

# ICT for Effectiveness and Job Performance of Staff in the Universities in Nigeria.

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#### Abstract

The study investigated the influence of ICT for effectiveness of staff job performance in two Universities in Oyo State, Nigeria. The descriptive survey research design was employed to collect the requisite data. The data collected were analyzed using statistical measures of Mean, Standard deviation, Pearson Product Moment Correlation. A total of nine hundred and four secretariat staff was used for this study from the two universities. Two hundred and twenty-eight were purposively used for this study. A structured questionnaire was used. The overall reliability coefficient was established at 0.76 using Cronbach Alpha. The data collected were analyzed using frequency counts, percentage scores, mean, Pearson product moment correlation analysis. The study revealed that availability of ICT facilities, in-service training and constraints were significantly related to the use of ICT effectiveness and job performance of staff in order to provide them with necessary new skills in usage of ICT gadgets. Government should provide the necessary infrastructures like power supply, Wi-Fi for internet connectivity, conducive environment which are needed for effectiveness and efficiency in their job performance which will motivate staff to develop their skills in the usage of ICT.

**Keywords**: Information and Communication Technology, availability, in-service training, facilities, effectiveness and staff development.

#### Introduction

The history of secretarial profession shows that there were no secretaries until the Romans started it when they were using some people as scribes who took dictations from their bosses (Olayanju, V. T. 2018). The profession of secretary became much prominent in Nigeria in the 1990s when women were employed to assist some bosses in their day to day activities. However, there were few secretaries in the early 1990s because there were no institutions to train and retrain secretaries. There were typists and stenographers who were playing the role of secretaries. These 'secretaries' were trained in road side institutes. These institutes were makeshift ones and they did not have adequate machines and qualified trainers. In view of this their competence was doubted. In the late '90s, the states and federal government of Nigeria started institutes to train competent secretaries in Lagos and Kaduna. Admission requirements to these institutes were low. Later with the establishment of Polytechnics in Nigeria, they started training secretaries. In most Polytechnics now the departments that train secretaries are called Office Management Technology or Administrative Science. Previous researchers stressed that new skills in the use of computer-based digital technology among secretaries is drastically altering the way things are done administratively in their day to day activities in an organization and the improvement in technology tools is enhancing university education delivering in terms of administration, service and approach, and also the introduction and development in Information Communication Technology (ICT) have changed the methods and procedure of doing office work by the secretarial staff. (Margaret Moronke Dosunmu et.a. l, 2018; Kayode, 2016)

#### **DOI:** 10.21522/TIJAR.2014.SE.19.02.Art004 **ISSN:** 2520-3088



Many secretaries are now respected within the academic environment because they have improved themselves by acquiring university degrees in secretarial administration and this has added value to the profession.

Abosede and Akintola (2015) described a secretary as a person who has acquired the basic secretarial skills of shorthand and practical experience acquired in the office work, to be able to cope adequately with some office jobs such as typing of letters, filing, reception duties, keeping records, preparing itinery, answering of telephone calls and so on. They opined that a secretary does not only handle the typewriter/computer and writes shorthand but can also serves as an executive of an organization. The secretary has to be well equipped to meet the present challenges and the challenges of the future in a contemporary office. The previous studies collaborated and concluded that there will be 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 work (Igbinedion, 2010; Onifade, 2009Boladele, 2002;). Ekula (2010) also opined that in offices, computers, database management and other accessories are being used to organize and control records. Secretaries, who are officers in charge of office records and correspondences, are expected to operate the computer using database, spreadsheet, graphic designs and word processing packages. Essentially to be abreast of the use of these packages, secretaries are to go for training on the use of these packages in order to possess the mastery of the use of office related application packages.

The technology age has changed the ways things are done now. Most things including office duties are carried out online. Instead of the use of office files, most secretarial functions everywhere in the world have undergone technical changes, as a result of the introduction of many new offices technological equipment. Kayode (2016) said the use of technology and paper based used by secretaries has allowed organizations to get prompt information, communicate with each other, and also have an overall effect on the educational environment using computer tools or digital equipment positively. The International Professional Secretaries (PSI) at its meeting in 1998, in the United States described the secretary as "an individual who possesses the mastery of office skills, demonstrate the ability to assume responsibility without direct supervision, exercises initiative and judgment, and makes decisions within the scope of assigned authority". This new technology has increased access to information; there is no field of study that cannot be accessed through the internet.

The secretary has access to information at his or her disposal as a result of information technology tools. Also, it brings about convenience and flexibility; information could be processed with ease with the aid of technology utilization unlike the old method of using the typewriter. At the same time information could be processed and retrieved at any point in time with the help of new technologies. Most organizations resort to computerized means to save their records; hence secretaries must acquire the required skills to be able to adapt to the work environment (Dangata, Odesanya, & Baba, 2012). However, these new developments brought by technological challenges require even more knowledge and skills beyond being a professional secretary. For the secretary to be abreast with the changing times, face the challenges and overcome the old ways of doing things he/ she needs training requirements in recent times to help meet organizational objectives. The effectiveness of these functions depends largely on the availability, the needed competencies and skills acquired by the secretary in the modern office practice. Therefore secretaries who have not acquired the required skills, competencies, knowledge and abilities required for the use of these applications find it difficult to manage the new technology and as such left behind and become irrelevant thus render them redundant or thrown out of the job.

The evolution of Information Communication Technology (ICT) has had a large effect on the present-day world and innovations in telecommunications have affected every aspect of human enterprise all over the world. James (2013) say that technology has been a significant tool in almost all human endeavours. Appah and Emeh (2012) and Adedoyin (2010), also corroborated that information technology has affected every profession positively in the last twenty years. The integration of ICT in businesses and organizations has resulted in enhanced organizational performance both in developed and developing countries. Information and Communication Technology are anchored on communication gadgets, equipment or facilities which improve and

enhance the manner in which message is shared, relayed, disseminated, preserved and recalled for meaningful communication purposes (Akinyemi (2001).

The present world is a technology driven age and is now a global village. This integration gave rise to new distinct technologies, which radically change ways of administration, and part of the advantages in administration includes phenomenal growth of information and new ways of conducting business through the use of information communication technology. Das (2019) elaborated that Information and Communication Technology (ICT) has revolutionized the educational sector with emphasis on improved methods and efficiency in the management of educational sector.

Information communication technology is simply a way of processing, storing, and sending information electronically. In this way information is much more quickly processed and as earlier pointed shared, relayed, disseminated, preserved and recalled for meaningful communication purposes. Bradi et al (2008) believe that obtaining high efficiency and effectiveness in organizations requires investment in major technology components such as computers, internet, etc. Transmission of message is no longer a monotonous process rather it speeded up and it takes little time in terms of the urgent need of time and space. It has also affected the old patterns of communication whereby letters are no more sent by post, faxes have replaced telegrams, computers are now in use than typewriters and the old style of the use of darkroom has been overtaken by digital photography; saving cost and hours.

The emergence of ICT, as earlier pointed out, has transformed the way office is run and also affected secretarial efficiency and has made accessibility of information easy. According to Fagbamiye (2000),

The relevance of job performance is very crucial to the long-term growth of any occupational system around the world. It probably ranks alongside professional knowledge and skills, center competencies, educational resources as well as strategies, in genuinely determining career success. Performance is the ability to carry out a responsibility in accordance with laid rules. The rate and degree of performance is determined through evaluation which is the systematic way of estimating the worth, quality, importance and relevance of a program with a view to rating, correcting, improving or changing the system or program. It is frequently expressed that job performance is a function of ability and technology. Performance can be regarded as almost any behavior, which is directed toward task or goal accomplishment. The importance of technology, its impact on employee performance and motivation, are recognized by many human resource practitioners and organizations today.

Almost all organizations employ the use of Information Communication Technology (ICT) as a means to develop and introduce value adding and efficiency-enhancing innovations in the organizations thus leading to enhanced performance. Performance is a measure of how well ICT achieve its purpose and it has many different aspects to it. Effectiveness and efficiency are the two fundamental dimensions of performance. Adams et al. (2002) refer to effectiveness as the extent to which stakeholder requirements are met, while efficiency is a measure of how economically the firm 's resources are utilized when providing a given level of stakeholder satisfaction.

On the basis of what has been enumerated above, one can conclude that Information Communication Technology has created an environment that brought in impressive changes and revolution which affect the status of secretaries.

The duties of the secretarial staffs such as typing, mailing of letters that usually take time has to be done in seconds with high speed and accuracy. As opined by Nwaokwa and Okoli (2012), many secretaries lack the communication technology skills required in the various offices and this has greatly affected their performance.

What has been said above about job performance, efficiency and effectiveness in terms of organization could also be said about tertiary institutions. Modern day higher institutions also need to be highly technologized, that is they must employ ICT in the management of the universities hence they need to be ICT driven just like any organization as enumerated above. The purpose of this study is to find out the ICT effectiveness and job performance of Secretarial Staff in University of Ibadan and Ladoke Akintola University of Technology, Nigeria.

#### **DOI:** 10.21522/TIJAR.2014.SE.19.02.Art004 **ISSN:** 2520-3088

The study examines the facilities available on the use of ICT tools of secretarial staff. The study also investigates whether in-service training on ICT tools has influence on job performance of secretarial Staff. The study also determines the constraints in the usage of ICT on job performance of Secretarial staff. The following research questions will be examined

1. Research question 1. What is the availability of ICT tools in the two universities?

2. Research question 2. Does in-service training improve the job performance of staff?

3. Research question 3. What are the constraints in the effective utilization of ICT and job performance of staff?

As the population of both students and staff increases in the Universities, there is the need to computerize the system of the university in order to meet modern day best practices of the management of the institutions in the two universities. It seems most of the available computers in some faculties, departments of these institutions are not sufficient and are not connected to the server and there is unstable Wi-Fi and these might hinder the effective use of Internet facilities to aid staff job performance.

Despite the great changes that technology has brought to modern world, the use of ICT tools has not been utilized effectively in the management of the University of Ibadan, Nigeria and Ladoke Akintola University of Technology, Nigeria. The administrative staff in these two institutions has not undergone rigorous training in the use of Information Communication Technology (ICT).

Therefore, the competence in the use of computer which is not available in the performance of secretarial duties in these institutions demands some attention and this research is meant to address this shortcoming. This is the reason why there is the need to conduct research into ICT effectiveness and job performance of secretarial staff who are responsible for effective and efficient delivery of their duties.

There have been solutions proposed to these problems and they include the availability of ICT tools in the universities, constant power supply, training and retraining of staff in order to make them to handle modern state of the art ICT tools Ojohwoh, (2014). All these are important but the most vital one is the availability of constant power supply Egbokhare, (2011). This is important because without constant power supply the staff cannot perform their work effectively and efficiently. The secretary supplies the boss with information both from the telephone calls and the visitors, as such the secretary is termed the "house keeper of the office"; that is why some bosses are disorganized when their secretary is absent from work.

All these functions and responsibilities could be done better and faster with modern office automation and ICT tools. Many scholars and experts opined that coping with today's ICT challenges require better development of secretaries' abilities to tackle complex mental tasks, doing well beyond the basic reproduction of accumulated knowledge of the writing of shorthand and typewriting skills using the new skill computer-based tools. Efforts should be made by them to improve in developing the ICT competencies which involve cognitive and practical skills, creative abilities and others (Margaret Moronke Dosunmu et.al, 2018).

It has been observed that availability and adequacy of ICT resources for OTM (Office Technology and Management has imparted secretarial duties positively in their day to day activities and made today's office look more sophisticated and more interesting place of work (Amiaya, Anita Ogheneovo, 2013).

In spite of huge benefits of modern technology, there are still challenges faced by secretaries. These challenges are - inadequate availability of ICT equipment due to lack of fund to purchase the equipment in these two universities. Because of this little modern equipment is purchased and this is supplemented by obsolete ICT tools. This makes the work of secretarial staff not at a high optimum level. As earlier pointed out above, constant power supply is needed for the use of these ICT tools.

The study was restricted to two public universities in Oyo State, Nigeria. The study was restricted to the secretarial staff of university of Ibadan, Nigeria and Ladoke Akintola university of Technology Ogbomoso, Nigeria. They are in the same geographical area which is the south west of Nigeria. In the future the research could be extended to other areas in order to know the extent to which ICT is being utilized.

This study has revealed the extent to which ICT and its gadgets are been used effectively among the secretarial staff in the two universities in Oyo State, Nigeria. This has contributed positively to the growth of goals and objectives of each university making administrative tasks effective and efficient using their new skills to administer their day to day activities with the digital tools unlike olden days of using typewriter. Secretarial staff of this digital age has moved beyond the old system to new digital age of using ICT gadget for their operation in their various offices.

### Methods

The descriptive survey research design was employed to collect the requisite data. A total of nine hundred and four secretariat staff was used for this study from the two universities. Two hundred and twenty-eight were purposively used for this study. For the purpose of obtaining the internal consistency of the instrument, Cronbach Alpha reliability method was used in which the co-efficient value of 0.76 was obtained. The data were analyzed using descriptive statistic of mean and standard deviation for the research questions

#### Results

## Research question 1. What is the availability of ICT tools and job performance of staff in the two universities in Oyo state, Nigeria?

 Table 1. Pearson product moment correlation of availability of ICT tools effectiveness and job performance of secretarial staff

Variable	Ν	r-cal	r-tab
Availability of ICT tools	228	0.040	0.179
Job performance	228		

#### P<0.05

The table above shows positive and very low relationship between availability of ICT tools and job performance of secretarial staff in the universities. The result obtained from the analysis shows that the value of r-calculated (0.040) was less than r-table (0.179).

This shows that the result was not significant. Therefore, the null hypothesis was accepted. This means that there was no significant relationship between availability of ICT tools and job performance of secretarial staff.

## **Research** question 2. Does in-service training improve the job performance of staff of the two universities in Oyo State, Nigeria?

Table 2. Pearson product moment correlation of in-service training and job performance of secretarial staff

Variable	Ν	r-cal	r-tab
In-service training	228	0.427*	0.179
Job performance	228		

### P<0.05

Table 2above showed positive and moderate relationship between in-service training and job performance of secretarial staff. The result obtained from the analysis shows that the value of r-calculated (0.427) was greater than r-table (0.179).

This shows that the result was significant. This means that there was significant relationship between in-service training and job performance of secretarial staff. It also reveals that most universities do send their staff for training and retraining which has greatly contributed positively to the performance of staff and it has impacted on the efficiency of staff and the goal and objective of the universities.

## **Research** question 3. What are the constraints in the effective utilization of ICT tools in the two universities in Oyo State, Nigeria?

SN	Items	Agree		Disagree	
		F	%	F	%
1	Lack of internet connectivity	146	64%	82	36%
2	Irregular supply of electricity	164	72%	64	28%
3	Inadequate ICT facilities	174	76%	54	24%
4	Inadequate knowledge of some software packages	173	76%	55	24%
5	Lack of in-service training of staff on the usage of some ICT	171	75%	57	25%
6	Virus attack	176	77%	52	23%

Table 3. Constraints in the effectiveness of ICT tools in the two universities

In the table above, any score above 50% was a constraint to the use of ICT among secretarial staff in the two universities. Table 3 above revealed the challenges of using digital technologies by the respondents as constraints to the effective use of gadgets tools in their day to day activities. It showed in the table above that 64% of the respondents agreed that lack of internet connectivity is a constraint to the effective use of ICT tools as against 36% of the respondents who did not agree that lack of internet connectivity was a constraint for the effective use of ICT tools by the secretarial staff of both universities.

The table also showed that 72% of the respondents agreed that the challenge of irregular supply of electricity has been an issue in their efficient and effective use of ICT tools in their daily activities and their job performances as against 28% of the respondents who did not agree that irregular supply of electricity was a constraint to their job performances. This shows that some secretarial staff makes use of other alternatives such like generators to power their computers for electivity to carry out their day to day activities.

The table further showed that 77% of the respondents agreed that the challenge of inadequate Computer gadgets hindered the effective utilization of digital tolls by the secretarial staff of the universities as against 23% of the respondents who disagreed that inadequate ICT facilities was a challenge to the effective utilization of ICT tools by the secretarial staff of these universities. This further shows that some secretarial staff still depended on old modern system like typewriters to carry out their duties in their various offices.

The table 3 above also shows that 76% of the respondents agreed that the challenge of inadequate knowledge of some software packages served as constraints to the effective use of e-tools among secretarial staff of University of Ibadan and Ladoke Akintola University of Technology as against 24% of the respondents who disagreed that inadequate knowledge of some software packages was a challenge to the effective utilization of ICT tools by the secretarial staff of these universities. This shows that since majority of the secretarial staff of these universities do not have adequate knowledge of most software packages, this means that the old facilities (i.e. typewriter) were being used by these secretarial staff to carry out their day to day activities. Hence adequate training and retraining on these new skills in technology is required by these secretarial staff.

The table further showed that lack of in-service training of staff on the usage of some ICT was a constraint to the effective use of those facilities by the secretarial staff in the Universities in Oyo State. This was agreed upon by 75% of the respondents against 25% of the respondents who did not agree that lack of in-service training of secretarial staff on the effective use on ICT gadgets was a challenge. This shows that some of the secretarial staff still depended on their personal efforts to use the ICT in carry out their daily activities. Therefore, the secretarial staffs of these universities need training and retraining to acquire new skill in ICT in order to effectively carry out their assigned duties.

Lastly, the table showed that the challenge of virus attack was a constraint to most computers use among the secretarial staff as agreed, by 77% of the respondents as against 23% the respondent who disagree that virus attack was a constraint to the effective use of Computer tools by the secretarial staff of these universities. The table further showed that virus attack was a major constraint to most

application packages and since there is no alternative, the use of current anti-virus is important so that the secretarial staff of these universities can be able to use ICT tools and its facilities to carry out their day-to-day activities effectively.

#### Discussion

The results of the study were discussed based on the general questions raised and the hypotheses. The study was designed to explores that relevance of computer facilities moderately available in some department, units and it revealed that lack of electricity, internet facilities, lack of in-service training, inadequate knowledge has been of constraints in the use of ICT technologies effectiveness does not have negative effects in their job performance. Armah (2015) supported that advent of the ICT gadgets has helped to improve the performance of secretarial profession. Aromolaran (2003) said that the usage of ICT gadgets has greatly enhanced the performance of secretarial staff. He further explained that the impact of computer-based tools used on job performance of secretarial staff depends on the degree of technology or automation that is introduced with necessary and stable facilities, the secretarial staff is less weakness as the machines feeds itself, inspects its work, adjust it when the operation is unperfected and makes minor repairs.

Also, the result reveals that there was significant positive relationship between in-service training and job performance of secretarial staff. The need for a continuous pragmatic and systematic staff development program of an organization cannot be over-emphasized. Therefore, there should be capacity building often for secretarial staff in all the universities. This was in support of Bukhala (2004) who explained that the need to provide substantial, adequate and relevant training and retraining of secretarial staff was imperative for better performance.

This finding was also supported by Zymelman (2000) who outlined a number of benefits to be gained by training and retraining of employees. He reiterated that orientation and induction training programmes for instance, provide new employee the general information that they need about the new technology that will make them perform better on their jobs. Obayan (2005) in another related study also affirmed that investment in employees (staff training) is necessary to promote fluency in information technology and further opined that the training should be a career long process.

It tested the relationship between availability of CBMIS and Job performance of secretarial staff was accepted. Findings of this study also show that there is no significant relationship between availability of CBMIS and job performance of secretarial staff. However, this finding negates the findings of Nwosu (2000) who in their submission reported that for secretarial staff to contribute meaningfully to the achievement of the organizational goals and objectives, computer-based technology is as part of the facilities in carrying out routine jobs which must be readily available which will ultimately lead to better performance.

This view is also supported by Obilor (2008) who viewed perceived usefulness of computer-based management information system and its availability as being related to individual impacts because, such improved individual productivity. Also, Onasanya (2000) corroborated this assertion when he maintained that a committed secretary with required skills and such tools on CBMIS available will be able to take on the challenges and excel to the level of expertise in her profession.

Lastly, the result also showed that a positive relationship between constraints in effective utilization of ICT and Job performance of secretarial staff. This is as a result that several inhibiting factors have hindered the development of ICT tools.

The poor and inadequate facilities in the Universities will definitely affect the productivity of secretarial staff in these two institutions. Also, irregular supply of electricity and inadequate computer-based management system all makes the usage of this technology stressful to the secretarial staff. This result is corroborated by Obi (2003) who reported that all these inadequacies will lead to stress which is the reaction of individual to the characteristics of work environment and pose a threat to psychological capabilities of man. Akinyemi (2001) also affirmed that the functions and effectiveness of the secretarial staff in every business organization or institutions depend on the availability of office technologies as well as skills and competencies of the staff.

#### **DOI:** 10.21522/TIJAR.2014.SE.19.02.Art004 **ISSN:** 2520-3088

## Conclusion

Based on the findings and results of this research study, the researchers concluded that secretarial staff must be conversant with the modern use of ICT tools in order to improve their competence in the performance of their job. It is also important for the secretarial staff to be up to date in this globalized world to know the use of ICT for effective performance of their job. And this applies to the two universities that have been researched.

### References

[1]. Adedoyin, T. (2010). "I.T. Productivity Tools for Managing the Accounting Function", The Nigerian Accountant, 43(4): 30-36.

[2]. Appah, E. and Emeh, Y. (2011). "Information Technology and Internal Auditors' Activities in Nigeria", Asian Journal of Information Technology, 10(6): 201-208.

[3]. Armah, E. D. A. (2015). The Impact of Office Information and Communication Technology on the Performance of the Professional Secretary at the Ghana Ports and Harbours Authority, Takoradi. International Journal in Management and Social Science, 3(1), 365-373.

[4]. Aromolaran, E.A. (2003). An Evaluation of the Continuous Relevance of Secretaries in the Automated Office. Business Education J. 4 (1): 63-70.

[5]. Boladele, Y. (2002) Secretarial Efficiency in an Automated Office: Journal of The School Vocational and Technical Education (THE VAS JOURNAL), 7 (1): 123-134.

[6]. Bradi, M., Fellenz, M. & Brooks, R. (2005) "Researching the role of Information Communication Technology (ICT) in contemporary marketing practices", Journal of Business and Industrial Marketing, vol. 23 No. 2. Pp. 108 -114.

[7]. Dangata, J.N., Odesanya, T.A. & Baba, M.M. (2012). Emerging challenges in the integration of ICT with the curriculum of Office Technology and Management. Book of Readings (ABEN), 2(1), 17-22.

[8]. Deeter-Schmelz, D. and Kennedy, K. (2004)" Buyer-fellow relationships and information sources in an e-commerce world", Journal of Business and Industrial Marketing, vol. 19 No. 3, pp. 188-196.

[9]. Egbokhare, F.O. (2011). Challenges of secretarial administration in a globalized world. The Professional Secretary. Journal of the University Secretarial Staff Association (USSA)2(2), 1-5.

[10]. Ekula, I.O. (2010). Repackaging secretarial/office education curriculum towards achieving the objectives of vision 20:20:20. Journal of Vocational and Technical Education ABU Zaria 5 (1), 23-26. Government of South Australia.

[11]. Fagbamiye, E.O. (2000). Teachers remuneration condition of service; job satisfaction, attitude to work and job performance in Lagos State. In Fagbamiye, E.O. &Durosaro, D.O. (Eds.) Education and Productivity in Nigeria, Ilorin: Haytee Publishers & Co.

[12]. Geiger, S., and Turley, D. (2005) "Personal selling as knowledge-based activity: communities of practice in the sales force", Irish Journal of Management, vol. 26 No. 1, pp. 61-71.

[13]. Gichoya, D. (2005) "Factors Affecting the successful Implementation of ICT projects in Government", The Electronic Journal of e Government, vol. 3, No. 4, pp. 175-184.

[14]. Igbinedion, V.I. (2010). "Knowing the Graduate office Secretary", Ozean Journal of Social Sciences, 3(1): 116-120.

[15]. Iwe, J. (2005) Enhancing women's productivity in the library and Information sector in Nigeria" The Electronic Library vol.23 pp. 319 -332.

[16]. Jaiyeola, R. (2007). "Information Communication Technology as a Tool for Effective Performance of Chartered Accountants", The Nigerian Accountant, 40(1): 48-49.

[17]. James, B. (2013). Effects of Information Communication Technology on Secretaries' performance in Contemporary Organization in Bayelsa State, Nigeria.Journal of Information and Knowledge Management, vol.3, No. 5. ISSN 2224-896X (online).

[18]. Kombol, M. (2006). An Assessment of the pattern of ICT use among Nigerian Media Practitioners: Implications for Media relations Practices in Public Relations. Public Relations Journal 14 (1),11-27.

[19]. Obayi, A. U. (2007). ICT and economic empowerment: The challenges. A lead paper presented at the 4th Annual National Conference on Repositioning Technical and Vocational Education. EhaAmufu: Federal College of Education, 5-8 June.

[20]. Ojohwoh, R. (2014). Emerging challenges in the use of new technologies in implementing office technology and management programme in polytechnic. Nigeria Journal of Business Education 1 (3), 333-340.

[21]. Onifade, A. (2009). "The third millennium Secretary and Information and Communication Technology: Nigerian Experience", International Journal of Management and Information System, 13(2): 39-48.

[22]. Sayyed, M. A., Zahra, M., Zahra, S. E. Mohsen, K. B. (2011) An Assessment of the effect of Information Communication Technology on Human Resource Productivity of Mobarekeh Steel Complex in Isfahan (Iran). Science Direct. Procedia Computer Science 3 pp. 1321-1326.

[23]. Olayanju, V. T. (2018). THE CHALLENGES OF NEW TECHNOLOGIES ON SECRETARIAL PROFESSION. Nigerian Journal of Business Education (NIGJBED), 3(2), 77-85.

[24]. Kayode, A.E. (2016). Impact of Computer-Based Information Technology on Job Performance of Secretarial Staff in Nigeria" International Journal of Academic Research.www.texilajournal.com/academic-research/article/415-impact-of-computer-based.

[25]. Das, K. (2019). The Role and Impact of ICT in Improving the Quality of Education: An Overview.

[26]. Margaret M. D., Abolaji O. B, Olugbenga A., Akintola O. (2018). Influence of Office Automation on Secretarial Administrators' Effectiveness in Ogun State-Owned Universities.

[27]. Amiaya, Anita Ogheneovo. (2013). Adequacy of Information and Communication Technology Resources for Office Technology and Management Programme in Delta State Polytechnics. International Journal of Education and Research, Vol. 1.No. 11.

[28]. Zymelman M. (2000). The economic Evaluation of Vocational training Programmes: Baltimore & London: The John Hopkins University Press. P. 101.