoy, 2002).

Respondents observed a deficiency of skilled staff capable of operating, applying, servicing, and repairing ICT hardware and software facilities at educational institutions. This also presents a significant obstacle to its utilisation in promoting innovation in school administration. This aligns with the findings of Anikweze and Kanu (2018), who emphasised the importance of having locally skilled technicians to effectively install, operate, and support ICT systems in Nigerian educational institutions. Additionally, it has been determined that there may be a challenge in locating appropriate software to effectively operate ICT facilities that are pertinent to school administration in Nigeria. Anikweze and Kanu (2018) found a significant disparity between the availability and demand for software in Nigeria.

Additionally, the insufficiency or insufficient ICT facilities were also highlighted as a significant obstacle to the use of ICT for innovation in educational administration in Nigeria. This aligns with a study that found that the primary obstacle to deploying ICT in educational institutions is the insufficiency of current infrastructures. While the need of incorporating ICT usage in the administration-learning process is acknowledged, only approximately 40 percent of educational institutions possess computers, primarily concentrated in urban areas. This creates a disparity in equality and access to high-quality educational administration between rural and urban locations. It was observed that the computers, network infrastructures, and connections are inadequate to meet the needs of the registered learners and the existing demands. Ukanwa and Chiemeka (2021) and Mikre (2011) mentioned this. A study highlighted that in Nigeria, the lack of infrastructure poses a significant barrier to the use of ICT for innovation. Furthermore, the inconsistent and unpredictable provision of electricity in Nigeria for the past twenty years hinders the development of advanced ICT applications (Anikweze & Kanu, 2018). The cost was identified as a significant obstacle to the implementation of ICT in promoting innovation among educational administrators. The cost of ICT equipment, such as computer hardware and software, prevents widespread availability of personal computers. Certain educational institutions may struggle to afford the expensive prices associated with internet connectivity, resulting in limited access to the internet. Administrators without internet connection are unable to retrieve a wealth of material relevant to their profession, hindering their ability to make innovative adjustments aligned with their work (Anikweze & Kanu, 2018).

## **CONCLUSION**

Information and Communication Technology (ICT) as a digital technology or tool in this digital age offers many numerous benefits to educational administrators including enhancing innovation. Innovation in educational administration, which is the process of generating and creating ideas, methods, and techniques that improve the previous, old and existing way of administration in educational institutions can be made possible by the adoption of ICT. ICT itself being an innovative technology can allow educational administrators to variety of information, and innovative activities that can improve the creative minds of educational administrators thus helping them to make innovative changes to the way they do their job. In addition, through ICT, administrators can support students, collect tuition, keep records, store and retrieve information and do a lot of administrative tasks more efficiently and effectively than the way they did before the advent of the digital age.

## **RECOMMENDATIONS**

It is therefore recommended that:

1. Educational administrators should take advantage of this digital age of technologies by ensuring they adopt ICT to make their job faster, easier and more efficient;
2. Government and educational stakeholders should provide support in the area of funding so that ICT is available at all levels of education.

3. ICT facilities and applications available should be properly maintained by experts to ensure that they last long; and
4. Educational administrators should undergo training on how to utilize ICT to make innovative changes in administration.

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