



EXTENT OF THE USE OF ELECTRONIC SYSTEMS IN OFFICES AS PERCEIVED BY GRADUATE SECRETARIES WITHIN THE POLYTECHNICS IN TARABA STATE

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Abstract

Courses in electronic systems are embedded in the Office Technology and Management Technology programme of the Nigerian Polytechnics. Graduate secretaries on completion of their studies, should have acquired sufficient practical skills for work. The graduate working secretaries ought to perform their functions at work places in line with their acquired skills. Offices at present are highly improved such that contemporary office practices are intertwined with the recent developments in the e-world. This study was undertaken to determine the extent of use of electronic systems in offices as perceived by graduate secretaries within the Polytechnics in Taraba State. Five segments of the electronic systems including: Electronic Publishing System, Electronic Communication System, Electronic Collaborating System, Image Processing System and Office Management System were studied. Five objectives and five research questions guided the study. Descriptive survey research design was used for the study. The population of the study from the two Polytechnics within Taraba State was 41. All were studied as no sample was taken due to the sizeable number. The instrument for data collection was a thirty item structured questionnaire. Mean was used as the statistical tool to determine the opinions of the respondents based on a five point Likert scale at demarcated boundary limits. It was discovered that of all the studied systems, the Electronic Collaborating System and Office Management Systems are not sufficiently in use largely due to the fact that most of the secretaries were not conversant with them. It was recommended among others that; curriculum planners should occasionally scan the work environment to determine nascent developments that should be incorporated in the course curriculum of Office Technology and Management.

Key words: *Office Technology and Management, Graduate Secretaries, Electronic Systems.*

Introduction

The Office Technology and Management (OTM) programme is one of the courses in the Nigerian Polytechnic System designed for the training of secretaries and office personnel. It was initially known as Secretarial Studies. Ogheneovo (2016) averred that it was designed by the National Board for Technical Education to replace the Secretarial Studies programme. Through the OTM programme, secretaries were often equipped for industries and the business world. Initially, very high emphasis was placed on acquisition of skills in Shorthand and Typewriting and some other office skills and just a course in Word Processing which was computer based. Following developments in Information Technology and its increased utilization and patronage, the curriculum of Secretarial



Studies was restructured. The Secretarial programme was designed to award National Diploma on completion of two years training. A Students Industrial Work Experience Scheme was expected to be undertaken on completion of the first two years after which another two years' training for Higher National Diploma is often certificated on completion. The four semester programme is designed to equip students with secretarial skills for employment as secretarial managers in various organizations (NBTE, 2004). The need to enhance the employability of secretaries in the new dispensation gave impetus to the restructuring of the programme.

The restructuring brought about the introduction of several courses in Information and Communication Technology (ICT) in keeping with current development in the ICT world now tagged the e-world. The e-world exerts a direct influence on what goes on in the contemporary offices. With the restructuring, it is expected that graduate secretaries would be equipped to work in the contemporary offices. The offices in the Polytechnic within Taraba State are contemporary in nature and therefore have a tinge of electronic nature.

The contemporary office portrays a paradigm shift from the traditional office where hard copies and non-electronic means of processing, storage and dissemination of information held sway. Offices at present are highly improved such that contemporary offices are adorned with electronic gadgets in line with recent developments in the e-world. Contemporary offices are now tagged electronic offices (e-offices).

The electronic office or e-office, was a term coined to cover the increasing use of computer-based information technology for office work, especially in the 1980s. It was a popular marketing buzzword during that era, but is no longer so widely used since all modern offices are electronic offices (Fenner, 1996). According to Ojo and Akhademe (2016) e-office is an office that is equipped with modern technologies like computer, projectors, printers, scanners, etc. Fenner further asserted that the general objective of e-office adoption was the elimination of paper and converting most or all office communications to electronic form. The definition of electronic office often allude to the following

The introduction of individual computers running office software applications, such as work processors,

The interconnection of office computers using a local areas network LAN), or

The centralization of office functions via collaborative software (i.e., groupware), which was later superseded in many contexts by web applications.

The introduction of e-office improves accuracy and efficiency of organizations and thereby enhance their level of services, while theoretically lowering costs and drastically reducing the consumption of paper. The immense benefits accruing from the emergence of e-office are unquantifiable. Notwithstanding this fact, the electronic office provides affordable, expert service by utilizing a blend of remote management tools, help desk support, and local onsite professionals. Information Technology services that enable the electronic office are a proactive solution that identifies potential problems and resolves incidents that impact business productivity. Nwosu and Ojo (2014), asserted that the emergence of new technologies such as the internet, computers, interactive multimedia systems, digital telecommunication, among others have altered theoretical and practical assumptions about the role of communication technologies in development. Although many documents, especially those that require signatures or other legal formalities and still being



printed out and circulated on paper, the e-office remain the trend. The e-office is all about office automation. Ayandele and Adeoye (2010) highlighted the following as electronic systems that make up the bulk of office automation in organizations.

Electronic Publishing Systems which incorporates word processing and desktop publishing. These enable electronic publishing capabilities in e-offices. While word processing uses and manipulates computer systems to create, edit, review and print text materials as documents, desktop publishing involves the manipulation of computer systems in the design and printing of news letters, brochures, manuals and books with several styles, graphics and colours on each page.

Electronic Communication Systems. This incorporates electronic mail (e-mail), voice mail, bulletin board and facsimile messages. It transmits and distributes texts and images in electronic form over telecommunication network and thus eliminates and reduces paper works.

Electronic Collaborating Systems. This incorporates electronic meeting systems, computer conferencing and telecommuting.

Image Processing Systems. This allows end users to electronically capture, store, process and retrieve images of documents. This also includes presentation graphics and multimedia presentation.

Office Management Systems. This include electronic calendars, electronic mail directories, schedulers and task management systems thus eliminating the laboriousness of planning with paper calendars, appointment books, directories, file folders, memos and notes

The Polytechnics as a learning environment, transacts a lot of academic, business and information daily. The Polytechnics is a hypermedia learning environments. Scheiter and Gerjets (2007) opined that, hypermedia learning environments consist of network-like information structures, where fragments of information are stored and can be accessed by electronic hyperlinks.

Secretaries in the Polytechnics are the handlers and managers of information in the Polytechnics. These services are made possible by technology dynamics. Oguejiofor and Umeh (2016) assert that these technologies are becoming obsolete, others are emerging with more complexities in operations and application. Nwosu in Oguejiofor and Umeh submitted that secretaries today require new sets of skills and competencies in the application of office functions for information processing management, employment, office productivity, job retention, job success and job satisfaction. This assertion is buttressed by the fact new machines requiring new skills are emerging every day. Okoji (2006) stated that there are now copiers that can enlarge, reduce and also print in colour with microprocessors that enable connection to computers. Fadare (2011) also mentioned telephone writers that transmits handwritten messages and sketches to any number of receiving stations over any distance in the form of electronic jotting pad which may be connected to any ordinary telephone. If secretaries must perform duties optimally, a level of competence in the utilization and manipulation of these electronic systems must be attained. Where these skills are not in use, the office operations will not keep step with developments in this dispensation.

An initial effort was made to identify graduate secretaries in the two Polytechnics within the State. The Federal Polytechnic, Bali and The State Polytechnic Suntai are the two Polytechnics in Taraba State. The Secretaries in these institutions, by virtue of their knowledge and work experience,



are well equipped to determine the extent of use of electronic systems which formed an enormous component of their practical training while in school.

Statement of the Problem

The degree of use of electronic systems in offices, to a large extent, depends on the competence of individual secretaries. Secretaries who loathe change and find it difficult to adopt innovation might not easily adapt to this changing times. Attitude to innovation might influence adaptation to new development. How people respond to change affects their personal performance and the results they achieve. Similarly, the way organizations respond to change is mark of their performance and success, and is often reflected in their bottom line and the challenges they face. Regardless of the nature of the challenge, the way we respond to change affects our performance and the ultimate result. It is much easier to cope with change if we have a positive attitude to changes in general.

Notwithstanding the enormous benefits from utilizing electronic systems in offices, several secretaries are either not fully acquainted with different packages of the systems or are lazy at acquiring the skill for utilizing them. The result of this situation is that several secretaries, though trained, are unable to perform optimally in electronic offices. Administrative bottle-necks, halfhearted performance of tasks, ineffective control and ignorance of administrative procedures that is the bane of several offices and organizations, with the Polytechnics inclusive, may be traced to attitude of secretaries towards the use of new automaton or electronic systems. These attitudes persist, despite the fact that utilization of these systems are taught in schools where these secretaries graduated. We have cases of some graduate secretaries that related accounts of their inability to succeed in employment interviews partly because they were unable to handle some electronic systems. The two Polytechnics in Taraba State might be facing difficulties in information handling if the secretaries are not electronic systems compliant. It is against this background that this study was undertaken to determine the extent of use of electronic systems in offices as perceived by graduate secretaries within the Polytechnics.

Purpose of the Study

The major purpose of the study is to determine the extent of use of electronic systems in offices as perceived by graduate secretaries within the Polytechnics in Taraba State. Specifically, the study is designed to:

- Ascertain the extent to which graduate secretaries use Electronic Publishing System in their offices within the Polytechnics in Taraba State
- Determine the extent to which graduate secretaries use Electronic Communication System in their offices within the Polytechnics in Taraba State.
- Find out the extent to which graduate secretaries use Electronic Collaborating System in their offices within the Polytechnics in Taraba State
- Verify the extent to which graduate secretaries use Electronic Processing System in their offices within the Polytechnics in Taraba State.
- Identify the extent to which graduate secretaries use Office Management System in their offices within the Polytechnics in Taraba State.



Research Questions

The following research questions guided the study:

What is the extent to which graduate secretaries use Electronic Publishing System in their offices within the Polytechnics in Taraba State?

What is the extent to which graduate secretaries use Electronic Communication System in their offices within the Polytechnics in Taraba State?

What is the extent to which graduate secretaries use Electronic Collaborating System in their offices within the Polytechnics in Taraba State?

What is the extent to which graduate secretaries use Electronic Processing System in their offices within the Polytechnics in Taraba State?

What is the extent to which graduate secretaries use Office Management System in their offices within the Polytechnics in Taraba State?

Methods

The study adopted a survey research design. Survey research design is a method of sociological investigation that uses question based or statistical surveys to collect information about how people think and act. The study was undertaken in Taraba State. Taraba State is located in the North Eastern part of Nigeria and two Polytechnics (Federal Polytechnic, Bali and State Polytechnic Suntai) are the main target of the study which are located in the State. The population of the study comprised all the graduate secretaries in the two Polytechnics (Federal Polytechnic, Bali and state Polytechnic, Suntai) Taraba State. The total population for the study was 41. Since the population was considered handy, no sample was taken. The entire population of 41 was therefore studied. Entire population can be studied when the characteristics is unique and the distance is convenient to the researcher. The structured instrument for data collection was titled "Graduate Secretaries' Utilization of Electronic Systems Questionnaire" (GSUESQ). It was designed and developed by the researchers. The instrument consists close ended questions that were designed to answer the five research questions. The constructs were measured using five point Likert scale of Very High Extent (VHE) 5 points with boundary limits of 4.50-5.00, High Extent (HE) 4 points with boundary limits of 3.50-4.49, Moderate Extent (ME) 3 points with boundary limits of 2.50-3.49 Low Extent (LE) 2 points with boundary limits of 1.50-2.49 and very Low Extent (VLE) 1 point with boundary emits of 1.00-1.49. The instrument was validated by two experts. The inputs from the validates were used in improving the quality of the GSUESQ. A total number of 41 questionnaires were administered and all of them were collected by the researchers. Mean was used as the statistical tool to determine the opinions of the respondents and the decision rule was based on the boundary limits.

Results

Research Question 1

What is the extent to which Graduate Secretaries use Electronic Publishing System in their offices within the polytechnics?



S/N	Electronic Publishing System	X	Decision
1.	Conversance with desktop publishing as one of the information technologies facilitates the processing of information.	4.63	VHE
2.	Operation of Word Processors as publishing system allows the creation, editing, revision, printing of text materials and improves productivity.	4.85	VHE
3.	Skill in the use of desktop publishing enables one to design and print newsletters, brochures and manuals.	4.61	VHE
4.	Capability in the use of electronic publishing systems has transformed the office into an in-house publisher documents	4.42	HE
5.	Page formatting involving modification of page margins, page orientations, page borders, colour header and footing is a feature that can be used often in a computer.	4.81	VHE
6.	Capability of printing all kinds of documents using the computer is essential for today's secretary	5.00	VHE

The entire items in this table (items 1, 3, 5 and 6) have mean scores above 4.50 and item 4 has a mean score of 4.42. It therefore follows that all the items are either utilized at high extent or very high extent.

Research Question 2

What is the extent to which Graduate Secretaries use Electronic Communication System in their offices within the polytechnics?

S/N	Electronic Communication System	X	Decision
7.	The electronic communication systems are central nervous systems of today's organization and demands constant utilization.	4.82	VHE
8.	Today's communication using e-mail demands constant usage, thus necessitating the required skill for its usage.	4.98	VHE
9.	Skills in storing and forwarding of voice messages on the magnetic disk devices of the computer system are often utilized in today's communication.	3.51	HE
10.	An electronic bulletin board system (BBS) allows one to post public or private messages that other end users can read by accessing the BBS with their computers	3.64	HE
11.	Facsimile allows one transmit images of important documents over telephone or other telecommunication links and this can easily be used.	3.50	HE
12.	With only a few minutes of effort (and a microseconds of transmission), one can compose, send and receive messages to others using electronic mail.	4.98	VHE

The items in this table (items 7, 8, and 12) have mean scores above 4.50 implying that they are utilized at very high extent. Items 9, 10 and 11 have mean scores between 3.50 and 3.64 implying that they are utilized at high extent.



Research Question 3

What is the extent to which Graduate Secretaries use Electronic Collaborating System in their offices within the polytechnics?

S/N	Electronic Collaborating System	X	Decision
13.	Electronic collaborating systems enables organizations and people to attend meetings and conferences away from normal work locations and people utilize it.	1.48	VLE
14.	Organizations utilize computer conferencing which involves the use of online terminals and workstations in the conduct of conference among participants at remote sites over a period of time, without the use of interactive video.	1.32	VLE
15.	Skill in the use and creation of yahoo and google groups is essential for secretaries.	1.79	LE
16.	Skills in telecommuting that allows the use of telecommunication to carry on work activities from temporary locations other than offices and homes are required by secretaries. Secretaries are sometimes involved in organizational conferences 1.21 VLE which are made possible using meeting rooms with network of workstations and large screen video projection for meetings. Experience in the use of electronic meeting system enhances the 1.33 VLE productivity of secretaries.	1.83	LE

The entire items in this table (items 13, 14, 17 and 18 have mean scores of 1.21 to 1.48. This implies that all the four items are utilized at very low extent. Items 15 and 18 have mean scores of 1.79 and 1.83 respectively implying that they are utilized at low extent.

Research Question 4

What is the extent to which Graduate Secretaries use Image Processing System in their offices within the polytechnics?

S/N	Image Processing System	X	Decision
19.	Graphics presentation to provide information in a graphical form eases business proposals and enables business decisions.	3.50	HE
20.	Line and bar graphics, pie charts and pictorial charts and variety of symbols in graphics presentation are essential features that secretaries must use in the office.	4.28	HE
21.	Secretaries should be conversant with making of reports and display of numbers and text materials using power points.	3.62	HE
22.	Texts, graphic display, voice and other digitized audio, photographs, and video clips can be possible using slide show and secretaries should be conversant with them.	3.51	HE
23.	Knowledge of the use of graphics enables one to analyze and interpret information presented to them.	3.57	HE
24.	Electronically, secretaries can capture, store, process and retrieve images of documents that may include numeric data, text, handwriting, graphics and photographs using electronic image system.	4.48	HE

All the items in the table (items 19, 20, 21, 22, 23 and 24) have mean scores from 3.50 to 4.48. This indicates that all of the items are used at high extent.

Research Question 5

What is the extent to which Graduate Secretaries use Office Management System in their offices within the polytechnics?

S/N	Office Management System	X	Decision
25.	Secretaries are aware and utilize office management system including electronic calendars, electronic mail directories, schedulers and task management systems, in office operations.	2.31	LE
26.	Secretaries have the capability of entering data and time of meetings into electronic calendars.	1.58	LE
27.	Electronic calendars of several people are used by secretaries for scheduling meetings and other related activities.	2.43	LE
28.	Secretaries have the capability of utilizing desktop accessory features such as calculator, notepad, alarm clock, phone directory, and appointment book that pop-up in a window on the display screen of secretary's workstation at the touch of a key.	1.59	LE
29.	Electronic mail directories are used to help contact people easily.	2.41	LE
30.	Electronic tickler file that automatically reminds secretaries of important events are utilized by secretaries.	1.78	LE

The entire items in the table (items 25, 26, 27, 28, 29 and 30) have mean scores between 1.58 and 2.43. This implies that all the six items are utilized at low extent.

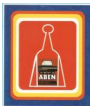
Discussion of Finding

The results of the analysis in tables 1 to 2 are quite revealing. They reveal that the secretaries' usage of electronic publishing system and electronic communication system are to a large extent very high in most cases. The secretaries' usage of image processing system is quite moderate. However, the secretaries' usage of electronic collaborating system and office management system are shown to be relatively awful. These systems are either lowly in use or used at very low extent. In this era where electronic usage holds sway, the researchers wonder how these offices operate in keeping with current realities. It cannot be said that these systems are not available for use since there is hardly any office where computers are not in use. An inference from this study suggests that it is either the graduate secretaries are not taught the skills while in school or they were taught but do not have mastery of the skills. This opinion is in line with the conclusion of Mamman and Oyinloye (2016) in their study on perceived influence of cutting-edge teaching/learning methodologies on the acquisition of 21st century business skills. They concluded that when students are taught using these methodologies, they would become more relevant in the 21st century world of work.

It may be argued that some of these courses were not taught to students before they graduated. Sometimes, training institutions lack the desired training equipment. Development in the e-world has been very vibrant and the existing OTM curriculum was first reviewed in 2004 after operating for many years. It is doubtful whether current teachings reflect these changes.

Conclusion

This study has exposed the fact that while the secretaries have the skills for three of the studied systems, skills for two of the systems, though vital, are hardly in use. If our contemporary offices must keep pace with nascent global developments, the training institutions must take necessary steps to address the situation.



Recommendations

In view of the foregoing the following are recommended:

Heads of the Departments of OTM should monitor the supervision of practical courses in their departments in order to ensure that the various ICT courses, as provided in the OTM curriculum, are properly taught to students before they graduate.

Curriculum planners should occasionally scan the work environment to determine nascent developments that should be incorporated in the course curriculum of Office Technology and Management.

The National Board for Technical Education should change their curricular every two to three years in order to ensure that the content of their teaching reflect the rapid advancing frontiers of scientific knowledge.

Heads of Departments of OTM should ensure that they make case for capacity building workshops for serving lecturers and instructors in order to equip them with the desired skills.

The Polytechnic Management should ensure that skilled lecturers and instructors are carefully selected at interview times in view of the peculiarity of the OTM programme.

References

- Ayandele, I.A. & Adeoye, O.S. (2010). Changing work environment through information and communication technology. Challenges to Secretarial Staff. *International Journal of Computer Application* (0975-8887)9
- Fadare, J.A. (2011). *Introduction to fundamentals of modern office equipment/machinery for students of tertiary institutions*. Oshogbo: New Deal Publications Limited.
- Fenner, S. (1996). *Complete office handbook. The definitive reference for today's electronic office*. 2nd edition. Random House, ISBN 0-679-038-0.
- Mamman, J.S. & Oyinloye, O.T. (2016). Perceived influence of cutting-edge teaching/learning methodologies on the acquisition of 21st century business education skills in Nigerian universities. *Nigerian Journal of Business Education*. 3(2) 137-150.
- Ogheneovo, A.A. (2016). Availability and utilization of new technology for teaching office technology and management in Delta State polytechnics. *Nigerian Journal of Business Education*. 3(2) 64-88.
- Oguejiofor, C.S. & Umeh, U.F. (2016). Database management functions used by secretaries in managing records in the civil service of Anambra State. *Nigerian Journal of Business Education* 3(2) 264-270).
- Ojo, E.O. & Akhademe, A. E. (2016). New technologies in teaching and learning of office technology and management. *Nigerian Journal of Business Education*. 3(2) 89-98.
- Okoji, B.I. (2006). *Modern office practice, administration and management for tertiary institutions and secretaries*. Oshogbo: St. Joseph Publishers.
- NBTE (2004). *Curriculum and course specifications for office technology and management, UNESCO Nigeria Project*. Kaduna.
- Nwosu, B.O. & Ojo, K.E. (2014). Improving business education and industry collaboration for manpower training in the era of new technologies. *Nigerian Journal of Business Education* 2(1), 1-9.
- Scheiter, K. & Gerjets, P. (2007). Learner control in hypermedia environments. *Educational Psychology Review* 19, 285-307.