

# Assessing the Impact on the Job of Secretaries on the Use of Information Communication Technology in Public Institutions: The Case of Bolgatanga Polytechnic

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## Abstract

This study basically aims at gathering information on the impact of office Information and Communication Technology on the performance of the professional secretary in Bolgatanga polytechnic. The descriptive survey method was used for this study. A total sample of 22 secretaries was used in this study. Questionnaires involving both open and closed ended questions were used to collect data. This study showed that there are computers, printers, photocopiers and telephones in every office of the secretaries in the polytechnic, however, not all the offices have electric typewriters, scanning machines, shredding machines, fax machines and duplicating machines. The result of the study also showed that all the secretaries accepted that the introduction of Information Communication Technology in their offices has helped staff to work faster than before, enhanced flexibility in their offices, and improves positively the performances level of secretaries. The secretaries also indicated that the main challenges of using ICT in secretarial duties were the instability in power system in the institution, the need for special training of personnel on the use ICT facilities, and protection against data loss. It was recommended that the Polytechnic should endeavour to organize training and development programmes that will enhance the effective performance of secretaries through acquisition of additional skills. Also, secretaries should always be ready and open-minded to acquire additional training/skills development, bearing in mind that changes occur frequently in the line of their chosen career.

**Keywords:** Information Communication Technology, secretaries, computers, electronic devices

## 1.0 Background to the Study

The introduction of sophisticated office technology equipment like computers, word processors and other information technology resources coupled with new management techniques have altered old work habits in the office and triggered off a new business orientation thus making moribund the older methods of business transaction (Nwaokwa&Okoli, 2012). According to Okute (2001), Information Communication Technology is concerned with the aspect of managing and processing information through the use of electronic computers and computer software to convert, store, protect, process, transmit and retrieve information. It is the handling and processing of information for use by means of electronic and communication gadgets such as computers, cameras, and telephones.

In terms of secretarial roles, it has been stated that most of their functions have undergone technical modifications over the years across the globe (Atakpa, 2010). Igbidinoin (2010) identifies the secretary's responsibilities to include; taking dictation and transcribing it into correspondence which is at once dispatched to its business destination. He highlights of some forms of these correspondence to include: letters, memos, circulars, orders, quotations, acceptances, contractual terms, and conditions, invitations, etc. Furthermore, Abosede and Akintola (2015) stated that a secretary does not only handle the typewriter/computer and writes shorthand but can also serve as an executive of an organization. They receive visitors. All the functions performed by the secretary reveals that the role played by the secretary in any organization cannot be undermined; and this is why some people refer to secretaries as the nerve-centre of any organization. Armah (2015) examined the impact of office information and communication technology on performance of the professional secretary at the Ghana ports and harbours authority. The result of the study also showed that all the secretaries accepted that the introduction of Information Communication Technology in their offices has ensured increased in efficiency in their performance and has also made it possible for them to implement major changes as well as making corrections easily.

The result of improvement in the efficiency could be attributed to modern office equipment that gives the secretaries the edge to work. Many office functions and secretarial duties that were previously done manually have been mechanized. Thus, the diversities of these office technologies require the secretary to possess new skills and sub-skills to enable him/her to be relevant in the modern office. In fact, ICT has changed the equipment and work groups, of course; nobody today would like to work in an office where information processing and other secretarial activities are done manually. So, the manual office is gradually given way to the automated office. Investment in networks of computer-based workstations and other automated equipment is transforming traditional manual office methods and paper communications media. This transformation has resulted in the development of automated systems that rely on electronic collaboration and communication

networks, text processing, image processing and other information and communication technologies.

Okwuanaso and Obayi (2003) stated that information communication technology has posed challenges to secretaries as they communicate in the present day office. In the past, secretaries' functions were performed manually such that documents and records were maintained on papers, stored in files and drawers. The consequences of global development in the modern information and communication technology area, calls for corresponding development of new skills in office communication by all secretaries and office managers. Information is a basic resource in today's society. We are living in a global information society, with a global economy that is increasingly dependent on the creation, management and distribution of information resources. People in many nations no longer live in agricultural societies, composed primarily of farmers, or even industrial societies, where a majority of the workforce consists of factory workers. Instead, the workforce in many nations consists primarily of workers in services occupations or knowledge workers, that is, people who spend most of their workday creating, using and distributing information (O'Brien, 1996).

Today, the Information Communication Technology revolution has dramatically changed all these and is moving quickly towards changing the work itself. The following are the modern ICT devices found in most offices for secretarial functions. They are, electronic computers with modern office accessories or packages and internet facilities for on-line communication and collaboration, computer printers, plotters, digit-memo, fax machine, photo-copier, digital video camera, close circuit television, and large-screen video projector. Similarly, the days of relying primarily on ICT professionals to meet our information processing needs are over. Today's secretarial staff is expected to use net-worked microcomputers as professional workstations to acquire the information they need to accomplish their jobs successfully.

Communication technologies are new innovations in offices that enable the discharge of office functions more rapidly and efficiently. The emergence of office technologies in modern day organizations has challenged the occupational skills of the employees including the secretaries (Nwaokwa&Okoli, 2012). Hence, these communication technologies have recently revolutionized office skills and rendered some skills such as transcription skills, typing on the manual typewriter obsolete and has also given rise to previously unknown skills such as webpage design, desktop publishing, networking, internet skills in modern organizations. This development has obviously challenged the skills and functions of secretaries. The modern world of high technology could not have come about except for the development of computer. Information technology has opened up a new era in managing information/communication through the techniques of automation and this has enhanced communication systems. Information technology has made secretarial job more competitive. One of the main causes of poor performance among secretaries in most organizations is their abject lack of communication technology skills. Many of them do not possess communication technology skills required in the various offices and have continued to negatively affect their general performances. Lack of skills in the area of webpage design, desktop publishing, office application, networking, proficiency in accessing the internet, among secretaries in government offices have often been a source of worry to the management of such organizations.

Eze (2000) maintains that any office staff of today that is lacking in Information Communication Technology would be boring, repetitive and would produce very little. Secretaries have to get themselves acquainted on how to operate new office automation such as information storage systems, the internet and other new software packages. According to Acquah (2012), the ICT usage in Ghana have undergone through many evolution. Frempong (2005) stated that in the past, most political and development planners classified ICT as a luxury service, and therefore, ICT did not feature prominently in the national strategies for socioeconomic development. But, recently ICTs are increasingly seen as key elements to general economic development of any nation. In view of the aforementioned problems the study tends to study the effect of information communication technology on secretaries job in public institutions in Ghana using Bolgatanga Polytechnic as a case study.

## **2.0 METHODOLOGY**

The study adopted descriptive research design. In this study, the target population was all the Senior Clerks, Administrative Assistants, Assistant Registrars and the Registrar of the Bolgatanga Polytechnic, which comprise of 22 respondents in the Polytechnic. In this research, the sampling technique of the study is census. According to Kothari (2008), census involves sampling all the elements of the population. Census was appropriate in this study because the size of the population is small. The sample size consisted of all the 22 respondents in order to ensure a fair representation.

Table 2.1: Population and Sample Size of Respondents

Respondents	Population	Sample size
Registrar	1	1
Assistant Registrars	8	8
Senior Administrative Assistants	8	8
Senior Clerks	5	5
<b>Total</b>	<b>22</b>	<b>22</b>

Source: 6<sup>th</sup> Congregation Manual, 2017.

Both primary data and secondary data were used to achieve the objectives of the study. Primary data is data collected directly from first-hand experience through administering of questionnaires to 22 respondents of the Polytechnic. The secondary data was also used to gather additional information on the research objective to support responses gathered from the questionnaires which included published and unpublished research articles, thesis, journals, books, and the internet. The main instrument of data collection was a questionnaire. Saunders et al (2009) indicated that quantitative analysis techniques allow researchers to analysis quantitative data to explore, present, describe and examine the relationships and trends with the data obtained from the field of study. Also, qualitative analysis procedures allow researchers to develop theory from all non-numeric data which may include both deductive and inductive approaches. The data gathered on the questionnaires was put into the Statistical Package for Social Sciences (SPSS) to bring out information for analysis and discussion.

### 3.0 RESULTS AND DISCUSSIONS

This section of the paper presents the results and discussion obtained from questionnaire administered to respondents from the sampled secretaries in Bolgatanga Polytechnic. The demographic information of respondents includes the gender, age range, qualification, and working experience of the respondents and the findings are presented in the proceeding sections. There was balance representation from both gender groups. The majority (9) of the respondents representing 40.91% fell between 41-45 years.

#### 3.1 Use of Computer in Relation to Qualification

In order to establish whether data was obtained from learned respondents, respondents were asked to state their qualification to determine if educational background has an impact on the use of computer.

Table 3.1: Computer Usage Based on Qualification

Qualification	Number of Respondents	Percentage
BECE	0	0.00
WASSCE	0	0.00
DBS	1	4.55
HND	4	18.18
1 <sup>st</sup> Degree	5	22.73
2 <sup>nd</sup> Degree	10	45.45
Other	2	9.09
<b>Total</b>	<b>22</b>	<b>100.00</b>

Source: Field Work, 2018

From Table 4.2, no respondent possessed either BECE or WASSCE certificate. One respondent representing 4.55% was with a DBS certificate and 4 respondents representing 18.18% were HND holders. Also, 5 respondents representing 56% and 10 respondents representing 45.45% were first degree and second degree holders respectively. Those with other qualification were 2 respondents representing 9.09%. It is evident that majority of the respondents were second degree holders because majority of the task to be done required people who are degree holders hence taking the highest percentage (45.45%). This implies that data for the study was obtained from learned respondents who have easily got adopted to use computer based system hence reliability of data.

#### 3.2 Working Experience of Respondents

In order to get relevant data from the respondents, the researchers found it necessary to determine the number of respondents who have worked in the institution in a certain period in order to establish the influence of experience of the respondents on their job as Secretaries. This result is shown in Figure 3.1.

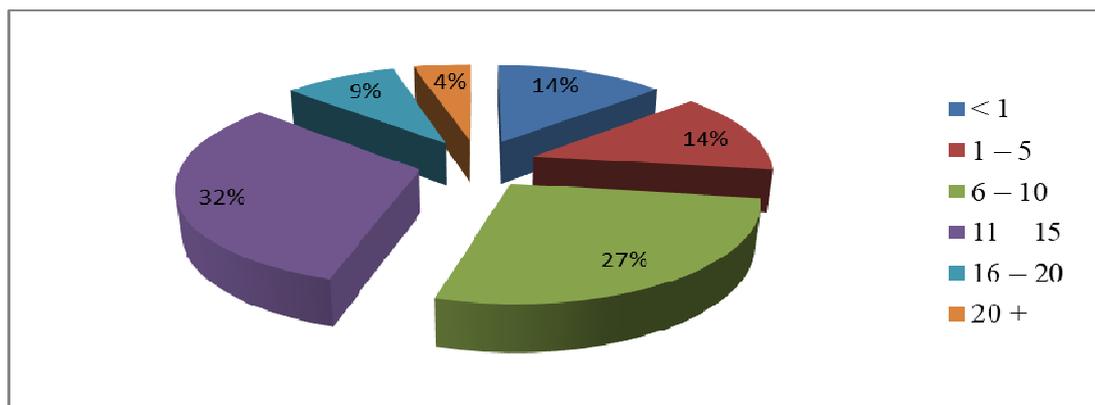


Figure 3.1: Working Experience (years)Source: Field Work, 2018

The results indicated that staff who had served between 11-15 years formed the greater number of the respondents representing 32%, followed by staff who had served between 6-10 years representing 27%, followed by those who served less than a year and between 1-5 years with 14% representation. Also 9% of the respondents have been working in the institution for a period between 16-20 years. The least of score of 4% have been with the institution for a period of 20 years and more. This agrees with the trend in environments where unemployment rate is high; people are expected to stay longer in one job as compared with other environments where the unemployment rate is relatively lower and the turnover rate is higher due to the ease with which people can find employment. So the number of employees who have served 6 years and above is significant (72%) to support this assertion.

### 3.3 ICT facilities used among Secretaries in Bolgatanga Polytechnic

The study tried to find out about the type of Information Communication Technology equipment used among Secretaries in Bolgatanga Polytechnic. Respondents were asked about the types of ICT equipment at their office. The responses to the question are shown in Table 3.2.

Table 3.2: ICT facilities use among Secretaries in Bolgatanga Polytechnic

ICT Facilities	Number Of Respondents	Percentage
Computer	22	100
Scanner	14	63.64
E-Mail	15	68.18
Mobile/Telephone	22	100
LaserJet Printer	12	54.55
Photocopier	18	81.82
Manual Type Writer	11	50
Pen Drive	11	50
Fax Machine	12	54.55
Shredding Machines	11	50

Total number = 22

Source: Field Work, 2018

From Table 4.3, all the respondents 22(100%) had computers and Mobile/Telephone in their offices, 15 respondents representing 68.18 % had official emails and photocopiers while 14 respondents representing 63.64% had scanners in their offices. It was also found out that, 12 respondents representing 54.55% had LaserJet Printers and Fax Machine in their offices. The table also shows that, 11 respondents representing 50% used Manual Typewriters, pen drives, and shredding Machines respectively in their various offices.

### 3.4 Literacy Level with the Following ICT Facilities

Respondents were also asked to indicate their level of knowledge with the following key ICT facilities. This result is presented in Table 3.4.

Table 3.4: Literacy Level with the Following ICT Facilities

ICT facilities	NK	B	I	A
Computer	-	3 (18.19%)	9 (40.91%)	9 (40.91%)
Scanner/ Photocopier/printer	0 (0.00%)	4 (18.18%)	11 (50.00%)	7 (31.82%)
Mobile/Cellular telephone	0 (0.00%)	3 (13.64%)	8 (36.36%)	11 (50.00%)
E-mail	2 (9.09%)	3 (13.64%)	8 (36.36%)	9 (40.91%)

**Key: NK-No knowledge; B-Basic; I-Intermediate; A-Advanced**

**Source: Field Work, 2018**

As clearly shown in Table 3.4 out of the total respondents, non of the respondents had no knowledge in computer. However, 18.19%, 40.91% and 40.91% had basic, intermediate, and advanced knowledge in computer respectively. With respect to having knowledge in scanning, photocopying and printing, 4 respondents representing 18.18% had basic knowledge, majority of 11 respondents representing 50% had intermediate knowledge while 7 respondents representing 31.82% had advanced knowledge in scanning, photocopying and printing. It was also found out that, 3 respondents representing 13.64% had basic knowledge with the use of a mobile phone, 8 respondents representing 36.36% had intermediate knowledge while majority of 11 respondents representing 50% had advanced knowledge in using a mobile phone.

Also, 2 respondents representing 9.09% had no knowledge with the use of emails, 3 respondents representing 13.64% had basic knowledge, 8 respondents representing 36.36% had intermediate knowledge while majority of 9 respondents representing 40.91% had advanced knowledge in using emails.

### 3.5 Effect of ICT on Secretaries' Job in Bolgatanga Polytechnic

An investigation on how Information Communication Technology equipment has contributed to the secretaries' performance level in their offices was also conducted. A 3-point Likert scale type questions were provided for them to respond to. The results are summarized in Table 3.5.

Table 3.5: Effect of ICT on Secretaries' Job in Bolgatanga Polytechnic

Effect	A	U	D
ICT equipment have helped me to work faster than before	17 (77.27%)	4 (18.18%)	1 (4.55%)
ICT equipment has enhanced flexibility in my office	17 (77.27%)	5 (22.73%)	0 (0.00%)
ICT equipment has made corrections of errors easy at the office	15 (68.18%)	4 (18.18%)	3 (13.64%)
ICT has increased my performance level at the Polytechnic	22 (100.00%)	0 (0.00%)	0 (0.00%)

**Key: A-Agree; U- Undecided; D-Disagree**

**Source: Field Work, 2018**

From Table 4.5, majority of 17 respondents representing 77.27% agreed that ICT equipment have helped them to work faster than before as compared to the old ways of doing things before the modern office equipment were introduced. Four (4) respondents representing 18.81% were undecided while only one (1) respondent representing 4.55% disagreed. This finding confirms the research findings by Edwin (2008) who said today's secretaries are exposed to office technology including the internet that makes work much easier. It was also found out that 17 respondents representing 77.27% agreed that ICT equipment has enhanced flexibility in their office while five (5) respondents representing 22.73% were undecided. It was further revealed that, 15 respondents representing 68.18% agreed that ICT equipment has made corrections of errors easy at the office, and four (4) respondents, representing 18.81% were undecided while three (3) respondents representing 4.55% disagreed. Also, as in Table 3.5 all the respondents (100%) agreed that, the introduction of Information Communication Technology has impacted positively on their performance level in their offices. None of the respondents thought otherwise.

### 3.6 Challenges Associated With the Use of ICT Facilities in Secretaries' Job

The challenges associated with the use of ICT facilities in secretaries' job in Bolgatanga polytechnic is presented in Table 3.6.

Table 3.6: Challenges Associated With the Use of ICT Facilities

Challenges	HC	C	U	NC	HNC
Instability in power system	1 (4.55%)	2 (9.09%)	4 (18.18%)	12 (54.55%)	3 (13.64%)
Needs special training for personnel	1 (4.55%)	4 (18.18%)	4 (18.18%)	7 (31.82%)	6 (27.27%)
Protection against data loss	4 (18.18%)	6 (27.27%)	2 (9.09%)	5 (22.73%)	5 (22.73%)
Problems of security and confidentiality	4 (18.18%)	5 (22.73%)	2 (9.09%)	8 (36.36%)	3 (13.64%)

**Key:** HC-Highly challenging; C-Challenging; U-Undecided; NC-Not challenging; HNC-Highly not challenging

**Source:** Field Work, 2018

From Table 3.6, one (1) respondent, representing 4.55% and two respondents, representing 9.09% indicated that instability in power system is highly challenging and challenging respectively. Four (4) respondents, accounting to 18.18% were not sure in their decision; majority of twelve (12) respondents, representing 54.55% said, it was not a challenge while three (3) respondents, representing 13.64% said, it was not of high challenge when using ICT facilities.

On the challenge of needing special training for personnel, one (1) respondent, representing 4.55% said, it was of high challenge, four (4) respondents, representing 18.18% said, it was a challenge, four (4) respondents, representing 18.18% were not sure while seven (7) respondents, accounting to 31.82% and six (6) respondents, representing 27.27% said that, it was not a challenge and it was not of high challenge respectively in using ICT facilities in Bolgatanga polytechnic.

The study further revealed that, protection against data loss was a challenge. This is because 18.18% of the respondents indicated it was of high challenge, 27.27% of the respondents said, it was a challenge, 9.09% of the respondents were not sure while 22.73% of the respondents said, it was not a challenge and also 22.73% of the respondents said, it was not of high challenge.

The problems of security and confidentiality also revealed varied responses. This was because, 18.18% of the respondents said, it was of high challenge and 22.73% of the respondents said, it was a challenge. 9.09% of the respondents were not sure. However, 36.36% of the respondents said, it was not a challenge and 13.64% of the respondents said, it was of high challenge in the use of computers in their work.

#### 4.0 CONCLUSION

On ICT facilities currently available for use in Bolgatanga Polytechnic, the study found out that all the respondents have computers and Mobile/Telephone in their offices, while some of the secretaries have official emails, photocopiers, scanners, LaserJet Printer and Fax Machine in their offices. Averagely, it was found out that most secretaries have advanced knowledge in use of computers, Mobile/Telephone, photocopiers, and scanners. The study also found a positive effect of ICT on secretaries' job with respect to the following; ICT have helped staff to work faster than before as compared with the old ways of doing things before the modern office equipment were introduced, ICT equipment has enhanced flexibility in their office, and the introduction of Information and Communication Technology has improves positively the performances level of secretaries. Finally, the main challenges of using ICT in secretaries were found to be the instability in power system in the institution, the need for special training of personnel on the use ICT facilities, and protection against data loss. However, the problems of security and confidentiality revealed a varied response. The study concluded that, there are computers, photocopiers and telephones in every office of secretaries in Bolgatanga Polytechnic, however, not all the offices have electric typewriters, scanning machines, shredding machines, fax machines and duplicating machines. The result of the study showed that, all the secretaries accepted that the introduction of Information and Communication Technology in their offices which has helped staff to work faster than before, enhanced flexibility in their office, and improves positively the performances level of secretaries. Having examined the influence of ICT on secretaries' performance in public institutions, the following recommendations are made: The Polytechnic should endeavour to organize training and development programmes that will further enhance the effective performance of secretaries through acquisition of additional skills. Secretaries should always be ready and open-minded to acquire additional training/skills development, bearing in mind that changes occur frequently in the line of their chosen career and they are not left behind in the use of ICT in this digital age.

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