

Information Technology (IT) and Employee Performance

Case Study: Posta Uganda Kampala

Arinaitwe Maclean

2012-M102-40001

Uganda Martyrs University

August 2014

Information Technology (IT) and Employee Performance

Case Study: Posta Uganda Kampala

**A Postgraduate Dissertation Presented to the Faculty of Business Administration and
Management in Partial Fulfilment of the Requirements for the Award of the
Degree of Master of Business Administration of**

Uganda Martyrs University

Arinaitwe Maclean

2012-M102-40001

August 2014

UGANDA MARTYRS UNIVERSITY

School of Post Graduate Studies

Master's Declaration

DECLARATION

I have read the rules of Uganda Martyrs University on plagiarism and hereby state that this is my own work. It has never been submitted to any other institution for any other degree or qualification, either in full or in part. Throughout the work I have acknowledged all sources used in its compilation.

Name of the Researcher

Researcher's Signature

This is to certify that carried out this project under my supervision.

Supervisor's Name Date

of Submission

Submitted to

DEDICATION

This dissertation is dedicated to Uganda Post Limited (UPL).

ACKNOWLEDGEMENT

I thank the Almighty God the provider of knowledge and wisdom for seeing me throughout my studies and for enabling me to undertake my research successfully, without His grace I wouldn't have made it.

I extend my deep appreciation to my supervisor Dr. Eric Mabonga for the guidance and advice provided during the study that made it possible for me to successfully complete this report.

Special thanks go to my dear husband Jimmy, my parents Mr. and Mrs. Rwekanika, my sisters Irene and Maureen for the moral and financial support you gave me. Your input was not in vain and may God bless you abundantly.

To all those who made tremendous contributions to this study, relatives and friends, I extend my sincere gratitude and I appreciate your encouragement and moral support.

May the Almighty God bless you abundantly

Table of Content

DECLARATION	iii
ACKNOWLEDGEMENT	v
LIST OF ABBREVIATIONS	xii
ABSTRACT.....	xiii
1.0 Introduction.....	1
1.1 Background to the Study.....	1
1.2 Problem Statement	3
1.3 Objectives of the Study.....	4
1.3.1 General Objective	4
1.3.2 Specific Objectives	4
1.4 Research Questions	4
1.5 Scope of the Study.....	5
1.5.1 Content Scope.....	5
1.5.2 Time Scope	5
1.5.3 Geographical Scope	5
1.6 Significance of the Study.....	5
1.7 Justification of the Study	6
1.8 Definition of Key Terms.....	7

Independent Variables (IV)	Dependent	Variable
(DV)	8	

Figure 1.1: Conceptual framework showing effect of IT on the performance of employees in Posta Uganda.....8

2.0	Introduction.....	10
2.1	Information Technology	10
2.2	Effect of Information Technology on Volume of Work Output by Employees	12
2.2.1	Work Output.....	12
2.2.2	Multiplicity of Tasks	16
2.3	Effect of Information Technology on Timeliness of Work Output	19
2.3.1	Quick Delivery	20
2.4	Effect of Information Technology on Service Delivery of Employees.....	24
2.4.1	Transparency	24
2.4.2	Cost effectiveness.....	26
2.5	Relationship between IT and Employee Performance	28
3.0	Introduction.....	35
3.1	Research Design.....	35
3.2	Population of the Study	35
3.3	Sampling Procedures.....	36
3.3.1	Sample Size.....	36

3.3.2	Sampling Techniques	37
3.4	Data Collection Methods and Instruments.....	37
3.4.1	Questionnaire.....	37
3.5	Quality Control Methods	38
3.5.1	Validity and Reliability.....	38
3.6	Data Management and Processing	38
3.7	Data Analysis	39
3.8	Ethical Considerations	39
3.9	Limitations of the Study	40
4.0	Introduction.....	41
4.1	Background of Respondents	42
4.1.1	Gender of the Respondents	42
	Figure 4.1: Gender of Respondents.....	43
	Table 4.1 Age of respondents	43
4.1.3	Education Level of Respondents.....	44
	Table 4.2: Education Level of Respondents.....	44
4.2	Findings on Information Technology in Posta Uganda.....	45
	Table 4.3 The organization has enough suites of IT hardware necessary for all the employees...45	
	Table 4.4 The specifications of the IT hardware available are suitable for the work requirements	46

Table 4. 5 The hardware used are the latest versions /technologies	47
Table 4.6 The inter face computers are appropriate and easy to use	48
Table 4. 7 The hardware equipment is regularly serviced and upgraded.....	48
Table 4. 8 The software installed on device acts as a virtual computer through which other applications are run	49
Table 4. 9 The software installed enables data to be easily input in the systems	50
Source: Field Data.....	50
Table 4.11 Captured data is enough to enable the operation of the organization.....	51
Table 4.12 Annual subscription/license fee for the soft wares is manageable	52
4.3 IT and Volume of Work Output by Employees	53
4.3.1 Work Output	53
Table 4.13 We have been able to increase your work output.....	53
Table 4. 14 Information output is correct.....	54
Table 4.15 All the generated reports are accurate.....	54
Source: Field data.....	55
Table 4.16 Satisfied with the entry transaction out put.....	55
Table 4. 17 The quality of work produced has improved.....	56
Table 4.18 Able to process many transactions at the same time	57
Source: Field Data.....	57
Table 4. 19 Auto processing reduces duplication of transactions information.....	57

Table 4. 20 It is easier to respond to client queries and implement requests of many clients at the same time	58
Coefficients ^a	59
4.4 IT and Timely Work Output at Posta Uganda	60
Table 4.22 Automatic validation enables timely reconciliation of transactions	60
Table 4. 23 The time spent on a single client has reduced	61
Coefficients ^a	62
4.5 Information Technology and Service Delivery	62
Table 4.25 Reports are shared with the management regularly as required	62
Table 4. 26 All reports generated are clearly understood	64
Table 4. 27 Using technology has reduced errors	65
Table 4. 28 Human resource costs have been reduced	65
Table 4. 29 Material costs (e.g Paper) have reduced	66
Coefficients ^a	67
5.0 Introduction	68
5.1 Summary of findings from the study	68
5.1.1 Effect of IT on Volume of Work Output by Employees	68
5.1.2 Effect of IT on Timely Work Output	68
5.1.3 Effect of IT on Service Delivery	69
5.2 Conclusions	69

5.3	Recommendations	70
5.3.3	IT and service delivery of employees in Posta Uganda.....	71
5.4	Suggestions for Further Research	72
	REFERENCES	73
	Introduction.....	83
	SECTION A: Demographic Characteristics.....	83
	SECTION B: INFORMATION TECHNOLOGY.....	84
	SECTION C: EMPLOYEE PERFORMANCE	85

LIST OF ABBREVIATIONS

BPR:	Business Process Reengineering
CVI:	Content Validity Index
DV:	Dependent Variable
HR:	Human Resource
ICT:	Information and Communication Technology
IT:	Information Technology
IV:	Independent Variables
PCs:	Personal Computers
SPSS:	Statistical Package for the Social Sciences
TPBS:	Telecommunications, Postal and Broadcasting Service
UMU:	Uganda Martyrs University
UPL:	Uganda Post Limited

ABSTRACT

The study was aimed at finding out the effect of Information Technology on employee performance of Posta Uganda. The three specific objectives were; To find out the effect of IT on volume of work output by employees in Posta Uganda; Secondly to find out the effect of IT on timely work output at Posta Uganda; and thirdly and to find out the effect of IT on service delivery of employees in Posta Uganda,

The study employed a quantitative research model in which a case study research design was used to collect data from 40 respondents using structured questionnaires. The study found out that there is a strong positive relationship between IT and employee performance in Posta Uganda. The correlation coefficient value was found to be $r = 0.52$, and at $\text{sig} = 0.000 < 0.01$ for volume of work output. This meant that IT influences volume of work output by more than 52%.

The study also found out that there is a strong positive relationship between IT and timely work output in Posta Uganda. The correlation coefficient was found to be $r = 0.734$ at $\text{sig} = 0.000 < 0.01$, meaning that timely work output is influenced by IT by at least 73.4%.

Furthermore, the study found out that there is a moderate positive relationship between IT and service delivery in Posta Uganda. The correlation coefficient was found to be $r = 0.49$ at $\text{sig} = 0.000 < 0.01$, meaning service delivery is influenced by IT by 49%.

The study concluded that IT has a significant positive influence on the performance of employees in Posta Uganda as measured by the variables of increased volume of work, timely work output and service delivery which were found to be positively influenced by IT.

As such, it was recommended that the standard and quality of Information Technology be continuously improved so as not to compromise employee performance and service delivery to the organisation's clients. The study further recommends that managers and policy makers need to keep abreast of the developments in this dynamic information technology sector to ensure up-to-dateness because new innovations keep coming up in the field of IT as old technologies become obsolete, thus there is need to maintain current and up-to-date technologies which are more efficient.

CHAPTER ONE: GENERAL INTRODUCTION

1.0 Introduction

This chapter covered the Background of the Study, Problem Statement, and Purpose of the Study, Objectives of the Study, Research Questions, Scope of the Study, Significance of the Study and the Conceptual Framework.

1.1 Background to the Study

Globally, the use of Information Technology is growing rapidly. The Information Technology (IT) environment is a product of the technical knowledge and advances in our society. The Fruits of IT whether constructive or potentially destructive have significantly shaped many countries (Peter and Ken 1998). Information technology (IT) has become an indispensable part of the contemporary world while employee performance globally has equally been affected in a number of ways through its adoption and application. The IT industry spans broadcast, electronics and print media, computers, human resources management, telecommunications and e-commerce activities (David, 2006).

At the same time, technology is developing with blinding speed and is becoming the principal instrument for meeting the concern of employee performance (Peter and Ken 1998). This explains why many organizations are investing large amounts of money in implementing information Technology. However, the advantages offered by technologies, especially in terms of enhancing employee performance, depend upon how these technologies are integrated into an organization.

Employees within the organizations are performing to best of their ability and developing their potential for improvement. Employee performance is intimately linked to IT change

and technological innovation. IT change could be effectively managed through human resource joint approach. Individuals can innovate and achieve great technological breakthrough but the complexities of modern technology require effective combination of different innovations based on different aspects of technology.

In other words, IT has helped organizations to enhance, measure and manage the employee performance. It helps to automate the processes of HR and save time and cost and reduce the efforts required and the paperwork (Black, & Lynch, 2001).

In Africa, many organizations have adopted and advanced in communication and IT which has created new opportunities for organizations to build and manage empowerment processes where employees collaborate utilizing technology across space and time to accomplish important organizational tasks (Aswathappa, 2003). Employees' tasks and work activities have been changed for the last two decades from manual routine tasks into more technological and IT tasks.

According to Bhaskar and Housden, (1990), employees are believed to be able to contribute creatively to the solution of organizational problems and, under proper conditions, not only to accept but to seek responsibility. These principles lead to a democratic and open organizational culture, where employees are given the freedom to decide and act, and managers learn to abandon their “ruling” roles. Emerging IT can support this direction by widely distributing information that is needed to build the trust of employees in management.

In Uganda, for decades, IT has been revolving around the Telecommunications, Postal and Broadcasting service (TPBS). This has been mainly voice, very limited data handling and

mail deliveries (Gladwin, Dixon, & Wilson, 2003). The adoption of IT in organizations has been growing at a phenomenal rate over the last decade, especially in the areas of mobile devices, computer applications, information processing, storage and dissemination (Broadcasting and Internet Points of Presence). The growth changes have had a profound impact on the performance of employees and the organization as a whole. In other words, IT has become an important part of the economy (Unwin, 2009).

Maintaining confidence and satisfaction of the clients means that the employees have to work more efficiently and effectively so as to attain this objective thus the adoption of IT to address this concern (Kibiky, 2008). Maicibi (2003) observed that before the introduction of IT, all tasks were done manually which hindered the achievement of employee performance targets. Therefore, the main concern of this study was to determine the effect of IT on employee performance at Posta Uganda.

1.2 Problem Statement

Employee performance in the organization (Posta Uganda) is said to be drastically going down mostly because the employees are not doing their job well enough, the goals are not being met, there is delayed mail delivery, poor communication within the organizational channels and the quality of work produced by the employees is still poor. According to a survey carried out in September to October, 2013 by the quality of service section of Posta Uganda to determine whether the set standards for domestic mail transmission were being achieved, it was noted that delayed mail delivery is still apparent on all links (Posta Uganda Planning and Review Meeting Report, January 2014). This research thus aimed at exploring how IT can be used to improve employee performance in Posta Uganda, in terms

of increasing work output, improving timeliness of activities and improving service delivery in general.

1.3 Objectives of the Study

1.3.1 General Objective

The main objective of the study was to find out the effect of Information Technology on employee performance in Posta Uganda.

1.3.2 Specific Objectives

The study objectives were;

1. To find out the effect of IT on volume of work output by employees in Posta Uganda.
2. To find out the effect of IT on timely work output at Posta Uganda.
3. To find out the effect of IT on service delivery of employees in Posta Uganda

1.4 Research Questions

The study sought to answer to the following research questions:

1. What is the effect of IT on the volume of work performed by employees in Posta Uganda?
2. What is the effect of IT on the timely work output by employees at Posta Uganda?
3. What is the effect of IT on the service delivery of employees in Posta Uganda?

1.5 Scope of the Study

1.5.1 Content Scope

In this study, the independent variable, Information Technology (IT) focused on hardware and software while the dependent variable, employee performance focused on volume of work performed, timeliness of work output by employees and service delivery.

1.5.2 Time Scope

This study was carried within a time period of five months that is from April to August 2014. This period was enough to gather the required data and information related to the topic under investigation.

1.5.3 Geographical Scope

Geographically, the study was conducted at Posta Uganda head office. The study was confined to the employees of Posta Uganda head office which is located on Plot 35, Kampala Road, Kampala District in Central Uganda.

1.6 Significance of the Study

The study findings will be significant to the following categories of people;

The study findings are hoped to be useful to the general community through improvement of Postal communication. Through information technologies, they can receive better services from Posta Uganda as information can be quickly delivered to users.

For academicians, they are hoped to be able to learn from this piece of work and it might provide them an opportunity to carry out other researches and be able to inform theory and

practice too. The findings of the study will help to create knowledge gaps that future researchers will depend on to identify researchable areas.

Other business organisations will also benefit from the study because based on the findings, they will be able design and adopt appropriate business strategies and plan of actions in the most suitable way toward IT application and employee performance.

Last, but not least, the researcher herself also benefited from the project. After the completion of the project, her research capacity and professional experience were enhanced.

1.7 Justification of the Study

Rapid and widespread diffusion of computers and information technology (IT) at the workplace has been one of the most notable trends since the past 20 years. Beaumaster, 2002; O'Brien, 2004 agreed that the demand for efficient and effective use of IT is gradually increasing at the present time. This is because an organization that adopts an IT system should provide special attention to planning, acquisition, and implementation of these technologies and how they are best incorporated and used by the employees to better their performance. The study by Milis & Mercken, (2002) portrays that IT implementation in many organizations is surrounded with various problems regarding the way it is embraced by the employees which the previous studies had left out. Moreover, the success of IT in boosting employee performance in an organization depends on a multitude of important and interrelated factors (Gargeya and Bardy, 2002). The extent to which IT affects the performance of employees in particular organizations has however been left out

by most researchers and thus this study is justified in the sense that it highlights the imperative of IT and its inherent dynamism towards employee performance in organizations and in this case, Posta Uganda.

1.8 Definition of Key Terms

Employee performance: These are job related activities expected of a worker and how well those activities were executed. Many business personnel directors assess the employee performance of each staff member on an annual or quarterly basis in order to help them identify suggested areas for improvement.

Hardware: These are machines, wiring, and other physical components of a computer or other electronic systems.

Information Technology (IT): This refers to the use of systems (especially computers and telecommunications) for storing, retrieving, and sending information. Information technology is associated with computer hardware, software, electronics, semiconductors, internet, telecom equipment, e-commerce and computer services etc.

Service delivery: This refers to the act of providing a service to customers.

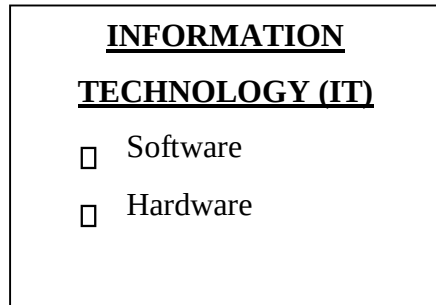
Software: These are programs and other operating information packages used by a computer.

Timeliness: Something that is occurring at a suitable time; seasonable; opportune; welltimed.

Volume of work: This is an amount of work that you can measure or count.

1.9 Conceptual Framework

Independent Variables (IV)



Dependent Variable (DV)

EMPLOYEE PERFORMANCE

Volume of work

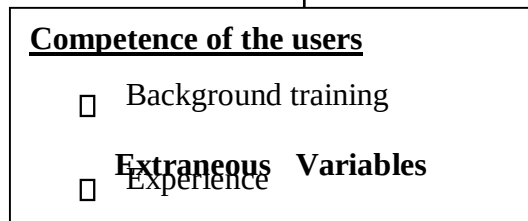
- Work output
- Multiplicity of tasks

Timeliness

- Quick/timely delivery

Service delivery

- Transparency
- Cost effectiveness



Source: Literature Review

Figure 1.1: Conceptual framework showing effect of IT on the performance of employees in Posta Uganda

The conceptual framework describes the relationship between the independent variable and the dependent variable. In this conceptual framework, Information Technology is the independent variable while employee performance is the dependent variable. In this study, it is assumed that adopting and enhancing information technology has a big role in

improving the performance of employees. In the conceptual frame work, information technology is operationalized into software and hard ware. On the other hand employee performance has indictors such as; volume of work, timeliness and Service delivery. However there are intervening variables that influence IT and employee performance. These include background training and experience.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This chapter covered the review of the related literature on the study variables of Information technology and its impact on employee performance.

2.1 Information Technology

IT can be defined as the use of hardware, software services and supporting infrastructure for management of delivering information. IT can also be defined as using hardware and software to store, retrieve, process and transmit data (Laudon and Laudon, 1998).

Buchanan and Boddy (1993) define IT as “All technology dealing with computer aided manufacturing and computer aided administration”. According to Reynold (1997), “IT is any computer based system used in transferring of information from one person to another person or group of persons who require that information for diversified activities”. Mehta and Shah (1998) define IT as “Information Technology is a combination of technologies as computer networks, imaging technology, massive data storage and artificial intelligence”. Long and Long (1999) have tried to link all above definitions and give a definition of IT in this way that “IT is a collective reference to the integration of computing technology and information processing. Any form of computer based system that has the capability of collecting, processing, and outputting information is called Information Technology.

Information technology is essential and significant for effective and efficient operation of any business venture be it traditional or otherwise. As finance is the life wire of any

profitable business, so also is information essential to a manager for decision-making process. For information to be effective, there must be a good communication network which will enable the information to flow in accordance with the intended direction. Good communication technology aids organizations to achieve their desired objectives through the people employed in its service and communication is the only effective means through which members of the organization interact (Ray and Acharya, 2004).

Technologies (IT) have received increased attention. Therefore it is essential to clarify what the term stands for. As an extension to the term IT, a special stress is given to the communication aspect. According to Buyukozkan (2003), Information and communication technologies (ICT) refers to all forms of technology that are used to transmit, store, create, display, share or exchange information by electronic means. ICT can be simply referred to as communication technologies.

Also, the amount of information that workers transmit during their normal work days has grown and so has research on how people actually deal with the increased amount of information and the communication associated with it. According Rumizen (1998), today's society requires various skills to deal with information. Skills such as, capability to absorb knowledge readily, complicated problem solving, independent searching of information, information creation and innovation are seen as essential in the future. The report also notes that in the increasingly networked society the capabilities to perform work in various contexts and the sharing of information become important. Imposing such requirements on individuals' skill levels certainly seem prone to affect the everyday work they do (Ray and Acharya, 2004). There is no doubt that performance management is rising to the top of the

business agenda. With no sign of the economic situation getting any better, business managers are realising that their best chances of success (or even survival) rest with their team yet good communication technology is the only effective means through which members of the organization work together.

2.2 Effect of Information Technology on Volume of Work Output by Employees

2.2.1 Work Output

Information technology has profoundly impacted the operations of organizations through the work output of their employees (Cimoli and Dosi, 1998). According to Froehle et al. (2000), the role of IT is especially critical to work output as it has quickly become one of the most important infrastructural elements of organization. For example, the use of Personal Computers (PCs) or computer workstations to perform statistical, optimization, simulation, or computer-aided-design analysis is pervasive among knowledge workers and has been seen to improve the work output of the employees.

Bharadwaj, (2000) talks about how human resource performance is intimately linked to Information technological change and technological innovation because individuals within the organizations are performing to best of their ability in producing maximum output and developing their potential for improvement and the employees' work performance.

Dvorak et al. (1997) argued that empirical research exists that delineates the performance benefits in services obtained from investment in IT. Their studies showed that with the support of IT, the speed that workers/employees generate output improves.

Beatty (1998) in her study documents noted that the average volume of output per unit time generated by the design engineer increases by (50%) with the use of IT. Beyond impacting the speed output that is generated by the workforce, the use of IT also affects the organization's ability to generate high performance and consistent quality.

The increase of work volume in postal companies which is employee productivity is the key essence when it comes to a business future. In order for a business to make more profit using its assets (tangible and intangible), one method is to increase the output without the increase of input. Investing in IT is one of the ways, as it might help employees producing the equivalent tasks in less time, or more tasks in the same time previously used (Cingano and Schivardi, 2004).

One of the purposes of IT is to reduce mental workload, thereby improving performance. Extremes of mental workload can create conditions of overload or under load, which may both be detrimental to performance. However, the speed and quality of the work output generated by the use of Information technology is affected by employee selection and training. Worker skill is measured based on a variety of dimensions such as years of education, years of work experience, or scores on specially designed tests (Zeithaml et al. 1990).

Strong Competition causes the new technologies to be employed for improving work output level of companies' resources. Productivity is one of the important factors to evaluate the economic growth both at the industry and firm level. Its growth directs companies to increase their market share (Tabatabae, 2000). At the most basic level, productivity is based on the economics of the firms. It is measured as the ratio of output to input. Historically,

productivity is often defined as the ratio of output to the most limited or critical input, with all the other inputs held constant.

Improving the productivity is fundamental to survival companies in a very competitive market. The purpose of all productivity-related attempts is to make lasting improvements in performance. Productivity is also the best methods we have to fight inflation, reduce unemployment, enhance profits, reduce costs, create capital and wealth and improve the quality of working life. Drucker, (2001) clearly indicated the importance of productivity as an economic indicator when he stated that without productivity objectives, a business does not have direction. Information technology (IT) is one of the valuable resources to increase the economic growth and customer satisfaction. It has a potential to impact on the structure of organizations and improve the quality of organizational performance significantly.

In the 1980s, IT was heralded as a key to competitive advantage (Porter and Millar, 1985). Porter and Millar (1985) concluded that IT has influenced competition in three ways: it has led to changes in industry structure and competition, it was used to support the creation of new businesses, and companies using IT outperformed their competition. Although IT as a critical factor to competitive advantage became less certain in the recent years, the high percentage of top executives considered IT as a key to a company's profitability and survival. This issue causes IT to pose a big dilemma for top management. On one hand, continuing IT innovations have the potential of changing the competitive game for many organizations. On the other hand, the size of the IT investment puts increasing pressure on managers to assess its business value (Mukhopadhyay et al., 1997).

For many years, there has been much discussion about whether the IT revolution was paying off in higher productivity. Studies in the 1980s found no positive relationship between IT investment and productivity, a situation referred to as the productivity paradox (Dedrick et al., 2003). Since then, decades of studies at the firm and country level has consistently shown that the impact of IT investment on productivity and economic growth is significant and positive.

Albadvi and Keramati (2006) also provided the satisfactory evidences to show that IT implementation increase productivity when supported by rational complementary investment. In the face of extreme competition and economic pressures, firms are changing their fundamental unit of analysis from the business function to the business process. IT investments may make little direct impact on the overall performance of the firms or the economy until they are combined with complementary investments in business activities, human capital, and companies redesigning. Therefore, according to the role of IT in Business Process Reengineering (BPR), as an enabler, BPR is essential for corporations to enhance the potential impacts of IT on their performances. On the other word, IT is able to improve productivity drastically. IT is known as the productive resource to increase the economic growth, productivity and customer satisfaction.

Most organizations survival today depends on its ability to prepare for changes in customer needs, as well as changes in regulation and technology (Fornell and Wernerfelt, 1987; Reichheld and Sasser, 1990). BPR begins with process redesigning which leads to fundamental changes in many aspects of an organization, including organizational structure, job characteristics, performance measures and the reward system. BPR relies

heavily on the IT uses to create radically different working methods to achieve improvements of the order of magnitude required. Furthermore, BPR facilitates the change in corporate management's perception of technology. It also confirms an alternative channel through which IT solutions are being scrutinized and selected (Soliman, 1997).

Information technology related to communications can help employees perform their jobs to the best of their ability. For employees with the ability to grasp new technology, it can speed up their productivity. New technologies, such as instant messaging, can help employees communicate in a more efficient manner and get answers and help immediately. This allows them to solve problems and address issues in the workplace instantaneously. Communications technology can also have a positive impact on the relationships between employees and suppliers or customers by improving response times to questions, comments and concerns (Albadvi and Keramati, 2006).

IT that helps automate processes will help reduce the workload for employees, freeing them up to work on other projects and assignments. New computer programs and software packages can help collect and analyze data that would normally go unused or would take employees a good deal of time to extrapolate. New technology can also be used to help improve work processes and in turn increase productivity for both the employee and the business (Drucker, 2001).

2.2.2 Multiplicity of Tasks

As companies want to increase completion of multiple tasks and coordination within the company, they often look at an investment in IT. When the purpose of the investment has

been defined, and the specifications of the equipments that are needed identified, the method of payment has to be decided (Zeithaml et al., 1990).

Das and Elango (1995) argue that IT often gives the advantage of businesses to stay flexible as the environments, both internal and external, are in often and constant changes. IT allows companies to develop ad hoc solutions in a more effective way to tackle these changes and to stay competitive in any given sector while performing well. This enables companies that are using IT in order to predict customer trends to hold a better tool to compete against other companies that are not using IT correctly.

March and Simon (1993) state that the new technologies should help to reduce the restrictions on rationality imposed by the cognitive limitations of individuals. Nowadays, there is a common sense that technology can provide useful tools for human beings in the development of their activities. Information technology has an important role in supporting human beings in performing their tasks. But this way of thinking was not always like that. During a long time, a lot of scientists assumed that technology could be used instead of the human being intelligence.

Technology resources can improve the management of multiple tasks because they allow easy and fast access to accurate information. In fact, there are a lot of advantages relative to using technology resources in organizations. For example, technology helps to distribute information and power, to enrich the communication process, to promote innovative ideas, to improve the need for a continuing learning, to keep people motivated for the job, and many others. Nowadays, all over the world, more and more organizations have increased

the amount of money they spend on information technological solutions, which have the ultimate objective of providing and sustaining competitive advantage to the organization.

In any organization, all departments have had the impact of new technologic instruments in the late years (Davenport and Prusak, 1998).

Huber, (1990) explains that in the past, the idea of using technological resources was to process and provide information to support managers to make decisions in the highest organizational hierarchical levels. At that time, information was controlled and centralised. Now with the introduction of microcomputers in the organizations, it is possible to start a decentralisation of the information process, and “networks” gave to organizations the possibility of having a more integrated and efficient information flow which allows easy management of the tasks in an organisation.

Employees are allowed to work simultaneously with continual interaction through electronic communication and this can promote innovation throughout the organization.

The ability of IT to enhance a person’s domain relevant skills is also an indispensable part of the innovation process (Ray and Acharya, 2004).

IT serves the purpose of providing essential information and ideas to the organization’s growth as well as smart investments. IT through Management accounting system usually provides valid and accurate information. The system can gather information and data from various departments and resources using the data mining technology (Rittberger, 2001). Data mining technology applies single database repository storing the information necessary in the accounting system. With this, the cost or budget information provided to

a company or firm's management for the purpose of decision making deemed as real time as well as accurate.

With the traditional accounting, management accounting information may take weeks, but with IT applied, information is ready any time. With technology, processing of large amounts of data and performance multitasking is possible in order to achieve the desired results. With the current technology, designing of the reports is possible to come up with the desired outlook of the report. 3D charts can be produced for presentations of reports. Most of the systems are easy to use or operate due to their user friendliness (Ballou, 1998).

2.3 Effect of Information Technology on Timeliness of Work Output

Bouzeghoub et al, (2004), for example, uses the term “timeliness” for the frequency of change and currency for the age of information. Eppler, (2003) uses “timeliness” for the ability of the system to deliver useful information in time and the term “currency” for the ratio between up-to-date and outdated information.

In Eppler, M. (2003), timeliness and freshness are aspects of currency, which is defined as “the degree to which recorded data is up-to-date”. (Ballou 1998) decomposes timeliness into “currency” and “volatility”, the former being the age of the data and the latter describing the time span during which data are valid. Rittberger (2001) uses currency and timeliness as synonyms. While these different conceptualizations are often hard to integrate, they also lack, in many cases, concrete applications of the suggested measures for evaluations of up-to-dateness in information sources. Thus, auditing timeliness of existing information systems is an open research problem and is critical for management of information production (Bouzeghoub et al. 2004).

2.3.1 Quick Delivery

The promotion of Information and Communication Technology as an integral part for enhancing quick mail delivery in the postal service sector was articulated by Samadar (1995). He submitted that ICT is a tool for facilitating the creation, storage, management and dissemination of mail information by electronic means. Meanwhile, Marcelle (2000) did not only see IT as a complex entity but an application and services used for the production, distribution, processing and transformation of information.

The use of IT has revolutionized mail service; there is quick mail processing, mail packaging, and tracking of mails and locating the intended recipients through the use of ITs. There is no doubt that the employment of IT in the postal service is to enhance and improve information delivery as quick as possible.

To support this, Adigwe (2010) cited Soforowa (2009) when he noted that IT is seen as the integration and utilization of computer technologies for the purpose of disseminating information to a target destination or consumer without the constraint of time and space. Information and Communication Technology in broadcast news gathering is on the increase by reporters and editors because of its benefits being recognized at every point of the entire supply chain of news. Technology development and the use of ITs in broadcast industry have improved news reportage.

According to Rodriguez and Wilson, (2000) with the implementation of ICT in companies, information spread infinitely becomes faster, cheaper and readily available. Before now, there was a significant time lag separating the point when an event took place, and the time when the news may be publicly made available. But, ICT has helped bridge the time lag

between when an event took place and the time it is made available to the public. Information and Communication Technology (ICT) is a generic term used to express the convergence of telecommunications, information, broadcasting and communications.

Harvey and Filiatrault (1991) demonstrated that IT adoption in the organizations may speed up time taken to respond to client queries and implement client requests and ultimately results in more favorable service quality evaluations. The use of centralized company-wide standard IT applications facilitates coordination among employees within and across teams throughout the organization and enhances consistence in responding to customer requests (DeSanctis and Jackson 1994; Mulligan 1999). Complementary customized IT applications enable team members to provide quicker, more detailed answers to customers' questions, resulting in better meeting customer expectations and higher productivity rates.

Mulligan (1999) argued that combining different service tasks with differential IT competence increases company performance and reduces time taken to undertake multiple tasks at once.. This implies that a positive interaction exists between the adoption levels of customized and standardized IT. The exclusive application of IT to highly standardized tasks makes all knowledge requirements redundant, whereas applying IT to tasks with limited standardization emphasizes the importance of content-based knowledge. As such, a mid continuum perspective has been advanced, which aims at know-how to accomplish automated routine tasks, as well as IT, aimed at content based knowledge about specific service procedures to create competitive advantage (Davenport, 1997).

Furthermore, DeSanctis and Jackson (1994) emphasized the importance of a hybrid IT management approach, where some IT resources (e.g., telecommunications, shared customer databases, large-scale computer operations) are managed company-wide, whereas other IT resources are managed locally (e.g., office computing and special applications development). Such hybrid forms of organizing IT seem to be a reasonable strategy for balancing between the advantages of standardized IT and customized IT. As such, the combined use of different types of IT has an incremental effect on time in which tasks are performed in the firm.

Rumizen (1998) confirms that the IT applications help workers to produce more in less time. The closer the result of an effort is to the ultimate goal, the more effective are the effort. The fewer the resources spread on achieving a goal, the more efficient the effort and IT does this job. IT is used to speed communications between trading partners, shorten product life cycle, establishing better relationships with customers, suppliers and partners and to reduce expenditures.

According to Dewett and Jones (2001), IT is being deployed in the firms because it makes links and enabling employees through electronic communications. Through IT, employees can interact with each other and it has promoted horizontal communication, which results in increased alienation of employees and increasing their efficiency.

Information systems are designed to assist employees or managers in the functions of sales and marketing, manufacturing and production, finance and accounting, and human resources, at all level of the organization. Manufacturing and production systems deal with the planning, development, and production of products and services, and controlling the

flow of production. Finance and accounting systems keep track of the company's financial assets and fund flows. Human resources systems maintain employees records; track employees skills, job performance, and training; and support planning for employee compensation and career development. This shows that at each level of the organization there are information systems supporting the major functions of the business.

IT has also ensured increased functionality of the employees in the accounting and the financial systems through the improvement of the accounting information timelines. Improvement of the financial information timeline enables accountants to prepare operations and reports analyses giving the management the accurate picture and representation of the current operations. The number of financial reports in various companies has also been improved through computerized systems. Departmental profits and laws, cash flows, as well as the market share and reports, are currently more accessible via various computerized systems (Levitt, 1992).

Information Technology also helps in the monitoring of business productivity and employee progress on goals. Online business productivity software solutions enable managers to more easily track progress during every phase of goal completion and offer immediate reinforcement or coaching to keep performance and deadlines on track. This process leads to greater business productivity because your organization is staffed with a workforce of people who are continually learning new skills and being challenged to do their very best. When it comes to the people who work for you, alert, motivated, and happy employees will work harder. Encourage your staff by rewarding them for their successes, using both monetary and non-monetary incentives (Traxler, & Luger, 2000).

2.4 Effect of Information Technology on Service Delivery of Employees

2.4.1 Transparency

Information transparency is critical for a communication portal because there are myriad information types, including textual, audio, video and other complex information types, which an organization has to manage. Information Technology has become a powerful force that drives the world toward a converging commonality (Levitt, 1992). Since the outset of the human era, technology has been one of the most essential and most important ingredients that facilitate the transparency in the management of tasks and service provision (Coombs et al, 1987). Companies today have embraced IT in a way to be transparent in their service to the customers. This is because they believe with the implementation of IT tools in the services that are offered mainly by postal services which include tracking of letters sent and managing the inflow and outflow of mail service in the company.

Information technology support in service delivery is not an end but a means to enhance service performance by boundary spanning teams. In the marketing literature, service performance has recently been posited as a phenomenon consisting of two related but distinct aspects. On one hand, it pertains to process-oriented, subjective measures that are often based on customer satisfaction and customer perceptions of quality.

On the other hand, service performance involves objectively verifiable, transparent and quantifiable service outcomes, which often concern service productivity measures such as volume of services delivered. Quinn (1996) argued that flexibility in the delivery of services is one “of the most important quality gains technology produces”. Large amounts of information that could not be remembered, saved, or organized previously are now easily

accessible for employees via high-end IT (e.g., customer relationship management [CRM] software). Through the use of IT, firms are able to effectively provide mass production services that are transparent in a personalized way to meet diversified customer expectations.

The advantages most appreciated by the users/managers were the availability of information that they could not obtain previously; the opportunity to meet deadlines more effectively, which considerably reduced the stress associated with preparing certain files; more rapid access to information; improved presentation of files; and more abundant and accurate data for analysing files (Reynold, 1997).

An individual can access desired information in any part of the organization with the aid of IT. This eliminates the need for the repetition of information and thus promotes nonredundancy. Corporate databases attached to telecommunications networks allow employees around the world to access data on customers, products, and services. The manager can communicate with employees and each other more easily. The teamwork and group collaboration is also made easier. Information can also be stored, retrieved and communicated far more easily and effectively through IT (Quinn, 1996).

Introduction of IT in the organization has also eased the work of employee such as accountants as they are left to focus on decision-making, financial analysis, consultancy, and management, as well as the designation of business models. This is possible because use of IT in management practices release the accountants from the normal and daily monotonous tasks that involve calculations, data collections, and reporting. The system can

also be designed to ensure performance of the said tasks and allow the management and the financial accountants concentrate on other productive activities (Samadar, 1995).

Another impact of IT in accounting is the easy attainment of competitive advantage. The Internet plays a significant role in providing technology benefits to various organizations. Companies have the opportunity to use the technology in drawing the attention of customers that ultimately aids in benefiting the growth of the company (Reynold, 1997). The IT management accounting also updates immediate information in various company websites to allow the customers, creditors and investors see the clear picture of the plans and goals of the organization

2.4.2 Cost effectiveness

Information technology offers a powerful tool to monitor the performance of employees and improves their cost-effectiveness. Advances in computer technology and capacity combined with lower start-up costs will allow organizations to achieve greater impact when they initiate IT systems (Rhodes, 1996).

Cost effectiveness is perhaps the most obvious component of the major impact of IT. IT systems are generally powerful new tools that enable employees to do what they want to do more effectively, quicker, and/or to a higher quality. Thus, while we may still be producing paper documents, the way we produce and refine them, as well as their 'quality', is now very different to what could be produced on (even) a (very expensive) typewriter. Even more remarkable is the power and sophistication of low cost design tools like AutoCAD, which can enable, at a fraction of the former cost, the production of high quality manufacturing drawings in engineering but also a wide range of more 'artistic' products

(used in clothes design, advertising products). And of course perhaps the most widespread IT-enabled change has occurred in the world of finance and accounting, where millions of transactions of all kinds now take place through, and are accounted on IT systems.

According to Davenport, (1997), a few examples of paid work exist in complete isolation from other people. In particular working tasks are generally undertaken within a context, and that context involves others. In the broadest sense, each person 'picks up' work tasks from others and 'passes' the outcome of his/her contribution to others. At the very least, the individual needs to understand within this value-chain what they are to do, how they are to do it and what is important in what they are delivering, and these specifications/clarification generally come from colleagues, bosses or customers. IT can play a range of roles in this context, from being the channel through which the specifications or clarifications are communicated, to providing the formal organisational environment through which tasks are scheduled, monitored and progressed.

Essentially IT is enabling a massive expansion in the ability for the individual to 'sell what s/he has', beyond the comparatively small community within which s/he was previously able to 'market his/her 'goods and services' (Mulligan 1999). IT generally through the new infrastructure provided by the internet has enabled practical diversification.

IT is a resource that can be deployed on different tasks. It has enhanced employment in that the employee's contribution turns out to be adequate for the cost. This has enabled additional new ways for paid work to take place which will undoubtedly play a part in the future world of work.

Information technology helps to measure and manage the employee performance. It helps to automate the processes of HR and save time and cost and reduce the efforts required and the paperwork. According to a survey, more than 30 percent of the respondent organizations are already using or are planning to buy software for the performance management in the organizations (Reynold, 1997).

Investors and managers may consider improvement in either information technology or labor to respond to customer desire for lower prices and to increase profit improved performance. Employees demand for increase wages may be traced to increase performance and productivity that are often due to management and control of technology system. There may be no scope for increased wages profit margin and price of unit of service if the cost of technology is high and the demand is not high enough to increase profit margin (Dauda, 2000).

In advanced countries the cost of technology is low, but that of labor is high and quantity of goods and services are large and the number of customer, are many. These may offset labour cost, reduce price margin and increased profits. In most developing nations low technological progress reduces the ratio of marginal product of labour to that of capital but in the developed nations where rapid technological change reduces price of capital and increase that of labour.

2.5 Relationship between IT and Employee Performance

The growth of innovation in the economy, since the industrial revolution of the nineteenth century, has seen likewise a great gain in the performance of the average worker as the

capacity of labor has increased exponentially. The effects of different technology on employee performance are enormous and worth noting in any economic account of the way that people live in the modern world. The effects of technology are often unnoticed due to their intrinsic nature.

Whether the increasing use of IT improves or reduces the performance of employees remains a subject of debate. Davenport, (1997), suggests that the net impact depends on the relative strength of two competing effects: On the one hand, the use of IT can lead to innovations, which can result in output growth and a concomitant growth in jobs. On the other hand, process innovation and IT-related productivity gains imply that a given output level can be produced with less labour input. In addition, there can be substitution effects if new IT-related products and services replace other potentially more labour-intensive, products and services.

The growth of the Internet, the globalization of trade, and the rise of information economies have changed the role of information technology in business and management. Information technology can be defined as " the hardware, software, telecommunication database management and other technologies used to store, process and distribute information" (Boddy, 1993). Information technology includes using information systems, network and Internet technology to conduct business electronically, in order to achieve new levels of efficiency, competitiveness, and profitability.

Information technology is supplying the foundation for new business models, new business process and new ways of distributing knowledge. Companies are relying on Information technology to conduct more of their work electronically, effortlessly linking factories,

offices and sales forces around the globe. Information technology and electronic commerce has changed the way people and organizations work in today's society (Harris and Katz, 1991).

Previous empirical studies support the argument that IT is positively associated with employee performance. Positive effects of IT investments and IT usage on growth have been demonstrated in the health care sector (Devaraj and Kohli, 2000). Similar results were found in the insurance industry where firms with top performing labour force with high premium income growth had higher IT expense ratios and lower non-IT costs (Harris and Katz, 1991). In addition, positive effects of ICT investment on sales growth were found among valve manufacturing firms.

Weill, (1992) noted that with new technology, productivity should be increased as some activities will be speeded up. This is in addition to the fact that the communications between the workers in the organization can also be improved with the incorporation of IT. This is because through new technology such as email and video-conferencing, communications will be improved within a business and also to external customers. Communication between branches or even between countries will be improved.

Machines are capable of producing the same standard of product over and over again, which reduces human error and therefore reducing waste on errors. Groups of people who are using electronic tools act together almost as fast as a single person could act but with the insights of the entire team. IT therefore allows employees to have faster access to information about sales, other partners and customers, which boosts their performance since they are able to react faster to problems and opportunities. IT allows for accuracy, immediacy and richness

of the information and brings to knowledge workers the insight and collaboration made possible by the information. It helps to stimulate a concerted response by employees to develop and implement a business strategy.

IT enhances knowledge sharing and helps to build on each other's ideas in real time. For a fast flow of good information, to streamline processes, raise quality and improve business execution, IT plays an important role to achieve this. IT gives access to data that leads to insight into the organizational business. Mulligan (1999) also argues that the relationship between Information technology and employee performance is significant in many organizations because IT allows automatic routine processes and allow employees to do thinking work, not manual work. IT helps to cut research from hours to minutes.

IT also enhances work style flexibility. For instance, a web work style also makes it easier for people who have good skill sets, but can't or choose not to work full-time. With the use of Internet, such people can find work and opportunities and yet work from remote locations. Many knowledge workers will live where they want to live and structure the work the way they want it and still make major contributions to the business they work for or with (Rhodes, 1996).

Information Technology has made this job smooth and more effective for the employee. IT is resulting in measuring actual performance, comparing and taking actions to correct deviations through different systems. Rumizen (1998) has talked about computerized monitoring that through video-cameras manager while sitting in his office can check the work and movements of all the employees and also can better alter security guards if anything goes wrong.

Information technology is efficiently providing the facility to all managers that make organizational designs in a way that will support and facilitate employees. It has really become an easy task to organize with the help of IT. Boddy (1993) notes that work specialization and larger span of control to reduce costs, cut overhead, speedup decision making, increase flexibility, get closer to customers, and empowering employees is possible now

Cooper and Rondolph (2000) also point out that there are four enablers for reengineering i.e total quality management, human resources (workers), organization (structure & culture) and Information Technology. But IT is regarded as an important enabler in reengineering process among all as every application of IT is invariably accompanied by some organizational or human resources management changes. Technology removes limits to the way employees perform their work allowing companies to redefine the way work is done and ultimately achieve a competitive advantage for earning higher profits.

IT enables an organization to empower its employees. It makes workers to pursue lifelearning skills, which will ultimately boost their productivity. This could be through training or even getting higher degrees online, employees can develop their most valuable asset there is, their brains and increase intelligences. IT according to (Jackson, 1994) extends the capabilities of employee minds.

Boddy (1993) has proved in his research that by using IT applications an employee can get increased accuracy, reduced cost of carrying out certain business operations, timely output, improved customer satisfaction, improved control of business, reduced errors, and faster availability of information among all units of business. They conclude that today IT is

directly effecting on manager plan, decision making, organizing, leading and controlling. These discussions give an insight of how IT helps the employees to perform their organizational function in more effective ways.

Wide variety of software packages and computer programs are available to the managers in the organizations, which help them to store, retrieve and analyze information for making plans. According to Dewett and Jones (2001), IT helps managers in creating plans by defining the paths through which the organization's goal can successively be achieved.

Formal plans are made and are made available to other organizations' members in the form of hard, soft and on-line copy.

Long (1999) also narrates that computer based application packages such as Microsoft Office programs are being used by the employee for graphical presentations of the graph and charts of companies performance. Most computers are programmed to provide operators with immediate response, if an error is made. This helps the subordinates to monitor their own activities and to remove any disorder. Similarly, many organizational quality programs rely on concurrent controls to inform workers if their performance output and levels are of insufficient in quality and it ensure that quality standards are met.

Many erroneously attribute all increase in productivity to Information technology. The contributions of the human element to organization and national development is often not recognized or ignored. Technologies could only increase productivity or improve performance when combined effectively with other resources by human resource or when technology is effectively, productively and ethically used. Computer is the greatest invention that has influenced organizations, nations and human interactions in nearly all

facets of life, nevertheless its performance and usefulness depend upon the knowledge, discrimination, intelligence and value of those who create them and make use of them. Man still has to define the problems, set objectives and lay down rules. He decides, analyze and judge (Tabatabae, 2000).

It is worth noting that Disabled workers are perhaps the largest sector of the workforce that can benefit from technological advances. With new technology, doors open for disabled workers who previously may have lacked the ability to work a specific job due to the inability of an employer to provide accommodations. In addition, technology can help increase the productivity of disabled individuals who are already employed. Technology, such as touchscreen computers, can help employees more easily access and operate common office equipment

IT also helps to connect teams virtually within the company. Creating employee portals and team sites helps people to work productively across the organization, no matter what location or team. It eliminates "corporate silos" that effectively cut off communication because employees can utilize technology to reach out to others working on similar projects or find experts to answer their questions throughout the organization (Samadar, 1995).

Generally speaking, employees want to be appreciated for their hard work. Business productivity software can bridge the gaps in communication and convey to each member of your team that they are valued. With your people working at their highest capabilities and your business aligned from top-to-bottom, you will be creating a workforce that is engaged, productive and loyal (Samadar, 1995). Feeling valued is the key to employee loyalty which leads to greater business productivity.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

This chapter covers the research design, study population, sample population, size, sampling procedures, data collection methods and their corresponding data collection instruments, data management and analysis procedures, reliability and validity, ethical considerations and the limitations of the Study.

3.1 Research Design

The study used a case study design approach considering both quantitative and qualitative approach using a structured questionnaire. A case study provided an in-depth study of the problem with limited time scale (Amin, 2005). The case study approach was perceived as the most preferable way of obtaining holistic, in-depth insights into the impact of Information Technology on employee performance of postal Uganda. Yin, (1994) argued that case study research strategies are appropriate for the investigation of how and why questions, especially when the concern is to study contemporary issues over which the researcher has no control. Case study research is also applicable when the boundary between a phenomenon under investigation and its organizational and social context is unclear (Yin, 1994). Quantitative research techniques were adopted, in order to exploit the synergies offered by different methodologies (Barifaijo, et.al, 2010).

3.2 Population of the Study

The study considered a total population of 44 respondents as follows, senior IT managers (4), senior Administration staff (4) and Post Officers (36).

Category	Population	Sample size	Sampling Technique
Senior IT managers	4	3	Simple random sampling
Senior Administration staff	4	3	Simple random sampling
Post Officers	36	34	Simple random sampling
Total	44	40	

Source: Primary data

3.3 Sampling Procedures

3.3.1 Sample Size

Given the population of Posta Uganda Kampala, a total of 40 respondents were selected based on Taro Yamane formula.

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

Where n=sample, N=Population, e=confidence level (0.05)

$$n = \frac{N}{1 + N(0.05^2)}$$

$$n = \frac{44}{1 + 44(0.05^2)} = 40 \text{ respondents.}$$

The sample size was manageable and the researcher was able to draw conclusions and deductions on the effect of IT on employee performance in Posta Uganda.

3.3.2 Sampling Techniques

The researcher used simple random sampling technique to determine the sample size from the employees at Posta Uganda. This technique had high generalizability of findings; hence it was suitable for a large study population (Sekaran and Bougie, 2010). The researcher used a sample from each proportion of respondents, allocated a number to every member of the accessible population, placed the numbers in a container then picked numbers at random. The subjects corresponding to the numbers picked were included in the sample (Mugenda & Mugenda, 2003).

3.4 Data Collection Methods and Instruments

The researcher used both primary and secondary data collection methods. Quantitative techniques were used to determine the effect of Information Technology on employee performance of Posta Uganda.

3.4.1 Questionnaire

The study used a questionnaire method. This is a formulated written set of questions that was used to obtain information about the study objectives from the study population (Amin, 2005). The questionnaire was used because of its ability to produce data which deals with the topic in depth and detail (Westerland, 2013). Marciniak (2013) also argues that a questionnaire is advantageous because it is free from bias of the interviewer since answers are in the respondent's own words and large samples can be used and thus the results were more valid and reliable. The questionnaire was subjected to the respondents in Posta Uganda. A close ended questionnaire was used to collect quantitative data.

3.5 Quality Control Methods

3.5.1 Validity and Reliability

Variable	Cronbach Alpha Value	Content Validity Index
IT and volume of work output by employees	.900	.705
IT and timely work output	.840	.863
IT and service delivery	.850	.815

Results revealed that the research instrument was both valid and reliable as the Reliability was measured using the Cronbach Alpha Value while the Validity was measured using the Content Validity Index. For each of the measures, the lowest values were 0.705 and 0.900 respectively yet Amin (2005) recommended minimum CVI of 0.7 and Mugenda and Mugenda, (2003) stressed that a coefficient of 0.80 or more implies that there is a high degree of reliability of the data. This shows the research instrument was both valid and reliable.

3.6 Data Management and Processing

The data was examined to extract the themes and sub-themes in relation to the research objectives, and then used to describe and explain the phenomenon of the effect of information technology on employee performance in Posta Uganda. A criterion for evaluating the performance was determined by analyzing the descriptive answers from each respondent. Answers about how IT affects employee performance were established and recorded. Discussions were based on identified themes. Findings were presented in percentages (%) and means. Data was coded and later processed using Statistical Package for the Social Sciences (SPSS) computer program.

3.7 Data Analysis

The responses of subjects collected through the questionnaire were categorized into frequency counts, percentages and means calculated. This was aided by use of the Statistical Package for Social Scientists (SPSS). Interpretation and drawing of inferences were done depending on the number of occurrences of each item. Consequently, the data was analyzed using simple frequency, and mean tabulation. In any quantitative study, it is necessary to measure the characteristics of the subjects and the variables defining the research question (Francis et al., 2013). The levels of measurement used within this study's analysis were both nominal and ordinal. A nominal measurement is when subjects of the research are divided into a number of categories, and after subjects of research are then differentiated by possessing given characteristics (Nandwa 2013). In this study this type of measurement was necessary to categorize results and demographics. Correlation and regression techniques were also used. The correlation technique was based on Pearson's coefficient (+ or – to show the direction of the relationship between the variables). The regression analysis used the adjusted R^2 values and significance values to determine the magnitude of the influence of the independent variables on the dependent variable (Amin, 2005).

3.8 Ethical Considerations

The goal of ethics in research was to ensure that no one is harmed or suffers adverse consequences from research activities (Cooper and Schindler, 2001). The following was done to ensure that the respondents' rights are protected:

- i. The researcher sought an introductory letter from the UMU which was presented to the management of Posta Uganda to seek permission and consent. The data obtained

from the respondents was treated purely as academic and confidential for the safety, social and psychological well-being of the respondents.

- ii. Informed consent was sought and appropriate documentation was kept.
- iii. Questionnaires were coded guarantee anonymity as no one of the respondents was named at any time during the research or in the subsequent study, and
- iv. Respondents were selected for their willingness to participate without compulsion and no risks to the respondents were identified at any stage during the research.

3.9 Limitations of the Study

The researcher found it difficult to probe deeper into the subject matter because some respondents withheld some information because it was regarded as confidential. However, the researcher assured the respondents that any information given would be treated with maximum confidentiality.

The researcher was limited by the small size of the study area and sample size. This study was conducted in only one branch and involved only 40 respondents. This was dictated upon by the available resources and time. Although care was taken to ensure that the study area and sample was as representative as possible in the prevailing circumstances, it is important to note that the socio-economic and working environment/conditions in organizations may not permit the findings of this study to be used to make generalizations.

CHAPTER FOUR: PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.0 Introduction

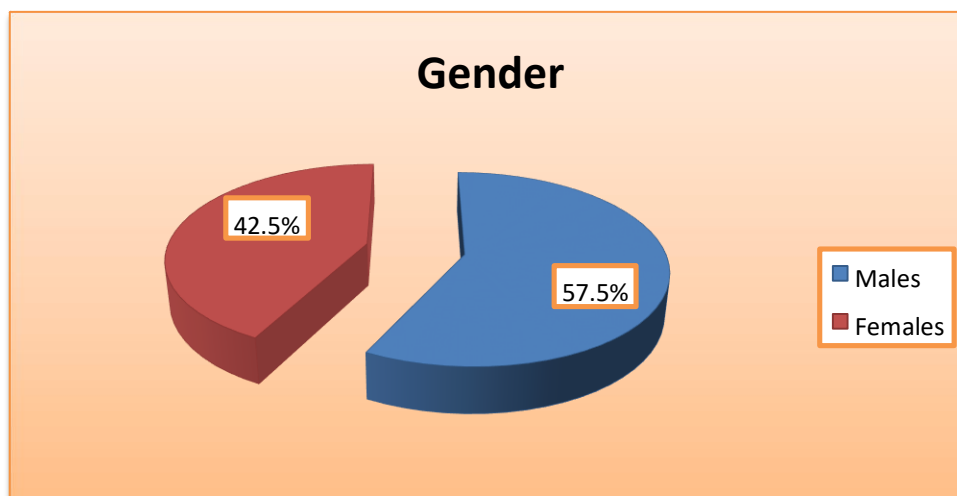
In this chapter, results on the background of respondents are analyzed and interpreted. This is followed by results on objective one, two and three respectively which are also analyzed and interpreted. Findings on the effect of Information Technology on employee performance of Posta Uganda as a case study are similarly presented, analyzed and interpreted.

4.1 Background of Respondents

This section presents the background information of the respondents, in regard to their gender, age and educational level. This information was considered useful in that it would reveal the professional relevance and knowledge base of the respondents to give informed responses.

4.1.1 Gender of the Respondents

The following figure presents findings about the gender of respondents and analysis follows. Gender is an important variable in a given organization which is variably affected by any social or economic phenomenon and IT and its effect to employee performance is not an exception. Hence the variable gender was studied for this research. Data related to gender of the respondents is presented in the figure 4.1.



Source: Field data

Figure 4.1: Gender of Respondents

As shown in the above figure, the majority of respondents, (57.5%) were males and females were only (42.5%). These results however differ from the social assumptions by the Gender and Development Journal which concluded that females are always more than the males in every community (Nussbaum, 2001). This was found relevant because respondents of different genders could be having varying views and knowledge on the effect of IT on employee performance in Posta Uganda.

4.1.2 Age of Respondents

The following table presents findings about age group of respondents and analysis follows.

Table 4.1 Age of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 20 – 25 years	7	17.5	17.5	17.5
26 – 30 years	12	30.0	30.0	47.5
31 – 35years	8	20.0	20.0	67.5
36 – 40 Years	9	22.5	22.5	90.0
Above 40 years	4	10.0	10.0	100.0
Total	40	100.0	100.0	

Source: Field data

The findings showed that most respondents (30.0%) were aged between 26 years and 30 years, compared to (22.5%) aged 36 to 40 years, (20.0%) were aged between 31 and 40

years, (17.5%) aged between 20 and 25 years, and those aged above 40 years were (10.0%). As shown, the proportion of respondents in each age group tends to decline with increasing age as presented in the Table 4.1.

From the results it can be concluded that the majority of the respondents were mature enough to have the mental capacity and strength to familiarize and interpret the contents of the questionnaire and to be able to complete it. The demographic results further indicate that the majority respondents were youthful and were mostly considered for their curiosity and knowledge of the facts about the effect of IT on employee performance.

4.1.3 Education Level of Respondents

The study also revealed the education level of the respondents in which findings were recorded as indicated in the Table 4.2 below.

The educational attainment of an organization's employees is an important indicator of their knowledge and attitude about the effect of IT on employee performance. Education also enhances the ability of individuals to achieve desired attitudes and performance goals. In this section, differences in educational attainment of the respondents are presented.

Table 4.2: Education Level of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	12	30.0	30.0	30.0
	Degree	24	60.0	60.0	90.0

Masters	4	10.0	10.0	100.0
Total	40	100.0	100.0	

Source: Field Data

As portrayed in the Table 4.2 above, majority respondents (60.0%), had attained degrees, followed by Diplomas as shown at (30.0%) and only (10.0%) attained Masters Degree.

These results indicate that majority respondents had attained education at least up to university level. In order to gather all these different views about IT and employee performance in Posta Uganda, the different levels of education was essential for this study.

4.2 Findings on Information Technology in Posta Uganda

Information Technology as a parameter was measured according to hardware and software. The tables below shows the findings about hardware and software and the responses in terms of frequencies and mean for all indicators.

4.2.1 Hard Ware

Table 4.3 The organization has enough suites of IT hardware necessary for all the employees

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	3	7.5	7.5	7.5
Disagree	3	7.5	7.5	15.0
Not sure	9	22.5	22.5	37.5
Agree	16	40.0	40.0	77.5

Strongly agree	9	22.5	22.5	100.0
Total	40	100.0		

Source: Field data

From the table 4.3 above, the majority of respondents (62.5%) agreed that the organization has enough suites of IT hardware necessary for all the employees as opposed to (15%) who disagreed to the statement; however there was substantial number of respondents (22.5%) who were not sure whether the organization has enough suites of IT hardware necessary for all the employees. The overall mean score of the statement that the organization has enough suites of IT hardware necessary for all the employees were 3.625 which showed that majority of the respondents relatively agreed that the organization has enough suites of IT hardware necessary for all the employees.

Table 4.4 The specifications of the IT hardware available are suitable for the work requirements

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	3	7.5	7.5	7.5
Disagree	3	7.5	7.5	15.0
Not sure	7	17.5	17.5	32.5
Agree	14	35.0	35.0	67.5
Strongly agree	13	32.5	32.5	100.0
Total	40	100.0		

Source: Field Data

From the results, it was indicated that some respondents with a percentage of (17.5%) were unsure of whether the specifications of the IT hardware available are suitable for the work requirements as compared to the (67.5%) who agreed and (15.0%) who disagreed. The mean was 3.775. This is probably because there is always a minimum hardware requirement that is often necessary to run specific programs essential for a particular job specification (such as a specific application programs or operating systems). 0702621514

Table 4. 5 The hardware used are the latest versions /technologies

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	5	12.5	12.5	12.5
Disagree	3	7.5	7.5	20.0
Not sure	6	15.0	15.0	35.0
Agree	12	30.0	30.0	65.0
Strongly agree	14	35.0	35.0	100.0
Total	40	100.0		

Source: Field data

It is also shown in the above table 4.5 that most of the respondents (65.0%) agreed that the hardware used is the latest versions or technologies with a few of them (20.0%) who disagreed. The mean response was 3.675. This implies that indeed, most of the company's computer hardware equipment is up to date and is consistent with the latest available versions. These findings are in line with Dvorak et al. (1997) who notably said that you will probably find that any modern personal computer will be adequate for your requirements. The input and output devices you require, as well as the software you wish

and need to run, should therefore primarily drive your hardware needs or else you may end up upgrading it to match with the latest technologies

Table 4.6 The inter face computers are appropriate and easy to use

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	4	10.0	10.0	10.0
Disagree	3	7.5	7.5	17.5
Not sure	5	12.5	12.5	30.0
Agree	13	32.5	32.5	62.5
Strongly agree	15	37.5	37.5	100.0
Total	40	100.0		

Source: Field data

It was revealed from table 4.6 that (70.0%) respondents agreed that the interface computers are appropriate and easy to use whereas (17.5%) disagreed and a few of them (12.5%) were uncertain. The mean was 3.80.

Table 4. 7 The hardware equipment is regularly serviced and upgraded

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	3	7.5	7.5	7.5
Not sure	12	30.0	30.0	37.5
Agree	10	25.0	25.0	62.5
Strongly agree	15	37.5	37.5	100.0

Total	40	100.0		
-------	----	-------	--	--

Source: Field data

The findings indicated that most of the respondents (52.5%) who agreed, (30.0%) were not sure and a few of them (7.5%) disagreed when asked whether the hardware equipment is regularly serviced and upgraded. The mean was 3.92. From these findings in general, the hardware equipment of the organization is easy and appropriate to use and is regularly serviced and upgraded. The computer hardware provides the infrastructural backbone for so many performance activities in an organization.

4.2.2 Soft Ware

Table 4. 8 The software installed on device acts as a virtual computer through which other applications are run

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	2	5.0	5.0	5.0
Not sure	6	15.0	15.0	20.0
agree	15	37.5	37.5	57.5
Strongly agree	17	42.5	42.5	100.0
Total	40	100.0		

Source: Field Data

According to the table 4.8 above, (80.0%) of the respondents agreed to the fact that the software installed on the devices acts as a virtual computer through which other applications are run as opposed to (5.0%) who disagreed to the statement, while (15.0%)

were not sure. The mean score of 4.175 shows a great agreement to the fact that software installed on device acts as a virtual computer through which other applications are run.

Table 4. 9 The software installed enables data to be easily input in the systems

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Not sure	6	15.0	15.0	15.0
Agree	15	37.5	37.5	52.5
Strongly agree	19	47.5	47.5	100.0
Total	40	100.0		

Source: Field Data

From the results also, 85.0% of the respondents agreed that the software installed enables data to be easily input in the systems and 15.0% were not sure. Those who disagreed were 0.0%. The mean was 4.325 which implied that most of the respondents strongly agreed. This implies that the overall data is easily captured and stored.

Table 4. 10 Business Transactions can be checked for completeness using the software

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	1	2.5	2.5	2.5
Disagree	2	5.0	5.0	7.5
Not sure	6	15.0	15.0	22.5
agree	8	20.0	20.0	42.5
Strongly agree	23	57.5	57.5	100.0
Total	40	100.0		

Source: Field data

It was also observed from the findings that (77.5%) of the respondents agreed that business transactions can be checked for completeness using the software; however (7.5%) disagreed and (15.0%) of the respondents were not sure whether business transactions can be checked for completeness using the software. The mean score of 4.25 showed that most of the respondents agreed. As Bharadwaj, (2000) argued, with the support of IT, the speed that workers/employees generate output improves and completeness of business transactions is also enhanced.

Table 4.11 Captured data is enough to enable the operation of the organization

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	2	5.0	5.0	5.0
Not sure	4	10.0	10.0	15.0
agree	16	40.0	40.0	55.0
Strongly agree				

	18	45.0	45.0	100.0
Total	42	100.0		

Source: Field data

From the table 4.11 above, most of the respondents (85.0%) agreed that captured data is enough to enable the operation of the organization; while (5.0%) disagreed and (10.0%) of the respondents were not sure. From the mean of 4.25, it showed that the majority of the respondents agreed to the statement that captured data is enough to enable the operation of the organization.

Table 4.12 Annual subscription/license fee for the soft wares is manageable

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Not sure	6	15.0	15.0	15.0
agree	13	32.5	32.5	47.5
Strongly agree	21	52.5	52.5	100.0
Total	40	100.0		

Source: Field data

The study also shows that (85.0%) of the respondents agreed that the annual subscription/license fee for the software's is manageable as opposed to the (15.0%) of the respondents were not sure. Every organization has to incorporate an appropriate software to match its business operations and has to be constantly updated through the monthly or annual subscriptions in order to facilitate smooth running of its activities.

4.3 IT and Volume of Work Output by Employees

The first objective of the study was to find out the effect of IT on volume of work output by employees in Posta Uganda. The findings were presented, analyzed and interpreted in frequencies and percentages as indicated below.

4.3.1 Work Output

From the table 4.13 bellow, the majority of respondents (77.5%) agreed that they have been able to increase their work output as opposed to 0.0% who disagreed to the statement, however there was a sizable number of respondents (22.5%) who were not sure as to whether they have been able to increase their work output. The mean score of 4.05 is relatively high. These results indicate that the use of IT affects the employees' ability to generate high performance and consistent quantity of work output. This, as noted by Beatty (1998) in her study documents who pointed out that the average volume of output per unit time generated by the employees increases by (50%) with the use of IT, impacting the speed and output that is generated by the workforce.

Table 4.13 We have been able to increase your work output

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not sure	9	22.5	22.5	22.5
	Agree	11	27.5	27.5	50.0
	Strongly agree	20	50.0	50.0	100.0
Total		40	100.0		

Source: Field Data

Table 4. 14 Information output is correct

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	3	7.5	7.5	7.5
Not sure	4	10.0	10.0	17.5
agree	9	22.5	22.5	40.0
Strongly agree	24	60.0	60.0	100.0
Total	40	100.0		

Source: Field Data

From the table 4.14 above, the majority of respondents (82.5%) agreed that Information output is correct as opposed to (7.5%) who disagreed to the statement; however there was a number of respondents (10%) who were not sure as to whether the information output is correct which implies that most of the respondents agreed that their Information output is correct.

Table 4.15 All the generated reports are accurate

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2.5	2.5	2.5
	5	12.5	12.5	15.0

Disagree	20	50.0	50.0	65.0
Not sure	14	35.0	35.0	100.0
agree				
Strongly agree				
Total	40	100.0		

Source: Field data

Additionally, the findings from the study as shown in table above reveal that the majority of respondents (85%) agreed that all the generated reports are accurate as opposed to (2.5%) who disagreed to the statement; however some of the respondents (12.5%) were not sure as to whether all the generated reports are accurate. This implies that the role of IT is especially critical to work output as it has quickly become one of the most important infrastructural elements of organizations with the fact that the information output is correct and the generated reports are accurate which eliminates or at least lessens the chances of errors and mistakes.

Table 4.16 Satisfied with the entry transaction out put

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	4	10.0	10.0	10.0
Not sure	6	15.0	15.0	25.0
Agree	14	35.0	35.0	60.0
Strongly agree	16	40.0	40.0	100.0
Total	40	100.0		

Source: Field data

From the table 4.16 above, the majority of respondents (75.0%) agreed that they are satisfied with the entry transaction output whereas (10.0%) disagreed to the statement; there was however a number of respondents (15.0%) who were not as sure whether they are satisfied with the entry transaction output meaning a majority agreement to the statement that they are satisfied with the entry transaction output.

Table 4. 17 The quality of work produced has improved

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	3	7.5	7.5	7.5
Not sure	9	22.5	22.5	30.0
Agree	14	35.0	35.0	65.0
Strongly agree	14	35.0	35.0	100.0
Total	40	100.0		

Source: Field data

Additionally, most of the respondents agreed that the quality of work produced has improved. This is evidenced by the 70.0% who agreed as compared to the (22.5 %) who were not sure and the (7.5%) who disagreed. These results show that that Information technology has indeed improved the work output of the employees at Posta Uganda.

4.3.2 Multiplicity of Tasks

Table 4.18 Able to process many transactions at the same time

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	1	2.5	2.5	2.5
Disagree	7	17.5	17.5	20.0
Not sure	10	25.0	25.0	45.0
Agree	6	15.0	40.0	60.0
Strongly agree	16	40.0		100.0
Total	40	100.0		

Source: Field Data

It was clear as seen in the table 4.18 above that the employees are able to process many transactions at the same time as evidenced by the (55.0%) of the respondents who agreed, (25%) were not sure and only (20%) disagreeing to this statement, which implies majority agreement that the employees are able to process a variety of tasks at the same time enabled by the use of IT systems.

Table 4. 19 Auto processing reduces duplication of transactions information

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	1	2.5	2.5	2.5
Not sure	3	7.5	7.5	10.0
Agree			42.5	
Strongly agree	17	42.5		52.5

	19	47.5	47.5	100.0
Total	40	100.0		

Source: Field data

As observed in the table 4.19 above, most of the respondents (90.0%) agreeing that auto processing reduces duplication of transaction information with a few (2.5%) disagreeing to the same and (7.5%) who were not sure. Information Technology resources can thus improve the management of multiple tasks, because they allow easy and fast access to accurate information and avoiding duplication of information.

Table 4. 20 It is easier to respond to client queries and implement requests of many clients at the same time

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Disagree	1	2.5	2.5	2.5
Not sure	4	10.0	10.0	12.5
agree	19	47.5	47.5	60.0
Strongly agree	16	40.0	40.0	100.0
Total	40	100.0		

Source: Field Data

It is also clear from the study that it is easier to respond to client queries and implement requests of many clients at the same time. This is shown by the majority of the respondents (87.5%) who agreed, (10%) of the respondents were uncertain and the minority (2.5%) disagreeing. This implies that IT often gives the advantage of businesses to stay flexible as the environments, both internal and external, are in often and constant changes with

changing customer demands and needs, thus, the need for a system that can meet all the requirements of the customers in the shortest possible time. Similarly, as Das and Elango (1995) argued, IT allows companies to develop ad hoc solutions in a more effective way to tackle these changes in the environment and stay competitive in any given sector while performing well. This enables companies that are using IT in order to predict customer trends hold a better tool for meeting the ever changing customer demands.

Table 4.21 Regression between Information Technology (IT) and volume of work

Model	Coefficients ^a				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1(Constant)	5.860	2.477		2.365	.023
Information technology	.215	.500	.519	.430	.670

a. Dependent Variable: Volume of work done

Source: Field data

A regression was done to ascertain the effect of Information Technology (IT) as the independent variable and volume of work as the dependent variable taking into consideration the standardized beta coefficient obtained 0.519. The standardized beta coefficient shows that there is positive effect volume of work output contributed by IT

Posta Uganda. In the regression results, this means that Information Technology contributes to the volume of work by 0.519 (51.9%).

4.4 IT and Timely Work Output at Posta Uganda

The second objective of the study was to find out the effect of IT on timely work output at Posta Uganda.

4.4.1 Quick/timely Delivery

Table 4.22 Automatic validation enables timely reconciliation of transactions

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	2	5.0	5.0	5.0
Disagree	3	7.5	7.5	12.5
Not sure	4	10.0	10.0	22.5
agree	14	35.0	35.0	57.5
Strongly agree	17	42.5	42.5	100.0
Total	40	100.0		

Source: Field Data

From the table above, the majority of respondents (77.5%) agreed that automatic validation enables timely reconciliation of transactions as opposed to (12.5%) who disagreed to the statement; however the respondents (10.0%) who were not sure as to whether automatic validation enables timely reconciliation of transactions which shows a high agreement to the statement that automatic validation enables timely reconciliation of transactions. These findings are supported by Soforowa (2009) who noted that IT is seen as the integration and

utilization of computer technologies for the purpose of disseminating information to a target destination or consumer without the constraint of time and space.

Table 4. 23 The time spent on a single client has reduced

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	1	2.5	2.5	2.5
Disagree	1	2.5	2.5	5.0
Not sure	5	12.5	12.5	17.5
Agree	14	35.0	35.0	52.5
Strongly agree	19	47.5	47.5	100.0
Total	40	100.0		

Source: Field Data

From the table above, the majority of respondents (82.5%) agreed that the time spent on a single client has reduced as opposed to 5.0% who disagreed to the statement; however a number of respondents (12.5%) were not sure as to whether the time spent on a single client has reduced, meaning that there was a high agreement to the fact that the time spent on a single client has reduced. This can be interpreted that IT greatly reduces client processing time for daily transactions due to auto validation of all transactions. In line with the findings, Aas (1997), in his study demonstrated that IT in the organizations may speed up time taken to respond to client queries and implement client requests and ultimately results in more favorable service quality evaluations.

Table 4.24 showing Regression between Information Technology (IT) and timely work output

Coefficients^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1(Constant)	1.996	1.377		4.449	.156
Information technology	.439	.478	.857	3.578	.123

a. Dependent Variable: Timeliness

Source: Field data

A regression was done in the table 4.24 above to ascertain the effect of IT as an independent variable on timely work output as a dependent variable taking into consideration the standardized beta coefficient obtained 0.857. The standardized beta coefficients show that there is a positive effect between IT and timely work output. This means that IT contributes to the timely the work output of employees in Posta Uganda by 85.7%.

4.5 Information Technology and Service Delivery

The third objective of the study was to find out the effect of IT on service delivery of employees in Posta Uganda. The findings were presented, analyzed and interpreted in percentages, frequencies as indicated below.

4.5.1 Transparency

Table 4.25 Reports are shared with the management regularly as required

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree Not	2	5.0	5.0	5.0
sure agree	3	7.5	7.5	12.5
Strongly agree	14	35.0	52.5	47.5
	21	52.5		100.0
Total	40	100.0		

Source: Field Data

It is shown in the table 4.25 above that (87.5%) of the respondents agreed that reports are shared with the management regularly as required, whereas only (7.5%) were not sure and (5%) disagreed. This means that transparency is achieved by the generation of business reports which are regularly shared with the management to ensure proper and accountable business processes which indicates that majority of the respondents agreed. This is in line with Levitt, (1992) who pointed out that since the outset of the human era, Information technology has been one of the most essential and most important ingredients that facilitate the transparency in the management of tasks and service provision through proper processing of reports.

Table 4. 26 All reports generated are clearly understood

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	1	2.5	2.5	2.5
Not sure	1	2.5	2.5	5.0
agree	24	60.0	60.0	65.0
Strongly agree	14	35.0	35.0	100.0
Total	40	100.0		

Source: Field data

The findings as shown in the study indicate that (95%) and (2.5%) who respectively agreed and disagreed, that all reports generated are clearly understood and that the reports generated are objectively verifiable. These percentages can be interpreted that there is transparency in Posta Uganda as a result of Information technology. However, according to the study, low report sharing percentage with the Board lessens the level of transparency in Posta Uganda. Overall it can be concluded that the level of transparency is satisfactory in Posta Uganda, however, report sharing with the Board and Management still needs enhancement.

4.5.2 Cost Effectiveness

Table 4. 27 Using technology has reduced errors

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	1	2.5	2.5	2.5
Disagree	1	2.5	2.5	5.0
Not sure	4	10.0	10.0	15.0
agree	20	50.0	50.0	65.0
Strongly agree	14	35.0	35.0	100.0
Total	40	100.0		

Source: Field Data

The findings from the study indicate that (85.0%) of the respondents agreed that using technology has reduced errors, with a few of them, (5%) disagreed and (10%) who were not sure. This implies that they would probably make more errors and take extra time trying to trace and fix an error using the manual system but with IT, errors have reduced and correcting mistakes and inaccuracies takes less time.

Table 4. 28 Human resource costs have been reduced

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	2	5.0	5.0	5.0
Not sure agree	10	25.0	25.0	30.0

Strongly agree	20	50.0	50.0	80.0
	8	20.0	20.0	100.0
Total	40	100.0		

Source: Field Data

The findings from the study also indicate that (70%) of the respondents agreed that the human resource costs have been reduced, while a few of them (25%) were not sure and (5%) disagreed. This implies that the human resources costs reduce probably because the size of the employees had been trimmed and replaced by the machines which take up some of their roles.

Table 4. 29 Material costs (e.g Paper) have reduced

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	2	5.0	5.0	5.0
Disagree	2	5.0	5.0	10.0
Not sure	8	20.0	20.0	30.0
agree	17	42.5	42.5	72.5
Strongly agree	11	27.5	27.5	100.0
Total	40	100.0		

Source: Field Data

The study also revealed that most of the employees (70%) agreed that the material costs (e.g Paper) have reduced as compared to the (20%) who were neutral, while (10%) disagreed. These findings are in agreement with Rhodes, (1996) who notably said that cost effectiveness is perhaps the most obvious component of the major impact of IT. IT systems

are generally powerful new tools that enable employees to do what they want to do more effectively, quicker, and/or to a higher quality. Thus, while firms may still be producing paper documents, the way they produce and refine them, as well as their quality, is now very different to what could be produced before.

Table 4. 30 Regression of IT and service delivery of employees

Model	Coefficients ^a		Standardized Coefficients	t	Sig.
	Unstandardized Coefficients				
	B	Std. Error	Beta		
1 (Constant)	3.550	1.039		3.416	.002
Information technology	.223	.210	0.486	.585	.562

a. Dependent Variable: Service Delivery

Source: Field data

A regression was done in the table 4.30 above to ascertain the effect of IT as an independent variable, on service delivery as a dependent variable taking into consideration the standardized beta coefficient obtained 0.486. The standardized beta coefficients show that there is a positive effect between IT and service delivery. This means that IT contributes to the service delivery of employees in Posta Uganda by 48.6%

CHAPTER FIVE: SUMMARY, CONCLUSION AND

RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary of the study, conclusions and recommendations of the findings; they are presented objective by objective.

5.1 Summary of findings from the study

This section summarises the findings from the study objective by objective that is; the effect of IT on volume of work output by employees; the effect of IT on timely work output and effect of IT on service delivery

5.1.1 Effect of IT on Volume of Work Output by Employees

The study considered the effect of IT on volume of work output by employees in Posta Uganda. The study findings showed that employees have been able to increase their work output as evidenced by the majority (77.5%) who agreed and that the volume of work produced has now increased. Further, the findings revealed that they are now able to perform multiple tasks because of easy and fast access to accurate information. This reveals that IT has an effect on the volume of work output perceived by the ability to improve on the quantity of work produced and the possibility of multitasking.

5.1.2 Effect of IT on Timely Work Output

The study also established the extent to which IT affects timely work output. The findings were presented, analyzed and interpreted using indicators of quick/timely delivery. From the findings it was realized that to a greater extent, IT has contributed a lot to the timeliness of the work output by the employees. This is evidenced by the majority of respondents

(82.5%) who agreed that automatic validation enables timely reconciliation of transactions and the 90% who agreed that processing time for daily transactions is small with the use of IT.

5.1.3 Effect of IT on Service Delivery

The study also was to establish the effect of IT on service delivery in Posta Uganda. From the findings, it was justified that there is a significant effect of IT on service delivery. This is because the majority of respondents (62.5%) agreed that reports generated are objectively verifiable, 95% agreed that they are able to communicate easily with all branches throughout the country. Also, 97.5% of the respondents agreed that the material costs (e.g Paper) have reduced.

5.2 Conclusions

From the findings of the study, the researcher generated the following conclusions;

From the findings, it was concluded that Information technology has a positive effect on volume of work output by employees in Posta Uganda. This is because the employees have been able to increase their work output as evidenced by the majority who agreed and that the quantity of work produced has improved in addition to the fact that they are now able to perform multiple tasks because of easy and fast access to accurate information. The correlation coefficient value was found to be = 0.52, and at sig= 0.000<0.01 for volume of work output. This meant that IT influences volume of work output by more than 52%.

It can also be concluded that IT significantly affects timely work output. The correlation coefficient was found to be 0.734 at sig=000<0.01, meaning that timely work output is

influenced by IT by at least 73.4%. This as evidenced from the indicators of quick/timely delivery, it was realized that automatic validation enables timely reconciliation of transactions and that processing time for daily transactions is small among others.

From the findings, it can also be concluded that IT has an effect on service delivery in Posta Uganda. This means that through the use of IT software and hardware, there is a significant improvement in terms of employee performance of Posta Uganda. The correlation coefficient was found to be 0.49 at $\text{sig} = 0.000 < 0.01$, meaning service delivery is influenced by IT by 49%. It can thus be concluded that IT has contributed positively towards employee performance in Posta Uganda. This is also because the majority of respondents agreed that reports generated are objectively verifiable, they are able to communicate easily with all branches throughout the country and that the material costs have also reduced. Information Technology (IT) has therefore contributed positively to the performance of employees in Posta Uganda as established from these findings.

5.3 Recommendations

5.3.1 IT and volume of work output by employees in Posta Uganda.

Given that the study found IT to have a significant positive impact on the performance of employees in Posta Uganda, it is important that the standard and quality of IT be continuously improved so as not to compromise the work produced by employees.

This study recommends that managers in organizations need to closely monitor the implementation of Information technology in order to optimize its benefits of improved work output.

It was also recommended that managers must think of releasing employees' potential and competencies through motivation strategies which will create more commitment and ownership of their jobs at work and in turn boost the output of their work. This encourages managers to minimize their efforts in direction, supervision, and follow up through empowering those with skill, knowledge and information at their fingertips.

5.3.2 IT and timely work output at Posta Uganda.

All IT users in Posta Uganda should be sensitized on the importance of IT and why data must be accurately and fully entered and stored. This provides a basis for capturing and usage of meaningful and relevant data in the IT systems.

There is also need to uplift the morale of employees in terms of job security and motivation so as to improve their performance and timeliness in delivering the work

There is need for monitoring and analysing recent technological developments, with the aim of informing the organizational units about the implications of these developments on the timely work output of its employees.

5.3.3 IT and service delivery of employees in Posta Uganda

Employees should be given equal chances for training and development in this field so that they can ably use the IT systems in place.

With regard to improving service delivery, there is need for empowering IT staff including reinforcing the empowerment of employees which would give them the chance to use their IT and information available in helping the organization in making more effective resolutions on how IT use can be improved.

It further recommends that managers and policy makers need to keep abreast of the developments in this dynamic information technology sector to ensure that organizations survive in the global market place through proper service delivery and policies to guide and regulate the use of IT in the organisation. This is because new innovations keep coming up in the field of IT as old technologies become obsolete, thus there is need to maintain current and up-to-date technologies which are more efficient.

5.4 Suggestions for Further Research

The research study was based on a small area and study population. Additional studies should be carried out in a wider area and with a bigger sample size in order to improve on the findings about Information Technology and Employee Performance.

Further research could be done to examine the contribution of IT to the competitiveness of Posta Uganda in the market.

More research can also be done on the relationship between IT use and business growth in organisations.

A study can also be done on the effect of IT on employee motivation and attitudes.

Further research can also focus on the relationship between IT use in organisations and customer satisfaction.

Further research could also be done on assessing the effectiveness of IT systems in other organizations.

REFERENCES

- ADIGWE, I. 2010. *The Impact of Information and Communication Technology on news processing: a study of NTA and AIT*. Unpublished project Lagos State University: School of Communication.
- AHMED, N., & WÖLFL, A. 2004. *ICT Investment in OECD Countries and its Economic Impact, in OECD). The Economic Impact of ICT – Measurement, Evidence and Implications*. OECD, Paris.
- ALBADVI, A. AND KERAMATI, A. 2006. *A proposal for a Framework or Research Approach on Information Technology impact on corporate level productivity*. Information technology journal.
- AMIN, M. 2005. *Social Science Research Concepts, Methodology & Analysis*. Makerere University Kampala.
- ANDERSON, T. 2001. *Information Technology, Strategic Decision Making Approaches and Organizational Performance in Different Industrial Settings*. Journal of Strategic Information Systems.
- ANDERSSON, M. AND KARLSSON, C. 2004. *The Role of Accessibility for the Performance of Regional Innovation Systems: Knowledge Spillovers and Knowledge Management*. Edward Elgar, Cheltenham.
- ASWATHAPPA. K. 2003. *Human Resources Personnel Management*, 3rd edition. India: Tata Mc Craw Hill Publishing Company Ltd.
- BALLOU, D., et al., 1998. *Modeling Information Manufacturing Systems to Determine*

- Information Product Quality*. Management Science, 444, P.462-484.
- BARIFAIJO, M., et al., 2010. *How to Write a Good Dissertation/Thesis: A Guide to Graduate students*. New Vision Printing Press.
- BEATTY, M. 1998. *Information Technology Effects on Firm Performance as Measured By Tobin's Q*. Management Science, P.1008-1024.
- BEAUMASTER, S. 1999. *Information Technology Implementation Issues: an analysis*. Unpublished.
- BERRY. B 1990. *The Relationship Between Investment in Information Technology and Firm Performance: a study of the valve manufacturing sector*. Information Systems Research, 34), P.307-333.
- BHARADWAJ, A. S. 2000. *A Resource-Based Perspective on Information Technology Capability and Firm Performance: An Empirical Investigation*. MIS quarterly, 169-196.
- BHASKAR, K. AND HOUSDEN, J. 1990. *Information Technology Management*, 2nd edition, Oxford : Butter worth Heinemann Ltd, Published in CIMA.
- BLACK, S., AND LYNCH, L. 2001. *How To Compete: The Impact of Workplace Practices and Information Technology on Productivity*. Review of Economics and statistics, 83(3), 434445.
- BODDY, D. 1993. *Organizations in the Computer Age*, Gower.
- BOUZEGHOUB, M. AND PERALTA, V. 2004. *A Framework for Analysis of Data Freshness*, International Workshop on Information Quality in Information Systems (IQIS'04), pp. 59–67.

- BRYNJOLFSON, E. AND KAHIN, B. 2000. *Understanding the Digital Economy. Data, Tools, and Research*, The MIT Press, Cambridge, MA.
- BUYUKOZKAN, G. 2003. *An organizational information network for corporate responsiveness and enhanced performance*, *Journal of Manufacturing Technology Management*, Vol 15, no 1 pp 57-67.
- CARLSSON, B. 2003. *The New Economy: What is New and what is not?* Edward Elgar, Cheltenham.
- CHANDRASEKHAR, P., AND GHOSH J. 2001. *Information and Communication Technologies and Health in Low Income Countries: The Potential and the Constraints*. Bulletin of the World Health Organization 79, no. 9 (2001): 850–55.
- CIMOLI, T. AND DOSI, K. 1998. *Introduction to multimedia communications: applications, middleware, networking*. John Wiley & Sons.
- CINGANO, F., AND SCHIVARDI, F. 2004. *Identifying the Sources of Local Productivity Growth*. Journal of the European Economic association, 2(4), 720-744.
- COHEN, I. SALOMON AND NIJKAMP, P. 2002. *Information-communication Technologies (ICT)*.
- COOMBS, R., SAVIOTTI, P. AND WALSH, V. 1987. *Economics and Technological Change*, London, Macmillan.
- COOPER, A. AND SCHINDLER, H. 2001. *As a matter of fact: Empirical perspectives on ethics*.
- COOPER, B. 2000. *IT development creativity: A case study of attempted radical changes*, MIS

- Quarterly, Vol. 24, Issue 2, pp245-277.
- DAS, K., AND ELANGO, B. 1995. *Managing strategic flexibility: key to effective performance*.
Journal of General Management, 20, 60-60.
- DAVENPORT, H. AND PRUSAK, L. 1998. *Working knowledge: How organizations manage what they know*. Harvard Business Press.
- DAVID, A. 2006. *Public information technology and e-governance: Managing the virtual state*.
Jones & Bartlett Learning.
- DEDERICK, J., GURBAXANI, V. & KRAEMER, L. 2003. *Information Technology and Economic Performance: A Critical Review of the Empirical Evidence*, ACM Computing Surveys.
- DEDRICK, J., et al., 2003. *IT and Economic Performance: A Critical Review of Empirical Evidence* ACM Computing Services, March.
- DESANCTIS, G. AND BRAD M. JACKSON 1994. *Coordination of Information Technology Management: Team-Based Structures and Computer-Based Communication Systems*.
Journal of Management Information Systems, 10, 85-110.
- DEVERA J. K AND KOHLI, G. 2000. *Issues in linking information technology capability to firm performance*. MIS quarterly, 125-153.
- DEWETTAND, J. 2001. *The Role of Information Technology in the Organization: a Review, Model and Assessment,*” Journal of Management: Managing in the Information Age, pp313-346.

- DVORAK, A. et al. 1997. *Organizational Information Systems: Determinants of Their Performance and Behaviour*, Management Science, Volume 28, Number 2, pp. 138-15.
- EPPLER, M. 2003. *Managing Information Quality: Increasing the Value of Information in Knowledge intensive Products and Processes*, Springer, Heidelberg.
- FARNBOROUGH, S. 1999. *Getting real about virtual commerce*, Harward Business Review, pp. 84-94.
- FORNELL, C. AND WERNERFELT, B. 1987. *Defensive marketing strategy by customer complain management : A theoretical analysis*. Journal of marketing research.
- FRANCIS, L. 2013. *Introduction to research methods*. New York: Wiley.
- FRANKE, R. 1987. *Technological Revolution and Productivity Decline: Computer Introduction in the Financial Industry*, Technological Forecasting and Technological Change.
- FREEMAN, C. 1987. *Technology Policy and Economic Performance: Lessons from Japan*, Pinter, London.
- FROEHLE, D. et al 2000. *How to Compete: the impact of workplace practices and information technology on productivity*. Review of Economics and statistics, 83(3), 434-445.
- GARGEYA, B. AND BRADY, C. 2005. *Success and Failure Factors of Adopting SAP in ERP business enterprise* (6th ed.). New York, McGraw-Hill/Irwin.
- GATEWOOD, K. AND FIELD, S. 1994. *A Resource- Based Perspective on Information Technology capability and firm Performance: an Empirical Investigation*. MIS quarterly, 169-196.

- GLADWIN, J. et al 2003. *Implementing a New Health Management Information System in Uganda. Health Policy and Planning*, 18(2), 214-224.
- GRAHAM, S. 2002. *Bridging Urban Digital Divides: Polarisation and Information and Communication Technologies (ICT), Urban Studies*.
- HARRIS, H. AND KATZ, L. 1991. *User Acceptance of Information Technology: system characteristics, user perceptions and behavioral impacts. International journal of manmachine studies*, 38(3), 475-487.
- HARVEY, K. AND FILIATRAULT, K. 1991. *Task-Technology Fit and Individual Performance. MIS quarterly*, 213-236.
- HUBER, P. 1990. *A Theory of the Effects of Advanced Information Technologies on Organizational Design, Intelligence, and Decision Making. Academy of management review*, 15(1), 47-71.
- KAUFMANN, A. et al (2003). *Effects of the Internet on the Spatial Structure of Innovation Networks. Information Economics and Policy*.
- KIBIKY, L. 2008. *Assessing Privatization in Uganda*. Doctoral dissertation, Roskilde University.
- LEVITT, T. 1992. *The Globalization of Markets, in Transnational Management: Text, Cases and Readings in Cross-Border Management*. Richard D. Irwin.
- LEWIS, D. et al 2012. *Understanding the Role of Technology in Health Information Systems. Pacific Health Dialog* 18, no. 1 (2012): 144.

- LONG, L. AND LONG, N. 1999. *Computers*, Prentice Hall Inc. U.S.A.
- MAICIBI, K. 2003. *Inter-organization Information Sharing Systems*, *MIS Quarterly*, *Special Issue*, pp. 93-105.
- MARCELLE, G. 2000. *A Method for Assessing the Economic Impact of Information Systems technology on Organizations in Proceedings of ICIS*, Indianapolis, pp. 45-56.
- MARCH, K. AND SIMON, M. 1993. *The Consequences of Information Technology Acceptance on Subsequent Individual Performance*. *Information & management*, 32(3), 113-121.
- MARCINIAK, J. 2013. *Qualitative Research Methods for the Social Sciences* (Vol. 5). Boston: Pearson.
- MAYAN, H. et al 2003. *Verification strategies for Establishing Reliability and Validity in Qualitative Research*. *International journal of qualitative methods*, 1(2), 13-22.
- MARTIN, G. AND ALEXANDER, H. 2005. *Technology, Outsourcing and HR Transformation*, Butterworth Heinemann, Oxford, pp. 161-92.
- MILIS, K. AND MERCKEN, R. 2002. *Success Factors Regarding the Implementation of IT investment projects*. *International Journal of Production Economics*, 80, 105–117.
- MUGENDA, M AND MUGENDA, A. 1999. *Research Methods: Quantitative and. Qualitative Approaches*. *Africa Centre for Technology Studies (ACTS)*, Nairobi.
- MUKHOPADHYAY, T. et al 1997. *Assessing the Impact of IT on Labor Productivity*. *Journal of Decision support systems*.

- MULLIGAN, P. 1999. *Differentiating Service Tasks for IT Application: An Exploratory Analysis in Financial Services*, *International Journal of Service Industry Management*, 10 (2), 190-210.
- NANDWA, L. 2013. *Case Study Research in Education: A quantitative approach*. Jossey-Bass.
- PETER, C. AND KEN S. 1998. *Organization Transitions and Innovation-Design*. New York: Pinter Publishers, p. 211.
- PORTER, F. AND MILLER, E. 1985. *How Information Gives you Competitive Advantage*. Harvard business review, July.
- QUINN, L. AND JAMES, B. 1996. *The Productivity Paradox Is False: Information Technology Improves Service Performance*, in *Advances in Service Marketing and Management*, Vol. 5. T. A. Swartz, D. E. Bowen, and S. W. Brown, eds. Greenwich, CT: JAI, 71-84.
- RAY AND ACHARYA, 2004. *Information Technology-principles and Applications*. Prentice-Hall India, pp4,47-72,151-166,437-454,455-471.
- REICHHELD, F. AND SASSER, W. 1990. *Zero Defection: Quality Comes To Services*. Harvard business review.
- REYNOLD, M. 1997. *Information Systems for Managers*, 3rd edition, West Publishing Company. U.S.A, p. 2-23, 65-138,186-277.
- RHODES, L. 1996 *Information technology and the Performance of the Customer Service Process: a resource-based analysis*. MIS quarterly, 625-652.

- RITTBERGER, M. 2001. *Quality Measuring With Respect to Electronic Information Markets and Particularly Online Databases*. Kent, A. (ed.); New York, NY: Marcel Dekker, 274-295. 2001.
- RODRIGUEZ, A. AND WILSON, S. 2000. *Overview of Strategic Aspects of Information Management, Technology and People*, Volume 1.
- RUMIZEN, J. 1998. *Site Visit: How Buckman Laboratories' Shared Knowledge Sparked a Chain Reaction*, Journal of Quality & Participation, Vol 21, pp34-38.
- SAMADAR, R. 1995 *New Technology at the Ship Flow Level: (New Technology and Workers Response to Micro-Electronics – Labour and Society)* . New Delhi, India: SAGE.
- SEKARAN, U. AND BOUGIE, R. 2010. *Research Methods for Business: A skill building approach*. Wiley system implementation. Business Process Management Journal, 11 (5), 501–516.
- SEKARAN, U. 2003. *Research Methods for Business: A skill Building Approach*, 4th Edition. John Willey & Sons ltd.
- SOLIMAN, F. AND YOUSSEF, A., 1998. *The Role of SAP Software in Business Process Reengineering*. International journal of operations & production management.
- SOLOW, R. 1957. *Technical Change and the Aggregate Production Function, Review of Economics and Statistics*.
- TABATABAE, A. 2000. *Quick Productivity Appraisal*. Tehran: Manshor bahrevary.

- TIM, R. 1996 *Outreach Work with Drug Users: Principles and Practice*. Council of Europe. pp. 25–26. ISBN 978-92-871-3110-2. Retrieved 17 September 2012.
- TRAXLER, J. AND LUGER, I. 2000. *Business and Internet: Implications for Firm Location and Clustering*, Journal of Comparative Policy Analysis and Practice.
- UNWIN, P. 2009. *Information and Communication Technology for Development*. Cambridge University Press.
- WEILL, M. 1992. *The Impact of Technology on the Quality of Employee Performance: a research agenda*. Journal of the academy of marketing science, 28(1), 168-174.
- WESTERLAND, B. 2013. *Introduction to Research Methods*. New York: Wiley.
- YIN, R. 1994. *Enhancing the Quality of Case Studies in Research*. *Health Services Research*, 34 (5 Pt 2), 1209.
- ZEITHAML, A. et al 1990. *Delivering Quality Service: Balancing customer perceptions and expectations*. Simon and Schuster.

Appendix I: Questionnaire for employees of Posta Uganda

Introduction

I am a student of Uganda Martyrs University and currently collecting data for compilation of my dissertation as a partial requirement for the award of Masters Degree in Business Administration of Uganda Martyrs University. I am here to conduct a research. The research I am conducting relates to the effect of Information Technology on employee performance in Posta Uganda. The information is purely for academic purposes and all the answers will be handled with utmost confidentiality and you do not need to indicate your identity anywhere on the questionnaire. I therefore humbly request that you complete this questionnaire correctly in the spaces provided or options given.

SECTION A: Demographic Characteristics

Tick / fill in the most appropriate answer.

Gender:

a) Female ☐ b) Male ☐

Age

☐
a) Below 20 years b) 20 – 25 years ☐ c) 26 – 30 years ☐
d) 31 – 35years ☐ e) 36 – 40 Years f) ☐ Above 40 years. ☐

Highest level of education Qualification

a) Diploma ☐ b) Degree ☐ c) Masters ☐ Indicate the extent to which you agree or disagree to the following statements' by ticking the appropriate number.

Strongly agree	agree	Not sure	Strongly disagree	Disagree
5	4	3	2	1

SECTION B: INFORMATION TECHNOLOGY

INFORMATION TECHNOLOGY		5	4	3	2	1
	HARD WARE					
1.	The organization has enough suites of IT hardware necessary for all the employees					
2.	The specifications of the IT hardware available are suitable for the work requirements					
3.	The hardware used are the latest versions /technologies					
4.	The inter face computers are appropriate and easy to use					
5	The hardware equipment is regularly serviced and upgraded					
	SOFT WARE					
6	The software installed on device acts as a virtual computer through which other applications are run					
7	The software installed enables data to be easily input in the systems					
8	Business Transactions can be checked for completeness using the software					
9	Captured data is enough to enable the operation of the organization					
10	Annual subscription/license fee for the soft wares is manageable					

SECTION C: EMPLOYEE PERFORMANCE

VOLUME OF WORK DONE						
Work output		5	4	3	2	1
11	You have been able to increase your work output					
12	Information output is correct					
13	All the generated reports are accurate					
14	You are satisfied with the entry transaction out put					
15	The quality of work produced has improved					
Multiplicity of tasks		5	4	3	2	1
16	You are able to process many transactions at the same time					
17	Auto processing reduces duplication of transactions information					
18	Details on organizations transactions are captured from many source documents at the same time					
19	It is easier to respond to client queries and implement requests of many clients at the same time					
20	You are able to perform multiple tasks because of easy and fast access to accurate information					
TIMELINESS						
Quick/timely delivery		5	4	3	2	1

21	Capturing data once at a single point saves time					
23	Automatic validation enables timely reconciliation of transactions					
24	The time spent on a single client has reduced					
25	You are satisfied with the entry transaction process time					
26	Processing time for daily transactions is small					
SERVICE DELIVERY						
Transparency		5	4	3	2	1
27	Reports are generated on a regular basis					
28	Reports are shared with the management regularly as required					
29	Generated reports are shared with board regularly as required					
30	All reports generated are clearly understood					
31	Reports generated are objectively verifiable					
Cost effectiveness		5	4	3	2	1
32	Using technology has reduced errors					
33	You have been able to advertise on a global scale					
34	You are able to communicate easily with all branches throughout the country					
35	All clients get timely reminders of due payments					

36	The human resource costs have been reduced					
37	Material costs (e.g Paper) have reduced					
38	It is easier and less costly to track and trace mails in transit					

THANK YOU FOR YOUR TIME AND COOPERATTION