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Full Length Research Paper

Modern office technology and the secretary's productivity in private business organisations

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The functions and effectiveness of the secretary in every business organization depends on the availability of office technologies as well as the skills and competencies of the secretary. Modern business organisations have come to appreciate the role and importance of the secretary as well as the need to providing the needed and necessary office machines and equipment for the efficacy of the secretarial functions. The study covered 40 randomly selected modern business organisations within Port-Harcourt, Nigeria and it's environ. 40 secretaries were used for the study. 3 instruments namely the modern office technology availability (MOTA), modern office technology and secretary's usage (MOTSU) and modern office technology and secretary's productivity (MOTSP) were developed and used for the study. Mean and Chi-square were used to analyse the data collected. The findings of the study revealed the availability of modern office technological gadgets in private business organizations, their use by secretaries cause increase in productivity. Amongst others, it was recommended that private business organizations should procure as many modern office technological gadgets as are available in the market to ease the job of secretaries to enable them increase their productivity.

Key words: Modern business organisations, technology and technological gadgets, secretary, productivity, efficiency, office machines and equipment.

INTRODUCTION

For decades now, fast changes have been taking place in all facets of human life including the office environment. This is as a result of technological advancement. Every office in today's business world, be it government, industry or other human endeavours, require facts and accurate information for quick decision-making.

The office worker, including the secretary, expects certain support from the organization into which he/she is employed. This support can be technological (machines and equipment) and human. In offices of past, manager's dictated memos and letters and secretaries typed them. Most recently, business have developed word processing centers and relied on personal computers and even electronic mail in an effort to lessen the need for secre-tarial support and make the employee-secretary very productive (Ezoem, 1995; Osuala, 2004).

As a result of changes in technology, the role of secre-taries in business has changed tremendously from that of typewriting and shorthand dictation, answering of tele-phone calls and processing of mails. Today's secretaries are exposed to office technology including the internet that make work much easier and knowledge more accessible (Edwin, 2008). It is now easier to send messages by telex, electronic mails (e-mails), fax and telephones. Other office gadgets available to the secre-tary are photo-copy machines, duplicating machines, dictating machines, printers, among others. This is the era of computers and information technology which has become an enabler of greater convenience. 3 of the most popular types of computer software programme are word processing, which help the user to write and edit memos, letters and reports, data management programmes or databases, which help the user-secretary to use long lists of data and spreadsheet programmes, which handle tables and numbers (Dulek and Fielden, 1999). Secre-taries now have many technologically advanced office gadgets to ease their jobs and enhance proficiency and productivity leading to improved access to goods and services

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globally (Akpomi, 2003; Anyakoha, 2002; Wofersohn, 2001).

There are wide range of office machines and equipment which now enable secretaries to improve their performances. Such new machines take the form of electronic typewriters that have replaced the manual ones. Word processors with milt-purpose facilities, computers and other sophisticated office machines and equipment are now provided by employers. Some of the physical equipment used by secretaries includes computer communication equipment and electronic pocket organizers (Lucas, 1997). New technological equipment that has altered the procedures and technique for office functions include the computers, electronic mail/ commerce, voice mail, and the Internet.

A secretary is an office-staff who combines the mastery of secretarial skills of typewriting and shorthand with office routine functions. Automation is an innovation and a consequence of the industrial revolution. It is a collection of methods for controlling machinery and production processes by mechanical method, usually with electronic equipment. Spencer (1981) defined automation as the process of replacing human work with work done by machines or system designed to perform a specific combination of action automatically or repeatedly.

Mayer (1977) defines a secretary as an executive assistant, who possesses a mastery of office skills, demonstrates the ability to assume responsibility with or without supervision, exercises initiatives and judgment and makes decision within the scope of assigned authority. It means that a qualified secretary should have a wide knowledge of business acumen, versatile knowledge in accounting, personnel, office practice, communication and inside knowledge of the operation of all departments within the organization where he works, unlike a half -baked secretary who possesses only knowledge of shorthand, typewriting and basic office practices. The advent of the word processor has helped to make the secretarial career path cleaner. For a secretary to be employable in an automated office, Merony (1983) believed that such a secretary must be well versed in the following specific automated office equipment training:

i.) The concept and theory of specific automated office equipment.
ii.) Knowledge of the categories of equipment and their intended uses and differences.
iii.) The skill to use resource or reference materials properly.
iv.) Hands-on equipment training, etc.

The success of the newly introduced equipment depends on people, procedure and equipment (PPE). Automation can only be successful if a careful study is carried out to assure the need of the equipment and the financial resources available for the purpose. It is important to note however, that technology is not static, therefore it is essential that while planning to equip the office with modern technology, great care should be taken of the changing nature of technology. As such finance should not be invested into technology that is likely to become obsolete in a short time.

It is believed that for a new equipment to be installed in any organization, it has to win the good will of the staff, since they are the ones to use it. By getting the good will of the user staff, the introduction and procedures will be accepted and effective.

An automated office, undoubtedly, offers new roles and responsibilities for the secretary. Such new roles presuppose that additional training and qualifications are required from the secretaries. The relevance of automation in business was identified by Aromolaran (2003) as follows

i.) Creating a distinct career path for the secretary.
ii.) Automation creates a prominent place for the secretary on the organisation chart.
iii.) It creates routine and assigned roles for the secretary.
iv.) With automation the secretary now spends less time in correcting,
revising, proof-reading and reproducing documents.

Silver and Silver (1981) asserted that based on the reorganisation of the office and the introduction of the automated office equipment, the manager's work is produced faster with professional touch. The manager is also able to concentrate on a more creative task with the presence of an experienced secretary assisting him. Spencer (1981) opined that automation remains a prominent factor that has contributed immensely and positively to the complete information processing revolution. In recent times, the secretary's routine has reached an advanced stage due to the invention of automated office equipment. Most of the traditional and routine tasks are performed by automated office equipment such as computers, telephone, etc. In a nutshell, automation has improved general and secretarial education, thus, enabling secretaries to become better prepared for automated office tasks.

STATEMENT OF THE PROBLEM

Cameron (1982), a very long time ago, commented that it takes up to 10 to 15 years between the introduction of new equipment in the market and its installation in small organizations. This is particularly peculiar to private business organizations in developing countries. In modern times, it is not uncommon to find some organizations still subjecting secretaries to the use of manual typewriters. When secretaries are not provided with effi-

cient and effective working tools, productivity is definitely bound to be low. What is the situation in private business organizations in Port-Harcourt, Nigeria?

RESEARCH QUESTIONS AND HYPOTHESES

The following research questions and hypotheses were posed and formulated for the study:

RQ1: What is the extent of availability of modern office technological gadgets in business organizations?
RQ2: What is the extent of usage of modern office technological gadgets by the secretaries in business organizations?
RQ3: What is the relationship between the secretaries' usage of modern office technological gadgets and productivity in business organisations?

Ho1: Modern office technological gadgets are not available in private business organizations.
Ho2: Secretaries in private business organizations do not use modern office technological gadgets.
Ho3: There is no significant relationship between usage of modern office technological gadgets and secretaries' productivity.

METHOD

The population for this study consisted of all the secretaries in all modern business organizations in Port-Harcourt and its environs. Random sampling technique was used to select 40 secretaries drawn from 40 selected private business organizations in Port-Harcourt. 3 instruments namely the modern office technology availability (MOTA), modern office technology and secretary's usage (MOTSU) and modern office technology and secretary's productivity (MOTSP) were developed and used for the study. The instruments were face validated by experts in office management and business education and had a test retest reliability index of 0.73, 0.84 and 0.89 respectively. Mean and Chi-square were the statistical tools used for analysis. All the questionnaires were properly filled and returned. Any item with a mean score of 2.00 and above was regarded as a factor that contributed to effective and efficient productivity of the secretaries in modern business organizations. While any item with a mean score of less than 2.00 was considered otherwise.

RESULTS

Presentation and analysis of data

Table 1 show that modern office gadgets are available in many business organizations. All the items in the table were accepted by the mean range used for decisions which is 2.00 and above. The scores in the agree column, except item 3 were all above 30. Items 3 and 10 recorded the lowest in terms of availability, showing that as many as 11 business organizations out of 40 and 10 out of 40 respectively do not have cassette players and franking machines.

A close observation of Table 2 shows that secretaries make use of the available modern office technological gadgets to a large extent, although some secretaries indicated non-use of some of the items such as items 10, 7, 2 and 3 respectively. All the items in the table were accepted by the mean range used for decision. The scores in the agree column were all above 30 except item 3.

The data in Table 3 shows that there exists a close relationship between the secretaries' use of modern office technological gadgets and productivity by a grand mean of 2.89. Results of the analysis show a positive mean response of 2.00 and above in all cases. Item 3 recorded the highest negative response of 8 out of 40 which does not disprove the fact that there is a close relationship.

Test of hypotheses

A close observation of Table 4 shows that the secretaries indicated availability of modern office technological gadgets. At 0.05 level of significance with 22 df, the critical Value is 33.92. Since the calculated value of chi-square is greater that the critical value, we conclude that the difference between the observed frequencies and expected frequencies is significant. Therefore, the hypothesis that modern office technological gadgets are not available in private business organizations is not accepted.

Table 5 shows that the secretaries put the available modern office technological gadgets to use. At 0.05 level of significance with 22 df, the critical value is 47.789. Since the calculated value of chi-square is greater than the critical value, we conclude that the difference between the observed frequencies and the expected frequencies is significant. The hypothesis that states that secretaries in private business organizations do not use modern office technological gadgets is also not accepted.
A critical examination of Table 6 showed a close relationship between the use of modern office technological gadgets by secretaries and their productivity. At 0.05 level of significance with 22 df, the critical value is 33.92. Since the calculated value of chi- square is greater than the critical value, we conclude that the relationship between the observed frequencies and the expected frequencies is significant. Therefore, the hypothesis that states that there is no significant relationship between usage of modern office technological gadgets and secretaries' productivity in private business organizations is also not accepted.

Table 1. The extent of the availability of modern office technological gadgets in business organizations.

S/No	Machines and Equipments	No. of responses agree	No. of responses disagree	No. response	Mean
1.	Electric typewriters	34	6	-	2.85
2.	Tape recorders	35	3	2	2.83
3.	Cassette players	29	11	-	2.73
4.	Personnel computers	38	1	1	2.93
5.	Scanning machines	37	3	-	2.93
6.	Photocopiers	36	4	-	2.90
7.	Electric calculators	35	3	2	2.83
8.	Duplicating machines	32	8	-	2.80
9.	Shredding machines	38	2	-	2.95
10.	Franking machines	30	10	-	2.95
11.	Filling/Equipment	35	5	-	2.88
12.	Telephone equipment (adapted)	33	7	-	2.83
	Total	412	63	5	34.21

Total Mean = 34.21; Grand Mean = 2.85.

Table 2. The extent of usage of modern office technological gadgets by the secretaries in business organizations.

S/No	Machines and Equipments	No. of responses agree	No. of responses disagree	No. response	Mean
1.	Electric typewriters	38	2	-	2.95
2.	Tape recorders	35	5	-	2.88
3.	Cassette players	34	4	2	2.80
4.	Personnel computers	40	-	-	3.00
5.	Scanning machines	37	2	1	2.90
6.	Photocopiers	40	-	-	3.00
7.	Electric calculators	35	5	-	2.88
8.	Duplicators	37	3	-	2.93
9.	Shredding machines	40	-	-	3.00
10.	Franking machines	32	8	-	2.80
11.	Filling/Equipment	40	-	-	3.00
12.	Telephone equipment (adapted)	37	1	2	2.85
	Total	445	30	5	34.94

Total Mean = 34.21, Grand Mean = 2.85.

Table 3. Relationship between secretaries' usage of modern office technological gadgets and productivity.

S/No	Machines and Equipments	No. of responses agree	No. of responses disagree	No. response	Mean
1.	Electric typewriters are faster and increase productivity	35	3	2	2.83
2.	Tape recorders help the retention of information	37	2	1	2.90
3.	Cassette players enhance office jobs	32	8	-	2.80
4.	Computers increase speed and productivity	37	3	-	2.93
5.	Scanning machines are very important for efficiency	36	2	2	2.85
6.	Copiers machines help in time-saving	38	1	1	2.93

Table 3 Contd.

7.	Electric calculators make tasks easier.	40	-	-	3.00
8.	Duplicators make for cheap production of many copies of documents	33	5	2	2.78
9.	Shredding machines are important for easy discarding of unwanted documents and help office secrecy	35	4	1	2.85
10.	Need franking machines for ease of stamping many documents	33	7	-	2.83
11.	Filling/Equipment aid safe keeping and easy retrieval of documents and information	39	1	-	2.95
12.	Telephone makes communication easy and reduces boredom	40	-	-	3.00
	Total	435	36	9	34.65

Total Mean = 34.65, Grand Mean = 2.89.

Table 4. The extent of the availability of modern office technological gadgets in business organizations.

S/No	Agree	Disagree	No response	Total
1	34 (34.33)	6 (5.25)	0 (0.417)	40
2	37(34.33)	3 (5.25)	2 (0.416)	40
3	29(34.33)	11 (5.25)	0 (0.417)	40
4	39(34.33)	1 (5.25)	1 (0.416)	40
5	37(34.33)	3 (5.25)	0 (0.417)	40
6	36(34.33)	4 (5.25)	0 (0.417)	40
7	37(34.33)	3 (5.25)	2 (0.416)	40
8	32(34.33)	8 (5.25)	0 (0.417)	40
9	38(34.33)	2 (5.25)	0 (0.417)	40
10	30(34.33)	10 (5.25)	0 (0.417)	40
11	35(34.33)	5 (5.25)	0 (0.417)	40
12	33(34.33)	7 (5.25)	0 (0.417)	40
Total	412	63	5	480

Expected values in bracket

$X^2 = \frac{(o-e)^2}{e}$

= 40.67

$X^2_{tabulated}$ = 33.92; df = 22, P=0.05.

Table 5. The extent of usage of modern office technological gadgets by the secretaries in private business organizations.

S/No	Agree	Disagree	No response	Total
1	38 (37.08)	2 (2.5)	0 (0.42)	40
2	35 (37.08)	5 (2.5)	0 (0.42)	40
3	36 (37.08)	4 (2.5)	2 (0.42)	40
4	40 (37.08)	0 (2.5)	0 (0.42)	40
5	38 (37.08)	2 (2.5)	1 (0.42)	40
6	40 (37.08)	0 (2.5)	0 (0.42)	40
7	35 (37.08)	5 (2.5)	0 (0.42)	40
8	37 (37.08)	3 (2.5)	0 (0.42)	40
9	40 (37.08)	0 (2.5)	0 (0.42)	40
10	32 (37.08)	8 (2.5)	0 (0.42)	40
11	40 (37.08)	0 (2.5)	0 (0.42)	40
12	39 (37.08)	1 (2.5)	2 (0.42)	40
Total	445	30	5	480

Expected values in bracket

$X^2 = \frac{(o-e)^2}{e}$

= 47.789

$X^2_{tabulated}$ = 33.92; df = 22, P=0.05.

DISCUSSION

The study investigated modern office technology and secretaries' productivity in private business organizations. Based on the findings, it was discovered that there are modern machines are available in offices except for cassette players, franking and duplicating machines that the secretaries indicated their non availability in some organizations (Table 1). Even at this, the number is not significant. Many private organizations, as opposed to the views of the researchers have been able to procure modern office technological gadget in their offices for use by secretaries. This is quite commendable and as observed during data collection, the secretaries in offices where the machines and equipment were available car-

Table 6. Relationship between secretaries' usage of modern office technological gadgets and productivity.

S/No	Agree	Disagree	No response	Total
1	35 (36.25)	3 (3)	2 (0.75)	40
2	37 (36.25)	2 (3)	1 (0.75)	40
3	32 (36.25)	8 (3)	0 (0.75)	40
4	37 (36.25)	3 (3)	0 (0.75)	40
5	36 (36.25)	2 (3)	2 (0.75)	40
6	38 (36.25)	1 (3)	1 (0.75)	40
7	40 (36.25)	0 (3)	0 (0.75)	40
8	33 (36.25)	5 (3)	2 (0.75)	40
9	35 (36.25)	4 (3)	1 (0.75)	40
10	33 (36.25)	7 (3)	0 (0.75)	40
11	39 (36.25)	1 (3)	0 (0.75)	40
12	40 (36.25)	0 (3)	0 (0.75)	40
Total	435	36	9	480

Expected values in bracket

$X^2 = \frac{(o-e)^2}{}$

ried out their duties happily. Akinyeni (2001) opined that in the past, automation was only restricted to agriculture, but now most organizations spend money to purchase modern office machines and equipment that will increase office productivity.

On the issue of the usage of the modern office techno-logical gadgets by secretaries, the study revealed the usage of the machines and equipment by secretaries. This is in line with the opinion of Akpomi (2003) who noted that once office machines and equipment are provided by employers, it behoves on the secretary to learn to put them to use for ease of office operations and productivity. Machines such as the franking machine and tape recorder where some secretaries indicated non-use as in Table 5 were not available (Table 1). In all offices where the franking machine was not available, it was observed that such private business organizations had no use for it. As for tape recorders, their importance cannot be overemphasized, especially for secretaries who attend meetings frequently and take minutes. During the interaction of the researchers with them, such secretaries expressed wish of their employers to procure them. It is very obvious that without machines and equipment in private business organizations, secretaries cannot function effectively.

Still on the usage of these modern office equipment and machines by the secretaries, Azuka (2000) observed that as the traditional office moves towards automation, the secretaries are also developing computer skills. Secretaries are finding that the ease and efficiency of a word processor or micro-computer far outweighs their initial fears of using such equipment (Nzerem, 1992). The use of computers, telex equipment, and email/commerce, etc. has become the order of the day in our society. Nwosu (2001) and Ohakwe (2001) also reiterated the usage of modern office technological gadgets by the secretaries in large modern business organizations.

In Table 6, the data elicited by hypothesis 3 indicates that the productivity (efficiency and effectiveness) of the secretary is related to and determined by the use of modern office technological gadgets. This finding is supported by Akpomi (2003) who noted that modern office technology facilitates operations and improves greatly the secretary's performance. Nwosu (2000) also noted that office machines and equipment positively affect the job performance of secretaries. This implies that office technology obviously increases productivity and improves efficiency and accuracy. It should however be noted that some of the offices where secretaries indicated non-use do not have the machines and equipment. A few of them do not have the need for such machines and equipment by virtue of the kind of business they do. In a few cases, the secretaries needed to be trained to effectively put the machines and equipment to use.

Conclusions

Based on the findings of the study, it is concluded that many private business organizations have computers and other modern office technological gadgets. Some however do not have and this affected the productivity of secretaries in such business organizations. The skills of the secretaries in the use of technological gadgets are basically portrayed in virtually all aspects of the working environment in a modern business office.

RECOMMENDATIONS

Based on the results and findings of the study, the following recommendations are therefore made,

i.) Private business organizations should procure as many modern office technological gadgets as are available in the market to enable secretaries increase their productivity.
ii.) Secretaries without new skills in the use of modern office technological gadgets should be retrained to fit into the trend of current advancement.
iii.) Secretaries should be given the opportunity and chance to perform/carry out other administrative functions.

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