ABSTRACT: This paper x-rayed how office automation has helped the Office Technology and Management graduates to increase productivity in their work. Two research questions guided the study. The paper examined critically the equipment found in an automated office and how it has actually assured the quality performance of the secretary. A total of 360 Office Technology and Management graduates selected from public and private organizations in Delta South Senatorial District formed the population of the study. The sample of this study consisted of 108 graduates of Office Technology and Management. The information collected from the respondents was grouped together for meaningful analysis of the data using simple percentages. Suggestions were made as to what the Office Technology and Management graduate must do in order to get the best out of an automated office. Based on the researcher’s findings, recommendations which includes that secretaries should not entertain fear that automated devices will displace them but rather to see it as something which has come to assist them to do their jobs in order to improve their efficiency and productivity are made to strengthen the Office Technology and Management graduates chances of being totally familiar with the modern equipment so that increased productivity can be guaranteed and quality assured.

KEYWORDS: Office Automation, Quality Assurance, Technology, Management, Productivity

INTRODUCTION

Office Technology and Management (OTM) is a recent nomenclature for Secretarial Studies in Nigeria. As the name implies, the emphasis has shifted to the graduates understanding and use of new technologies in automated workplace. However, in view of the ever-changing world of technologies, OTM seems not have kept with the rate of change in technologies in Nigeria.

Advances in technology are rapidly changing today’s modern business around the globe and have seriously affected every aspect of the office. The effects are generally felt in science, commerce, industry, education, politics and particularly in the business world. These new technologies have facilitated new business procedures from the traditional office of yester years to the electronic office. Nwogwugwu (2002) asserted that the introduction of sophisticated telecommunication equipment, computer and word processors, information technology machines coupled with the new management techniques have changed old work habits, thereby resulting in complete job re-designation and acquisition of new skills.

Osuala (1998) observed that the most common office equipment before the office revolution were typewriters, telephones and filing cabinets. All these provide the means by which the
three main information activities are carried out – namely document production, communication and filing. During that time office work was dull, slow and labour intensive. According to Osuala, these three traditional technologies are still very much part of office life, but the electronic office has introduced a number of innovations which complemented or replaced them. Etonyeaku (2009) noted that secretaries in the organizations of yester years were dealing with papers worked with manual machines, relied on postal services for external communications and kept office records in the cabinets. These technological innovations demand new skills, attitudes and the development of new professional and intellectual concepts among secretaries.

Harvey (1986) noted that since the primary business of the modern office is to collect, record, sort, analyze, store and distribute information, office information system (OIS) integrates all available hardware, software procedures and human resources so that office information is not only processed accurately, speedily and comprehensively by also made available when, where, and in the manner required.

Today, computers as well as other technological aids play very important roles in the effective discharge of business functions. Information is required for a business to function effectively, and to highlight performance of the different units of the business, and to direct attention to areas requiring review. Most information required for management purposes are either available in a form on which they can be readily used or they exist in the form of raw data. According to Ejeka (2006), the automated office functions effectively and efficiently with little or no stress at all. Office automation reduces the drudgery, which often accompanied doing repetitive tasks such as typing numerous memoranda, filing and copying. This creates time for the secretary to be creative and also increases productivity.

Statement of the problem

It is not clear what effect office automation has on OTM staff. While the impression is that the introduction of automation in business establishment appears to be a blessing to its users, the OTM staff who had not up-dated their skills fear that it would replace them. Is that a genuine fear? If an automated office would effectively replace the secretary, how soon would that happen? The world is undergoing a rapid change due to the innovation of office automation as the new millennium and the evolution continue, in order to cope with the modern age needs and to know the effects of all these automated machines. What are the effects of these changes on the productivity of secretary in the office, her ability to cope, her job security, her relevance to the office work for which she is employed and moreover, the training which is to prepare her to meet the challenges of her ever-changing work environment are the basis for carrying out this study.

Significance of the study

The secretary is undoubtedly an indispensable member of an office and it is said that the secretary’s job is affected one way or the other by the introduction of these devices. Automated office devices are needed to enhance performance and productivity.

The results of this study will reassure secretaries who think their skill is no longer useful in the office as a result of introduction of new office automation. This ought to be done in order to boost their morale and increase their productivity as well.
It will also be useful to both practicing secretaries and secretaries to be, not to fear about the future prospect of their profession. The results of the study will also be very useful to various institutions where secretaries are trained to design healthy training programmes for secretaries.

**Purpose of the study**

Specifically, the study was aimed at identifying the following:

(a) To examine the importance of quality assurance as an aid to OTM staff effectiveness.

(b) To examine the effect of office automation on the OTM staff job.

**Research Questions**

In carrying out this study, the following research questions were raised to guide the researcher:

(a) What are the importance of quality assurance as an aid to OTM staff effectiveness?

(b) How has the introduction of office automation affected the job of the OTM staff?

**LITERATURE REVIEW**

According to Geoffrey (2003) office automation is an aid to the secretary who makes constant use of the machines, hence the machines can carry out routine work or clerical jobs quickly, accurately and automatically more than the ordinary human being can do, thereby freeing the secretary in working out payroll, and other numerous letters and calculations which need an expert and excellent touch to be done correctly. Some of these machines have large storage facilities and can store information in their memory unit. He confirmed that the presence of computer as an office automation has created new job opportunities especially for the secretarial assistant.

According to Ejeka (2006) office automation refers to utilizing personal computers such as word processors and electronic intercom mail plus other technologies used to upgrade workers productivity and efficiency. It is the technique of making a processor system automatic in the office. Ejeka went further to assert that office automation is the merging of technologies an integration of providing quality information and communication facilities designed to improve professional and management productivity.

Office automation refers to all processes that integrate computer and communication technology with the traditional manual processes. Stanwell (1980) noted that mechanization of office work has come as a result of the need for great speed and accuracy. The characteristic picture of modern office in efficiency is the successful integration of the use of machines and equipment into what is called “system”. Abang (2009) reported that secretaries have vital roles to play in enhancing the attainment of organizational goals. Though secretaries of nowadays would not necessarily be expected to understand as much about the business in hand as their executives, they are increasingly being expected to have some understanding of the significance and effective management of the correspondence, reports and instructions which normally pass through their desks. The trained secretaries with the
state of the art material and equipment are expected to be gainfully employed in the labour markets or even create jobs and become self-reliant despite the present hardship in the Nigerian economy.

According to Esene (2012) the modern offices of today, lay due emphasis on paperless office as a way of facilitating the process of correspondence handling and operation. For instance, Ekula (2008) stated that in offices computer, database management and other accessories are increasingly being used to organize and control records. Secretaries are now being required to be able to operate computer using Dbase, Excel, Corel Draw and Word Processing packages such as Word Perfect, MS word, Power Point, Adobe Page Maker and in particular the dexterity to use most of the application packages contained in Windows 2000 to 2007 respectively.

According to Esene (2012) computer internet is now being used to send and retrieve information from any part of the world with relative ease. Office automation has taken over the entire activities of very many organizations. Various electronic equipment such as: computer, electronic typewriters, photocopiers, tele-printers, fax recorders, telephones with cellular, GSM/Mobile attachments, electronic switch boards, laminating machines, scanners, Dictaphones, magnetic and non-magnetic tapes etc. All these equipment, as a matter of fact are used to speed up the processing of correspondence, but not to replace the secretarial function of the secretaries (Ekula, 2010). Perhaps, it must be stated very clearly that these equipment listed in the preceding paragraphs demand special skills on the part of the secretarial personnel to operate them proficiently. Really, automation carries with it good mission for secretaries, for apart from bringing about increased mechanization of office activities and services, it has gone a step further to make the impact of secretaries felt in the world of business.

According to Esene (2012) quality is usually seen as the degree of excellence in terms of passing judgment on the level of value in a product (graduate). Middle-Hurst (1992) perceived quality as a grade of achievement, standard against which to compare certain things by means of judgment. Assurance refers to promises by one or more agencies that the degree or level of value of service will produce good results – usually all the time. Using these two terms, quality assurance is defined as a plan and systematic activities implemented in a quality system so that quality requirements for a product or service will be fulfilled. It is a systematic assessment, measurement and evaluation by making objective comparison with a standard, monitoring of processes and an associated look that confers error prevention. Ehiametalor (1990) described quality assurance as the practice of managing the way goods are produced or services are provided to make sure they are kept at a high standard. Quality assurance in work delivery of the secretary is a fundamental aspect of gaining and maintaining credibility for programmes in the secretarial profession, not only nationally, but worldwide. On the whole, quality assurance is principally designed to prove and improved the quality of an institution’s methods, and educational products and outcomes. Maduewesi and Onyeachu (2010) posited that for quality assurance to be achieved, some strategies should be used to achieve it. These strategies include constant monitoring, evaluation, supervision, inspection, quality control and reporting.

**Concept of Office Automation**

Office automation is a new technology. According to Dosweli (1990) office automation is a conglomerate of all the separate office information processing technologies which include:
word processing, data processing, micrographics, reprographics and telecommunications. It also refers to the various automated electronic methods by which information is gathered, processed, reproduced, communicated, stored or protected and retrieved (Popyk, 1985). This includes not only the methods through which office information is processed but also the resources applied to capture, process, deliver and or store office information (Azuka, 1996). Information in this context can be regarded as any meaningful data or any fact or figure capable of providing knowledge.

**Word Processing**

According to Nwosu, Anaka and Eleoba (2003) word processing is an electronically processing of alphabetic and alpha numeric information. A word processor consists of keyboard, electronic memory, a display unit and printer. Because word processors are versatile, they can be useful to any person who wants to produce documents such as advertising copy, novels, letters, term papers, scientific papers, legal briefs and any other type of word based document. They went further to list the functions of word processor as follows: storing, editing information and retrieving text, insertion and deletion of text, underlining using various types of fonts, moving text, page numbering and saving, storing or retrieving texts. However, the capability of a word processor is dependent upon the special features of the application software. Word processing skills have made the work of secretaries more interesting. Even the status and work environment of secretaries have witnessed tremendous changes. Today’s secretaries require the knowledge, skills, attitude and aptitude of word processing to obtain good output in office operations.

Word processing is beneficial to secretaries in the following ways:

- The success or failure, status or lack of status of a manager/boss will no longer determine the secretary’s position.

- It relieves secretaries of the burden of repetitive typing thus making the production of documents less tedious.

- It enables secretaries to make additional and meaningful contributions to office tasks.

**Micrography**

According to Staffady (1998), micrography provides for the storage and retrieval of information through efficient utilization of magnetic storage and electronic transmission. It can therefore be described as the science and technology of creating images of micro-photography. These images which are greatly reduced in size are only readable with the help of optical aids like microscopic lenses. Chukwumezie (2002) described micrography as modern ways of recording information in electronic data storage device such as microfilm and computer disks. Automation in data storage have modernized the speed or retrieval of information, allowed greater and easier access to large quantities of records without the need to store papers in bulky filing cabinets. Many micrographic systems also include computer assisted retrieval mechanism. Micrographic system has replaced the traditional paper records management of using folders and cabinets to categorize data. Chukwumezie therefore remarked that secretaries should recognize and appreciate the importance of these film methods since finding of information held on paper, disk or filings are necessary secretarial functions in electronic office.
Data Processing

Kontos (1981) described data processing as the manipulation or computation of numeric data (numbers) to achieve desired result. He noted that business data processing functions include arranging, filing, sorting, editing, subtracting, recording and sorting alpha numeric data for future use. Agomuo (2005) posited that data processing is the manipulation of all forms of data used in an organisation into information in order to plan, control, manage and facilitate organisational activities. He noted that data processing can be done manually or automatically which ever method used. Data processing consists of three steps: inputting, manipulating and outputting. Nwosu, Anaka and Eleoba (2003) noted that the computer is used to process large volumes of accounting data relating to routine repetitive operations such as accounts receivable, accounts payable, inventories, payrolls and posting to large accounts. The nature of operations performed by an organisation is dependent on the data processing skills used by that organisation. They went further to list the following as data processing methods: batch processing, demand processing, interactive processing, real time processing, and time stating processing.

Ohakwe (2002) described the computer as a complex electronic machine used for all sorts of information processing. The information may be data, graphics, picture or audio. Computers are marked by accuracy of results, speed in operation and versatility in application. The use of computer system has brought about a lot of improvement and efficiency over the previous manual operations. Data processing skills will enable secretaries meet established performance criteria, maintain/update stored data base, and enable the secretary to interpret computer print outs.

Reprography

According to Abayi (2003), reprography is all aspects of copying and duplicating which have a lot impact on office information processing and dissemination. Reprography also known as copy processing ranges from the use of carbon to the very sophisticated photo typesetting equipment connected to the computer. Bergerud and Gonzalez (1991), noted that in the traditional office, copies of documents were usually reproduced using carbon copies, ink duplicating or spirit duplicating machines. But today, copies of documents are reproduced with modern technology using reprographic gadgets such as photo copying machines, computer print outs and scanning equipment. Reprographic skills are very important to the job of secretaries in the area of information processing and should be emphasized in their training.

Ekpenyong (1991), asserted that secretaries need to acquire new office technology skills to enable them adequately carry out routine office tasks that are repetitive, boring and cumbersome, to enable them secure jobs, retain job positions, dignity, achieve the objectives of the organisations and be relevant in the automated office. In addition, secretaries should endeavour to make use of reprographic equipment taking into consideration the time, space, finance, nature of output and skills required.

Telecommunications

Horby (2001), defined telecommunication as the technology of sending signals, images and messages over long distances by radio, telephone, television satellite opined that the merger of both telephone and the on satellite etc. Buchanna (1994), opined that the merger of both
telephone and computer technologies and the introduction of mobile phones, computer teleconferencing and information technology have made telecommunication an indispensable component of office information systems.

Ohakwe (2004), pointed out that telecommunication is about meeting or discussing with people from a distance. He listed some telecommunication equipment to include telephone and wireless phones, electronic mail, teleconferencing and video conferencing, word processors and telex, television, public address systems, internet and intranet services, satellite radio and satellite phones, electronic organizer, global positioning system and voice recognition by computer. Leo and Leo (1985) postulated that business information is the backbone of any organisation. It is the most critical resource of the business organisation and an indispensable link that ties together all the components of business organisation for better co-ordination and for survival in today’s competitive environment. They asserted that in this era of information explosion, where people are bombarded with data, getting the right information in the right amount and at the right time is not an easy task. It is only those organisations that have succeeded in managing information that will survive. Barron (1995), described telecommunication as all the methods of sending and or receiving messages by telephone or telegraph. Innovations in telecommunications have resulted in new technologies such as CD ROM, data broadcasting, small satellite antenna and remote date base access, etc.

According to Atakpa (2012) business organisations and secretaries need telecommunication skills to enable them to up-to-date and be relevant in today’s growing economy. Although telephone technique remains basically the same, new features are being introduced into the office at an alarming speed. This is because the electronic office relies on computer technology and telephone new works. Any secretary who is lacking telecommunication skills will find it very difficult to communicate effectively in an automated office.

Data Analysis Technique

The data collected with the questionnaires were carefully assembled and analysed by the use of simple percentages using the following formula:

\[
\% = \frac{f}{n} \times 100
\]

Where \( f \) = frequency of response

\( N \) = number of response

Presentation, Analysis and Interpretation of Data

Research questions were analysed and answered with the aid of relevant tables.

Research Question 1

What is the importance of quality assurance as an aid to Office Technology and Management Technology staff for effectiveness?
Table 1

Quality assurance in OTM is to improve the organisational effectiveness of the secretary.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Responses</th>
<th>Percentage(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>65</td>
<td>60.18</td>
</tr>
<tr>
<td>Agree</td>
<td>25</td>
<td>23.15</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>8</td>
<td>7.41</td>
</tr>
<tr>
<td>Disagree</td>
<td>7</td>
<td>6.48</td>
</tr>
<tr>
<td>Neutral</td>
<td>3</td>
<td>2.78</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>108</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The table above shows that 65(60.18%) of the respondents believed that quality assurance in OTM is to improve organizational effectiveness of the secretary. However, 25(23.15%) agreed, 8(7.41%) strongly disagreed, 7(6.48%) disagreed while the remaining 3(2.78%) were neutral. This shows that quality assurance in OTM is to improve the organisational effectiveness of the secretary.

Table 2

Quality Assurance in OTM is primarily designed to ensure that high standards are maintained in the profession.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Responses</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>72</td>
<td>66.67</td>
</tr>
<tr>
<td>Agree</td>
<td>20</td>
<td>18.52</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>10</td>
<td>9.26</td>
</tr>
<tr>
<td>Disagree</td>
<td>6</td>
<td>5.55</td>
</tr>
<tr>
<td>Neutral</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>108</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 2 above shows that 72(66.67%) of the respondents strongly agreed that the quality assurance in OTM is primarily designed to ensure that high standards are maintained in the profession. 20(18.52%) agreed, 10(9.26%) strongly disagreed while the remaining 6(5.55%) disagreed. This shows that majority of the respondents agreed that quality assurance in OTM is primarily designed to ensure that high standards are maintained in the profession.

Research Question 2

How has the introduction of office automation affected the job of the Office Technology and Management staff?
Table 3

Office Automation has increased job performance and efficiency of secretaries.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Responses</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>86</td>
<td>79.63</td>
</tr>
<tr>
<td>Agree</td>
<td>20</td>
<td>18.52</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Disagree</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Neutral</td>
<td>2</td>
<td>1.85</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>108</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The information presented on table 3 above shows that 86(79.63%) strongly agreed, 20(18.52) agreed while 2(1.85%) were neutral. This shows that the more a secretary can make use of modern automated machines, the more efficient on the job he becomes.

Table 4

Office automation may lead to reduction in the number of secretaries to be engaged.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Responses</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>2</td>
<td>1.85</td>
</tr>
<tr>
<td>Agree</td>
<td>3</td>
<td>2.78</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>77</td>
<td>71.30</td>
</tr>
<tr>
<td>Disagree</td>
<td>26</td>
<td>24.07</td>
</tr>
<tr>
<td>Neutral</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>108</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 4 above shows that 2(1.85%) of the respondents strongly agreed that the more offices are automated, the less the number of secretaries that will be needed in the organization. However, 3(2.78%) agreed, 77(71.30%) strongly disagreed while the remaining 26(24.07) disagreed with the opinion. This shows that office automation may not lead to reduction in the number of secretaries to be engaged.

Table 5

Office automation has led to increase in productivity.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Responses</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>80</td>
<td>74.07</td>
</tr>
<tr>
<td>Agree</td>
<td>28</td>
<td>25.93</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Disagree</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Neutral</td>
<td>-</td>
<td>2.78</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>108</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 5 above shows that 80(74.07%) of the respondents strongly agreed with the issue, 28(25.93%) agreed. This implies that all the respondents believe that office automation may lead to increase in productivity.
CONCLUSION

The emphasis in the new OTM programmes is designed to enable Nigeria join the rest of the developed countries. The OTM curriculum has significantly improved in content and in pedagogy by the inclusion of courses in computer, database management, ICT applications management and secretarial office practice, vocational skills and contemporary courses. All these are designed to enable secretaries to operate computer using Dbase, Excel, Corel Draw and Word Processing packages such as Word Perfect, MS Word, MS power point, Adobe Page Maker etc. These new technologies are to enable the secretary progress in his employment on a useful and productive basis, especially now that modern offices lay emphasis on paperless offices as a way of facilitating the processing of correspondence, handling and operation. As new businesses and job opportunities are generated everyday as a result of automation, there is need for secretaries to match the new challenges by acquiring new skills and competencies in the operation of these new technologies. Secretaries who are not well equipped for the electronic office are sure to be embarrassed as their inadequate skills will render them redundant or even throw them out of job.

One way to achieve quality in the secretarial profession is to constantly train the secretary in the use of modern office equipment and in monitoring the system put in place.

RECOMMENDATIONS

In view of the impact of modern office technology on quality delivery of work in the offices and industries by secretaries and on the strength of the results derived from the study, and the conclusion reached, the investigator recommends as follows:

1. Secretaries should not entertain fear that automated devices will displace them but rather to see it as something which has come to assist them to do their jobs in order to improve their efficiency and productivity.

2. Schools that offer Office Technology and Management should lay more emphasis on the use of automated devices. Employers should send their secretaries for further training.

3. Internet facilities should be installed in all the offices so as to ensure quick dissemination of information and timely accomplishment of tasks.

4. Secretaries should see office automation as a challenge and prepare themselves towards facing it by going for training. Because in the near future, secretaries that do not have knowledge of these new devices will be displaced by those who have the knowledge of them.

5. More modern machines and equipment should be procured by various organisations so as to make for quality delivery of work.

6. Finally, in order to see that the introduction of these devices yield results, there should be proper planning, someone must be in-charge.
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