Effects of Internet Services on Secretary's Job Performance in Tertiary Institutions in Rivers State

By

Akpelu, Frankline Ekwueme PhD
Department of Office and Information Management
Faculty of Business Studies
Ignatius Ajuru University of Education
Rumuolumeni, Port Harcourt
Tel: 08068069620
akpelufrankline@yahoo.com
&
Ordua, George
Department of Office and Information Management
Faculty of Business Studies
Ignatius Ajuru University of Education
Rumuolumeni, Port Harcourt
Tel: 08035068703
Email: ordua.george@yahoo.com

Abstract

This study examined the effects of internet services on secretary's job performance in Tertiary Institutions in Rivers State. The purpose of the study was to determine the extent to which e-mail improves secretaries' ability to disseminate information in organizations, and to find out the extent to which intranet services affect secretaries office coordination,. Two research questions and hypotheses were formulated which served as a guide to the study. The exploratory research design was used for the study. The population of the study comprised one hundred secretaries (100). The sample size consisted of 80 respondents. The instrument titled internet services and secretary's job performance questionnaire (ISSJPQ) was used to collect data for the study. The instrument was validated and yielded a reliability index of 0.75. The statistical tool for data analysis was a chi-square (x^2). The findings revealed that internet is a helpful device for secretary job performance. It was recommended among other things that management of organizations should enhance the use of e-mail by their secretaries in the dissemination of information, management should encourage the secretaries on the use of e-mail in saving documents.

Keywords: Internet Services, Secretary, Job Performance, Tertiary Institution, Management

Introduction

Tools of information and communication technology (ICT) such as internet services have drastically turned the world into a global village. As a global network connecting millions

of computers, the internet makes communication and information easy and speedy across nations of the world irrespective of geographical distance. Apart from transforming and facilitating the flow of information across the world, the use of internet has also caused drastic changes in virtually all spheres of human endeavours. Modern business office environment relies significantly on internet services and this has made secretaries to be listed as one of the professionals that make extensive use of internet services in the dispense of their duties. The internet offers a lot of tools and services (components) that have proven to ease the job performance of secretaries and impart on their performance significantly. The internet offers features or online services such as e-mailing, internet relay chat, file transfer protocol (FTP), Usenet, intranet, telnet, hosting, search engines, and world wide web which are often explored by modern secretaries in the performance of their occupational duties.

The Internet has revolutionalized the way the world business offices are operated on both local and global level. The modern office has changed dramatically since the 19902. Secretaries in today's society are transmitting information via electronic mail (e-mail), electronic calendars, and teleconferencing, as well as other electronic devices. Communication via technology is just as important as oral and written communication in the work environment. Technology continues to play a vital role in transforming the business environment. The backbone of technology is the local area network (LAN), a single-site computer network, or the wide area network (WAN), which supports worldwide work groups. Both of these networks provide tools for users such as secretaries to transmit data, graphics, mail, and voice across the network. LANs and WANs enable distributed work teams to complete projects using groupware and decision support systems.

E-mail is one of the most popular internet services used in business offices today. E-mail has come to occupy a special niche in daily secretarial activities as an important communication tool. Its speed ease and relatively low cost has led to its adoption by many organizations and secretarial staff. With e-mailing software and a functional access to the internet, secretaries are able to send electronic mails to offices within and outside the organization. For instance, with e-mail service, the secretary can send important and urgent files to her boss abroad or anywhere in the world with just a click. With e-mail, her boss can receive her mail within a coupleof minutes if the network is efficient. Yahoo mail and Gmail are some of the most popular e-mailing platforms used in business offices today. Large volumes of files can be attached and send in a couple of minutes. This no doubt enhances the job performance of a secretary in modern organizations as it helps them to send and access files very fast (Stephen, 2009). The use of e-mail also helps secretaries in terms of records keeping. Clement (2010) noted that e-mailing services are also used by office administrators for safekeeping of relevant documents. All the secretary needs to do is to e-mail relevant documents to a specific organizational e-mail address and she will be able to access such document anytime and anywhere provided there is internet

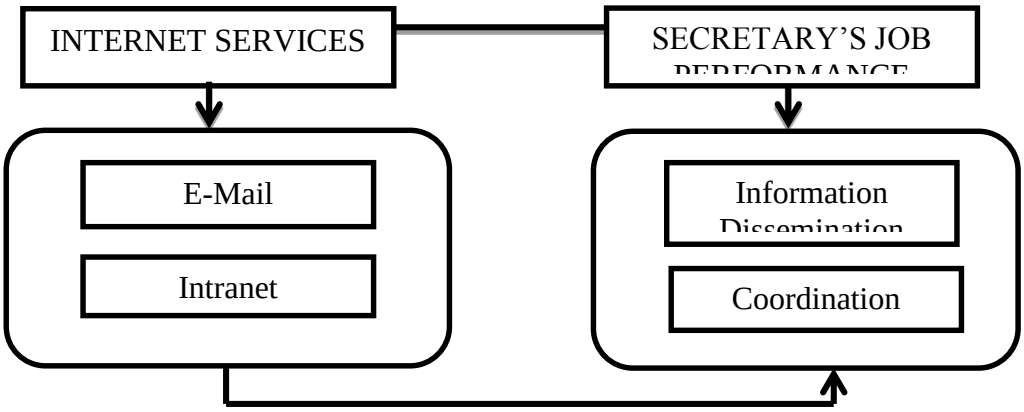
access. As the world goes for paperless office where documents are rather stored, and accessed via electronic means, many secretaries now send vital company documents and personal files to a confidential e-mail. Every other data storage system can fail and relevant files lost to fire, water, or virus but the moment a document is e-mailed on line, is secured from any of these file destructors. Thus, e-mailing is helping secretaries to disseminate information fast and keep records reliably.

Another form of internet service (services) that are used in organizations today which have a bearing on secretaries' job performance is the intranet. Intranet is an internet service that enables administrators to send and access files from all systems within an organization via file transfer protocol (FTP). The availability of intranet service in an organization enables office administrators (secretaries) to access and transfer bulky files and disseminate information both within and outside an organization with so much ease. File management and file transfer has got very easy with the use of this service and secretaries who have this service tend to be more efficient in their administrative duties because information is disseminated with ease (Braff, 2012). Indeed, availability and condition of internet services in an organization affects secretaries' job performance in an organization.

Statement of the Problem

The business offices rely on internet services such as e-mail, intranet, social networking platforms for operations and the secretary of today cannot work productively without making use of internet services. Unfortunately, the internet services in Nigeria today are very slow as a result of poor network and poor access to internet services. Poor network condition in Nigeria seems to delay delivery of e-mails which often hampers or cripples administrative processes and information dissemination in an organization. When the network is bad, the secretary finds it difficult to send and receive e-mails as and when due; this often slows down secretary's administrative activities and hampers information dissemination. A bad network condition also truncates secretary's ability to send and transfer files within the organization. The problem that secretaries encounter in the use of internet services is not as a result of the internet services rather, the poor network condition makes internet services very slow. Another component of the internet that has affected secretary's job performance is social network platforms such as facebook, whatsapp, and other internet relay chats. The internet is very distractive and secretaries are often distracted while trying to send or access e-mails. This shows down administrative activities because some secretaries waste more than half of their day chatting online.

Conceptual Framework



Source: Researcher's Conceptualization, 2020

An Overview of the Internet

The internet has been described as a major breakthrough in technology, a revolution. The wonders of its millennia and indeed, the most flexible medium currently available in a technological era. It is international network of powerful computer which further turned the globe into a tiny village (Yerima and Mohammed, 2008). Internet is a lot of computers connected to each other. It is, therefore a global network of thousands of computers, allowing worldwide community to communicate over any distance, to access information from anywhere in the world and publish text and images instantly.

The revolution of internet has suddenly enveloped industrial, political and commercial landscape of the world from its previous patterns during the pre-industrial era to a whole new digital network (Maridell, 2009). Mmeruwa (2011) put it thus; the internet is likened to a room filled with many spiders, each spinning its own web. The webs are inter-connected that the spiders can travel freely with this image. The same way the internet is a global collection of many different types of computer and network that are linked together.

Ohakwe (2012) defines internet as a global network of computers. This global network fulfils many and differing functions with the global network. It can travel to places, get movies, theatre schedules, locate loadfriends, find a job, complete a complex research using the internet resources. Ejehoms (2002) sees the internet simply as a vast type of topics from news and current events, to entrapments and references achieves. Nwogwagugwu (2002) further describes the internet as an international network of computers. It is a mechanism for transferring of data from one computer as the net is the world largest computer network.

Furthermore, Awake (1997) states that the internet is a good collection of many different types of computers and computer networks that are linked together. Just as a telephone enable you talked to someone on the other side of the earth who also has a phone, the internet enables a person to sit at his computer and exchangeinformation and computer network. The internet can also be described as the information super highway. Just as a road allows travel through many different interconnected computer networks. As messages travel, each network that is reached contained information that assists in correcting to the adjacent network. The final destination maybe in different city or country.

Historical Foundation of Secretary's Job Performance

Secretaries are very important and influential to the life or existence of any formal organization. Perhaps, this is the reason they are found in almost every organization; the term secretary is derived from the Latin word Secretarius, "to distinguish" or "to set apart", the passive participle (Secretum) meaning "having been set apart", with the eventual connotation of something private or confidential, as with the English word secret (Wikipedia, 2015). A Secretarius is a person, therefore, overseeing business confidentially, usually for a powerful individual (a king, pope, etc.). As the duties of a modern secretary often still include the handling of confidential information, the literal meaning of their title still holds true. Since the renaissance until the late 19th century, men involved in the daily correspondence and the activities of the great business men had assumed the title of secretary. With time, like many titles, the term was applied to more and varied functions, leading to compound titles to specify various secretarial works better, like general secretary or financial secretary.

A secretary is a person, whose work consists of supporting management, including executives, using a variety of project management, communication, or organizational skills to facilitate operations in an organization (Wikipedia, 2015). These functions may be entirely carried out to assist other employees or may be for the benefit of more than one. In other situations, a secretary is an officer of a society or organization who deals with correspondence admits new members, and organizes official meetings and events.

In the view of Ense & Vaughn (2009), a secretary is a person who is employed to help in an office, and help the people in charge of the office do their job. By definition, the main task of a secretary is to keep organized paper and electronic files for the business, school, hospital, or government agency they work for (Neil, 2013). Other common jobs that secretaries do are answering telephones; typing and writing letters; plan and schedule meetings with guests; and manage the website of their office.

In different workplaces, and for different reasons, a secretary may also be called an administrative assistant, receptionist, clerk, or executive assistant (Njoku, 2011).

A secretary has many administrative duties, however the most important is cleaning or any tasks asked of their employer (Clement, 2010). The largest difference between a generalized secretary and skilled executive assistants is that the executive assistant is required to be able to interact extensively with the general public, vendors, customers, and any other person or group that the executive is responsible to interact with (Neil, 2013). As the level that the executive interacts with increases so does the level of skill required in the executive assistant that works with the executive. Those executive assistants that work with corporate officers must be capable of emulating the style, corporate philosophy, and corporate personnel of the executive for which they work. In themodern workplace the advancement of the executive assistants is dependent on the success of the executive and the ability of both to make the job performance of the team seamless whereas the job place evaluation is reflective of each other's performance of executive secretary for now.

The duties of a secretary or administrative assistant vary by industry or employer, but some tasks are common to many work settings. In general, secretaries perform basic clerical, organizational and office responsibilities for an organization or department.

Neil (2013) summarized the duties and responsibilities of a secretary in an organization. Secretaries often manage customer files and other records in an office. In a doctor's office, for instance, the secretary pulls each patient's file at the time of the appointment for the nurse or doctor. She replaces it when the appointment is over. Keeping files in alphabetical order and using a local filing system for easy storage and retrieval are keys to successful file organization.

Secretaries are often tasked with copying documents for mailings or for internal distribution. They also must fax documents from the company to clients or customers, and receive incoming faxes to pass on to the appropriate person. Some secretaries use email, word and excel to create spreadsheets or documents and pass them on to employees or customers. Proofreading documents before they are sent out of the office is another duty. Especially in small offices, a secretary may be asked to carry out routine clerical tasks and errands to assist others. This may include cancelling or rescheduling appointments, ordering office supplies, taking notes during meetings, and getting drinks for the supervisor and guests.

In general office positions, secretaries commonly assist new employees and visitors in finding their way around. This includes directing visitors to the people they came to meet and showing new employees where to go on their first day. In general, the secretary projects the image of the business by offering a friendly and professional reception to people who come into the office.

Impact of E-mail on Information Dissemination

With the continuing expansion of global telecommunications networks further advances can be expected in intra-corporate and inter-corporate electronic links in organizations. Advances can then be expected in computer-mediated communications, including electronic mail (e-mail), that will create new issues for organizations. Furthermore, it has been claimed (Negroponte, 1995), that in the next millennium, e-mail will be the dominant interpersonal telecommunications medium, "approaching if not overshadowing voice". The expansion of e-mail as a communication medium will create new possibilities and have unforeseen consequences for users and organizations (Rudy, 2010). In a review of information technologies, Culnan & Markus (2007) defined electronic media as interactive, computer-mediated technologies that facilitate two-way interpersonal communication among individuals or groups. They suggested that the introduction of new technologies that alter communication activities in organizations have the potential to influence key aspects of organizational structure and process. Electronic mail has been defined as "the entry, storage, processing, distribution and reception, from one account to one or more accounts, of digitized text by means of a central computer" (Rice, Grant, Schmitz &Torobin, 2010). While a recent definition (Kettinger& Grover, 2013) views e-mail as a computer system for the exchange of messages and other information that may include text and numerical data, computer programs, video, graphics and sound. E-mail features apparent to those who have used the medium include asynchronous discussion, data sharing, message composition and possible information overload.

Rudy (2009) in a relatively recent review of e-mail research comprehensively discusses the two dimensions of e-mail research, media choice and media effects. Rudy concludes that information overload is an important area in the context of e-mail and growing use of the Internet, and that rather than think of e-mail as a unique technology, we should think of it as just another way for humans to interact. Garton and Wellman (2005) reviewed research literature into how e-mail shapes, and is shaped by organizational process and dissemination of information in an organization. They concluded that e-mail services helps secretaries to access people and disseminate information in organizations, that changes associated with e-mail use are socially as well as technically determined and, when people communicate electronically, work groups become more fluid. In a study of how inter-organizational e-mail systems are being used and what factors are related to usage, Kettinger and Grover (2012) found that e-mail has become an important method used by secretaries or others in an organization to broadcast, task and social inter-organizational communication. Secretaries and office administrators use the e-mail for broadcast in the form of public bulletin boards, list servers and discussion groups. Secretaries also use e-mail services for information dissemination, problem solving, and project coordination (Mackay, 2008). With e-mail services, secretaries are better empowered to make organizational arrangements and to ensure that team members are duly informed about developments and change of plans without necessarily having to meet them physically.

Digital electronic mail differs from paper in its capabilities therefore creating new opportunities and constraints in the medium and in organizational use. E-mail allows asynchronous exchanges, digital storage capabilities and rapid message retrieval and enables secretaries to communicate effectively in an office system (Crook and Booth, 2012). Electronic mail systems can be linked to external multi-node networks such as Binet, CompuServe and the Internet, making them useful for external organizational communication. E-mail services can inform the sender when the mail recipient has opened (and read) the message content or if delivery is successful. However, e-mail can also be unforgiving with carelessly addressed messages. E-mail is routed by computers not people; smart software may eventually mimic a postal delivery system, but for now, accuracy in addressing is mandatory (Morrisett, 2011).

E-mail has mutated the evolution of the internal business memo as organisational members selectively draw upon rules and norms associated with the memo when using e-mail, a new communication medium. However, this new electronic form should not be directly equated with the memo form. It is a new communication medium and communication activity that has appropriated attributes from a broad selection of organizational communication artifacts.

Intranet Service and Office Coordination

An intranet is a private network accessible only to an organization's staff. Often, a wide range of information and services are available on an organization's internal intranet that are unavailable to the public, unlike the Internet. A company-wide intranet can constitute an important focal point of internal communication and collaboration, and provide a single starting point to access internal and external resources. In its simplest form, an intranet is established with the technologies for local area networks (LANs) and wide area networks (WANs). Many modern intranets have search engines, user profiles, blogs, mobile apps with notifications, and events planning within their infrastructure. Intranets began to appear in a range of larger organizations from 1994.

Increasingly, intranets are being used to deliver tools, e.g. *collaboration* (to facilitate working in groups and teleconferencing) or sophisticated corporate directories, sales and customer relationship management tools, project management etc., to advance productivity.

Intranets are also being used as corporate culture-change platforms. For example, large numbers of employees discussing key issues in an intranet forum application could lead to new ideas in management, productivity, quality, and other corporate issues. In large intranets, website traffic is often similar to public website traffic and can be better understood by using web metrics software to track overall activity. User surveys also improve intranet website effectiveness.

Intranet user-experience, editorial, and technology team work together to produce in-house sites. Most commonly, intranets are managed by the communications, HR or CIO departments of large organizations, or some combination of these. Because of the scope and variety of content and the number of system interfaces, intranets of many organizations are much more complex than their respective public websites. Intranets and their use are growing rapidly.

These are virtually the same as the Internet, but for internal use only. Some of the services include: Email, File transfer, Real time chat, Web pages, Video and Audio streaming services. Each service requires at least one server to provide the service e.g. Web server and Email servers. Although it is unlikely that the video and audio services are there for entertainment (unlike the Internet). They can be used to stream business multimedia - for instance video training packages streamed to the students' computer. The point of an intranet make people more effective at their work rather as a means of entertainment or socialising.

The Intranet Coordinator is responsible for day-to-day operation and management of the company intranet. This person is responsible for maintaining the visual design, site navigation and site content. They are also responsible for coordinating key stakeholders, engaging and training users, and monitoring the health of the underlying technology. During the design and rollout phase of the new intranet platform, the Intranet Coordinator will coordinate the project to build a new intranet, utilizing a new intranet platform. For all stages of the intranet's development, this person will work on the overall visual design, site navigation, site content, engagement and training of users, coordination with key stakeholders and oversight of the technology, in coordination with the Intranet Taskforce. A modern intranet should be well organized and easy for users to navigate, especially if the organization does not want to spend a fortune training secretary and other staff again and again, this is something that can be discussed with a consultant. The ability to share internet information across the whole of the staff often does away with the need to constantly send internal memos and emails so the work of a secretary is simplified and she disseminates information more effectively with the use the intranet. The secretary can use discussion boards on an intranet to sample staff opinions and come up with collaborative ideas before meetings or when working on a project, thereby cutting down the time needed for physical meetings as everyone is aware of their position on a project (Reilly, Caldwell & Barnett, 2009).

When a number of employees from different department are working on the same document, perhaps by virtue of the secretary asking them to prepare and submit their departmental report or any other official document, the use of the intranet makes it easy for the secretary to access their reports without physical contact, go through it, comment on them and as well send it back to them for correction via the intranet without delay. By using an intranet, a secretary can do away with the confusion of which document or spread

sheet is the latest version as it is updated in real time, without the need for sending back and forth via email thus, intranet does not only help the secretary to disseminate information, it also enables them of their records keeping and word processing functions in an organization (Polanyi, 2013).

Aim and Objectives

The overall purpose of this study was to examine the effects of internet services on secretaries' job performance. Specifically, the study seeks to accomplish the following:

1. To determine the extent to which e-mail improve secretary's ability to disseminate information in organizations.
2. To determine the extent to which intranet services affect secretary's office coordination.

Research Questions

The following research questions were posed to guide the study.

1. To what extent does email improves secretary's ability to disseminate information in an organization?
2. To what extent does intranet affects secretary's office coordination.

Research Hypotheses

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

Ho_1: There is no significant relationship between the use of e-mail service and secretary's ability to disseminate information in an organization.

Ho_2: There is no significant relationship between intranet and secretary's office coordination.

Methodology

The exploratory research design was adopted for this study. Exploratory research design is a design that emphasizes the test of hypothesis in order to investigate and establish the relationship between variables. The population of the study was one hundred secretaries consisting of 50 secretaries of Ignatius Ajuru University of Education and 50 secretaries of Rivers State University, Port Harcourt.

The sample size of this study was 80 respondents. The sample size was obtained using the Taro Yamen formula which is ideal to be used when the population size is known (Wali, 2006). The Taro Yamen formula is stated and applied below:

$$n = \frac{N}{1 + N(e)^2}$$

Where n = known as population size

E = Error margin

Margin error = 0.05 or 0.005

1 = constant

$$N = 100$$
$$= \frac{N}{1 + 100\ x\ 0.05^2}$$
$$= \frac{100}{1.25} = 80$$

Therefore, the sample size of the study is 80. For the purpose of the study, a structured questionnaire was used as the instrument for data collection. The instrument was entitled "Internet Services and Secretaries' Job Performance Questionnaire (ISSJPQ). The questionnaire design is the likert scale format with four response options such as Very high Extent (VHE), High Extent (HE), Moderate Extent (ME), and Low Extent (LE). The questionnaire was structured by the researcher with a letter of introduction describing the purpose of the questionnaire.

To determine the content and face validity of the questionnaire, the instrument was submitted to the supervisor and other lecturers for evaluation. Their comments and responses were used to effect corrections on the final copy of questionnaire administered to the respondents. Reliability of instrument refers to the degree or extent to which an instrument consistently measures what it was supposed to measure. The test-retest method was used to achieve this, the instrument was administered to another group of employees in the same organization apart from the defined sample unit. The product moment correlation coefficient was used to test the reliability at 0.05 level of significance. A total of 80 copies of questionnaire were personally administered by the researchers. The statistical tool that was used for this study is chi-square (x^2). The chi-square formula is stated thus:

$$x^2 = \frac{(fo - fe)^2}{fe}$$

Where

Σ = Summation
Fo = Frequency Observed
Fe = Expected Frequency

The hypotheses were tested at 0.05 level of significance. The decision rule applied is stated below:

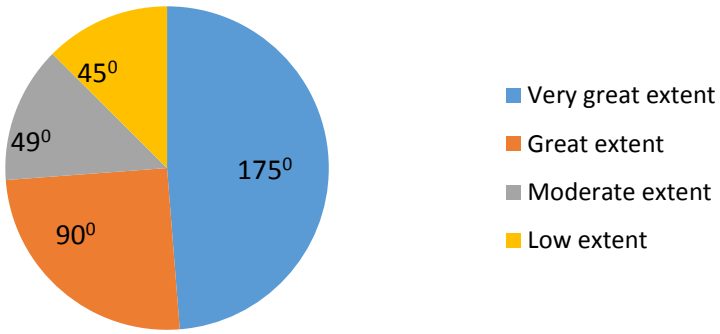
Decision Rule: The null hypothesis was accepted if the calculated x^2 value is greater than the x^2 critical value obtained, otherwise, it was rejected.

Results

The results of the study came from the answers to the research questions and test of hypotheses.

Research Question 1: To what extent does e-mail improves secretary's ability to disseminate information in an organization?

Chart 1: Response to Research Question 1 on the extent to which e-mail services have improved Secretaries abilities to disseminate information in Organisations.



Source: Data Survey, 2020.

Therefore,

$\frac{39}{80} x \frac{360}{1} = 175^0$

$\frac{20}{80} x \frac{360}{1} = 90^0$

$\frac{11}{80} x \frac{360}{1} = 49^0$

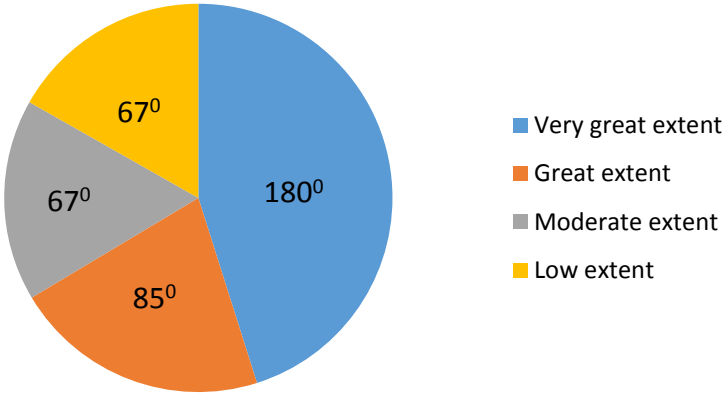
$\frac{10}{80} x \frac{360}{1} = 45^0$

Analysis

From the pie chart above, it was shown that 175^0 of the respondents agreed that e-mail improves secretary's ability to disseminate information in an organization to a very great extent; 90^0 of the respondents indicated that e-mail improves secretary's ability to disseminate information in an organization only to a great extent; 49^0 of the respondents indicated that e-mail improves secretary's ability to disseminate information in an organization moderately whereas, 45^0 indicated that e-mail improves secretary's ability to disseminate information in an organization to a low extent.

Research Question 2: To what extent does Intranet services affects Secretary Coordination?

Chart 2: Response to Research Question 2 on the extent to which intranet services have effected Secretaries cordination



Source: Data Survey, 2020

Therefore:

$\frac{40}{80} x \frac{360}{1} = 180^0$

$\frac{19}{80} x \frac{360}{1} = 85^0$

$\frac{15}{80} x \frac{360}{1} = 67^0$

$\frac{6}{80} x \frac{360}{1} = 27^0$

Analysis

The pie chart above shows that 180^0 of the respondents agreed to the fact that Intranet affects secretary's coordination to a very great extent. 85^0 of the respondents agreed that intranet affects secretary's co-ordination to a great extent whereas 67^0 agreed with moderate extent. Finally, 27^0 of the respondents indicated that intranet affects secretary's co-ordination to a low extent.

Test of Hypotheses

Test of Hypothesis 1: There is no significant relationship between e-mail and secretary's ability to disseminate information in organizations.

Table 1: Frequency observed

Very great extent	Great extent	Moderate extent	Low extent	Total
39	20	11	10	80
30	20	16	14	80
12	15	20	33	80
34	26	15	5	80
115	81	62	62	320

Source: Data Survey, 2020

$$fe = \frac{RT\ x\ CT}{GT}$$

Where

RT = Row Total
CT = Column Total
GT = Grand Total

Very great extent $= \frac{115\ x\ 80}{320} = 28.75$

Great extent $= \frac{81\ x\ 80}{320} = 20.25$

Moderate extent $= \frac{62\ x\ 80}{320} = 15.5$

Low extent $= \frac{62\ x\ 80}{320} = 15$

Table 2: Contingency Tale for Ho_1

Fo	Fe	(Fo-Fe)	$(Fo-Fe)^2$	$(Fo-Fe)^2$
39	28.75	10.25	105.0625	3.654348
30	28.75	1.25	1.5625	0.054348
12	28.75	-16.75	280.5625	9.758696
34	28.75	5.25	27.5625	0.958696
20	20.25	-0.25	0.0625	0.003086
20	20.25	-0.25	0.0625	0.003086
15	20.25	-5.25	27.5625	1.361111
26	20.25	5.75	33.0625	1.632716
11	15.5	-4.5	20.25	1.306452
16	15.5	0.5	0.25	0.016129
20	15.5	4.5	20.25	1.306452
15	15.5	-0.5	0.25	0.016129
10	15.5	-5.5	30.25	1.951613
14	15.5	-1.5	2.25	0.145161
33	15.5	17.5	306.25	19.75806
5	15.5	-10.5	110.25	7.112903
				49.03899

Source: Data Survey, 2020

Since the calculated value $x^2 = 49.03899$ is greater than the critical x^2 16.919, the null hypothesis which states that there is no significant relationship between e-mail and secretary's ability to disseminate information in organizations was rejected. This implies that email enhances the quality of information dissemination of secretaries in tertiary institutions in Rivers State.

Test of Ho_2: There is no significant relationship between intranet and secretary's coordination skill.

Table 3: Frequency observed

Very great extent	Great extent	Moderate extent	Low extent	Total
40	19	15	6	80
35	25	18	2	80
10	12	27	31	80
38	24	11	7	80
123	80	71	47	320

Source: Data Survey, 2020

Fe = RT x CT
GT

Where

RT = Row Total
CT = Column Total
GT = Grand Total

Very great extent $= \frac{123\ x\ 80}{320} = 30.75$

Great extent $= \frac{80\ x\ 80}{320} = 20$

Moderate extent $= \frac{71\ x\ 80}{320} = 17.75$

Low extent $= \frac{42\ x\ 80}{320} = 10.5$

Table 4: Contingency Table for Ho_2

Fo	Fe	(Fo-Fe)	$(Fo-Fe)^2$	$(Fo-Fe)^2$
35	30.75	4.25	18.0625	0.58739837
10	30.75	-20.75	430.5625	14.0020325
38	30.75	7.25	52.5625	1.70934959
33	30.75	52.25	2730.063	7.7825203
25	20	5	25	1.25
12	20	-8	64	32
24	20	4	16	0.8
61	20	41	1681	84.05
18	17.75	0.25	0.0625	0.0035113
27	17.75	9.25	85.5625	4.82042254
11	17.75	-6.75	45.5625	2.56690141
56	17.75	38.25	1463.063	4.4260563
2	10.5	-8.5	72.25	6.88095238
31	10.5	20.5	420.25	40.0238095
7	10.5	-3.5	12.25	1.16666667
40	10.5	29.5	870.25	5.8809524
				35.150583

Source: Data Survey, 2020

Since the calculated value x^2=35.150583 is greater than the critical x^2 16.919, the null hypothesis which states that there is no significant relationship between intranet and secretary's coordination skill was rejected. This implies that intranet and secretary's coordination skill enhances secretaries' job performance of tertiary institutions in Rivers State.

Discussion of Findings

This sub-heading compares or relates the current findings to the research findings of previous researchers on the variables investigated in the current study as contained in chapter two.

E-mail and Secretary's ability to disseminate information in Organizations

The findings here proved that there is a significant relationship between e-mail and secretary's ability to disseminate information in an organization.

This is in view with the claim of Negroponte (1995) that in the next millennium e-mail will be the dominant interpersonal telecommunications medium, "approaching if not overshadowing voice". The expansion of e-mail as a communication medium will create new possibilities and have unforeseen consequences for users and organizations (Rudy, 2010).

In a review of information technologies, Culnan& Markus (2007) defined electronic media as interactive, computer-mediated technologies that facilitate two-way interpersonal communication among individuals or groups. They suggested that the introduction of new technologies that alter communication activities in organizations have the potential to influence key aspects of organizational structure and process. Electronic mail has been defined as "the entry, storage, processing, distribution and reception, from one account to one or more accounts, of digitized text by means of a central computer" (Rice, Grant, Schmitz &Torobin, 2010). While a recent definition (Kettinger& Grover, 2013) views e-mail as a computer system for the exchange of messages and other information that may include text and numerical data, computer programs, video, graphics and sound. E-mail features apparent to those who have used the medium include asynchronous discussion, data sharing, message composition and possible information overload.

Rudy (2009) in a relatively recent review of e-mail research comprehensively discusses the two dimensions of e-mail research, media choice and media effects. Rudy concludes that information overload is an important area in the context of e-mail and the growing use of the internet, and that rather than think of e-mail as a unique technology, we should think of it as just another way for humans to interact. Carton & Wellman (2005) reviewed research literature into how e-mail shapes, and is shaped by organizational process and dissemination of information in an organization. They concluded that e-mail services helps secretaries to access people and disseminate information in organizations, that changes

associated with e-mail use are socially as well as technically determined and, when people communicate electronically, work groups become more fluid. In a study of how inter-organizational e-mail systems are being used and what factors are related to usage, Kettinger & Grover (2012) found that e-mail has become an important method used by secretaries or others in an organization to broadcast, task and social inter-organisational communication. Secretaries and office administrators use the e-mail for broadcast in the form of public bulletin boards, list servers and discussion groups. Secretaries also use e-mail services for information dissemination, problem solving, and project coordination (Mackay, 2008). With e-mail services, secretaries are better empowered to make organizational arrangements and to ensure that team members are duly informed about developments and change of plans without necessarily having to meet them physically.

However, in the contrary, digital electronic mail differs from paper in its capabilities therefore creating new opportunities and constraints in the medium and in organizational use. E-mail allows asynchronous exchanges, digital storage capabilities and rapid message retrieval and enables secretaries to communicate effectively in an office system (Crook & Booth, 2012). Electronic mail systems can be linked to external multi-node networks such as Bitnet, CompuServe and the Internet, making them useful for external organizational communication. E-mail services can inform the sender when the mail recipient has opened (and read) the message content or if delivery is successful. However, e-mail can also be unforgiving with carelessly addressed messages. E-mail is routed by computers not people; smart software may eventually mimic a postal delivery system, but for now, accuracy in addressing is mandatory (Morrisett, 2011).

E-mail has mutated the evolution of the internal business memo as organizational members selectively draw upon rules and norms associated with the memo when using e-mail, a new communication medium. However, this new electronic form should not be directly equated with the memo form. It is a new communication medium and communication activity that has appropriated attributes from a broad selection of organizational communication artifacts.

Intranet and Secretaries' Coordination

Our findings stated here that there is a significant relationship between intranet and secretary's coordination on time within an organization. An intranet is a private network accessible only to an organization's staff. Often, a wide range of information and services are available on an organization's internal intranet that are unavailable to the public, unlike the Internet. A company-wide intranet can constitute an important focal point of internal communication and collaboration, and provide a single starting point to access internal and external resources. In its simplest form, an intranet is established with the technologies for local area networks (LANs) and wide area networks (WANs). Many modern intranets have search engines, user profiles, blogs, mobile apps with notifications, and events planning within their infrastructure.

Coleman and Mike (2010) defined intranet as a private network that is contain within an enterprise that makes the sharing of information easy in the organization. It may consist of many interlinked local area networks and also used leased lines in the wide area network. Typically, an intranet includes connections through one or more gateway computers to the outside Internet (Burt and Ronchi, 2009). The main purpose of an intranet is to share company information and computing resources among employees.

Increasingly, intranets are being used to deliver tools, e.g. collaboration (to facilitate working in groups and teleconferencing) or sophisticated corporate directories, sales and customer relationship management tools, project management etc. intranets are also being used as corporate culture-change platforms. For example, large numbers of employees discussing key issues in an intranet forum application could lead to new ideas in management, productivity, quality, and other corporate issues.

Conclusion

Based on the analysis of data and discussion of findings, the study concluded that there is a significant relationship between e-mail and secretary's ability to disseminate information in an organization. This means that the e-mail has a great positive influence on the secretary's ability to disseminate information in an organization because of how far it goes in sending information across the organization.

The research also concluded that there is a significant relationship between intranet and secretaries coordination. This implies that intranet plays a big role in the secretaries' coordination. Finally the research concluded that there is a significant relationship between social networking platforms and administrative effectiveness of secretaries.

Recommendations

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

1. Management of organizations should enhance the use of e-mail by their secretaries in the dissemination of information. This is because of its (e-mail) importance in the dissemination of information e.g. sending and receiving of information is made fast through e-mail.
2. Management of organisations should enhance the use of intranet by their secretaries in coordinating office activities. This is because of its importance (intranet) in communicating effectively and efficiently within their organisations.

References

Aral, N., Brynjoltsson, V.D. & Van, E. (2009).*Modern information processing: A functional approach to administrative management*. New York: Prentice Hall.

Awake, M. (1997). *Secretarial duties made easy.* California: Star Publications.

Borgatti, S. & Cross, H.D. (2013). *Information and management: A contemporary perspective.* Great Britain: Macdonald and Evans Limited.

Braff, K. (2012). *Management.*New Delhi: Tata McGraw-Hill.

Burt, R. &Ronchi, I.N. (2009). *Managing today's organization: A technological approach.* Tokyo: McGraw-Hill Book Company.

Burt, R. (2010). *Contemporary management.*Tokyo: McGraw-Hill Book Company.

Clement, V. (2010). The search-transfer problem: The role of weak ties in sharing knowledge across organization subunits. *Journal of Administrative Science,* 62(4): 55-71.

Cohen, J. &Levinthal, D.T. (2010).*Resources and relationships: Social networks and mobility in the work-place.* New York: Prentice Hall.

Coleman, I. & Mike, E.B. (2010). Networks, information and social capital.*Journal of International Conference on Network Science,* 6(3): 215-235.

Crook, P. & Booth, W. (2012).*Information communication technology: A managerial approach.* California: Mercy Publications.

Culnan, J.T. & Markus, B.A. (2007). A relational view of information seeking and learning in social networks.*Journal of Management Science,* 49(4): 230-245.

Ejehoms, A. (2002). *Prospering in dynamically-competitive environments: A technological view.*London: Allon B.B. Prints.

Ensel, N. &Vaughn, S.C. (2009). *Secretarial practice and office management.* U.S.A: Exquisite Publishers.

Flippo, I.E. (2012).C*omputer in today's world.*New York: Prentice Hall.

Grant, M.H. (2010). *Network structure and knowledge transfer.* New York: W.H. Alla and Company.

Hanson, C.F. (2009). *Organization's innovation: A path-way to success.* California: Clitton Prints.

Kettinger, T. & Grover, I. (2013).*Information and communication technology: A functional and systematic approach.* Tokyo: Tophill Company.

Mackay, E.P. (2008). *Organizational behaviour performance*. Illinois: Foreman Company.

Maridell, K. (2009). *Management, information and application: The essentialities of an organization's survival.* Boston: ST. Luke's Prints.

Mehra, C.R.; Kilduff, B. & Brass, T. (2011). Social contagion and innovation: Cohesion versus structural equivalence. *American Journal of Sociology,* 4(6); 2287-2295.

Mmeruwa, G.K. (2011). *Administrative science.*New York: Prentice Hall.

Muller, P.P. (2009). *Networks, information and social capital.*Illinois: Foreman Company.

Negroponte, H.A. (1995). *Secretaries and administrative duties.*Great Britain: Macdonald and Evans Limited.

Neil, D.W. (2013). *Data collection management: A functional approach.* California: Mercy Publication.

Njoku, F. (2011).*Contemporary management: A systematic view on technology.* New Delhi: Tata McGraw-Hill.

Nwogwagugwu, S. (2002). Work group demography, social integration and turnover. *Journal of Administrative Science Quarterly,* 52: 11-25.

Ohakwe, O.E. (2012). *Modern business management*. New York: Prentice Hall.

Polanyi, A. (2013). *Best practice in management technology.* San Francisco Peiffer.

Reilly, H., Caldwell, C. & Barnett, W. (2009).*Technology management: A communication skills approach.* New York: Prentice Hall.

Rice, I.; Grant, A.; Schmitz, V.B. &Torobin, E. (2010).The critical role of information technology in business organisation.*Journals of Administrative Science,* 3:93-110.

Rudy, K.D. (2010). *Information management in organization: A technical approach.* California: Clitton Prints.

Scot, M. (2009).*Technological environment: How to manage its turbulence in today's management.* Boston: Cap Prints.

Seebolin, B.T. (2011). *Information and communication technology*. New York: W.H. Alla and Company.

Simon, A. (2008). *Information and business.*Boston: HBS Press.

Stephen, D.S. (2009). *Contemporary management: A functional and technological perspective.* California: Mercy Publications.

Steve, O.E. (2013). *Principles and practice of business education of technology.*New York: South Western Publishing Company.

Wali, G.I. (2006). *Educational research: A functional approach.* Port Harcourt: Harey Publications Company.

Wikipedia (2016). Information and secretaries efficiency. http://www.wikipedia.com/information_and_secretaries_efficiency.

Yerima, G.M. & Mohammed, Y.S. (2008).*Information technology: A global trend in today's business.* New York: Prentice Hall.