



CHALLENGES OF CONTINUOUS INNOVATIONS IN INFORMATION AND COMMUNICATIONS TECHNOLOGY TO OFFICE MANAGERS IN COMMERCIAL BANKS

Ama, Faith Nnenna Ph.D

*Department of Office Technology and Management
Akanu Ibiam Federal Polytechnic, Unwana
Afikpo –Ebonyi State
amafaithnne@gmail.com (08037308390)*

Simon Oluwatobi Olowofila (MABEN,1084)

*Department of Office Technology and Management
Akanu Ibiam Federal Polytechnic, Unwana
Afikpo –Ebonyi State
[\(08060119158; 09047472777\)](tel:08060119158;09047472777)*

Abstract

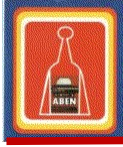
The study ascertained the challenges faced by office managers in commercial banks due to continuous innovations in information and communication technologies (ICT). Four research questions guided the study. The population comprised office managers (administrative assistants, executive assistants, and administrative officers) working in commercial banks in Abakaliki metropolis. The instrument for data collection was a structured questionnaire entitled “Challenges of Continuous Innovations in Information and Communication Technology (CCIICT). Data collected was analysed using mean statistics and standard deviation to answer the research questions. The result of the study showed that continuous innovations in ICT have posed the challenge of cyber security, skill upgrading, ergonomics issues and information overload. The study therefore recommended among others that bank management should continuously upgrade ICT facilities used by office managers as each version of ICT comes with upgraded security software. Moreover, procurement officers of commercial banks should as much as possible consider the matter of information overload in procuring and installing ICT gadgets/software for office managers in commercial banks.

Keywords: Commercial Banks, Continuous innovation, Information and Communication Technologies, Office Managers,

Introduction

Innovation refers to the process of creating and implementing new ideas, products, services, or processes that bring about significant improvement, change, or additional value. Innovation involves the application of creativity and problem-solving to address existing challenges, explore opportunities, and meet the evolving needs of individuals, organizations, and society as a whole

Michael (2019) avers that continuous innovation in ICT is the frequent and steady changes or improvement in the current information and communication technologies used in the discharge of duties. Eric (2019) opines that continuous innovation of ICT is the continuous modification of information and communication technology for the present day use. Eric (2021) also added that continuous innovation in information and communication technology (ICT) refers to the ongoing development and improvement of technologies, systems, and solutions within the field of ICT. This



constant evolution is driven by factors such as advancements in hardware, software, networking, data management, and user interfaces. Continuous innovation in ICT is driven by a combination of research and development efforts, industry competition, user feedback, and emerging trends. It plays a vital role in shaping our digital future, driving economic growth, and transforming various industries by introducing new possibilities and efficiencies which users must embrace.

Continuous innovations have brought about digital technologies like artificial intelligence (Ai), Big Data, Cloud computing and the Internet of Things. These ICT innovations enhance productivity and efficiency. It has improved communication and collaboration and redefined work environments and flexibility (Olusegun, Kola & Abdulrasaq, 2016). However, it has also brought human-related, technology/infrastructure, and organization/managerial challenges. In the 21st century, digital technologies has taken over work operations in different sectors without the exception of commercial banks where office managers work to ensure the smooth operation of administrative functions critical to the institution's success.

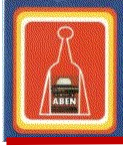
Ajayi (2017) noted that an office manager is a highly qualified person who masters not only office skills but also co-ordinates the office work with less supervision. An office manager works in an office handling critical roles such as human resource management, which include recruitments, on boarding, and fostering positive employee relations, keeping records and arranging meetings. They utilize their leadership and coordination skills to create a collaborative work environment and ensure the effective functioning of office operations. With the advent and continuous innovations in

ICT, roles of office managers have gone beyond the traditional roles of taking down dictations in shorthand, transcribing them on the typewriter which consume most of their time. Communication technologies have been designed to handle these mundane activities whereby an office manager is expected to deploy the new tools in handling decision making and administrative activities.

Therefore, innovations in ICT have come with the challenge of change of roles for office managers.

Office managers in commercial banks are banking officers saddled with numerous duties that have to do with administration and office management. Different banks give them different names like Administrative Assistants; Executive Assistants; Administrative Officers; Office Managers; Personal Assistants; and Administrative Coordinators. They do not only occupy leadership positions but also have liaison roles as they provide a bridge between executive leadership and daily office activities. Pandey in Amaewhule and Nwiyor (2025) has the view that office managers handle various tasks and operations such as customer services, setting up cyber security measures to fight against fraud, cyber-attacks and any unscrupulous activities and work in compliance with the goals of the banking regulations. Their job functions are central to the smooth operations of commercial banks. They work closely with other departments within the bank such as investment, lending department, risk management and others to achieve the business objectives. Considering the dynamic nature of commercial banks, office managers must be adaptable to evolving technologies.

It is very understandable that digital technology has taken over work operations in today's modern offices, therefore, the job scope of office managers revolves around technology (information technology and management technology) which has evolved challenging and new responsibilities. Information and Communication Technology (ICT), according to Okauru (2018), is the digital processing and utilization or use of electronic computers. It comprises the storage, retrieval, conversion and transmission of information. It has come to stay and its influence spreads to all spheres of human endeavour, especially office management. Modern businesses today require office managers with diverse information technology skills and professional competences, who will be able to meet up with the demand of emerging skills in the new technology.



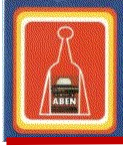
In view of the constancy in the advancement of office technological equipment, office managers must be vast in their knowledge of current ICT inventions and at the same time have the capability to handle subsequent versions of ICT. Office managerial staff must keep abreast of this technological revolution that has made a profound impact on business and communication today. In banking sectors today, digital technologies like social media platforms, Internet, E-commerce are used for effective office and work operation. Digital payment solutions has also significantly transformed the way financial transactions are conducted. There is also contactless payments, enabled by near field communication (NFC) technology which allows one to make purchases using smartphones, smart watches and others. In the opinion of Amawhule and Nwiyor (2025) there are also digital wallets that has come to be as a result of technological innovations which facilitate secure and convenient transactions in the banking industry. More so, with the invention of digital technologies like artificial intelligence, Big Data, Cloud computing and the Internet of Things (IoT); office managers are challenged to constantly adapt and acquire new skills to effectively manage their teams and operations.

Anyaele (2021) describes commercial banks as institutions set up purposely for safekeeping of money, valuable goods and documents like wills and others. On the other hand, Miguel (2022) states that a commercial bank is a financial institution that provides a range of services to individuals, businesses, and organizations. These banks primarily focus on receiving deposits from customers and lending money to borrowers, thereby facilitating the flow of funds in the economy.

Commercial banks use categories of workers among whom are the office managers. Office managers in commercial banks handle the clerical and administrative processes of the bank. They co-ordinate the activities of junior workers like the security officers, dispatch staff, drivers and others. They ensure that materials which include consumables are procured for easy flow of banking activities. They prepare offer letters for customers, receive callers to the bank and work in liaison with the business managers. They use different computer applications in the course of their work and therefore must be skilful in the applications.

Skill challenges have been a significant obstacle for office managers in several ways and could manifest in form of skills-gaps. Onele (2022) sees skill gap as a problem which can occur when employees lack the necessary skills or knowledge to perform their job effectively. This can be a challenge for office managers, as they need to identify the skills gaps and provide appropriate training or resources to address them. Uduma (2019) pointed that rapidly changing technology fuels skills gaps because technology is constantly evolving, and employees need to keep up with these changes in order to remain productive and competitive. This can be a challenge to office managers, as they need to possess the necessary skills to use new technologies effectively. He went further to state that being able to use technology in its multitasking capacity is another challenge. This is because in today's fast-paced workplace, office managers are often required to multitask and switch between different tasks and projects. This can be a challenge for office managers, as they need to ensure that they and other employees have the skills and resources to manage their workload effectively.

Avin (2021) stated that advancement in technology has undoubtedly brought numerous benefits to workplaces, and concurred that it has also introduced several challenges as office managers struggle to keep abreast with them. As earlier noted, technology evolves at a rapid pace, and office managers must continuously adapt to the new tools, software, and systems. Keeping up with the latest trends and understanding how to effectively leverage new technologies can be challenging and time-consuming. Training and skill development for proper implementation of new technologies are basic needs of office managers. Learning new software or systems and ensuring



employees are proficient in using them can be a significant challenge, especially for managers who may not have a technical background. Integration and compatibility of software and tools for different purposes, and ensuring compatibility and seamless integration between these systems can be complex. Office managers may need to invest time and effort in integrating various technologies to streamline workflows and avoid inefficiencies.

Continuous innovation in ICT brings about structural challenges to office managers in a variety of ways, depending on the size and nature of the organization as noted by Igwe (2019). Innovation in the office often brings various physical and structural challenges that affect creativity, collaboration, and the development of new ideas. In the past traditional cubicles or closed office spaces hindered communication and idea sharing, while open office layouts lead to noise and distractions that impede focused work. Continuous ICT innovation has brought about a complete restructuring from the old and such change is always difficult as it brings a complex and costly process that requires careful planning and execution. Restructuring has actually brought remote and hybrid work management structure which calls for strategies for managing and motivating a dispersed workforce.

Another challenge of constant innovation in ICT as opined by Enwerem (2017) is ergonomics. This has become a significant challenge for office managers because it is essential for maintaining the health, safety, and productivity of employees. Ergonomics has turned into a challenge for office managers through increased awareness; there is now a greater awareness of the importance of ergonomics in the workplace, and employees are increasingly demanding ergonomic workstations. Innovations in technology have made several machines and equipment available; it becomes imperative that machines and equipment must be arranged in such a way that safety and health of the office manager is not compromised. The health hazards that could come with the use of these ICT gadgets are back pain, neck pain, and carpal tunnel syndrome. This can result in increased absenteeism, reduced productivity, and increased health care costs. Office managers need to take steps to prevent these issues, such as providing ergonomic training and regular ergonomic assessments. Overall, ergonomics has become a significant challenge for office managers because it requires a comprehensive approach to workplace design and equipment selection that takes into account the individual needs of each employee.

Office managers also contend with the issues of data security and privacy. With the increased reliance on digital systems, the risk of data breaches and cyber-attacks becomes a significant concern. Office managers must prioritize data security and privacy, implementing robust measures to protect sensitive information and ensuring compliance with relevant regulations. Continuous innovation in ICT has triggered information overload. Technology has made it easier than ever to access information, but it has also resulted in information overload. Office managers may find it challenging to filter through vast amounts of data and identify what is relevant and valuable to their work. This can lead to decision-making difficulties and a potential loss of productivity.

Innovation in ICT has unsettled work-life balance. The constant connectivity and accessibility provided by technology can blur the boundaries between work and personal life. Office managers may feel pressured to be available round the clock, leading to increased stress and difficulties in maintaining a healthy work-life balance.

In the areas of cost, while technology can enhance efficiency and productivity, it often comes with a financial cost which need to be considered else the organization will run into deficit. Innovation in technology has both negative and positive impact in the cost of running an office as it can lead to saving costs or generating new expenses. Even though automation and digital tools have streamlined many office processes, reduced the need for manual labour and lowered



operational costs, there are also new expenses associated with it which includes the cost of purchasing and maintaining IT equipment, cyber-security measures to protect data, and ongoing software subscriptions. As earlier emphasized, staying up-to-date with the latest technology requires investments in training and skill development for employees.

Continuous ICT innovations require that, office managers should stay updated on technological advancements, prioritize training and skill development, collaborate with IT professionals, prioritize cyber-security measures, promote effective information management practices, encourage work-life balance, and foster a culture of openness to change and innovation. Continuous ICT innovation and lack of effective use of information and communication facilities in banks has shown that the office managers lack necessary knowledge, skill and ability required for using the modern facilities to do their work.

It is upon this that the researcher embarked on a study on challenges of continuous innovations in Information and Communication Technology (ICT) to office managers in commercial banks in Abakaliki, Ebonyi State. This location was chosen because it is the capital of Ebonyi State; one of the newest states in the federation and therefore the commercial hub of the State.

Purpose of the Study

The major purpose of this study was to ascertain the challenges of continuous innovations in information and communication technology (ICT) to Office Managers in Commercial Banks. Specifically, the study sought to:

1. Ascertain how continuous innovation in ICT affects data security and privacy of office managers.
2. Find out how continuous innovation in ICT affects training and skill development of office managers.
3. Ascertain the problem of continuous innovation in ICT on information overload of office managers.
4. Ascertain ergonomics challenges faced by office managers due to continuous ICT innovations.

Research Questions

The following research questions guided the study:

1. In what ways has continuous innovation in ICT affected data security and privacy of office managers?
2. In what ways has continuous innovation in ICT affected training and skill development of office managers?
3. What are the problems of continuous innovations in ICT on information overload of office managers?
4. What are the ergonomics challenges faced by office managers due to continuous ICT innovations?

Method

The study adopted descriptive survey design. This design was considered appropriate because the study sought the opinions of office managers on the challenges they encounter due to continuous innovations in information and communication technologies. The population of the study consisted of 50 office managers, administrative assistants, executive assistants, and administrative officers working in commercial banks in Abakaliki metropolis, Ebonyi State. The entire population was used as the sample size because of its manageable size. The researcher



developed a four-point scale structured questionnaire entitled “Challenges of Continuous Innovations in Information and Communication Technology (CCIICT)” for collection of data. The response categories were strongly Agreed, Agreed, Disagreed and Strongly Disagreed. The questionnaire was subjected to face and contents validation by three lecturers from Office Technology and Management department of Akanu Ibiam Federal Polytechnic Unwana. The questionnaire had an overall reliability index of 0.84 using Cronbach Alpha reliability method and this was established through a pilot test of 10 office managers working in commercial banks in Aba metropolis.

Fifty copies of the questionnaire were administered through personal contact by the researcher with the help of three research assistants. The 50 copies were returned and used for the analysis. Data collected were analysed using mean and standard deviation. A cut-off of 2.5 was used as a base line score for accepting or rejecting of each of the items of the questionnaire.

Results

Research Question 1:

In what ways has continuous innovation in ICT affected data security and privacy of office managers?

Table 1: Mean rating of response of office managers on ways continuous innovation in ICT affected data security and privacy.

S/N	Variables	SA	A	D	SD	X	Std	Decision
1	Increased threat surface	15	15	10	10	2.7	1.11	Accepted
2	Emerging threats	20	15	5	10	2.9	1.15	Accepted
3	Data accessibility/mobility	20	20	5	5	3.1	0.95	Accepted
4	Compliance challenges	15	20	15	0	3.0	0.78	Accepted
5	User awareness and training	30	10	5	5	3.3	0.70	Accepted
6	Third-Party risk	20	15	5	10	2.9	1.15	Accepted
7	Incident response and recovery	20	20	5	5	3.1	0.95	Accepted
8	Data encryption and authentication	15	20	15	0	3.0	0.78	Accepted
9	Machine learning and AI for threat detection	20	15	5	10	2.9	1.15	Accepted
10	Balancing security and usability	15	15	10	10	2.7	1.23	Accepted
	Grand Mean/Std					2.9	0.88	Accepted

Data in Table 1 reveals that questionnaire items 1-10 had a grand mean of 2.9, therefore all the questionnaire items were accepted as ways continuous innovation in ICT has affected data security and privacy of office Managers.

Research question 2:

In what way has continuous innovation in ICT affected training and skill development of office managers?



Table 2: Mean rating of response from office managers on ways continuous innovation in ICT affected training and skill development

S/N	Variables	SA	A	D	SD	X	Std	Decision
11	Continuous innovation in ICT has called for need for technological competence	20	20	5	5	3.1	0.95	Accepted
12	Digital transformation skills of office managers have been affected	15	20	15	0	3.3	0.78	Accepted
13	It has changed the way office manager manage confidential information	30	10	5	5	3.3	0.78	Accepted
14	Continuous innovation has repositioned the way office manager handles customer relation	20	15	5	10	2.9	1.15	Accepted
15	Cyber-security awareness	20	20	5	5	3.1	0.95	Accepted
16	It affected office managers adaptability skills	20	15	5	10	2.9	1.15	Accepted
17	Regulatory compliance	20	20	5	5	3.1	0.95	Accepted
18	It has repositioned collaboration and teamwork	15	20	15	0	3.3	0.70	Accepted
19	It has improved leadership skills of office managers	20	15	5	10	2.9	1.15	Accepted
20	It brought about continuous learning culture in use of ICT	20	15	5	10	2.9	1.15	Accepted
21	Virtual reality and augmented reality which are new innovation are being used to enhance training	20	20	5	5	3.1	0.95	Accepted
Grand Mean/Std						3.0	1.04	Accepted

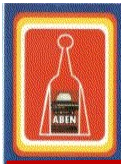
Table 2 reveals that all the items were considered as ways continuous innovation in ICT affected training and skill development of office managers with a grand mean of 3.0.

Research Question 3:

What are the problems of continuous innovation in ICT on information overload of office managers?

Table 3: Mean rating of response from office managers on problem of continuous innovation in ICT on information overload

S/N	Variables	SA	A	D	SD	X	Std	Decision
22	Training and skill upgradation	20	15	5	10	2.9	1.15	Accepted
23	Resource allocation	20	20	5	5	3.1	0.95	Accepted
24	Keeping up with customer expectations	15	20	15	0	3.0	0.78	Accepted
25	Data management stress	20	15	5	10	2.9	1.15	Accepted
26	It enable data driven decision	20	15	5	10	2.9	1.15	Accepted
27	It leads to decreased productivity	20	20	5	5	3.1	0.95	Accepted
28	It contributes to difficulties in decision making	15	20	15	0	3.0	0.78	Accepted
Grand Mean/Std						2.9	0.98	Accepted



The results and analysis presented in Table 3 reveals that all the items have mean values more than 2.50 representing strong agreement using grand mean of 2.9. This implies that all the items are challenges of continuous innovation in ICT as a result of information overload of office managers.

Research Question 4:

What are the challenges posed by continuous ICT innovation to office managers in regards to ergonomics?

Table 4: Mean rating of response from office managers on challenges posed by continuous ICT innovation to office managers in regards to ergonomics

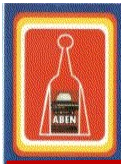
S/N	Variables	SA	A	D	SD	X	Std	Decision
29	Challenge in ergonomic workspace design	30	10	5	5	3.3	0.70	Accepted
30	Issues of health and safety is compromised	20	15	5	10	2.9	1.15	Accepted
31	It reshapes work-life balance	40	0	5	5	3.1	0.95	Accepted
32	It leads to techno-stress	20	15	5	10	3.5	1.30	Accepted
33	There is an increased concern about privacy and security	20	20	5	5	3.1	0.95	Accepted
34	It has remote work challenges	15	20	15	0	3.0	0.78	Accepted
35	It has challenges of training and skill development	20	15	5	10	2.9	1.15	Accepted
36	Challenges of integration of new technologies	35	5	5	5	3.3	0.70	Accepted
37	Cost considerations	20	20	5	5	3.1	0.95	Accepted
38	Effects on collaboration and communication	25	5	10	10	2.9	1.15	Accepted
Grand Mean/Std						2.8	0.97	Accepted

Table 4 shows that respondents agree with a grand mean of 2.8 that all the questionnaire items are challenges posed by continuous ICT innovation to arrangement of office by office managers. This is because all the items had mean rating above 2.50.

Discussion of Findings

The findings in research question 1, showed that the respondents agreed that increased threat surface, emerging threats, data accessibility/mobility, compliance challenges, user awareness and training, third-party risk, incident response and recovery, data encryption and authentication, machine learning and AI for threat detection, balancing security and usability are ways continuous innovation in ICT affected data security and privacy of office managers. This is in tandem with the assertion of Ezeorah (2019) that continuous innovation in ICT affects data security and privacy of office managers.

The findings in research question 2, showed that the respondents agreed that continuous innovation in ICT has affected training and skill development of office managers. This might be why Anyaele (2021) emphasized that continuous innovation in ICT has called for technological competence. Digital skills of office managers have been affected; continuous innovation in ICT has changed the way office managers manage confidential information. This is supported by the view of Fredrick (2019) that continuous innovation has repositioned the way office managers handle customer



relation and cybersecurity awareness, has also affected office managers' adaptability skills and regulatory compliance. It has repositioned collaboration and teamwork. It has improved leadership skills of office managers and has brought about continuous learning culture in use of ICT, virtual reality and augmented reality which new innovation are being used to enhance training. The result of the study is also in agreement with the assertion of Avin (2021) that continuous innovation in ICT has affected training and skill development of office managers.

In research question 3, the findings showed that the office managers agreed that the challenge of continuous innovation in ICT has brought about information overload of office managers in the following ways: problem of training and skill upgrading, resource allocation, keeping up with customer expectations, data management stress, enabled data driven decision, leads to decreased productivity and difficulties in decision making. This is in consonance with the view of Moses (2021) that continuous innovation in ICT has posed problems as a result of information overload.

The result in research question 4, showed that the office managers agreed that challenges such as arrangement of workspace design, issues of health and safety are being compromised due to continuous ICT innovation. ICT innovation also has reshaped work-life balance, it has led to technostress, Continuous ICT innovations have brought increased concern about privacy and security, it has brought about remote work challenges, and challenges of training and skill development, integration of new technologies, cost considerations and effects on collaboration and communication. The results are also in tandem with the views of Uzoma (2019) that continuous ICT innovations raised arrangement of office issues.

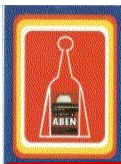
Conclusion

A careful examination of the office manager's response on challenges encountered by office managers as a result of continuous innovations in ICT leads to the conclusion that innovation in Information and communication Technology has exposed office managers to the new method of carrying out office routine, which they are struggling to catch up with in order to stay relevant in the banks. Also, innovation in information and communication technology has not come to displace or render office managers redundant rather it has come to modify their managerial work and has also provided solutions to its inherent challenges.

Recommendations.

Based on the findings and conclusion made, the study recommends that:

1. Management of banks should continuously upgrade the facilities used by office managers. This will enable them combat the challenge of data security and privacy of office manager through increased threat surface. This is because each version of ICT comes with upgraded security software.
2. Office managers should embark on upgrading through self-help or sponsorship of the banks to enable them keep abreast with skills for contemporary facilities.
3. Office managers should engage in research activities in order to understand the concept of ergonomics thoroughly. This will enable them to plan their workstation taking into consideration the health and safety measures.
4. The procurement officers of commercial banks should as much as possible consider the matter of information overload in procuring and installing ICT gadgets/software.



References

- Amaewule, W. A., & Nwiyor, B. N. (2025). Digital practices influence job functions of office managers
In selected banks within Port Harcourt City and Obio/Obiakpor Local Government Areas. *International Journal of Social Sciences and Management Research* 11(1), 119-136.
<https://www.iiardjournals.org> DOI: 10.56201/ijssmr
- Anorue, G. C. (2018). *Modern business correspondence*. Bastover Plymouth: Macdonald and Evans Ltd.
- Avin, A.S. (2021). *Oxford Advanced Learners Dictionary of Current English* New York: Oxford University Press.
- Azuh, J. (2019). Thursday 12th July, Prospects of office managers' in changing work environment. *Journal of Business and Vocational Education* 2(1)34
- Babalola, S.T & Banabas, F. (2018) *Essential of Secretarial Duties*. Akure: Alabi Eyo & Co. Ltd
- Eric, M. (2019). Information and Communication Technology for Socio-Economic Development in Nigeria. *Journal of Business and Technological Education*. 1(2), 54.
- Eugene, E.E (2019). Office technology and management programme for capacity building in Nigeria. *A Journal of office Technology and Management*.1 (1) 9- 10
- Ike, M. (2017). Optimum utilization of internet service and application through secretarial skills. *Business Tech Journal of Contemporary Issue in Business and Technology*. 1(2) 26
- Ngurukwem E.C. (2018). Task Ahead of Integration of information and Communication Technologies in Business Teacher Education: *NABE Book of Readings*. Nigeria Association of Business Educators.
- Nwankiti, O.C. (2018). *Man and his environment*. Ikejua: Longman Nigeria Limited.
- Nweke, N.C (2019). *Fundamental of Information and Communication Technology*. Enugu: First Fountain Publisher (Nig).
- Nwogu U. (2021). *Understanding Communication*. Owerri: Hudson Jude Press Nig.
- Ohaegbulem, N.M. (2002). *The Modern Office Practice*. Enugu: John Jacob's Classic Publishers Ltd.
- Ohaegbulem, N.M. (2010). Identification of Machine and Equipment Needed for Teaching and Learning Office Technology and Management in Nigeria Polytechnic. *Journal of Business and Vocational Education*. 1(1) 60
- Suleiman, O., Aguablaide, A. K., & Isiha, A. (2016). An assessment of benefits and challenges of ICT to office managers in the banking industry. *Journal of Internet Banking and Commerce* 2(1), 1-11. <https://www.icommercentral.com>
- Uzoma, V.O (2019). Secretarial Staff and Career Opportunities and Advancement in Information Technology Era. *A Journal of Contemporary Issues in Business and Technology*. 2 (5) 131.