



## Research Innovations in Office Technology and Management (OTM): Challenges and Implications for OTM Educators.

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### ABSTRACT

Office Technology and Management was formerly called Secretarial Studies and this came into existence as a result of advancement in technology. These new technologies have facilitated new business procedures from the traditional office of yester years to the electronic office. This paper therefore assessed the challenges of research innovations in the teaching of OTM courses for the standard delivery of the program in polytechnics. Our education system in Nigeria for sometimes now has been of great concern to Nigerians because the office environment is one of the places that have experienced great technology innovation in the past. OTM programs in the polytechnics are the major measure adopted by polytechnics in the country to produce graduate for the country's economy. Unfortunately, achieving its mandate has been hindered by poor delivery system through Information Communication Technology. It was concluded that research and innovation in OTM is inevitable for sustainable delivery of OTM. After the review of relevant literatures, the following recommendations among others were made: Teachers must be properly trained in ICT skills and knowledge. Steps should be taking by stakeholders to continue in research innovation in OTM program in order to attain global standard in terms of new technologies the graduates will eventually meet in the modern world.

**Keyword:** Research Innovation, Sustainable Delivery, Challenges, ICT

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### 1. INTRODUCTION

Research innovation in office technology and management has brought about a load of new office practice opportunities and innovations, it has also reshaped the way information is created, stored and disseminated, the role of secretaries has changed tremendously from that of typewriting and shorthand, answering phone calls and processing of mails to information and communication technology. Yet several novel challenges and uncertainties are faced by the graduates in this quest - as pointed out by Adunfe (2005). With these advanced office technological supports and their diverse challenges, Udoh (2008) emphasized that today's graduates must be fortified with the competencies to perform efficiently in the workplace. Poor delivery system has impaired realization of the objectives of Office technology and Management Program. Most Polytechnics offering office technology and Management are faced with diverse challenges and have since affected the quality of their outputs (graduates).

Office Technology and Management (OTM) is sometimes called office or secretarial education. Office technology and management or Secretarial Education is a vocational business education program designed purposely to educate and train students to become secretarial teachers and office administrators.



It equipped students with the appropriate skills and competencies needed to take up a career in office occupation and business (Amoor & Udoh, 2008). Technology has reshaped the way information is created, stored and disseminated. As a result of changes in technology, the role of secretaries has changed tremendously from that of typewriting and shorthand, answering phone calls and processing of mails to information and communication technology. ICT is the technology required for information processing, in particular, the use of electronic computers, communication devices and software applications to convert, store, protect, process, transmit and retrieve information from anywhere, and at any time. According to Okolo (2001), Information Communication Technology is concerned with the managing and processing of information through the use of electronic computers and computer software to convert, store, protect, process, transmit and retrieve information. It is the handling and processing of information for use by means of electronic and communication gadgets such as computers, cameras, telephones among others. The advent of the internet and computer technologies has changed the role of secretaries, which has resulted in the loss of jobs of 18 most secretaries. Individuals preparing for a career path in OTM should possess skills on how to use the internet to facilitate communication in the office, should be able to use current computer software in word processing and spread sheets, software presentation, desktop publishing packages, computer packages in managing information, perform electronic inventory control, data management software, webpage design, etc. Secretarial Education provides knowledge, skills, competencies and attitudes needed for would-be secretaries to function well in office.

Similarly, Tinio (2003) stressed that secretarial education provides students with adequate skills, information and competencies needed to function well in office occupation. It is a program of study that focuses on developing the knowledge, skills and competencies needed to function effectively in the world of work especially as secretary or office manager. An office manager or a secretary is an executive assistant who possesses a mastery of office skills and who demonstrates the ability to assume responsibility of managing an office without direct supervision (Ekpenyong, 2005). Office technology and management is a vocational business education program that is offered in tertiary institutions (Polytechnics, Colleges of Education and Universities)

Tertiary institutions are those institutions of higher learning that provide formal education for youths after their secondary education. According to National Policy on Education NPE (2004), tertiary education is the education offered after secondary education in institutions like polytechnics, colleges of education, universities as well as institutions that offer correspondence courses. For the purpose of this study, tertiary institutions refer to three higher institutions namely: polytechnics, colleges of education and universities. Federal Republic of Nigeria stated in NPE (2004) that the goal of tertiary education is to acquire physical and intellectual skills which will enable an individual to be self-reliant and be a useful member of the society. To be a useful member of the society, one need to acquire skills and knowledge from various disciplines offered in tertiary institutions including office technology and management. The success or otherwise of any tertiary institution program depends largely on the quality of its graduates’.

## **2. ORIGIN OF OFFICE TECHNOLOGY AND MANAGEMENT EDUCATION**

Office Technology and management started in the United States of America in the 17th and 18th centuries as secretarial studies. By the 19th and 20th centuries the course expanded rapidly to some developed countries and spread to developing countries (Wikipedia, 2012). Wikipedia (2012) stated that today, Office Technology and Management is a specialized phase of vocational education that prepares students to enter teaching and office occupations as capable and intelligent members of the labour force. Women are no strangers to Office Technology and Management education. They started to enter the vocation in the late 1880s about the same time when the adding machine, typewriters and telephone were invented. Since then secretarial education has undergone a lot of transformation in all ramifications in order to meet changing office work and environment.



The information and communication technology has taken secretarial education beyond the level imagined by its inventors. It has also provided job opportunities for both women and men. The use of office managerial services permeates all facets of a country's socio-economic and political life. For example, Office managers – products of Office technology and management education – usually work in offices with other professionals in schools, hospitals, corporate settings, or in legal and medical offices. Office managers and administrative assistants are employed in organizations of every type. They are employed in firms providing services ranging from education and health to legal and business services. Others work for firms engaged in manufacturing, construction, wholesale and retail trade, transportation, and communication. Banks, insurance companies, investment firms, and real estate firms are also important employers, as well as Federal, State, and local government agencies. This non-restrictive nature of office managerial services provides its recipients with wide access to job employment opportunities.

From the pervasive nature of office managerial services, it is clear that virtually all spheres of life need office technology management intervention. All organizations need good information management systems, good record keeping for effective competitiveness and profit making. Secretarial education has been evolving and developing with the advancement in office work and technology. As a response many tertiary institutions in Nigeria have now changed the nomenclature from Secretarial Education/Studies to Office Technology and Management. It portrays responsiveness to global changes in office and secretarial work especially with the application of information and communication technology to office secretarial practices. This new perception has opened a wide vista in the development of new skills in the secretarial vocation and has helped in the creation of many new jobs and job opportunities for office technology and management graduates and other office managerial operatives (Wikipedia, 2013).

From the foregoing, it is obvious that office managerial work keeps expanding and has a lot of room for initiative and abilities to improve organizations wellbeing. Many IT job/career opportunities have been created for competent office technology management graduates and other office managerial operatives. The acronym ICT which means Information and Communication Technology simply relates to those technologies that are used for accessing, gathering, manipulating, storing, presenting or communicating information. United Nations Educational, Scientific and Cultural Organization (2007) defined ICT as forms of technologies that are used to create, store, share, transmit, or exchange information. It includes such technologies or resources as radio, television, video, DVD, telephone and network hardware and software as well as services associated with these technologies such as video-conferencing and electronic mail. Similarly, Tinio (2003) submitted that ICTs are diverse set of technological tools and resources used to communicate, create, disseminate, store, and manage information. The most significant about ICT is the increasing convergence of computer-based, multi-media and communications technologies and rapid rate of change that characterizes both the technologies and their uses (Mandara & Paul, 2012). Nwadiani (2015) explained that ICT in the education process has been divided into two broad categories namely: ICTs for Education and ICTs in Education. In order to accomplish the aim of OTM in tertiary institutions and as well ensure quality of products in this global age, the systems must function in line with application of ICT resources in teaching and learning.

Teaching is a deliberate and conscious effort of imparting the totality of education to learners at any level of education. The totality of education here includes knowledge, skills, values, vocations, culture, and attitude. In the view of Filani (2010), teaching is a systematic process of imparting desirable knowledge, values, attitude and skills to the learner. Adunfe (2005) noted that teaching is a communication process that involve the sender (teacher) sending the message (content) to the receiver (students) which later send the feedback (through evaluation). Today, effective teaching exercise requires the use of ICT facilities in line with subject and pedagogical procedures to impart necessary skills to the learners. The integration of information and communication technology in teaching is a central matter in ensuring quality of business education which includes OTM (Okolocha & Nwadiani, 2015).



The role of ICT in teaching and learning cannot be overemphasized. The use of ICT resources in instructional delivery arouses the interests and active participation among learners in OTM which in turn contribute to quality assurance of the program (Mandara & Paul, 2012). According to Sadkar and Sadker (2003), students can have lessons presented with presentation software, simulate situations, build their own knowledge, improve their knowledge base, explore authentic issues, work with peers and experts across the globe, select the mode they prefer and work at their own pace. Mandara & Paul (2002) noted that when ICT are use appropriately, it will help to help expand OTM students access to information, strengthen the importance of the program to increasingly digital workplace, and raise the program quality. It will assist in making teaching and learning more engaging and active by connecting theory to real practical life. The above benefits of ICT to education showed that a systematic quality assurance in the teaching and learning of OTM courses is possible with utilization of information and communication technology (ICT) resources (Okolocha & Nwadiani).

Over the years, the challenge in office technology and management programme in tertiary institutions in Nigeria has been the quality of the graduates in relation to technological advancement in the labour market. Onasanya (2010) asserted that most tertiary institutions lecturers in Nigeria lack adequate pedagogical knowledge for effective utilization of ICT resources for teaching. Also, the issue of utilization of ICT resources is directly connected to availability because one cannot use what is not available. It is uninteresting and common to see most OTM graduates enroll in computer or ICT centres to acquire those ICT skills which ought to have been mastered in their tertiary institutions days (Mandara & Paul, 2012). There seems to be a gap in the practical skills acquisition especially in the area of ICT skills in the present teaching of OTM courses. From the studies carried out by Kelly (2004) it was revealed that ICT application in tertiary institutions fall below expectation. Okwudishu (2005) and Nworgu, B.N. (2007) discovered that the non-availability of some ICT resources in schools hamper educators utilization of ICT resources in teaching. Similarly Mandara and Paul (2012) found that ICT facilities were not utilized in teaching office education students in Adamawa state while Okolocha and Nwadiani (2015) discovered that few ICT resources available were rarely utilized in south Nigeria. To the knowledge of researchers, there are however no published empirical evidences to ascertain the actual situation regarding the extent of availability and utilization of ICT resources in teaching of OTM courses in tertiary institutions. Therefore, the paper was carried out to assessed the research innovations in the teaching of OTM courses for the standard delivery of the program in polytechnics.

### 3. CHALLENGES OF RESEARCH INNOVATIONS IN OFFICE TECHNOLOGY AND MANAGEMENT

An innovation is an idea, practice or object that is perceived as new by an individual or other object of adoption, it matters little, so far as human behavior is concerned, whether or not an idea is objectively new as measured by the lapse of time since its first use or discovery. (Rogers, 2003). This research innovation has played a significant role in the implementation of OTM curriculum and this has made some of the professional courses computer based carrying high practical unit. Suarez, D. Challenges which are as follows:

1. Epileptic Power Supply: Inadequate power supply is one of the major constraints for the use of new technologies. Information Technology gadgets required regular supply of power if the students is going to make maximum use of the equipment. High cost of installing and maintaining high capacity power-generating sets makes the alternative source of power out of reach and it has negative effect on the quality of the program.
2. Paucity of qualified ICT Personnel: Availability of new technology in OTM is not enough than to employ ICT personnel that will operate such equipment and absence of highly skilled information technologies engineers and expert in IT innovations makes it less accessible. Where there are technicians, maintenance and repairs are costly.



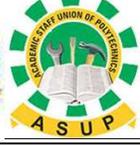
3. Inadequate Supply of ICT Equipment: Inadequate equipment and facilities can affect the effective delivery of knowledge. Olaitan (1996) in his remark that the condition under which OTM Education is poor and most Nigeria Polytechnics lack equipment for training, lack workshop and workshop facilities, have ill-equipped laboratories and libraries. OTM Education is the type of education that prepares its recipients for the world of work and so the students are supposed to be exposed to a work environment which will enable them to fit in and outside the school environment.
4. Incessant Strike Action: Disruption of academic activities occasioned by staff unions and students unrest negatively affects research innovations, definite and indefinite strike actions in Nigeria Higher Institutions has been regarded as one of the utmost and disheartening challenges affecting implementation and proper usage of new technologies in OTM Education and this by one way or the other has caused a tremendous damage to OTM products
5. Inadequate Funding: Inadequate funding of OTM education has been a problem in the implementation of new technologies and examination of office technology and management education in Nigeria Schools and Polytechnics. OTM education is practical oriented; the absence of equipment and facilities due to inadequate funding will affect the competency of the product. i.e. Higher Institution graduates
6. High Enrolment Figures of OTM Students: There is always a problem of high enrolment figures of students for Office Technology and Management Studies. The population of the students is more than the number of equipment available. Prior to this, large population of OTM students makes equipment less accessible.
7. Lack of qualified lecturers: Lack of qualified lecturers to handle or teach information technology related subjects. It is the responsibility of the lecturer to utilize the instructional resources for the maximum benefits of the students.

The above Challenges can be resolved by the following suggestions:

1. Personal procurement of specific modern office machines and software
2. Willingness to be engaged in lifelong learning programme
3. Helpful collaboration with other staff by being a good team player
4. Willingness to fashion ways to improve the techniques to perform secretarial and related job functions
5. Engaging in productive social networking activities
6. Willingness to accept changes in working patterns and practices
7. Readiness to indulge in self-investment and development
8. Installation of premium antivirus and antimalware software programme
9. Mandatory relaxation at work during break time
10. Implementation of protected back-up and disaster-recovery plans
11. Assessment of performance and work measurement
12. Mental alertness and willingness attitude

#### 4. CONCLUSION

Based on the findings of the study, it was concluded that ICT resources were not available for teaching OTM courses and this situation with other factors brought about poor utilization of ICT resources for teaching OTM courses in Nigeria Polytechnics. Though, ICT resources utilization in teaching of OTM courses has significant influence on quality of OTM products especially in this technological era but a lot of factors hindered the effective utilization of ICT resources in teaching of OTM courses in Nigeria Polytechnics. Tertiary institutions need to be proactive in the utilization of ICT resources in order to ensure quality of OTM graduates that will be relevant in technological era and global labour market driven by the use of ICT.



## 5. RECOMMENDATIONS

Based on the findings and conclusions, the following recommendations were made:

1. Government at the federal and state level should prioritize the funding of education sector especially skill courses like OTM to enhance the procurement of ICT resources for effective educational activities in Nigeria Polytechnics.
2. Polytechnics Management should engage lecturers in training and re-training program to update their ICT knowledge, skills and competencies to ensure effective utilization of available ICT resources.
3. Government should make stringent policy through NBTE accreditation exercise to enforce and strengthen utilization of ICT resources to support learning and other programmes of the Nigeria Polytechnics.
4. Management of OTM or Secretarial education department should develop sustainable preventive and corrective maintenance culture by servicing and repairing the available ICT resources.



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