# INFORMATION COMMUNICATION AND TECHNOLOGY AND EMPLOYEE PERFORMANCE IN PRIVATE SECTOR A CASE STUDY OF MUKWANO GROUP OF COMPANIES

BY
EDWIGE TUMUSHABE
12/U/311/GMBA/PE

# A RESEARCH REPORT SUBMITTED TO THE GRADUATE SCHOOL IN PARTIAL FULFILMENT OF THE REQUIREMENTFOR THE AWARD OF A DEGREE OF MASTER OF BUSINESS ADMINISTRATION OF KYAMBOGO UNIVERSITY

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# **DECLARATION**

I,EdwigeTumushabedo hereby declare that, this research report is my original work and has never been presented to any other institution for any award of academic qualification and all the information obtained from other sources has been fully acknowledged.

Signature #65

Date 22/12/2014.

**EDWIGE TUMUSHABE** 

12/U/311/GMBA/PE

# APPROVAL

This thesis has been under our supervision as University supervisors and is ready for submission.

Signature:	Date: 23/12/2014
Dr. JACOB. L. OYUGI	
PRINCIPAL SUPERVISOR	
Signature:	Date: 23/12/2010

Mr. MASIMENGO TADEO

SECOND SUPERVISOR

.........

# **DEDICATION**

I dedicate this research work to my husband Edmond, daughters Atwiine, Kobumanziand my son Bakamwenya, who have in different ways supported my education struggle.

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I would like to convey my sincere appreciation to God for his abundant grace and blessings that have enabled me to complete this research work successfully. This work would not have come to an end without God's consent and assistance from other colleagues and contemporaries.

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#### **ABSTRACT**

The study was centered on ICT and employee performance in private sector organisations using a case studyof Mukwano Group of Companies. This is because as companies introduce ICT they expect employees to perform efficiently and meet the performance target but what is happening in many organizations is that although they have managed to introduce ICT in their operations, still employees fail to meet the performance targets and this was the reason for carrying out this study. The study was guided by the three objectives that is, to examine whether ICT matches with the ability of the employees, to establish how ICT affects employee's level of efficiency and to assess the effect of ICT on employees timely completion of work.

A cross-sectional research design was used for the study since data was collected at single point in time and this assisted in the collection of detailed and in-depth data from Mukwano Group of Companies staff. The study used questionnaire and interview guide to collect data from the respondents and 60 respondents formed the sample size of the study.

The findings indicated that there is positive correlation between ICT and employee performance in Mukwano Group of Companies. ICT accounts for 79.5% of the variation in employee performance and other factors which are not known contributes 20.5%. Further the study shows that there a linear relationship between ICT and employee performance (r = .884). In order to determine the effect of ICT on employee performance, the regression coefficient was squared ( $r^2 = .781$ ) and then adjusted (Adjusted  $r^2 = .753$ ) and expressed as a percentage. Thus, it is shown that ICT accounts for 75.3% of the variance in performance of employees

The study recommended that an attempt to introduce new ICT in organization should be made after a careful assessment of the employee's ability so that they are in position to use it efficiently and thus trained adequately.

#### CHAPTER ONE

#### INTRODUCTION

#### 1.0 Introduction

The study is designed to establish the relationship between ICT and employee performance in private sector using a case study of Mukwano Group of Companies. This chapter includes the following; back ground to the study, statement of the problem, purpose of the study, objective of the study, research questions, scope of the study which includes the conceptual scope, geographical scope, time scope, significance of the study and definition of key terms.

# 1.1 Background to the study

The performance of employees in the world today has been greatly influenced by the systematic application of ICT (Bishop, 2005). ICT in most organization provides the required forces through various forms by which goods and services are produced. Dauda (2009) says that information and communication made up of knowledge, tools, method and system directed to work in specific manner.

ICT has changed all aspects of organization direction and operation (Morgan, 2009). Work systems and employment relations have been affected by ICT in nearly and its major aspects. Microchips revolution and optic fibre cable have altered ICT and work as never before (Terry, 2005). Employee and managers are interconnected through network of computers and other information gadgets. Many aspects of organization, industrial, national and international relations are organized and directed through ICT networking (Keaf, 2003). These networking

also connect production within and outside the industry and it extends to customers, suppliers, vendors, research and development maintain its systems.

According to Donnelly et al (2009) employees of different categories, even the less educated factory workers have benefited from the use of ICT. Internet and multimedia telephone and other communication systems have provided opportunities to all categories of employees to receive and send information from and to anywhere in the world. This has provided access to technical and non-technical solution to their individual and organizational problems and increase their efficiency and effectiveness. Thurston (2006) says that engineers, technologist, technicians, craftsmen and artisan now use internet to search for solution, tools and materials that may help to improve performance and solve problems which have increased individual and team performance in many organization.

Bennett (2008) expresses employees in many organisations do not know how to use ICT yet employees will need the right information and communication to perform their duties appropriately. Some employers in the hope of reducing cost do not offer training opportunities to their staff and they even go overboard in limiting the resources availed to employees. It is good business practice to control business expenses, however denying people training in use of ICT; it makes it impossible for the employees to deliver (Ulrich and Brockbank, 2005). For example, if the organisation's business relies heavily on real time data, invest in a reliable internet connectivity network with the appropriate bandwidth. This will allow employees to be more efficient, have the data they need to perform their duties and most of all make them happy as they have the right tools. On the other hand if the organisation's choice of tools is scanty, it

results into frustration from both employees and customers. Therefore, the study was conducted to assess the relationship between ICT and the performance of employees using a case of Mukwano Group of Companies.

#### 1.2 Statement of the problem

Megginson (2011) says that ICT choice leads to productivity of employee. Further MarkmanandSuhr (2013) say that there is a growing awareness in the business community that companies can benefit from increased workforce productivity by allowing employees to have some level of choice in what ICTthey use and the degree of mobility they have basing on the training levels employees possess. However, what is happening in Mukwano Group of Companies is different. The Human Resource Records for 2013 show that the combined capacity utilization levels for employees was at 73% in 2011, 75% in 2012 and dropped to 71% in 2013. Attempt to introduce new user-friendly ICThas not yielded the desired performance targets of employees as most of the employees still fail to meet the pre-set performance targets of 95% and above. It is not clear whether failure to meet performance targets is due to mismatch between the employees' abilities and the ICTin place or is due to other factors. Therefore, this study was intended to assess the impact of ICTon employee performance in order to fill the knowledge gap.

#### 1.3 Purpose of the study

The study examined the relationship between ICT employee performances in private sector usingMukwano Group of Companies as a case study. This is because organisations when they introduce ICT they expect performance improvement from employees. However, majority of employees fail to meet the performance targets and this is what the study sought to verify.

# 1.4 Objectives of the study

- i. To examine whether ICT matches with the employee's ability to perform tasks.
- ii. To establish the effect of ICT on employee's level of efficiency.
- iii. To assess the effect of ICT on employees timely completion of work.

# 1.5 Research questions

- i. How does ICT affect employee'sability to perform tasks?
- ii. How does ICT affect employee's level of efficiency?
- iii. How does ICT affect employee timely completion of work?

# 1.6 Scope of the study

# 1.6.1 Subject scope

The study was focused on information communication and technology (ICT) and employee performance. ICT was measured by specifically looking at its components such as creation, storage, manipulations and communication of information, together with their related methods and management and application. Forms of ICT include computers, E-mail (electronic mail) and internet. On the other hand employee performance in private sector was measured basing on ability to use the ICT, level of efficiency and timely execution of tasks.

# 1.6.2 Geographical scope

The study was carried out at Mukwano Group of Companies located on Plot 30 Mukwano Road, in Kampala – Uganda.

#### 1.6.3 Time scope

This research covered a period of Ten months running from January 2014 to December 2014. The information compiled in the period of Ten months was sufficient to enable the researcher to assess how ICT affects the employee performance in private sector. This time was specifically selected because this is a time when new changes in technology happened with a hope that employees' performance will change and thus help the staff to meet the pre-set performance standards but since then the performance level have failed to reach the indented performance targets of 95% and above and this is what the study sought to verify.

# 1.7 Significance of the study

The findings of the study will be helpful to:

- i. Managers to assess and evaluate how technology influences the performance of employees.
- It will also help managers and other decision makers in organizations to define the tasks of individuals and their areas of responsibility.
- iii. The study will assist managers to determine the appropriate management techologies which are suitable to their employees.
- iv. The findings of the study will reveal the managerial weaknesses that are characterized in the use of computers in decision making process.
- v. The study will iron out the confusion over whether or not the use of technology leads to good employee performance.

# 1.8 Definition of key terms

Information Communication and Technology is a term used generally to describe the use of computers to capture process and provide information. It is the merging of electronic phenomena together with modern technology so as to arrive at some information requirements. It is a term used to describe the use of computers to capture, store, manipulate and communicate information to the users

**Performance** It is expressed as timely completion of tasks, employees' ability, level of efficiency in execution of tasks, cost effect and profitability of the firm.

**Technological change** is a term that is used to describe the overall process of invention, innovation and diffusion of technology or processes (McRonney, 2009). The term is synonymous with technological development, technological achievement, and technological progress. In essence TC is the invention of a technology (or a process), the continuous process of improving a technology (in which it often becomes cheaper) and its diffusion throughout industry or society (Blackden, 2004).

Technology can be most broadly defined as the entities, both material and immaterial, created by the application of mental and physical effort in order to achieve some value. In this usage, technology refers to tools and machines that may be used to solve real-world problems. It is a far-reaching term that may include simple tools, such as a crowbar or wooden spoon, or more complex machines, such as a space station or particle accelerator. Tools and machines need not be material; virtual technologies, such as computer software and business methods, fall under this definition of technology. The word "technology" can also be used to refer to a collection of

techniques. In this context, it is the current state of humanity's knowledge of how to combine resources to produce desired products, to solve problems, fulfill needs, or satisfies wants; it includes technical methods, skills, processes, techniques, tools and raw materials.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

The aim of this chapter was to try and put together what various authors have written about the topic that is addressed in this research work and try to bring out the researcher's thoughts about what is found in current literature especially in relation to topic. This chapter begins with the theoretical review, conceptual review and lastly reviewed the study objectives basing on what studies have been made on the same area of study.

# 2.2 Theoretical Review of ICT and performance

#### **Technology Acceptance Model**

The Technology Acceptance Model (TAM) introduced by Davis (1989) is an adaptation of the Theory of Reasoned Action (TRA) specifically tailored for modeling user acceptance of technology as a factor for employee performance (Dauda, 2009). TAM was developed to explain and predict technology or computer usage behavior. Although several theoretical models have been proposed to describe the phenomenon of ICT acceptance, TAM is increasingly recognized as a robust yet parsimonious conceptualization (Agarwal &Karahannna, 1998). The goal of TAM is "to provide an explanation of the determinants of technological acceptance that is general, capable of explaining user behavior across a broad range of end-user technologies and performance of employees, while at the same time being both parsimonious and theoretically justified" (Davis et al., 1989). It states that beliefs influence attitudes; which lead to intentions and to behaviors. TAM proposes two specific belief constructs, that is, perceived usefulness (the extent to which ICT affects the performance of employees) and perceived ease of use (the degree

to which the potential adopter expects technology to be free of effort in use) as critical antecedents to an individual's technology adoption process (Davis, 1989). Both perceived usefulness and perceived ease of use a specific perception and are anchored to specific beliefs employees hold about the system. In summary, it believed that TAM could successfully predict ICT acceptance behavior under different technologies and different situations. In addition, it is noted that TAM is a much simpler; easier to use and more powerful model of the determinant of user acceptance of computer technology than other models (Pavlou, 2003)

# Organizational Perceived Usefulness of ICTtowards employee performance

Perceived usefulness (PU) is defined as "the degree to which a person believes that using a particular technology would enhance his job performance" (Davis, 1989). Perceived usefulness has a direct positive correlation with attitude towards using the new and behavior intention to use the system by the employees. A study by Malone and Yates (1989) reveals that technological adoption in an organization influenced by the organization's perceived usefulness of the system besides stimulating employees' performance and system usage (Nguyen & Barrett, 2006).

# 2.3 Conceptual framework

The conceptual framework was developed to examine the effect of ICT on employee Performance as shown in figure 1.

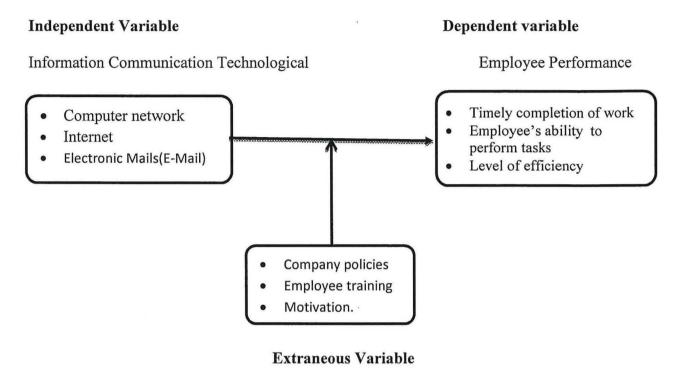


Figure 1: (Source: Adapted from the Technology Acceptance Model, 1989)

As shown in figure 1 above, the conceptual framework is developed to examine how ICT affects employee performance. ICT is the independent variable while employee performance is the dependent. It should be noted that ICT is made up of the computer networks, e-mail and internet. On the other hand dependent variable was measured in terms of employee commitment to accomplish tasks within the agreed time framework, level of efficiency and employees' ability to perform tasks.

However, employee performance can be influenced by the extraneous variables such as company policies on use of ICT, employee training and motivation which can negatively affect employee performance. These extraneous factors were controlled by matching them with independent variable (ICT) and the dependent variable (performance). Therefore, to manage the challenges that hinders employee performance as a result of ICT and strategies to overcome such. It is believed that if such strategies are well implemented they can result into improved performance of employees.

# 2.4 ICT and employees' ability

The state of technology in any organization has a significant influence on employees' ability to be productive to organization (Morgan, 2009). But despite this, technology is prone to constant change which organizations have to monitor, manage and cope with (Montgomery, 2004). Manufacturing industry that will like to be competitive and profitable should ensure that employees are trained and involved in the management of technological change for organizational survival (Khalil, 2000). However, what the author did not state is that most organization tends to undermine the contribution of employee in managing technological change, the outcome of which are low profitability and performance.

Employees' ability to perform is intimately linked to technological change and technological innovation (Bennett, 2008). Technological change could be effectively managed through human resource joint approach. Employees 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 (Ulrich and Brockbank, 2005). Hence employees need

to work as an individual and as a team and combine their innovation for production of new technology, goods and services. Individual innovation is meaningful and workable when combined with that of others (McRonney, 2009). The collective innovation is also impossible without individual innovation, hence the two are separate, but could only work in the production process when they are combined and effectively managed to produce result (Bishop, 2005). However, what the authors left out is that managers need to provide enabling work environment that enhances collaboration and team-networking to encourage employee initiative to innovate for organsational survival and competitiveness.

New technologies of various kinds, together with globalization, are powerfully affecting the quality of work settings for individuals in advanced and developing countries alike – and at various levels of education (Ulrich and Brockbank, 2005). Technological innovations are not only reducing the number of routine jobs, but also causing changes in global supply chains and networks that result in the relocation of routine jobs – and, increasingly, non-routine jobs at multiple skill levels – in the tradable sector of many economies.

Though organisations like the advantages that come with technology at work, it also tends to be risky, especially when it comes to matching it with employees' ability, quality of work and data security (Thurston, 2006). All employees in important decision making positions will need access to private business information; this can pose as a threat, because it can be very difficult to monitor the usage and privacy of this information. Many employees come with flash drives at work, so they can transfer critical business information and use it for their own personal gains (McRonney, 2009).

#### 2.5 ICT and employee's levels of efficiency in an organisation

Many erroneously attribute all increase in productivity to technology. The contributions of the human element to organisation and national development are often not recognised or ignored (Markman andSuhr, 2013). 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 (Morgan, 2009). 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.

Many businesses are using various business communication technologies to change the way their employees perform, interact and communicate while at work (Keaf, 2003). Employees can use various communication tools to interact or exchange information at work. For example, employees from different departments in a company can use text messaging services or video conferencing tools like Skype to share and exchange information (Bishop, 2005). Virtual communication tools like Skype can be used to share screens and this can help workers to share projects while in different departments, the same application can be used to support group decision making. Also communication technologies can be used in the customer service department to serve customers on time.

Many industries and nations in the developed and developing countries have established research and development units, departments and organizations to enable them to cope with technological

change (Ulrich and Brockbank, 2005). The degrees of aggregation of technological innovation by organization and nation determine its performance and development. This is related to management and control of internal and systems and its response to external system (Montgomery, 2004). Significant improvement in output, productivity and growth are achieved when they use new technology. Increased productivity and general economic growth in most developed nations have been attributed to increasing technology and technological innovation (Thurston, 2006). In these countries a significant proportion of R & D expenditure are devoted to the introduction of new product. Productions of large quantity and quality of goods and services have been traced to improved technology through R & D.

Growth and employment are thus diverging in advanced countries (Dauda, 2009). The key force driving this trend is the technology which is playing multiple roles. The replacement of routine manual jobs by machines and robots is a powerful, continuing, and perhaps accelerating trend in manufacturing and logistics, while networks of computers are replacing routine white-collar jobs in information processing (Markman andSuhr, 2013). Part of this is pure automation. Another important part is disintermediation – the elimination of intermediaries in banking, online retail, and a host of government services, to name just a few affected areas.

There are so many ways technology can distract employees at work. The use of social networks at work can cause so much distraction and it affects the productivity of employees (Morgan, 2009). Some companies have decided to block access to specific websites like Facebook, Twitter and YouTube, because of the unlimited distraction they cause. Other business technologies

which cause distraction at work include smartphones, computers and virtual meeting applications like.

Since most tasks are automated by technology, many employees become lazy at work, technology kills their creativity and skills (Markman and Suhr, 2013). Simple tasks like calculating sales and tracking inventory are being done with computers, so you will find that employees do not put their brains at work, they can't solve high-end business problems because a computer or software will do it with no challenge.

# 2.6 ICT and employee timely completion of work

The explosion of knowledge that is taking place today is the innovation of employees in the past. Since the present condition is not static, it is dangerous for an organisation to rely on the present achievement, hence, the need to innovate whether they are succeeding or failing (Terry, 2005). Organisations should not wait for technology limit before innovation; hence, human resources require constant nurturing and training to enable employees to recognise or capture the limit and attack, rather than to allow change to overwhelm them (Keaf, 2003). The "attacker" constantly analyses the present, and peeps into the future, to understand and determine environmental threat and limitation and launch attack (Dauda, 2009). Defending the present condition may provide false security that cannot stand the test of time. However, what authors failed to highlight is that the defender may be deceived by security of economic performance that may make it difficult for it to reposition itself or to move along with the changing conditions. Managers in this situation may find it "too late" to respond and doomed by doing "too little" and this is what the study intended to bring out.

As with any change in the workplace, changes in technology may result in anxiety and even resistance among employees (Bennett, 2008). Technical changes can be seen specifically as threats by employees who envision that their roles within the company will be replaced by a machine or computer that can do the job cheaper or faster (Montgomery, 2004). Developing strategies to combat this resistance to change is key to the human resources manager's role. This starts by assuring employees of their worth and meaningful place within the business and by helping them to see the technology as an aid not a hindrance to their work (Terry, 2005). However, the authors never indicated the level of anxiety and resistance can be as a result of technological changes and how it affects adversely the performance of employees which this study intended to bring out.

Megginson (2000) examined that only new employees must be trained and upgraded if they were to complete work assignments within the agreed timeframe and thus adjust to rapidly changing technological requirements. Hence training must be provided to the employees who have been working for the company for along time in order for them to cope up with new techniques and skills needed to carry out a job.

Even when unemployment is at record high levels, a shortage of skilled workers exists in many industries. As a result, human resource managers often find it difficult to find workers who are adept at using new technology (Keaf, 2003). This means two things for businesses: they must train their current employees to keep up with technical changes and they must motivate and encourage employees who they bring on board to be the best they can be at using new technology (Thurston, 2006). Human resources can also facilitate further education programs,

training days, conferences and seminars to keep employees' skills fresh. However, the author did not state how technological change may affect the performance of employees in terms of meeting the pre-set standards and deadline.

Employees communicate via cell phones, text messages, email or virtual video conferencing tools. This type of communication technology eliminates face-to-face communication (Bishop, 2005). Interpersonal communications are important in building workplace relationships because employees will get a chance to know each other in person, sometimes they can even share non-work related information, this type of interaction is killed by communication technology tools(Montgomery, 2004). Employees become more reserved and self-centered; they get buried into their work which can be of great harm to a business.

#### 2.7 Conclusion

Basing on what other writers and researchers discovered about ICT and employee performance, the study witnessed that although ICT a is the key of ensuring improved performance of employees, still there are challenges which cripples the performance of employees to meet the pre-determined performance targets. Therefore, this necessitated a need for a thorough investigation of why this gap exists and why authors and writers failed to address the key element in employees' performance as a result of ICT.

#### **CHAPTER THREE**

#### METHODOLOGY

#### 3.0 Introduction

This section presents the research design, area and population of the study, sample size and sample selection techniques, sources of data, data collection instruments, data quality control, procedure of the study, data analysis and interpretation and limitations of the study.

#### 3.1 Research Design

The study adopted a cross sectional study design because data was collected at one single point in time. The design was used to examine in details the relationship between ICT and the performance of employees. Furthermore, a cross sectional research design was intended to facilitate collection of qualitative information through in-depth interviews in order to allow time for interaction and to verify information collected through inspection of records.

Quantitative method was also be used to collect data which could not be generated qualitatively.

According to Mbabazi (2008) qualitative methods enable the researcher to get exhaustive answers that facilitate an all-inclusive strategy to address the issues at hand. Quantitative methods help to gather data which cannot be quantified.

# 3.2 Area and population of the study

The study was carried out at Mukwano Group of Companies in Kampala. Study population involved employees in the ICT and Human Resource in Mukwano Group of Companies. According to the Human Resource Records of Mukwano Group of Companies (2013), there are approximately 80 staff in IT and human resources, therefore, the study targeted 80 staff and these

involved junior staff and managers responsible for IT and employee performance (Human resource).

#### 3.3 Sample size and sampling technique

#### 3.3.1 Sample size

According to Krejcieand Morgan, (1970) a population of 80, requires a sample size of 66 to be within a 95% level of confidence as shown: -

Table 3. 1: The sample size determination as guided by Krejcie and Morgan (1970)

Category	Population	Sample size	Sampling Technique
Junior staff	70	56	Stratified random sampling
Managers	10	10	Purposive
Total	80	66	

# 3.3.2 Sampling Techniques

Two sampling techniques were used to select the sample size of the study. Managers were selected using purposive sampling technique. Odiya (2009) observes that under purposive sampling participants are sampled on the basis of the knowledge that they have the information being sought or because they are the only ones in their respective categories. The purpose of using purposive sampling technique was to access confidential information relating to ICT and employee performance. This technique was used since managers have rich and deeper information and yet they are the center of ensuring employee performance. Junior staffs in various departments of Mukwano Group of Companies were selected using stratified sampling technique to form strata. This technique was used to make sample selection without any prejudice and to enable every employee in each department to have the same chance to be part of the study.

#### 3.4 Sources of Data

The study mainly employed both primary and secondary sources of data collection.

# 3.4.1 Primary Sources

The studyused questionnaire and interview guide to solicit necessary data from the respondents.

The reason for using these tools was to access firsthand information for the study.

#### 3.4.2 Secondary Sources

Data was also extracted from the published reports of Mukwano Group of Companies relating ICT and employee performance. Data obtained from published reports of Mukwano Group of Companies was compared with the firsthand information from primary sources so as to arrive at a conclusion.

#### 3.5 Data Collection Instruments

The study used two key tools to collect data for the study that is; questionnaire and interview.

#### 3.5.1 Questionnaires

The study used structured questionnaires to gather data from the junior and managers of Mukwano Group of Companies. Open ended and closed ended questions were used to access first-hand information. Close ended questions were used to give respondents alternative answers and to avoid waste of time in thinking. On the other hand, open ended questions were used to allow respondents to express issues at hand in details. Questionnaires were used because the format is familiar to most respondents, they are straight forward to analyze, simple to administer and can be filled in at the respondents' convenient time. The questionnaires were designed in such a way that reflects the objectives of the study.

#### 3.5.2 Structured Interview

The study also used structured interview to collect necessary data for the study. The researcher asked managers about their experience with the ICT and how it affects the performance of employees. This instrument was used to access firsthand information and it is the quickest technique of collecting data and questions can be repeated clearly for the respondents so that they comprehend them better. The researcher compared and contrasted the interview responses with the answers given in the questionnaire so as to gather more knowledge about the problem under the study. In the course of interviewing, the researcher was jotting down some important issues, which later were analyzed.

# 3.6 Data Quality Control

Several methods were used during the process of data collection to ensure quality data for the research. Personal prejudices and biases were avoided, systematic and accurate recording of data obtained was made, listening carefully, establishment of trust and rapport with the interviewee was employed to ensure validity and reliability.

# 3.6.1 Validity

Amin (2005) defines validity to be the ability to produce findings that are in agreement with the conceptual values. Validity of an instrument therefore means that the instrument is able to measure what it is intended to measure. Validity therefore has to do with how accurately the data obtained in the study represents the variables in the study. For the researcher to consider those items relevant and valid, the ratings from the experts were computed using;

Content Validity Index =  $\frac{No \ of \ items \ rated \ as \ relevant}{All \ items \ in \ question naire}$ 

The content validity index (CVI) was computed as follows

Raters	Relevant	Not relevant	Total
1	20	3	23
2	21	2	23
Total	41	5	46

CVI= 41/46 = 0.89Given that the CVI was above 0 .70, the questionnaire was considered suitable for collecting data (Amin, 2005).

# 3.6.2 Reliability

Reliability is a measure of the degree to which a research instrument yields consistent data results or data after a repeated (Mugenda and Mugenda, 2003). This refers to how consistent the research instrument is. It also refers to the stability and dependability of the instrument and the degree to which the instrument measures what it is intended to measure. Amin (2005) says that the instrument is reliable when it produces the same results when it is used repeatedly hence ensuring dependability and precision. To ensure reliability, Cronbach alpha approach was used to compute the reliability of the instruments.

ICT and employee performance	Cronbach Alpha Value	
ICT and employee ability to perform	.7771	
ICT and employee level of efficiency	.7991	
ICT and timely completion of task	.7987	

The results in all items had high reliabilities with alphas above 0.7 and thus considered highly reliable in eliciting the data that was required for this study (Amin, 2005).

#### 3.7 Measurement of variables

The variable of the study were measured on a five point Likert scale ranging from 1- strongly disagree to 5-Strongly agree. The choice of this measurement was that each point on the scale carries a numerical score which can be used to measure the opinions of respondents and it is the most frequent used summated scale in the study of business and social attitude.

# 3.8 Procedure of the study

The study was conducted in a planned way. In this a letter from the School of Management and Entrepreneurship of Kyambogo University was obtained which was presented to the management of Mukwano Group of Companies. Questionnaires were first issued out to the junior and senior staff and after three weeks, the filled questionnaires were collected. In the process of collecting the questionnaires, managers were interviewed using various questions relating to the problem under investigation.

# 3.9 Data Presentation and Analysis

Qualitative and quantitative data collected was analyzed, interpreted, arranged and tabulated.

Quantitative data was analyzed using regression analysis to yield the desired statistical output and measures of dispersion which yielded the desired statistical output. Results were presented in form of frequency tables which were interpreted accordingly.

Analysis of **qualitative data** was done through descriptions of events and occurrences as gathered from the interviewees. The main reason for using this type of analysis was to present issues as they arose on ground without subjecting the research findings with statistical tests.

#### 3.10 Limitations

Numerous limitations were encountered during the study and they included: -

Financing the study required a large amount of money (about shs 4 million) and it was not ease to access that amount. However, the researcher sought financial assistance to enable her accomplish the research study in time.

Sufficient literature on study variables was not easy to obtain. There were cases where there was outright refusal to avail information or demand for material compensation for data provided. The researcher tried to overcome this by getting advice from the experienced supervisors on how and where to locate relevant literature.

Some respondents shunned the interviews citing the high and frequent number of times they have been interviewed and 'with no benefits accruing'. Some of the staff cited the time 'lost' to interviews and discussions with researchers and thus loss of business. Persuasion was used to convince respondents to corporate.

#### **CHAPTER FOUR**

#### DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

#### 4.0 Introduction

This chapter focuses on the presentation, analysis and interpretation of findings of the study. The study was focused on technology and employee performance in private sector organisations using a case of Mukwano Group of companies. This chapter covers the demographic data about the respondents, whether ICT matches the ability of the employees, how ICT affects employee's level of efficiency and the effect of ICT on employees timely completion of work.

# 4.1 Response rate

A total of 66 questionnaires were given out, but the researcher only obtained 60. This translated into a 90.9% response rate. The response rate was high because staff of Mukwano Group of Companies picked interest in the subject matter under investigation since most of the employees fail to meet agreed performance standards.

# 4.2 Demographic Characteristics

To collect demographic characteristics, the study focused on; gender distribution of the respondents, age structure of the respondents, educational background and the department in which respondents fall. The findings obtained are presented as shown below:-

Table 4.1: Shows Gender of the respondents

		Frequency	Percent
Valid	Male	33	55.0
	Female	27	45.0
	Total	60	100.0

Source: Field data, 2014

The study shows that out of the 60 respondents who participated in the study, the male respondents (55%) formed the majority in the study compared to their female counterparts (45%). The implication of this finding is that the study was not gender balanced. However, the ideas, opinions and view of the respondents relating to whether ICT matches with the ability of the employees, the influence of ICT on employee's level of efficiency and how ICT affect employees' timely completion of work were well discussed and presented in this study.

After the analysis of the gender distribution of the study, the study sought to establish the age distribution of the respondents and the findings gathered are shown:

**Table 4.2**: Shows Age Distribution of the Respondents

		Frequency	Percent
Valid	< 20	10	16.7
	21-30	20	33.3
	31-40	15	25.0
	41-50	10	16.7
	51+	5	8.3
	Total	60	100.0

Source: Field data, 2014

The findings in table 4.2 above shows that 33.3% of the respondents were in the age bracket between 21-30 years, 25.0% were between 31-40 years, 16.7% were between 41-50 years, 16.7% were less than 20 years and the remainder (8.3%) were 51 years and above. The implication of this finding is that young people had interest to participate in the study and may be Mukwano Group of Companies generally employs young and talented people who can drive the company's mission towards its intended destination.

After the analysis of age distribution of the respondents, the researcher wanted to establish the educational background of the respondents and the results collected are shown in the following table:

**Table 4.3**: Shows the Level of Education of the respondents

		Frequency	Percent
Valid	Masters	6	10
	Bachelors	40	66.6
	Diploma	10	16.7
	Certificate	4	6.7
	Total	60	100.0

Source: Field data, 2014

As shown in table 4.3 above, 66.6% of the respondents had bachelor's degree, 16.7% had diplomas, 10% were masters' holders and 6.7% had certificates in various fields. The implications of this finding is that the participants in the study had adequate level of education necessary to answer the questions posed to them and this enabled the researcher to solicit the desired and relevant information relating to technology and employee performance.

## 4.3 Whether ICT matches employees' abilities

The study sets one of its objectives to ascertain whether ICT matches employee's ability and the details are presented in the descriptive statistics as shown: -

**Table 4.4:** shows the ICT in place does not allow employees to exercise the abilities

		Frequency	Percent
Valid	Strongly Disagree	12	20.0
	Disagree	8	13.3
	Not sure	3	5.0
	Agree	30	50.0
	Strongly Agree	7	11.7
	Total	60	100.0

Source: Field data, 2014

The results in table 4.4 show that 61.7% (50.0% + 11.7%) of the respondents concurred that the technology in place does not allow employees to exercise the abilities. The implication of this finding is that the technology in place is complicated for the staff to be in position execute tasks efficiently. On the other hand 33.3% (20% + 13.3%) of the respondents disagreed with the view and 5% were not sure whether the technology in place does not allow employees to exercise the abilities. This is because some staffs have not yet seen the benefits of the existing technology and other may not have a clear understanding of whether the ICT in place matches with their abilities.

In an interview held with one of the managers in ICT section, said that;

The complexities in the technology we have in the organization do not help much our staff to meet the performance targets and this compromises our performance. He went on to say that before the company introduces new technology it has to ensure that people will be in position to use itso that we carry out need assessment of the staff to find out which abilities they possess in order to enable them to be prepared to handle more challenging tasks.

It should therefore be construed that to a greater extent the existing technology does not allow staff to exercise their potential to meet the needs of the company.

The study sought to find out whether whenever, there are technological changes employees' abilities are adversely affected, the results collected are presented as follows:

Table 4.5: Shows that whenever, there are ICT changes employee's ability is adversely affected

		Frequency	Percent
Valid	Strongly Disagree	3	5.0
	Disagree	9	15.0
	Not sure	6	10.0
	Agree	32	53.3
	Strongly Agree	10	16.7
	Total	60	100.0

Source: Field data, 2014

The findings in table 4.5 above shows that 69.7% (53% + 16.7%) of the respondent concurred that whether whenever, there are technological changes employees' ability is adversely affected. This means that planning for introduction of new technology requires employees to go for training so that their ability in use of new technology is not affected negatively. Nevertheless, 20.0% (5% + 15%) of the respondents discarded the view that whether whenever, there are technological changes employees' ability is adversely affected. It was only 10% of the respondents who were not sure with the view. The results from the interview emerged that;

It is true that whenever, there are changes in the ICT, obviously, people's performance is affected as they have no knowledge of how to use the new systems.

This shows that respondents had varied responses on whether whenever, there are technological changes employees' ability is adversely affected.

The study found it useful to ascertain whether an assessment is always made whenever there are technological changes not to affect employees' abilities. The findings collected are shown in the next table

**Table 4.6:** An assessment is always made whenever there are technological changes not to affect employees' abilities

		Frequency	Percent
Valid	Strongly Disagree	11	18.3
	Disagree	19	31.7
	Not sure	2	3.3
	Agree	25	41.7
	Strongly Agree	3	5.0
	Total	60	100.0

Source: Field data, 2014

The results in table 4.6 indicate that 50.0% (18.3% + 31.7%) of the respondents were in disagreement that an assessment is always made whenever there are technological changes not to affect employees' abilities. On contrary 46.7% (41.7% + 5%) of the respondents expressed that an assessment is always made whenever there are technological changes not to affect employees' abilities. The implication of this finding is that although an assessment is made, it may not be adequately done to cater for employees' needs. It was only 3.3% of the respondents who were not sure about the view. However, some respondents did not understand the question or had mixed views and ideas about the test statement.

The study also found it useful to identify whether the technology adopted by the organization is user friendly. The results collected are presented as follow:

**Table** 4.7: The technology adopted by the organization is user friendly

		Frequency	Percent
Valid	Strongly Disagree	15	25.0
	Disagree	29	48.3
	Not sure	0	0
	Agree	12	20.0
	Strongly Agree	4	6.7
	Total	60	100.0

Source: Field data, 2014

The results in table 4.7show that 73.3% (48.3 % +25.0%) of the respondents disagreed that the technology adopted by the organization is user friendly. Although 26.7% (20% + 6.7%) agreed with the view, the implication of this finding is that people don't understand how to use the ICT systemin place. However, very little is known about the acceptance of ICT systems by employees of Mukwano Group of Companies. The study shows that it would be inappropriate for Mukwano Group of Companies to assume that adoption decisions of ICT systems made by the management would result in automatic and spontaneous acceptance of the system by their employees. This is because imbalance in benefits may occur between organisational and user level. Nevertheless, it is not clearly known how employees have responded to their organizational decisions to embrace ICT systems and in what ways various factors have contributed to their acceptance of these systems.

It should be argued that the introduction ICT system was meant to iron out the problems of poor performance and to eliminate manual system. Manual system involved a lot of paper work and time consuming. This is because there were lot of procedure that had to be followed and this involved a lot of mistakes and errors. From the foregoing therefore, it should be argued although

this was done still the performance of employees is still below the standards set thereby raising questions of whether the technology in place matches with employees' ability.

The study also found it important to examine whether there a lot of complaints from the staff about the systems used compared to their abilities. The findings gathered are presented as follows:

Table 4.8: There a lot of complaints from the staff about the systems used

		Frequency	Percent
Valid	Strongly Disagree	3	5.0
	Disagree	10	16.7
	Not sure	5	8.3
	Agree	30	50.0
	Strongly Agree	12	20.0
	Total	60	100.0

Source: Field data, 2014

The results of the study in table 4.8 further indicated that 70.0% (50% + 20%) of the respondents were with a view that there are a lot of complaints from the staff about the systems used compared to their abilities. However, even then the 21.7% (5% + 16.7%) of the respondents seemed to have disagreed with the view and 8.3% were not sure. This shows that respondents had varied responses regarding the test statement. The findings from the interview held with one of the managers it emerged that;

Much as the company wants to reduce the cost of doing business, stimulate efficiency and register its performance goals both at individual level and organization, still it has continuously failed to do it as the systems in place are very hard for the staff to use them

to meet the desired performance targets. It should be remembered that people have skills but the skills they have plus their abilities does not really match with the systems in place.

Basing on the above view it should be argued that the technology in place does not enable efficient execution of tasks.

Furthermore, the study sought to establish whether training given to staff in most cases does not match with employees' abilities and skills. The findings gathered are presented on the next page:

**Table** 4.9: Training given to staff in most cases does not match with employees' abilities and skills.

		Frequency	Percent
Valid	Strongly Disagree	7	11.7
	Disagree	22	36.7
	Not sure	0	0.0
	Agree	25	41.6
	Strongly Agree	6	10.0
	Total	60	100.0

Source: Field data, 2014

The findings of study in table 4.9 also indicate that 51.6% (41.6% + 10.0%) of the respondents were in agreement that there a lot of complaints from the staff about the systems used compared to their abilities. However, 48.4% (11.7% + 36.7%) of the respondents disagreed. The results from an interview held with one manager it emerged that,

We always organize training for our employees to ensure that they can use the systems efficiently. However, what is not clear whether the training given to staff addresses their needs. We conduct in house training to help staff in two distinct ways: a) It helps in the

transfer of knowledge from vendors consultants to employees about why the new technology is needed and how it should improve their work. This in turn helps in addressing the fear employees may have about the technological changes.

From the above view it should be logical to give employee hand-on training because it can help them to know about the features of the software and thus helps in developing a familiarity with the system. Thus, user training is essential to overcome the problem of computer illiteracy.

## 4.4: ICT and employees' level of efficiency

The study focused on ICT and employee's level of efficiency and the findings generated are presented in the descriptive statistics as shown in the following tables: -

		Frequency	Percent
Valid	Strongly Disagree	8	13.3
	Disagree	20	33.3
	Not sure	3	5.0
	Agree	19	31.7
	Strongly Agree	10	16.7
	Total	60	100.0

Source: Field data, 2014

Table 4.10 shows that majority of respondents [48.4% (31.7% + 16.7%) seem to agree that ICT has stimulated the level of efficiency in execution of tasks. However, the supporting percentage is small to justify that the use of ICT has lead to accuracy in the performance of task. Even then there were variations in responses to this test statement as revealed by the percentage of

respondents [46.6% (13.3% + 33.3%)] who disagreed with the view and 5% were not sure. The results from the interview indicated that;

The introduction of ICT generally has moderately resulted into increased accuracy in the way employees execute their tasks more especially in purchasing information processing in Mukwano Group of Companies and this implies that there has been a slightimprovement in the way tasks are done. It was further argued that much of the information relating to purchasing including the production of purchasing and order requisitions, creating invoices, is processed and transmitted using the system (internet) facility. This leads to saving in terms of money and time that could have been otherwise expensed.

From the foregoing therefore, it should be reasoned that the use of ICT has moderately increased the accuracy of the way staff execute their tasks.

The study further wanted to establish whether mistakes and errors are eliminated when using the ICT system in place. The findings collected are shown as follow:

Table 4.11: Mistakes and errors are eliminated when using the ICT system in place

		Frequency	Percent
Valid	Disagree	17	28.3
	Not sure	9	15.0
	Agree	21	35.0
	Strongly Agree	13	21.7
	Total	60	100.0

To results of the survey as reflected in table 4.11 suggest that 56.7% (56.7% +21.7%) of the respondents were in agreement that mistakes and errors are eliminated when using the ICT system in place. Conversely, 28.3% of the respondents disgreed implying that mistakes and errors can happened due to wrong information being fed in the system, incomplete or misleading information and 15% were not sure indicating that they may not have understood the question or lack clear knowledge whether mistakes and errors happen when using the ICT system in place. From the above view it should be comprehensible to note that if wrong information is fed in the system and the recipient may get wrong items ordered thereby compromising the employees' performance.

It was also found out useful to test whether quality output is always possible with the aid of ICT.

The results obtained are presented and analyzed as follows:

**Table 4.12:** 

		Frequency	Percent
Valid	Strongly Disagree	4	6.7
	Disagree	9	15.0
	Not sure	4	6.7
	Agree	34	56.6
	Strongly Agree	9	15.0
	Total	60	100.0

Source: Field data, 2014

Table 4.12 shows that 71.6% (56.6% + 15.0%) of the respondents were in agreement that quality output is always possible with the aid of ICT. It should be noted that ICT leads to quality output and facilitates employee performance improvements. However, 21.7% (6.7% + 15%) of the

respondents suggests varied responses as they disagreed with the statement regarding to whether quality output is always possible with the aid of ICT. Further 6.7% of the respondents were not sure implying they did not understand the test statement or they were naïve about the view in regard to whetherquality output is always possible with the aid of ICT.

The researcher also wanted to verify whether there has been tremendous improvement in the productivity levels of employees as a result of use of ICT. The results solicited are presented as follow:

**Table 4.13**: There has been tremendous improvement in the productivity levels of employees as a result of use of ICT

		Frequency	Percent
Valid	Strongly Disagree	13	21.7
	Disagree	19	31.7
	Not sure	6	10
	Agree	17	28.3
	Strongly Agree	5	8.3
	Total	60	100.0

Source: Field data, 2014

The study (as reflected in table 4.13) found that 53.4% (31.7% +21.7%) of the respondents seem to disagree that there has been tremendous improvement in the productivity levels of employees as a result of use of ICT. The implication of this finding is that respondents averagely did not know how to measure their productivity levels when using the ICT. However, 36.6% (28.3% +8.3%) of the respondents disagreed and 10% were not sure. This also shows that there is a clear

variation in the responses provided by the respondents about ICT and productivity improvement.

The results from the interview emerged that;

The rationale for introducing ICT was meant to stimulate the productivity levels with a lot of perfection. However, what is actually happen in the company is different as most of the staff are below the standards set by the company.

From the above view therefore, it should reasoned that the introduction of ICT has not been translated into good productivity level of staff.

Further the study sought to examine whether ICT causes social networks at work and destruct employees from doing their work efficiently and the findings collected are presented as follows:

**Table 4.14:** ICT causes social networks at work and distract employees from doing their work efficiently

		Frequency	Percent
Valid	Strongly Disagree	8	13.3
	Disagree	13	21.7
	Not sure	2	3.3
	Agree	27	45.0
	Strongly Agree	10	16.7
	Total	66	100.0

Source: Field data, 2014

As shown in table 4.14, 61.7% (45.0% + 16.7%) of the respondents accepted that ICT causes social networks at work and distract employees from doing their work efficiently. The implication of this finding is that many employees instead of doing their work they spend most of the time on internet surfing thereby causing a backlog of workload to be executed. On the

other hand 35.0% (13.3% + 21.7%) disagreed with the tests statement and the remainder (3.3%) were not sure whether ICT causes social networks at work and destruct employees from doing their work efficiently. The results from the interview were that; most of the time is wasted by some staff when they are e-mailing personal messages which not productive to the organization yet the intentions of introducing the internet was meant to make work easier and faster so that company can reap some benefit. However, the computer misuse within the company has hampered the performance of staff and at the same timely compromised the financial performance.

The study aimed at establishing whether ICT kills creativity and skills development of employees thereby leading to inefficiency, the results gathered are shown in the next table:

**Table 4.15**:ICT kills creativity and skills development of employees thereby leading to inefficiency

		Frequency	Percent
Valid	Strongly Disagree	1	1.7
	Disagree	11	18.3
	Not sure	8	13.3
	Agree	22	36.7
	Strongly Agree	18	30
	Total	60	100.0

Source: Field data, 2014

The results as reflected in table 4.15, 66.7% (36.7% + 30%) of the respondents seem to agree with the statement, and 13.3% were not sure. However, 20% (1.7% + 18.3%) of the respondents disagreed with the statement. The implication of this finding is that respondents exhibited some level of agreement as to the statement regarding whether ICT kills creativity and skills

development of employees thereby leading to inefficiency. ICT stifle the efforts one would put to think and bring the desired results which Mukwano Group of Companies is seeking. The effect of this is that staff will not input a lot thinking that the company has solved all its problems which affect negatively skills development.

The importance of ICT towards employee performance was further tested with the statement which necessitated respondents view on whether ICT eliminate duplication of tasks and thus stimulates efficiency. The responses gathered are presented as follow:

Table 4.16: ICT eliminate duplication of tasks and thus stimulates efficiency

		Frequency	Percent
Valid	Strongly Disagree	6	10
	Disagree	12	20
	Agree	22	36.7
	Strongly Agree	20	33.3
	Total	60	100.0

Source: Field data, 2014

The analysis of results in table 4.16 reveal that 70.0% (36.7% + 33.3%) of the respondents were in agreement that ICT eliminate duplication of tasks and thus stimulates efficiency. However, 30% (10% + 20%) opposed the view. This reveals a significant variation in the opinions which could also relate to not clearly understanding whether ICT eliminate duplication of tasks and thus stimulates efficiency. In an interview with one manager had this to say;

ICT is uncomparable with manual system. He continued to say that ICT means elimination of repetitive tasks, accuracy, efficiency, reliability, timeliness, cost effective

and responsiveness. All these are the reasons for adoption of ICT to overcome the duplication of tasks. Our ordering lead times have reduced by 51% meaning that we are able to save a lot of time and money and this will help us to concentrate on activities that can improve the performance of the company.

From the above view therefore, it should be noted that ICT eliminate duplication of tasks and thus stimulates efficiency to some extent.

# 4.5 ICT and timely execution of tasks

The study aimed at examining how ICT affects timely execution of tasks and the findings generated are presented in the descriptive statistics as shown in table 4.17: -

**Table 4.17** 

		Frequency	Percent
Valid	Disagree	11	18.3
	Not sure	2	3.3
	Agree	29	48.4
	Strongly Agree	18	30
	Total	60	100.0

Source: Field data, 2014

From the results of the survey as reflected by table 4.17, 78.4% (48.4% + 30.0%) of the respondents seem to agree that systems breakdown always causes delays in the execution of tasks thereby affecting negatively the performance of employees. However, 18.3% of the respondents opposed the view and 3.3% were not sure indicating variation in the responses generated by the respondents. The results from the interview, one manager had this to say,

The system provides us with an easy way of doing business but in situations where there is system breakdown may be caused by viruses this hampers negatively the performance of employees as nothing can be done other than waiting for the technicians to solve the problem. In this case employees will not be in position to meet deadlines and targets set.

From the foregoing therefore, it should be logical to state that to a great extent, systems breakdown always causes delays in the execution of tasks thereby affecting negatively the performance of employees.

In identifying whether ICT shortens time it would have taken to accomplish a task when using manual system, the findings collected are shown in table 4.18: -

**Table 4.18**: ICT shortens time it would have taken to accomplish a task when using manual system

		Frequency	Percent
Valid	Strongly Disagree	2	3.3
	Disagree	10	16.7
	Not sure	4	6.6
	Agree	22	36.7
	Strongly Agree	22	36.7
	Total	60	100.0

Source: Field data, 2014

The results in table 4.18 above reveal that 73.4% (36.7% +36.7%) of the respondents agreed that ICT shortens time it would have taken to accomplish a task when using manual system. The implication of this finding is that ICT makes work easier and faster compared to manual system.

However 20% (3.3% + 16.7%) of the respondents disagreed and 6.6% were not sure showing varied responses as far as to whether ICT shortens time it would have taken to accomplish a task when using manual system. The findings from the interview with on manager emerged that,

The use of ICT in organization helps to execute tasks faster and efficiently. When the company introduced ICT system, delays in performance of tasks were lessened and this helped the company to meet customer needs in time and thus saved the company the amount of money it was spending using the manual system. The cost reduced by 40% compared to the manual system.

It should be argued that to a great extent ICT shortens time it would have taken to accomplish a task when using manual system.

The study wanted to ascertain whether resistance from employees when new technology is introduced can affect adversely timely execution of task. The findings collected are shown as follow:

**Table 4.19**: Resistance from employees when new technology is introduced can affect adversely timely execution of task

		Frequency	Percent
Valid	Strongly Disagree	6	10.0
	Disagree	14	23.3
	Not sure	4	6.7
	Agree	26	43.3
	Strongly Agree	10	16.7
	Total	60	100.0

The findings in table 4.19 shows that 60% (43.3% +16.7%) of the respondents agreed that the transfer that the transfer that the planning in table 4.19 shows that 60% (43.3% +16.7%) of the respondents agreed that the findings in table 4.19 shows that 60% (43.3% +16.7%) of the respondents agreed that the transfer to the transfer transfer to the transfer transfer to the transfer transfer transfer to the transfer tra

The study also sought to verify whether network problems can always affect deadline for particular tasks and the results collected are shown as follows:

Table 4.20: Network problems can always affect deadline for particular tasks

		Frequency	Percent
Valid	Strongly Disagree	4	6.7
	Disagree	15	25.0
	Not sure	0	0.0
	Agree	24	40.0
ļ.	Strongly Agree	17	28.3
	Total	60	100.0

Results of the survey as reflected in table 4.20 shows that 68.3% (40.0% + 28.3%) of the respondents concurred that network problems can always affect deadline for particular tasks. It was noted that lack of high-speed connections and software incompatibility affects adversely employee utilisation of the ICT. Although 31.7% (6.7% +25.0%) of the respondents seem not to agree with the statement, the results from the interview suggest that;

There is a problem of unreliability and systems failure. The respondents indicated that sometimes there are technical problems and the system goes down and therefore cannot be used which makes it unreliable. If there is too much dependence on the system, systems failure means no work.

From the foregoing therefore, it should be maintained that network problems can always affect deadline for particular tasks this creates a backlog of tasks thereby compromising the performance of employees.

The study also wanted to confirm whether ICT is prone to power problems and this hinders timely execution of tasks. The findings collected are presented in table 4.21:

Table 4.21: ICT is prone to power problems and this hinders timely execution of tasks

		Frequency	Percent
Valid	Strongly Disagree	1	1.7
	Disagree	8	13.3
	Not sure	4	6.7
	Agree	30	50.0
	Strongly Agree	17	28.3
	Total	60	100.0

The findings in table 4.21 shows that 78.3% (50.0% + 28.3%) of the respondents stated that ICT is prone to power problems and this hinders timely execution of tasks. On the other hand 15.0% (1.7% + 13.3%) of the respondents disagreed with the test statement and the remainder (6.7%) were not sure whether ICT is prone to power problems and this hinders timely execution of tasks. However, in an interview with one departmental heads she said that;

Although the system is prone to power problems, it is no long an issue in our company since we have standby generator to help us to do our routine tasks more efficiently to ensure business continuity. But it should be acknowledged that ICT is prone to power problems because of the volatility in the Ugandan electricity.

From the above assertions, it should be cemented that ICT is prone to power problems and if the company does not have alternative power to ensure business continuity this can affect adversely the performance of employees to meet the performance standards of the organization.

Further the study wanted to verify whether systems security always hinder timely performance of task and the results collected as shown in table 4.22: -

**Table 4.22**: Systems security always hinder timely performance of task

		Frequency	Percent
Valid	Strongly Disagree	6	10.0
	Disagree	10	16.7
	Not sure	3	5.0
	Agree	24	40.0
	Strongly Agree	17	28.3
	Total	60	100.0

The findings in table 4.22 above shows that 68.3% (40.0% +28.3%) of the respondents were with a view that systems security always hinders timely performance of task. The implication of this finding is that ICT is affected generally by computer hackers and crackers because of lack of security measures. Hacking in simple terms means an illegal intrusion into a computer system or network. While crackers are individuals who break into information systems to intentionally cause harm; hackers may not cause any harm at all, but may simply be curious and experimental. However, 26.7% (10.0% +16.7) of the respondents disagreed with the statement and 5.0% were not sure thereby giving varied responses on whether systems security always hinders timely performance of task. From the foregoing therefore, it should be stated that employees are estopped from using ICT system because of lack of adequate security measures. Further there is a significant challenge in gathering and prosecuting evidence in computer crime prosecutions. Investigators face challenges in ensuring that the integrity of computer evidence had been maintained. The results from the interview indicated that.

Companies need to be encouraged to come out of hiding and start communicating incidences of cybercrime (even if it is to the overseer body) and educating users about the tricks used by cyber criminals. The status quo, is that an inside racket makes off with millions of money and the bank keeps it under wraps. This creates a vicious cycle of repeat offences with each incident getting more sophisticated and a greater financial embarrassment.

IT managers need to start garnering support from management on prevention of cyber or computer related crimes. Once there is sufficient buy in from management, then it is easier for security policies to be enforced and this will drastically lower the vulnerability and subsequently the attacks.

From the foregoing therefore, there is a need to optimally exploit the great resource of ICT system by ensuring that employees have access to these new technologies. To achieve this, there is a need to create secure, conducive, and enabling environment for all users and beneficiaries of the ICT to avoid abuse and misuse. This is also necessary to build trust.

#### The extent to which technology affects employee performance

Correlation coefficient of determination and regression were used to determine the extent to which technology affects employees' performance in Mukwano Group of Companies and the findings are presented in the following tables as shown below.

Table 4.23: Correlation between Technology and Employee Performance

	Employee Performance										
	Correlation	Correlation   Coefficient of   Significance of the   Number									
	coefficient	determination	correlation	respondents							
	(r)	$(r^2)$	(p)	(n)							
Technology	.892	.795	.000	60							

Source: Field data, 2014

The results in table 4.23 above show that there is positive correlation between technology and employee performance in Mukwano Group of Companies (r = .892) with a coefficient of determination ( $r^2$ ) of .795. These findings were significant (p < .000). Therefore, ICT influences employee performance in Mukwano Group of Companies greatly. It should be noted after careful assessment of employees' needs, the introduction of ICT can lead to good performance improvement of employees. The findings in table 4.23 above indicate that technology accounts

for 79.5% of the variation in employee performance and other factors which are not known by the researcher contributes 20.5%.

However, it was important to establish the regression of technology on employee performance. Findings are presented in the following table accompanied with an analysis and interpretation of the findings.

Table 4.24: Regression of technology and employee performance

Dependent variable: Employee Perform	ance	
R	.884	
$r^2$	.781	
Adjusted r <sup>2</sup>	.753	
ANOVA		
Fisher's Ratio (F)	Sig. (p)	_
19.6	.000	
	Coefficient	·
	T	ig.
Technology	3.210	012

Source: Field data, 2014

Table 4.24 shows a linear relationship between technology and employee performance (r = .884). In order to determine the effect of technology on employee performance, the regression coefficient was squared ( $r^2 = .781$ ) and then adjusted (Adjusted  $r^2 = .753$ ) and expressed as a percentage. Thus, it is shown that technology accounts for 75.3% of the variance in performance

of employees and 24.7% is due to other factors outside the scope of this study. These findings were subjected to an ANOVA test and found significant (F = 19.6, p < .000). Thus, this implies that technology has a direct positive bearing on employee performance in Mukwano Group of Companies.

The coefficient of technology (.012) was computed to determine its effect on employee performance. Technology with significance value (p) less than .05 significantly affects employee performance. Thus, technology affects employee performance (p < .05).

#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND SUGGESTIONS

## 5.0 Introduction

This chapter presents the discussion of findings, summary of findings, conclusions, recommendations and suggestions. It is divided into five sections. The first section presents the discussion of findings; the second section covers the summary of findings according to the objectives. The third section presents conclusions and fourth section presents recommendations and the fifth section presents suggestion for further research.

## 5.1 Discussion of findings

#### 5.1.1 Matching ICT with employees' abilities

Table 4.4 shows that 61.7% (50.0% + 11.7%) of the respondents concurred that the technology in place does not allow employees to exercise the abilities. This view is supported by Markman andSuhr (2013) that there is a growing awareness in the business community that companies can benefit from increased workforce productivity by allowing employees to have some level of choice in what technology they use and the degree of mobility they have basing on the training levels employees possess. However, what is happening in Mukwano Group of Companies is different. The Human Resource Records for 2013 shows that the combined capacity utilization levels for employees was at 73% in 2011, 75% in 2012 and dropped to 71% in 2013. Attempt to introduce new user-friendly technology has not yielded the desired performance targets of employees as most of the employees still fail to meet the pre-set performance targets of 95% and

above. From the foregoing therefore, it should be argued that when the company is reluctant to train its staff whennew things happen, they may not produce the desired results.

The findings in table 4.5 above shows that 69.7% (53% + 16.7%) of the respondent concurred that whether whenever, there are technological changes employees' ability is adversely affected. This shows that planning for introduction of new technology necessitates employees to upgrade their ICT skill so that their ability in use of technology is not affected negatively. This is in line with Bennett (2008) that employees in many organisations do not know how to use technology yet employees will need the right tools and technology to perform their duties appropriately. Some employers in the hope of reducing cost do not offer training opportunities to their staff and they even go overboard in limiting the resources availed to employees. It is good business practice to control business expenses, however denying people training in use of technology; it makes it impossible for the employees to deliver (Ulrich and Brockbank, 2005) From the above view it should be reasoned that whenever, there are changes in the ICT, obviously, people's performance is affected as they have no knowledge of how to use the new systems.

The results in table 4.6 above indicate that 50.0% (18.3% + 31.7%) of the respondents were in disagreement that an assessment is always made whenever there are technological changes not to affect employees' abilities. This finding indicates that an evaluation of employees' ability is rarely made to ascertain their strengths and weakness in the use of the available technology. It should be noted however, much the company wants its staff to meet the pre-standard, it not done enough to prepared it staff to be in position to use to existing technology to attain the desired

performance goals and this what the study is all about to enhance performance improvement of employees.

The results in table 4.7 show that 73.3% (48.3 % +25.0%) of the respondents disagreed that the technology adopted by the organization is user friendly. This is in line with Ulrich and Brockbank (2005), that it is good business practice to ensure that employees in the organization have the skills to use the technology, however denying people training in use of technology; it makes it impossible for the employees to deliver. For example, if the organisation's business relies heavily on real time data, invest in a reliable internet connectivity network with the appropriate bandwidth. This will allow employees to be more efficient, have the data they need to perform their duties and most of all make them happy as they have the right tools. Nonetheless, it is not clear whether staff have accepted ICT systems in place. From the foregoing it should be argued that it would be inappropriate for Mukwano Group of Companies to assume that adoption decisions of ICT systems made by the management would result in automatic and spontaneous acceptance of the system by their employees. This is because imbalance in benefits may occur between organisational and user level. Additionally, it is not clearly known how employees have responded to their organizational decisions to embrace ICT systems and in what ways various factors have contributed to their acceptance of these systems.

The results of the study in table 4.8 further indicated that 70.0% (50% + 20%) of the respondents were with a view that there are a lot of complaints from the staff about the systems used compared to their abilities. It should be noted that the systems which was introduced employees cannot use it freely in their course of executing their tasks and this is the reason why they have continuously failed to use it efficiently to meet the desired performance targets of the company.

It should be remembered that people have skills but the skills they have plus their abilities does not really match with the systems in place.

The findings of study in table 4.9 also indicate that 51.6% (41.6% + 10.0%) of the respondents were in agreement that there a lot of complaints from the staff about the systems used compared to their abilities. Further, other results indicate that Mukwano Group of Companies generally organize training for its employees to ensure that they can use the systems efficiently. However, what is not clear whether the training given to staff is inadequate to address their needs. The findings shows that the company conducts in house training to help staff in two distinct ways: a) It helps in the transfer of knowledge from vendors consultants to employees about why the new technology is needed and how it should improve their work. This in turn helps in addressing the fear employees may have about the technological changes. From the above view it should be logical to give employee hand-on training because it can help them to know about the features of the software and thus helps in developing a familiarity with the system.

#### 5.1.2 ICT and employees' level of efficiency

Table 4.10 shows that [48.4% (31.7% + 16.7%) of seem to agree that ICT has stimulated the level of efficiency in execution of tasks. However, the supporting percentage is small to justify that the use of ICT has lead to accuracy in the performance of task. Conversely, this is in disagreement with Markman&Suhr (2013), that there is no way an organization can improve efficiency level without ICT. Therefore, by conducting this study, the recommendation shows that organization need to evaluate properly what are the needs of the employees so that they can execute their tasks efficiently. It should be argued that much as ICT enable the company to procure information relating to production improvement this has not been translated into good performance levels.

To results of the survey as reflected in table 4.11 suggest that 56.7% (56.7% +21.7%) of the respondents were in agreement that mistakes and errors are eliminated when using the ICT system in place. This view was supported by Thurston (2006) that there is input output relationship when it comes to the information fed in the system. That significant improvement in output, productivity and growth are achieved when correct information is fed in the system. If people don't know how to use the system of course mistakes and errors are inevitable. From the above view it should be comprehensible to note that if wrong information is fed in the system and the recipient get wrong information on which to make informed decision this can cripple performance goals.

Table 4.12 show that 71.6% (56.6% + 15.0%) of the respondents were in agreement that quality output is always possible with the aid of ICT. It should be noted ICT speeds up the work load cycle times and facilitates employee performance improvements. *This is line with* Dauda (2009) that there is no way a company can improve the quality of its products unless emphasis is put on ICT. From the above view it should be reasonable to indicate that ICT lead to quality output.

The study (as reflected in table 4.13) found that 53.4% (31.7% +21.7%) of the respondents seem to disagree that there has been tremendous improvement in the productivity levels of employees as a result of use of ICT. The implication of this finding is that respondents averagely did not know how ICT has affected productivity level. It should further be argued that the need for ICT is generally meant to stimulate the productivity levels with a lot of perfection. But if the

performance levels have not improved then the acquired technology is not suitable for employees.

As shown in table 4.14, 61.7% (45.0% + 16.7%) of the respondents accepted that ICT causes social networks at work and destruct employees from doing their work efficiently. This is in agreement with Morgan (2009), that there are so many ways technology can distract employees at work. The use of social networks at work can cause so much distraction and it affects the productivity of employees (. Some companies have decided to block access to specific websites like Facebook, Twitter and Youtube, because of the unlimited distraction they cause. Thus many employees instead of doing their work they spend most of the time on internet surfing thereby causing a backlog of workload to be executed.

The results as reflected in table 4.15, 66.7% (36.7% + 30%) of the respondents seem to agree with the statement that ICT kills creativity and skills development of employees thereby leading to inefficiency. This is what Markman&Suhr (2013) talked about that since most tasks are automated by technology, many employees become lazy at work, technology kills their creativity and skills. Simple tasks like calculating sales and tracking inventory are being done with computers, so you will find that employees do not put their brains at work, they can't solve highend business problems because a computer or software will do it with no challenge. This shows that ICT stifle creativity, skills development and people cannot be innovative when using the system in place.

The analysis of results in table 4.16 reveal that 70.0% (36.7% + 33.3%) of the respondents were in agreement that ICT eliminate duplication of tasks and thus stimulates efficiency. From the foregoing it should be argued that ICT is superior to manual system. This is in line with Dauda (2009), that the growth and employment are thus diverging in advanced countries. The key force driving this trend is the technology which is playing multiple roles. The replacement of routine manual jobs by machines and robots is a powerful, continuing, and perhaps accelerating trend in manufacturing and logistics, while networks of computers are replacing routine white-collar jobs in information processing. This is because it elimination of repetitive tasks, fosters efficiency, it is reliable and thus cost effective in long run. From the above view therefore, it should be noted that ICT eliminate duplication of tasks and thus stimulates efficiency to some extent.

#### 5.1.3 ICT and timely execution of tasks

Table 4.17, show that 78.4% (48.4% + 30.0%) of the respondents seem to agree that systems breakdown always causes delays in the execution of tasks thereby affecting negatively the performance of employees. This view was supported by Megginson L.C (2000) that whenever, there are systems breakdown work becomes at a standstill. Where there is system breakdown may be caused by viruses this compromises the performance of employees as nothing can be done. From the foregoing therefore, it should be logical to state that to a great extent, systems breakdown always causes delays in the execution of tasks thereby affecting negatively the performance of employees.

The results in table 4.18 above reveal that 73.4% (36.7% +36.7%) of the respondents agreed that ICT shortens time it would have taken to accomplish a task than when using manual system..

The implication of this finding is that ICT makes work easier, faster and thus accurate compared

to manual system. This is what Terry (2005) says that that ICT helps to perform tasks faster. ICT eliminates delays and this enables the company to meet its targets. It should be argued that to a great extent ICT shortens time it would have taken to accomplish a task when using manual system.

The findings in table 4.19 shows that 60% (43.3% +16.7%) of the respondents agreed that resistance from employees when new technology is introduced can affect adversely timely execution of task. Bennett (2008), in line with Montgomery (2004), say that as with any change in the workplace, changes in technology may result in anxiety and even resistance among employees. Technical changes can be seen specifically as threats by employees who envision that their roles within the company will be replaced by a machine or computer that can do the job cheaper or faster. This means that when changes happen in organization people are prone to resist the new changes and before such happen it requires to involve employees at both planning and implementation stages to decrease the resistance to any IT system because they develop a feeling that they are important stakeholders who can make decision about how the system can be made work for them.

Results of the survey as reflected in table 4.20 shows that 68.3% (40.0% + 28.3%) of the respondents concurred that network problems can always affect deadline for particular tasks. It was noted that lack of high-speed connections and software incompatibility affects adversely employee utilisation of the ICT. The study shows that the problem of unreliability and systems failure affects negatively the performance staff. From the foregoing therefore, it should be maintained that network problems can always affect deadline for particular tasks.

The findings in table 4.21 shows that 78.3% (50.0% + 28.3%) of the respondents stated that ICT is prone to power problems and this hinders timely execution of tasks. It should be argued that ICT uses power and since there are volatility in Ugandan power this affects successful execution of work and thus hinders the attainment of performance goals of the company.

The findings in table 4.22 above shows that 68.3% (40.0% +28.3%) of the respondents were with a view that systems security always hinders timely performance of task. The study shows that ICT is affected generally by computer hackers and crackers because of lack of security measure. Hacking in simple terms means an illegal intrusion into a computer system or network. While crackers are individuals who break into information systems to intentionally cause harm; hackers may not cause any harm at all, but may simply be curious and experimental. From the foregoing therefore, it should be noted that employees are estopped from using ICT system because of lack of adequate security measures. Further there is a significant challenge in gathering and prosecuting evidence in computer crime prosecutions. Investigators face challenges in ensuring that the integrity of computer evidence had been maintained.

#### 5.1.4 The extent to which ICT affects employee performance

Correlation coefficient of determination and regression were used to determine the extent to which technology affects employees' performance in Mukwano Group of Companies and the findings in table 4.23 indicated that there is positive correlation between technology and employee performance in Mukwano Group of Companies (r = .892) with a coefficient of determination  $(r^2)$  of .795. These findings were significant (p < .000). Therefore, ICT influences employee performance in Mukwano Group of Companies greatly. It should be noted after careful

assessment of employee's needs, the introduction of ICT can lead to good performance improvement of employees. The findings in table 4.23 above indicate that ICT accounts for 79.5% of the variation in employee performance and other factors which are not known by the researcher contributes 20.5%.

## 5.2 Summary of the findings

The findings of the study shows that the ICT in place does not allow employees to exercise the abilities. That an attempt to introduce new user-friendly technology has not yielded the desired performance targets of employees as most of the employees still fail to meet the pre-set performance targets of 95% and above.

The study further revealed that whenever, there are technological changes employees' ability is adversely affected. This is because staff are prepared enough to be in position to use to existing technology to attain the desired performance goals. This causes resistance from the staff. And this is the reason why they have continuously failed to use it efficiently to meet the desired performance targets of the company.

It was found out that the introduction of ICT has not stimulated the level of efficiency in execution of tasks.

It was highlighted that mistakes and errors are eliminated when using the ICT system in place. However, if people don't know how to use the system of course mistakes and errors are inevitable. That quality output is always possible with the aid of ICT. But is happening in Mukwano Group of Companies is that productivity levels have not improved much this is because the respondents averagely did not know how ICT has affected productivity level.

It was found out that ICT causes social networks at work and destruct employees from doing their work efficiently. Some employees instead of doing their work they spend most of the time on internet surfing thereby causing a backlog of workload to be executed and thus kills creativity and skills development of employees thereby leading to inefficiency.

The study shows that ICT eliminate duplication of tasks and thus stimulates efficiency. This is because it elimination of repetitive tasks, fosters efficiency, it is reliable and thus cost effective in long run.

It was found out that systems breakdown always causes delays in the execution of tasks thereby affecting negatively the performance of employees. Where there is system breakdown may be caused by viruses this compromises the performance of employees as nothing can be done.

It was noted that ICT shortens time it would have taken to accomplish a task than when using manual system. Thus it makes work easier, faster and thus accurate compared to manual system.

The findings in table 4.19 shows that 60% (43.3% +16.7%) of the respondents agreed that resistance from employees when new technology is introduced can affect adversely timely execution of task.

Results of the survey as reflected that network problems can always affect deadline for particular tasks. It was noted that lack of high-speed connections and software incompatibility affects adversely employee utilisation of the ICT.

It was established that ICT is prone to power problems and this hinders timely execution of tasks.

The findings show that ICT is affected generally by computer hackers and crackers because of lack of security measure. Further there is a significant challenge in gathering and prosecuting evidence in computer crime prosecutions. Investigators face challenges in ensuring that the integrity of computer evidence had been maintained.

#### 5.3 Conclusion

The study was focused on technology and employee performance in Mukwano Group of Companies. The findings indicated that there is positive correlation between technology and employee performance in Mukwano Group of Companies (r = .892) with a coefficient of determination (r<sup>2</sup>) of .795. It should be noted after careful assessment of employee's needs, the introduction of ICT can lead to good performance improvement of employees. Technology accounts for 79.5% of the variation in employee performance and other factors which are not known by the researcher contributes 20.5%.

Further the results show that there a linear relationship between technology and employee performance (r = .884). In order to determine the effect of technology on employee performance, the regression coefficient was squared ( $r^2 = .781$ ) and then adjusted (Adjusted  $r^2 = .753$ ) and expressed as a percentage. Thus, it is shown that technology accounts for 75.3% of the variance in performance of employees. These findings were subjected to an ANOVA test and found significant (F = 19.6, p < .000). The coefficient of technology (.012) was computed to determine its effect on employee performance. Technology with significance value (p) less than .05 significantly affects employee performance. Thus, technology affects employee performance (p < .05).

#### 5.4 Recommendations

Basing on the finding of study the following was recommended.

## 5.4.1 Matching ICT with employees' abilities

An attempt to introduce new technology in organization should be made after a careful assessment of the employee's ability so that they are in position to use it efficiently and thus trained adequately.

### 5.4.2 ICT and employees' level of efficiency

The technology introduced should be user-friendly in order to eliminate cases of resistance, mistakes and errors and thus yield the desired performance targets.

There also a need to have standby generators to overcome power problems which affect the performance of staff.

Security measure should be strengthened to mitigate the occurrence of computer hacking and cracking.

#### 5.1.3 ICT and timely execution of tasks

Measures should be put in place to ensure that ICT in place does not causes social networks at work and distract employees from doing their work efficiently. This is because failure to do that, can result into a backlog of workload to be executed and thus affect negatively the performance levels.

There is a need to introduce high-speed connections to overcome the problem of network in order to ensure business continuity.

#### 5.5 Areas for further research

The study was focused on technology and employee performance. However, the study suggests that further research should be conducted on areas of

- 1 Management information systems and employee performance
- 2 Systems security and safety of company records
- 3 Performance evaluation and employee performance

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## **APPENDICES**

APPENDIX 1

R.V. KREJCIE AND D. W. MORGAN (1970) SAMPLE SIZE ESTIMATION TABLE

N*	$S^{\dagger}$	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

<sup>\*</sup>N is the population †S is the sample size

## Appendix 2:

## **QUESTIONNAIRE**

Dear Sir/Madam,

I am EdwigeTumushabe conducting a study on "ICT and Employee Performance in Private Sector using a case of Mukwano Group Of Companies" as a partial fulfillment of the requirement for award of a Masters of Business Administration of Kyambogo University. The information given will be treated with maximum sincerity and for academic purposes only. Your contribution will be highly appreciated. Please spare some time to answer the following questions.

# **INSTRUCTIONS:**

Please tick or fill in the blank space with what is most appropriate to you.

Pa	rt A	: Bio Data					
1.	Wh	nat is your gender?	Male [		Female		
2.	In v	which age group do yo	u fall? < 20		21-30	31-40 41-5	0
51-	+ [						
3.	Wł	nat is your level of Edu	cation attaine	ed so far	r?		
	a)	Masters					
	b)	Bachelors					
	c)	Diploma					
	d)	Certificate					
	e)	Others					

Using the 5 liker scale of ranking (SA- Strongly agree, A-Agree, N- Not sure, D-Disagree, SD-Strongly disagree) indicate what is most appropriate to you.

Part B: Whether ICT matches employees' abilities		SD	D	N	A	S
		1	2	3	4	5
1	The technology in place does not allow employees to exercise the abilities					
2	Whenever, there are technological changes employees' ability is adversely					
	affected					
3	An assessment is always made whenever there are technological changes not					
	to affect employees' abilities					
4	The technology adopted by the organization is user friendly					
5	There a lot of complaints from the staff about the systems used compared to					
	their abilities					
6	Training given to staff in most cases does not match with employees abilities					
	and skills.					
Par	t C: ICT and employees' level of efficiency					
7	ICT has stimulated the level of accuracy in the execution of tasks					
8	Mistakes and errors are eliminated when using the ICT system in place					
9	Quality output is always possible with the aid of ICT					
10	There has been tremendous improvement in the productivity levels of					
	employees as a result of use of ICT					
11	ICT causes social networks at work and destruct employees from doing					
	their work efficiently					
	their work efficiently					

12	ICT kills creativity and skills development of employees thereby leading to				
	inefficiency				
13	ICT eliminate duplication of tasks and thus stimulates efficiency				
Part	D: ICT and timely execution of tasks				
14	Systems breakdown always causes delays in the execution of tasks				
15	ICT shortens time it would have taken to accomplish a task when using				
	manual system				
16	Resistance from employees when new technology is introduced can affect				
	adversely timely execution of task				
17	Network problems can always affect deadline for particular tasks				
18	ICT is prone to power problems and this hinders timely execution of tasks				
19	Systems security always hinder timely performance of task				
20.	Please give suggestion for how employees can use ICT to register the desir	ed perfe	ormanc	е	•
faro	rets?				

# END

Thank you for your cooperation

## Appendix 4:

#### INTERVIEW GUIDE FOR MANAGERS

Dear Sir/Madam,

I am EdwigeTumushabe conducting a study on "ICT and Employee Performance in Private Sector using a case of Mukwano Group Of Companies" as a partial fulfillment of the requirement for award of a Masters of Business Administration of Kyambogo University. The information given will be treated with maximum sincerity and for academic purposes only. Your contribution will be highly appreciated. Therefore, you are required to answer the following questions: -

- 1. Are you aware on ICT innovations taking place in your organization?
- 2. If yes, does the ICT used in your organization match with employees' ability in the performance of organizational duties?
- 3. If no, what could be the problem why the ICT used does not match with the employees' abilities?
- 4. Does employees' skills in use of the existing ICT bring about the desired performance level?
- 5. If yes, what level of efficiency does ICT bring to employees when performing organizational duties?
- 6. Does the technology in place enhance timely execution of tasks?
- 7. If no, why? please explain
- 8. Do employees have any problem in use of the existing ICT?
- 9. Is there any element of resistance to new technology?
- **10.** How can the organization help employees to the existing ICT?