



## **ELECTRONIC RECORDS MANAGEMENT COMPETENCIES REQUIRED OF POLYTECHNIC OFFICE TECHNOLOGY AND MANAGEMENT GRADUATES IN SOUTH-SOUTH NIGERIA**

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### **Abstract**

*The study assessed electronic records management competencies required of OTM polytechnics graduates in the e-records world. Two research questions and two null hypotheses guided the study. Descriptive survey design was adopted with a population of 145 OTM lecturers in public polytechnics in South-South Nigeria. The entire population was used as sample because of its manageable size. Data were collected, using a structured questionnaire on a five point rating scale. Three experts validated the instrument while cronbach alpha reliability coefficient was used to determine the reliability of the instrument with a coefficient of 0.85. Data collected were analyzed using mean and standard deviation, while t-test statistics was used for testing the null hypotheses at 0.05 level of significance. The study showed that OTM graduates required word processing and database management competencies for office e-records management in the e-records world of work for global competitiveness. The hypotheses tested, showed that, there were no significant differences in the mean ratings of male and female lecturers of OTM on office e-records management competencies required of OTM graduates. Based on the findings, the study among others recommended that the identified e-records management competencies in word processing and database management should be used for retaining of lecturers for effective use of ICTS in polytechnics.*

**Keywords:** *E-records, Competencies, e-world, OTM and Polytechnics*

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### **Introduction**

Office Technology and Management (OTM) education in Nigerian polytechnics has been evolving and developing with the advancement in office work and technology. Office Technology and Management is a nomenclature that has replaced Secretarial Studies Programme in Nigerian Polytechnics. (NBTE 2004). This was as a result of an extensive review of Secretarial Studies Curriculum in order to make its recipients to be ICT-compliant and fit appropriately in the world of work, most especially, in the modern offices that are characterized by various types of state of the art technologies. Polytechnic education in Nigeria is part of tertiary education whose aim is to provide middle-level manpower to man the various sectors of the Nigerian economy (Ikelegbe & Odede, 2012). According to the National Policy on Education, (FRN, 2013), Polytechnics in Nigeria shall maintain a two tier programme of studies; namely, the National Diploma (ND) and the Higher National Diploma (HND) with one year period of industrial experience serving as one of the pre-requisites for entry into the HND programme.



Office Technology and Management programme is designed to equip students with the competencies required to work in a modern office environment (E-world). The broad objectives of OTM programme, according to NBTE the (2004), are:

Acquisition of Secretarial skills

Acquisition of ability to write shorthand for three minutes in varied materials at 1.3 syllabic intensity dictated at 80 Words Per Minute (WPM) and 1.4 syllabic intensity of 100 wpm and transcribed on the computer with a minimum of 95% accuracy for both ND and HND respectively.

Typing effectively various office jobs and acquiring a copying rate of 40wpm and 50wpm for ND and HND respectively on passages not below 1.3 syllabic intensity with 98% accuracy.

Acquisition of general education.

Laying the foundation for advanced studies.

The knowledge, attitudes and skills expected of the ND graduates, according to the curriculum objective is to enable the graduates fit in properly into the office of any organization and perform professionally, the functions of the modern secretary. This is because the curriculum is ICT-based and tailored towards the need of the modern office. At the HND level, the students are expected to acquire an in-depth knowledge of Office Procedures, ICT Office Administrative and Management (Amiaya, 2015). Graduates are also expected to be trained in office concept and office procedures, ICT office applications, records management information systems, advanced web page design, professional career and professional ethics and social responsibility (Ugwanyi, 2012). The activities of the modern office in the E-world such as accounting, mail handling, filing, telephone switching systems, reprographics, among others are needed to be performed by competent professional secretary.

The work of the professional secretary has changed from the traditional office routine of handling mails manually to the application of modern office techniques and the use of sophisticated office equipment in the processing of information and managing information (Oguejiofor & Ile, 2015). In the light of changes, the secretary has come to be seen as a manager of office records. Thus, the modern secretary needs to acquire records management competencies to meet up with the changing business environment and secretarial functions. There is no doubt that secretaries are among the best office management and administration practitioners all over the globe. Since technology is about improving work efficiency within work environments, it means that secretaries have to be proactive in their profession to be abreast with the E-world as soon as any new development is introduced in office records management. Records are the memory of an organization, the raw material for decision-making and the basis for legal defensibility (Caetzer, 2012).

Cornwell Management Consultants (2014) defined a record as a document produced or received by a person or organization in the course of business and retained by that person or organization. Records are the assets of an organization that are created, processed, transmitted, used, stored, retrieved, retained and eventually destroyed. An electronic record (E-record) is any information that is recorded in machine readable form. Computers generate large volumes of paper records that can be managed using the electronic records management system. However, organizations are increasingly choosing to not only create records electronically, but also to store, retrieve and use them in computerized form for long periods. Electronic records unlock the contents



previously difficult to access in paper form, enable more effective sharing of information and contribute to knowledge network flow. The importance of records management is highlighted by the need for evidential proof of activities in account or dispute. Organizations and individuals thus cannot afford to downplay the art of proper records management systems.

A systematic approach to the management of records is essential for organizations to protect and preserve records as evidence of activities and transactions. The National Archives and Records Service of South Africa in Ajike (2015) defined records management as the management of information resources in a manner that makes information easily accessible, securely protected and stored, and correctly disposed of when necessary. Thus records management controls and oversees the creation, maintenance, use and disposal of records. Records management is the process by which internally or externally generated physical or electronic records are managed from their inception, receipt and storage, all the way through to their disposal (Ngulube in Seniwoliba, Mahama & Abilla, 2017). Records management therefore seeks to efficiently and systematically control the lifecycle (creation, use, maintenance, archive or disposal) of records that are routinely generated because of its activities and transactions by a competent secretary.

Competence is the state or quality of being adequately or well qualified, having the ability to perform a specific role. Competence is the ability to do something well. The European Commission's Cedefop glossary (Cedefop, 2014) saw competency as the ability to apply learning outcomes adequately in a defined context (education, work, personal or professional development). Cedefop expressed further that competency is not limited to cognitive elements (involving the use of theory, concepts or tacit knowledge), it also encompasses functional aspects (involving technical skills) as well as interpersonal attributes (for example social or organizational skills) and ethical values. Thus, there is the need to assess the office E-record management competencies required of OTM graduates in the polytechnics in the following secretarial professional competencies in the E-world: The word processing competencies and database management competencies as limited to this present study.

### **The Problem**

Office e-record management competencies are essential and are required of office technology and management graduates for global competitiveness because no organization exists without records which have to be created and captured, retained for the period of schedule and disposed as at when due. Despite the benefits of e-records management skills taught in Nigerian polytechnics, it appears that some, if not most office technology and management graduates from the polytechnics in South-South Nigeria still find it difficult to effectively manage records using electronic devices. Office technology and management graduates are required to possess e-records management competencies to create and capture, retain and dispose information appropriately but there seems to be a gap in the level to which these competencies OTM graduates possess in the polytechnics in south-south Nigeria. This study therefore, is concerned with the Assessment of Electronic Records Management Competencies Requirements of Polytechnics OTM Graduates in South-South Nigeria for the world of work, for global competitiveness.

The main purpose of the study was to assess the office e-records management competencies required of OTM graduates in the e-world of work for global competitiveness in the polytechnics in South-South Nigeria. Specifically, the study:



Determined the word processing competencies required of OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in South-South Nigeria.

Determined the database management competencies required of OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in South-South Nigeria.

The following research questions guided the study:

What are the word processing competencies required of OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in South-South Nigeria?

What are the database management competencies required of OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in South-South Nigeria?

The following null hypotheses were tested at 0.05 level of significance.

There is no significance difference in the mean responses of male and female OTM lecturers on the word processing competencies required of OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in South-South Nigeria.

There is no significance difference in the mean responses of male and female OTM lecturers on the database management competencies required of OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in South-South Nigeria.

## **Method**

The study adopted descriptive survey design. The study was carried out in public polytechnics in South-South Nigeria. The population for the study comprised 145 respondents (made up of male and female OTM lecturers) in the six public polytechnics in South-South Nigeria. The entire population was used as sample for the study because of its manageable size. The data for the study were collected using a structured questionnaire. The instrument was structured on a five point rating scale of Very Highly Required (VHR) 5 points, Highly Required (HR) 4 points, Moderately Required (MR) 3 points, Less Required (LR) 2 points and Not Required (NR) 1 point. Data collected were analyzed using mean and standard deviation, while the t-test was used to test the hypotheses at 0.05 level of significant.

## **Results**

### **Research Question One**

What are the word processing competencies required of OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in South-South Nigeria?

**H<sub>01</sub>:** There is no significance difference in the mean responses of male and female OTM lecturers on the word processing competencies required of OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in South-South Nigeria.

The data for answering research question one and testing hypothesis one are presented in Table 1.

**Table 1:** Mean Ratings and t-test Statistics of Male and Female OTM Lecturers on the Word Processing Competencies Required of OTM Graduates for Office e-records Management in the e-world of Work for Global Competition in Polytechnics in South-South Nigeria (n = 138)

SN	Required Word Processing Competencies for E-Record Management	$\bar{X}_1$	$\bar{X}_2$	$\bar{X}_G$	SD <sub>G</sub>	t-cal	t-tab	Remarks RQ	H0
1	Keyboarding with speed and accuracy	4.58	4.88	4.73	0.48	1.98	1.96	VHR	Sig
2	The use of word processing packages and software	4.59	4.58	4.58	0.59	0.15	1.96	VHR	NS
3	Formatting and proofreading documents	4.21	4.28	4.25	0.43	0.87	1.96	HR	NS
4	Saving files to hard disk, disk drive and network	4.65	4.60	4.63	0.68	0.58	1.96	VHR	NS
5	Retrieve save document in external or back-up drives	4.75	4.71	4.73	0.44	0.44	1.96	VHR	NS
6	Organize files, directories and folders	4.32	4.28	4.30	0.56	0.56	1.96	HR	NS
7	Check and correct spelling and grammatical errors	4.70	4.64	4.67	0.47	0.67	1.96	VHR	NS
8	Move cursor round the active document	4.88	4.56	4.71	0.65	2.05	1.96	VHR	Sig
9	Highlight specific text on a document	4.37	4.31	4.34	0.47	0.79	1.96	HR	NS
10	Insert new text and delete existing text appropriately	4.43	4.39	4.41	0.55	0.53	1.96	HR	NS

**Key:**  $X_1$  = Mean of Male;  $X_2$  = Mean of Female;  $X_G$  = Grand mean; SD = Standard Deviation; t-cal = t-calculated; t-tab = t-table value; Number of the Respondents (138); VHR = Very Highly Required; HR = Highly Required; Sig = Significant; NS = Not Significant.

In the grand mean ratings of the responses of the OTM lecturers, seven out of the 10 identified items in Table 1 range from 4.58 4.73 which are within the boundary limit of 4.50 5.00 on a 5-point Likert rating scale. This indicated that the six identified items of word processing competencies are Very Highly Required by OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in South-South Nigeria. The grand mean ratings of the respondents of the remaining four items in the table, specifically, items 3, 6, 9 and 10 are 4.25, 4.30, 4.34 and 4.41 respectively which fell within boundary limit of 3.50 4.49 on a 5-point Likert rating scale indicating that the remaining four items of word processing competencies are Highly Required by OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in South-South Nigeria. The standard deviation values for the 10 items were between 0.43 and 0.68 which indicated that the responses of the respondents are close to one another and the overall mean.

The data presented in Table 1 on t-test statistics further show that the t-cal (t-calculated) values of eight out of the 10 items in the table ranged from 0.15 to 0.87 which are all less than the t-tab (t-table) of 1.96. This indicated that there are no significant differences in the mean ratings of male and

female lecturers of OTM on the eight items word processing competencies required of OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in South-South Nigeria. Hence, the hypothesis of no significant difference in the mean ratings of male and female lecturers of OTM is accepted on the eight items in the table. The t-cal (t-calculated) values of the remaining two items in the table, that is, items one and eight are 1.98 and 2.05 which are all greater than the t-tab (t-table) of 1.96 indicating that there are significant differences in the mean ratings of male and female lecturers of OTM on the two items. Therefore, the hypothesis of no significant difference in the mean ratings of male and female lecturers of OTM is rejected on items one and eight in the table.

**Research Question Two**

What are the database management competencies required of OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in south-south Nigeria?

**H0<sub>3</sub>:** There is no significance difference in the mean responses of male and female OTM lecturers on the database management competencies required of OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in south-south Nigeria.

The data for answering research question three and testing hypothesis three are presented in Table 2.

**Table 2:** Mean Ratings and t-test Statistics of Male and Female OTM Lecturers on the Database Management Competencies Required of OTM Graduates for Office e-records Management in the e-world of Work for Global Competition in Polytechnics in South-south Nigeria (n = 138)

SN	Required Database Management Competencies for E-Record Management	$\bar{X}_1$	$\bar{X}_2$	$\bar{X}_G$	SD <sub>G</sub>	t-cal	t-tab	Remarks RQ	H0
1	Create and maintain data	4.50	4.60	4.55	0.61	1.02	1.96	VHR	NS
2	Extract and list all records	4.39	4.51	4.45	0.71	1.00	1.96	HR	NS
3	Sort records in ascending or descending order	4.62	4.55	4.58	0.49	0.84	1.96	VHR	NS
4	Generate formulated text with title and subtitle	4.65	4.56	4.60	0.53	1.06	1.96	VHR	NS
5	Interpret and execute programme instruction	4.32	3.78	4.03	0.76	2.57	1.96	HR	Sig
6	Create a record in a spread sheet	4.59	4.62	4.60	0.60	0.26	1.96	VHR	NS
7	Classify data into convenient groups	4.45	4.54	4.50	0.50	1.02	1.96	VHR	NS
8	Sort data into sequence	4.59	4.62	4.60	0.48	0.33	1.96	VHR	NS
9	Create payroll for workers of different grade levels	3.84	3.86	3.85	0.80	0.12	1.96	HR	NS
10	How to find, sort and print information	4.59	4.47	4.52	0.53	1.41	1.96	VHR	NS

**Key:**  $\bar{X}_1$  = Mean of Male;  $\bar{X}_2$  = Mean of Female;  $\bar{X}_G$  = Grand mean; SD = Standard Deviation; t-cal = t-calculated; t-tab = t-table value; Number of the Respondents (138); VHR = Very Highly Required; HR = Highly Required; Sig = Significant; NS = Not Significant.



The grand mean ratings of the responses of OTM lecturers seven out of the 10 identified items in Table 2 range from 4.50- 4.60 which are within the boundary limit of 4.50 5.00 on a 5-point Likert rating scale. This indicates that the seven identified items of database management competencies are Very Highly Required by OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in south-south Nigeria. The grand mean ratings of the respondents of the remaining three items in the table, that is, items 2, 5 and 9 are 4.45, 4.03 and 3.85 respectively which fell within boundary limit of 3.50 4.49 on 5-point Likert rating scale indicating that the remaining three items of database management competencies are Highly Required by OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in south-south Nigeria. The standard deviation values for the 10 items were between 0.49 and 0.80 which indicated that the responses of the respondents are close to one another and the overall mean.

The data presented in Table 3 on t-test statistics further reveal that the t-cal (t-calculated) values of nine out of the 10 items in the table ranged from 0.12 to 1.41 which are all less than the t-tab (t-table) of 1.96. This indicated that there are no significant differences in the mean ratings of male and female lecturers of OTM on the nine items database management competencies required of OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in south-south Nigeria. Therefore, the hypothesis of no significant difference in the mean ratings of male and female lecturers of Business education is accepted on the 9 items in the table. The t-cal (t-calculated) values of the remaining one item in the table, that is item five was 2.57 which was greater than the t-tab (t-table) of 1.96 implying that there was significant difference in the mean ratings of male and female lecturers of OTM on the item. Consequently, the hypothesis of no significant difference in the mean ratings of male and female lecturers of OTM is rejected on item five in the table.

### **Discussion of Findings**

The findings of this study showed that, the word processing competencies required by OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in South-South Nigeria include keyboarding with speed and accuracy, the use of word processing packages and software, formatting and proofreading documents, saving files to hard disk, disk drive and network, retrieving saved document in external or back-up drives, organizing files, directories and folders, checking and correcting spelling and grammatical errors and moving cursor round the active documents, among others. Database management competencies required of OTM graduates for office e-records management in the e-world of work for global competition in polytechnics in south-south Nigeria include creating and maintain data, extracting and listing all records, sorting records in ascending or descending order, creating a record in a spread sheet and classifying data into convenient groups, among others.

The findings of this study agreed with that of Asuquo (2010) who studied the business and information processing skills needed by business centre operators. The author found out that operators of business centre are deficient of ICT skills and therefore needed all the information technology skills in system operations including typesetting of all types of documents, handling of special documents, graphics and architectural designs, performing statistical analysis as well as doing desktop publishing. In addition, the finding of this study corroborated that of Agbamu (2007) who



carried out a study on ICT competencies need by NCE business education graduates and found out that computer operation competencies such as ability to start up and shut down a computer system and its peripherals, start an application and create a document, use a word processing package, using data management system, writing, sending and receiving mails using the E-mail internet facility are generally required for employment in both the public and private sectors of the economy. In addition, the findings of this study supported that of Okafor (2017) who identified electronic office management skills required by Nigerian graduates of Business education to include effective use of ICT element such as word processing package, software, hardware, budgets, marketing and exploration. Other findings by Okafor are handling various photocopying machines for reproduction of documents, using electronic scanning, phototypesetting to typeset, edit and reproduce documents using the computers, doing desktop publishing using the computer, using accounting spreadsheet with the computer, proficiency in handling data analytical packages such as SPSS for official data management, using techniques involved in saving, coding indexing and retrieving documents on disks, microfilms and other magnetic media, writing, sending and receiving mails using the e-mail internet facility and using the computer to do graphic and webpage designs.

### **Conclusion**

Office e-record management competencies are essential and are required of office technology and management graduates in the e-world of work for global competition because no organization exists without records which have to be created and captured, retained for the period of schedule and disposed as at when due. Unfortunately, despite the overwhelming benefits of e-records management skills taught in Nigerian polytechnics, most office technology and management graduates from the polytechnics in south-south Nigeria still find it difficult to effectively manage records using electronic systems. Hence, this study concluded that OTM polytechnics graduates are required to be acquainted with the identified e-record management competencies to meet up with the global competition in the e-world of work.

### **Recommendations**

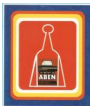
Based on the findings and conclusions drawn from the study, the following recommendations are made:

That the identified e-record management competencies in word processing, micrographic and database management should be used for retaining of teachers and lecturers for effective use of ICTs for teaching polytechnics students in Nigerian schools.

There should be adequate provision of ICT facilities for teaching and learning in Nigerian polytechnics so that the graduates can acquire basic ICT skills while in schools for better performance in the labour market.

There should be proactive curriculum review and update with relevance in ICT-oriented curriculum for improved e-learning skills and competencies by the graduates.

The State governments through their ministry of education should help package the identified e-record management competency items in word processing and database management teachable programmes for training the idle graduates for self or paid-employment in the Nigerian labour market.



## References

- Agbamu, T. P. (2007) ICT competences required by employers of NCE business education graduates. *Unpublished M.Sc thesis*. Nnamdi Azikwe University, Awka.
- Ajike, V.O. (2015). Information and communication technology (ICT)-based office skills required by secretaries for effective administration of local governments in Abia State. Unpublished M.Ed dissertation in department of Vocational Technical Education (Business Education Unit), Faculty of Education, University of Nigeria, Nsukka.
- Amiaya, A.O. (2015). Information and communication technology challenges and strategies among office technology and management educators in Nigeria polytechnics. *International Journal of Education and Practice*, 3(3), 156-162.
- Asuquo, E.E. (2010). Business and information processing skills needed by business centre operators. *Business Education Journal*, 7(3), 95-101
- Cedefop (2014). *Terminology of European education and training policy (Second Edition) A selection of 130 key terms*. Luxembourg: Publications Office. Retrieved on 12/01/2018 from: [www.cedefop.europa.eu/EN/Files/4117\\_en.pdf](http://www.cedefop.europa.eu/EN/Files/4117_en.pdf).
- Caetzer, X.P. (2012). The status of records management at the university of Zululand. Unpublished Master dissertation in the Department of Information Science, University of Zululand.
- Cornwell Management Consultants. (2001). Model requirement for the management of electronic records (MoReq). Retrieved April 15, 2017 from [www.cornwell.co.uk](http://www.cornwell.co.uk)
- Federal Republic of Nigeria (2015). *National policy on education*. Lagos: NERDC Press.
- Ikelegbe, S. & Odede, N (2012). information and communication technologies (ICTs) as tool for developing Nigeria educational sector. *Journal of Business Studies and Technology Development* 3(2) 129-136.
- National Board for Technical Education (2004). *National/Higher National Diploma in Office Technology and Management curriculum and course specifications*. Kaduna: Federal Government Press.
- Nworgu, B.G. (2015). *Educational research: Basic issues and methodology (3<sup>rd</sup> edition)*. Nsukka:
- Oguejiofor, C.S. & Ile, C.M. (2015). The microfilming functions used by the secretaries in managing office records in government establishments in Anambra State, Nigeria. *Education Journal*, 4(6), 15-18.
- Okafor, E. C. (2017). Electronic-office management skills required by graduates of business education in South-south, Nigeria. *International Journal of Office Management*, 3 (1): 67-79.
- Seniwoliba, A.J., Mahama, A.V. & Abilla, B.J. (2017). Challenges of records management in higher education in Ghana: The case of university for development studies. *International Journal of Educational Policy Research and Review*, 4(3), 29-41.
- Ugwuanyi, M. O. (2012). Strategies of improving educational resources in office technology and management departments in the polytechnics. *Business Education Journal*, 8(2), 99 109.