



Information Systems Application Skills Required of Secretaries for Job Performance in E-world Parastatals in Rivers State

OKPOKWASILI, Nonyelum P. (PhD)

**Department of Library and Information Science
Rivers State University, Port Harcourt, Nigeria**

ABSTRACT

This study sought to determine the information systems application skills required of secretaries for job performance in public parastatals in Rivers State. A research question and null hypothesis were formulated to guide the study. A descriptive survey research design was adopted for the study. The population comprised 1,200 Secretaries and Office Technology and Management (OTM) lecturers with sample size of 370 respondents selected using stratified random sampling from higher institutions of learning and public parastatals in Rivers State. A structured and validated instrument titled “Information Systems Application Skills Need of Secretaries for Job performance Questionnaire (ISASNSJPQ)” was used for collection of data for the study. Cronbach Alpha procedure was used to establish the reliability of the instrument and it produced a coefficient of 0.78 which shows that the instrument was reliable. Mean and Improvement Need Index (INI) were used to analyse the responses from the research question, while the null hypothesis was tested using the independent t-test at 0.05 level of significance. The result revealed that Microsoft suits are highly needed with positive improvement need index. All these skills needs were statistically significant at .05 alpha level. Based on the findings, the following recommendations were given among others: that Secretaries in the public service should be given awareness by their employers on the need to acquire information systems application skills and Training institutions should develop programmes that would assist secretaries update their skills at confidence time and space.

Keywords: Information, Systems, Application, Skills, Secretaries, Performance.

INTRODUCTION

The functions of secretaries in public parastatals have become broader in recent times. The secretaries' responsibility in utilizing information systems requires certain skills that will enable them perform efficiently and effectively (Okubotimibi, 2010). According to Ubulom (2007), duties of a secretary have gone beyond performing the normal manual daily official routines. To him, in today's automated office environment, secretaries are expected to acquire modern information system application skills in order to be proficient in their duties.

Secretaries in some establishments are most times referred to as information managers since the functional processes to which they are continually exposed to, are synonymous with normal office information managing activities. However, Uche (2004) opined that secretaries also oversee the implementation of office procedures, establish work priorities; conduct analyses of secretarial operations

and co-ordinate acquisition of office services such as office space, supplies and other secretarial services. Mortion (2012) listed new office technologies to include PowerPoint (slider presentation), blogging, mobile devices, iTunes, screen casting, augmented and virtual reality, camp (concept mapping), twitter, wikis, voice threat, voice recognition, web, video and Tele-conferencing, video conferencing, interactive white board, personal digital assistance handheld computers, web-based discussions list-serve, bulletin board/electronic discussion environment, online library, database, LCD projector, overhead projector, direct to home tech, two way messaging papers, Internet etc.

Ugiagbe (2002) defined a secretary as an assistant to an executive, possessing an impressive mastery of office skills and ability to assume responsibility without direct supervision and who displays initiative and exercises judgement and makes decisions within the scope of his/her authority. In the same vein, Nwosu, Anaka and Eleoba, (2003) opined 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. The authors also observed that secretaries who are not well-equipped with these skills, knowledge and abilities will soon render themselves obsolete, redundant or can even be thrown out of jobs. It is important to note that secretaries who are not compliant in acquiring these needed information application skills will find it difficult to perform effectively in their assigned office duties. The traditional pattern of carrying secretarial functions is fast fading away. The introduction and invention of sophisticated office equipment and machines has placed a demand on secretaries to acquire certain information systems skills so as to enhance their job performance. Oguejiofor and Umeh (2016) opined that the stereotype picture of the secretary of the past completely with traditional office competencies is beginning to fade and the image of the new secretary with electronic competencies is emerging.

Today's secretaries are required to use sophisticated office machines/equipment in setting up an information system architecture that would enable them to carry out their office duties efficiently in order to enhance their productivity. Ahukannah (2009) stated that automated office information systems in today's workplace have fundamentally changed the skills requirements for effective job performance. Spiff (2009) in Owen (2011) opined that every secretary has the responsibility of up-dating and acquiring appropriate skills that are relevant for office information development and dissemination.

Information systems, according to Askenas and Westalius (2003) are objects, technical constructions that are used by people (secretaries) to generate, create, organize and disseminate information that are specific to an organization. Onuekwa (2014) opined that information system is an umbrella of interconnected technological components that are used to collect, process, and store as well as disseminate information to support decision making in any organization. The author observed that information system propels production in any organization because no organization can exist without information. Yasser, Alina and Nor (2014) explained that information systems technically is a set of interrelated components that are used to collect (or retrieve), process, store, and distribute information to support decision making, coordination and control, in any organization. Supporting this, in the same vein, Adakole (2015) described information systems as a term used to describe hardware and software elements that allow an individual to access, retrieve, store, organize manipulates and present information by electronic means.

Information systems application skills according to Chijioke (2006) are the skills that enable users to operate and manipulate all the equipment and machines that can enhance and accelerate the collection of data, its processing, analysis, transmission and presentation as facts to aid rational decision making, planning and control of business operations. It comprises ability to use various office technical devices in executing every day office activities. Information systems application skills also involve the ability to use computer application software such as, Microsoft suits in the collection, organization and management of office information that relates to the management of clients, sales records, and staff payroll information. It also includes the ability to use Internet facility in receiving, processing and dissemination of information that will enhance the performance of the organization. The aforementioned abilities can be attained through effective training in the use of office technical devices, computer applications such as Microsoft suits, and Internet facilities among others.

Secretaries' need for information system skills varies across organizations. This is due to the fact that their job responsibilities vary in line with their various organizations' objectives and goals. Therefore, even though secretaries generally are information managers, the type and nature of information they receive, generate, process, maintain and disseminate differ significantly. While some handle only text-inclined information, others may be required to handle text-numeric and graphic information. However, whatever type of information or data a secretary may be handling or have to handle, it is ideal that the secretary be well equipped with wide-range of information systems applications skills to enable easy mobility across jobs and have edge over others in this era of scarcity of job opportunities. There are many information systems application tools commonly used in various offices in public parastatals. These information systems application tools include: Microsoft suits, Internet services, graphic application tools like CorelDraw etc. The utilisation of these information system tools does not come with ease, it requires the development of certain level of competencies that will enable the users perform their jobs efficiently and effectively, thereby, enhancing the accomplishment of the public parastatals' objectives.

According to Mitchelmore and Rowley (2010) in Abdulkarim (2016) competencies as generic and specific knowledge, skills and attitude needed for productivity. Therefore, since competencies include knowledge, skills and experiences related to job, in this study secretary's competencies with relation to information systems can be defined as the knowledge, skills and attitude developed for their information systems proper utilization. However, the interest of the present study is on the skills needed for the utilization of the various applications that can facilitate information gathering, processing, storage, management and dissemination, especially, the offerings of Microsoft suit. Microsoft comprised of all Microsoft application software used for office information processing and presentation.

Statement of the Problem

It has been observed that in order to take advantage of the advancement in technologies, governments across the country invested hugely in the procurement and maintenance of technologies used for information collection, processing, maintenance, storage and dissemination. As a result, there is virtually no office today that does not have one form of computer system or the other as well as networking cables or wireless connection. However, despite these provisions, the researcher observed that many of the computers in most public parastatals in Rivers State lie-down idle without being put to functional use and where it is being used, only typing of textual documents are done with it. Most times, graphic and calculation works, Internet services, PowerPoint, Microsoft publishers, spreadsheet as well as database applications are neglected and often times the official documents are taken to commercial business centres for production. This exposes official documents to the public even before they are signed for implementation. This may hinder the achievement of organizational goals.

Most secretaries in public parastatals in Rivers State seems not to be trained, most of the secretaries seems to lack the basic skills for utilizing the information systems for effective job performance. In same vein, most of the secretarial graduates who even have certificate in Office Technology and Management Education find it difficult to utilize and apply the skills in producing official documents needed for official decision making. This is because most of them lack the needed and required application skills that will enable them utilize the information systems. Why is it so? Were they trained with obsolete secretarial machines and equipment? All these indicate lack of adequate exposure of today's public secretaries to appropriate information system skills required for job performance. If these problems are to be solved, there is need to ascertain the specific information system skills need of secretaries for job performance in the public parastatals, especially as it relates to the secretaries in Rivers.

It is generally observed by the researcher that most literature on information systems application is foreign-based. Very scanty literature with local content is found. Secondly, the researcher has not found any literature which specifically addresses issues on skill need of secretaries in relation to information systems application in public parastatals in Rivers state. Therefore, this study is being carried out to fill the gap created by paucity of literature in the area of information systems application skills need of secretaries in Rivers state. The main purpose of the study was to determine the information systems application skills need of secretaries for job performance in public parastatals in Rivers State.

Concept of Information Systems

Information system is an interconnected constituent of equipment that works in consonant with individuals to collect, process, stored and disseminate the processed data as information for policy control, coordination as well as decision-making of organizations. Agomuo (2014) observed that the concept of information system describes a set of people, procedures and resources that collects, transforms and disseminates information in an organisation. Agomuo also view information system as a system that accepts data resources as input and process them into information products as output. This makes it an imperative tool for the public institutions that use information system in facilitating their administrative activities. Information systems are integrated in everyday life of every organization in maximum utilization in carrying out the office routines, especially in public parastatals. It is worth noting that the activities of such organisations determine the type of information systems they procure and install for usage.

Laudon and Laudon (2013) opined that information system can be technically defined as a set of interrelated components that collect (or retrieve), process, store, and distribute information to support decision making and control in an organization. Thus, they stated that in addition to supporting decision making, coordination, and control. Information systems involve the technical equipment used by secretaries to enhance office activities as well as facilitate work-force for more production in organizations. Okagbare and Ejeka (2011) opined that information systems are methods through which information could be disseminated in an organization, which includes; the equipment and machines used. Okagbare and Ejeka also stressed that information systems is concerned with the various methods by which information could be gathered, processed, reproduced, communicated, distributed, stored, protected and retrieved. According to Vincente (2004) in Agomuo (2014), information system is an attribute of value system which consists of three components, such as human, task and application systems. Information systems comprised the totality of office equipment and resources used for collection, process, storage as well as dissemination of information for organisational decision-making. It is important equipment which enhances secretaries' job performance in any organisation. Agomuo (2014) viewed information system as the discipline concerned with the development used, application and influence of technologies. Agomuo also stressed that information system is a specific type of system in general.

Research Questions

1. What are the information Application skills required of secretaries for job performance in public parastatals in Rivers State?

Null Hypotheses

1. There is no significant difference in the mean responses of Office Technology Management (OTM) Lecturers and Secretaries on the information systems Application skills need of secretaries for job performance in public parastatals in Rivers State.

METHODOLOGY

The descriptive survey research design was employed for this study. The survey research design was employed because; the study attempted to elucidate the opinions of secretaries in the Office Technology and Management (OTM). Survey design according to Ekong (2000), is employed when information is gathered from a sample of relevant population who are familiar with the ideas needed for a purpose. This study was carried out in Rivers State of Nigeria. Rivers State was created on 27th May, 1967; it was created out of Enugu province, which comprised of South-South and South-East States. Rivers State has twenty-three (23) local government areas with Port Harcourt as the State Capital. The population for this study comprised 1,200 respondents, made up of 1,142 secretaries across the public parastatals in Rivers State, and 58 Office Technology and Management (OTM) Lecturers from higher institutions in Rivers State.

A sample size of 366 respondents consisting of 312 secretaries sampled from ministries of education, finance, health, transport, justice, works, sports and culture and tourism and 58 Office Technology and

Management Lecturers selected from higher institutions of learning including Rivers State University of Science and Technology, Ignatius Ajuru University of Education, Federal College of Education Omoku, Port Harcourt Polytechnic and Ken Saro Wiwa Polytechnic Bori. The sample size was selected using stratified random sampling technique using respective parastatals as the strata. From each stratum, 39 secretaries were sampled using systematic random sampling technique. The sample size represents 30% of the target population for the study.

The researcher developed instrument titled "Information Systems Application Skills Need of Secretaries for Job Performance Questionnaire (ISASNSJPQ) that was used to elicit information from the respondents. The instrument (ISASNSJPQ), was subjected to face-validation by three experts. To determine the reliability of the instrument, Cronbach's Alpha test was used to test the internal consistency of the instrument items. The test yielded a coefficient index of 0.71 which was deemed reliable. The copies of questionnaire were administered to the respondents by the researcher with the help of two research assistants. The research assistants were briefed on the procedures for administration and collection of the instrument from the respondents. The data collected were analysed using Mean and Improvement Need Index (INI) to answer the research questions, the weighted Mean for application skills need of secretaries was represented by (x_1) while the weighted Mean of the job performance was represented by (x_2) . The difference between the two Mean (\bar{x}) , that is, $(x_1 - x_2)$ was determined to indicate the performance gap (PG), which yielded a positive or a negative value. The null hypotheses were tested using the independent t-test at 0.05 level of significance.

RESULTS

1. *What are the information Application skills required of secretaries for job performance in public parastatals in Rivers State?*

Table 1: Mean and INI on Information Systems Application Skill Required of Secretaries in Public parastatals in Rivers State (N=366)

S/N	Items	\bar{X}_1	\bar{X}_2	$\bar{X}_1 - \bar{X}_2$ (INI)	Remark
1	Ability to access E-mail	2.98	2.83	.15	Needed
2	Ability to send E-mail	1.98	1.85	.13	Needed
3	Ability to browse and for information	2.54	2.38	.18	Needed
4	Skills in downloading information	3.21	3.03	.18	Needed
5	Skills in retrieval of information	2.86	2.62	.24	Needed
6	Skills in Video-conferencing	1.86	2.02	.16	Needed
7	Skills in manipulating online collaboration	1.89	2.15	-.26	Not needed
8	Ability to create Internet platform	2.18	2.01	.17	Needed
9	Ability to sort information	2.87	2.68	.19	Needed
10	Ability to search for engines and windows	2.68	2.38	.30	Needed
11	Skills in manipulating protocols	2.48	2.38	-.21	Needed
	Cluster Mean	2.50	2.39	.11	Needed

Source: Field survey, 2018

Data in Table 1, showed the mean scores of respondents and the INI on Information systems application skill needs of secretaries for job performance in public parastatals. It is indicated that except on skills on manipulating online collaboration (- .26) and skills on manipulating protocols (-. 21), all other skills have positive INI. And the cluster Mean of .11 which means that the level of which secretaries could perform the application. Therefore, the skills are needed for improvement by the secretaries.

Hypothesis:

1. There is no significant difference in the mean responses of Office Technology Management (OTM) Lecturers and Secretaries on the information systems Application skills need of secretaries for job performance in public parastatals in Rivers State.

Table 1: The t-test testing the difference between the Mean responses of OTM lecturers and Secretaries on Information Systems application skills Required of Secretaries for Job Performance in Public Parastatals ($N_1 = 56$, $N_2 = 310$)

S/N	Items	\bar{X}_1	\bar{X}_2	SD ₁	SD ₂	t-cal	t-crit	Decision
1	Ability to access E-mail	1.96	2.83	.98	1.16	1.07	1.96	NS
2	Ability to send E-mail	2.68	2.55	.98	.76	1.30	1.96	NS
3	Ability to browse and search for information	2.54	2.38	1.26	2.67	1.05	1.96	NS
4	Skills in downloading information	3.21	3.03	1.26	1.46	1.16	1.96	NS
5	Skills in retrieval of information	2.86	2.62	2.34	4.16	1.04	1.96	NS
6	Skills in video-conferencing	1.86	2.02	.98	1.26	1.07	1.96	NS
7	Skills in manipulating online collaboration	1.89	2.15	2.61	2.26	-1.13	1.96	NS
8	Ability to create Internet platform	2.18	2.01	.98	1.08	1.21	1.96	NS
9	Ability to sort information	2.87	2.68	1.26	1.09	1.18	1.96	NS
10	Ability to search for engines and windows	2.68	2.38	3.12	4.62	1.11	1.96	NS
11	Skills in manipulating protocols in sending information	2.48	2.69	1.28	1.26	-1.31	1.96	NS
	Cluster t					0.71	1.96	NS

NS = Not significant at 0.05 alpha level and df = 364.

Data in Table 1 showed the summary of t-statistics testing the difference between the mean responses of OTM lecturers and Business Education undergraduate students on Internet services application skills need of Business Education undergraduate students for job performance. The analysis reveals that the calculated t-values for all the identified skills are less than the critical t-value (1.96) at 0.05 level of significant and 364 degree of freedom. Hence, the null hypotheses that there is no significant difference between the Mean responses of OTM lecturers and Business Education undergraduate students on Internet service application skills need of Business Education undergraduate students for economic diversification is retained.

CONCLUSION

It is revealed by this study that Information systems application skills of secretaries are highly needed for job performance. A positive INI is also indicated by the study. The test of hypotheses yield a significant skills needed by secretaries for job performance in public parastatals. This result is supported by the findings of Nwosu, Egbule and Olannye (2013) that the need for information managers to develop the abilities to the utilize information systems for secretaries job performance. The researcher further stated that managers/secretaries must be able to download, upload and store voice and video messages for future use at the receiving location. Accordingly secretaries in public parastatals require skills and competencies to enable them operate information systems application packages provided by the Internet service providers. The result is supported by findings of Mandel (1989) which identified Internet services as an indispensable tool for information system applications for secretary's job performance. Hence, secretaries are expected to acquire information Application skills for job performance.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made:

1. Employers of secretaries in the public service should be given awareness on the need to train their employees on word processing application skills in order to keep them abreast of new features of updated versions. This will enable them know the importance of the word processing application skills in their career development.
2. Training institutions should develop programmes that would assist secretaries update their internet service application skills at convenient time and space.
3. Federal and State governments should come out with policies that will ensure standards in the training and employment of secretaries for the public sector of the economy, especially as it relates to publisher's application skills acquisition.
4. Secretaries and would-be secretaries should make concerted efforts to develop their *spread* sheet application skills in order to be proficient on the job.

REFERENCES

- Abdulkarim, M. (2016). Information System and Information System Resources: A Seminar Paper Presented as Part of Requirement For Ph.D Course Work in the Department of Vocational Education. University of Uyo, Akwa- Ibom State
- Adakole, E. (2015). Assessing the Effectiveness of Information Technology in Teaching *Business Education in Nigerian Institutions Conference Proceedings*, 2(1), 223 – 229.
- Agomuo, E. E. (2014). *Modern Office Technology: Issues, Procedures and Practice*. Enugu: Debees Printing Services.
- Ahukannah, L. I. (2009). *Applied Office Administrative Procedures and Business Communication: ICT – Propelled Development in Office Careers*. Onitsha: Africana First Publishers Plc.
- Askenas, L. and Westelius, A. (2003). Five Roles of An Information System, A Social Constructionist Approach to Analyzing the Use of ERP Systems. *Developing Effective Information: Proceedings of the Twenty-first International Conference on Information Systems*, P. Weill, W. Orlikowski, S. Ang, H. Kremer and J.I. DeCross (eds), Brisbane, Australia, 426 – 434.

- Chijioko, O. (2006). Secretarial Profession and Information Technology which is Ahead. Enugu: *Proceedings of National Association of Professional Secretarial Staff of Nigeria. (NAPSON)* 26-32.
- Laudon, K .C. and Laudon, J. P. (2013). *Management Information Systems: Managing the Digital Firm: Twelfth Edition*. England: Pearson Education Limited.
- Mandel, S. C. (1989). *Computer and Data Processing: Concepts and Applications (3rd Ed)*. New York: West Publishing.
- Mortion, M. (2012). *Emerging Technologies for Teaching and Learning*. Concorida University. available@teaching.concordia.ca/index.php .
- Nwosu, B. O., Anaka, E. A. and Eleoba, P. C. (2003). *Fundamentals of Word Processing*. Owerri: Chin and Chris ventures.
- Oguejiofor, C. S. and Umeh, U. F. (2016) Database Management Functions Used by Secretaries in Managing Records in the Civil Service in Anambra State. *Nigerian Journal of Business Education*. 3 (2): 264 – 270
- Okagbare, E.A. and Ejeka, C. A. (2011). *The Secretary and Records Management for Tertiary Institutions- Polytechnics, Colleges of Education and Universities*. Asaba: Nereva Publishing Educational Services.
- Okubotimibi, J. E. (2010). Assessment of Competencies and Skills Required of Business Educators in the Niger Delta to Meet the Global Challenges, *A Dissertation Submitted to Rivers State University of Science and Technology*. Port Harcourt. Unpublished
- Onuekwa, F. A. (2014). Assessment of Training Needs of Business Education Teachers in Tertiary Institutions in Rivers State, *A Dissertation Submitted to Rivers State University of Science and Technology*. Unpublished
- Owens, T. O. (2011). *Training and Human Resources Development*. Owerri: Manny Firm publishers.
- Ubulom, W. J. (2007). *Computer Appreciation and Software Application*. Port Harcourt: Celwil Nigeria Limited.
- Uche, K. E. (2004). *Secretarial Functions: Theory and practice*. Sanclin Publishers.
- Ugiagbe, F. E. S. (2002). *An Analysis of Secretarial Office Automation and Work Ethics in National Development*. Akoka Lagos: DIC Publishing Company.
- Yasser, H. A., Alina, S. and Nor, A. (2014). The Roles of Different Types of Information Systems in Business Organisations: A Review. *International Journal of Research (IJR)*. 1 (7), 333-339.