

**COMPUTERIZED ACCOUNTING AND ORGANIZATION  
DEVELOPMENT IN SELECTED PUBLIC INSTITUTION  
IN KIGALI, RWANDA**

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Kampala, Uganda

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In Partial Fulfillment of the Requirements for the Degree  
Master of Business Administration

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August, 2012

## DECLARATION A

"This thesis is my original work and has not been presented for a degree or any other academic award in any university or institution of learning".

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Name and Signature of Candidate

  
24<sup>th</sup> / 8 / 2012  
Date

### DECLARATION B

"I confirm that the work reported in this thesis was carried out by the candidate under my supervision".

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Name and Signature of Supervisor

30<sup>th</sup>/08/2012

Date

## APPROVAL SHEET

This thesis entitled "***Computerized Accounting and Organization Development in selected public institution in Kigali, Rwanda***" prepared and submitted by **TWATSINZE DUSHIMIGENA Adelard** in partial fulfillment of the requirements for the degree of a Master of Business Administration; has been examined and approved by the panel on oral examination with a grade of \_\_\_\_\_

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## **DEDICATION**

To My mother Margueritte MUKANOHELI and my late father Jean  
Damascene HAGENIMANA.

To my uncle Marcel MBONYINSHUTI and his wife Marie Claire  
MUREKATETE

To My sisters Adeline NDABATEZE, Adeliphine NiWEMUTONI  
And my brother Adelte UMUHOZA, Adalbert MBABAZI and Manfred  
MUGISHA

I dedicate this research study.

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## **ACRONYMS AND ABBREVIATIONS**

AICPA	:	American Institute of Certified Public Accountants
AIS	:	Accounting Information Systems
CAATS	:	Computer Aided Audit Tools
EWASA	:	Energy water and Sanitation Authority
FASB	:	Financial Accounting Standards Board
ICT	:	Information Communication and Technology
IT	:	Information Technology
MBA	:	Master of Business Administration
MIS	:	Management of Information Systems
OD	:	Organization Development
RRA	:	Rwanda Revenue Authority
SMEs	:	Small and Medium Sized Enterprises
SPSS	:	Statistical Package for Social Scientists

### **ABSTRACT**

This study is a result of an academic research entitled “, Computerized Accounting and Organization Development in selected public institution in Kigali, Rwanda.”. The purpose of this study was to test the null hypothesis of no significant relationship between computerized accounting and organization development in selected public institution in Kigali, Rwanda, to generate new information from the existing data and to validate the concept of Stefanou. The objectives of this study are (i) To identify the profile of the respondents in terms of gender, age, education, qualification and length of experience; (ii) to determine the extent of computerized accounting in selected public institution; (iii) to determine the level of organization development in selected public institution; (iv) to establish if the extent of computerized accounting are significantly correlated with the level of organization development. The study population comprised of 276 people of Rwanda Revenue Authority and Energy water supply agency; a sample of 163 respondents was chosen, using Sloven formula and simple random sampling. Questionnaire was used in collecting both primary and secondary data. SPSS was used to analyze all data. The data were processed using frequency distribution, mean, and Pearson’s linear correlation coefficient and regression analysis. The findings of the study revealed that the null hypothesis has been rejected and affirmed that there is a relationship between computerized Accounting and Organization development. The study concluded that computerizing Accounting has a profound influence to the Organization development. It is recommended that on the extent of computerized accounting in selected public institutions in Rwanda, the study recommends that more has to be done on the adoption and use of computerized accounting in Rwanda Revenue Authority and EWAS although preliminary findings already show that the use of computerized accounting is high in these institution.



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## **CHAPTER ONE**

### **THE PROBLEM AND ITS SCOPE**

#### **Background of the Study**

With the expansion of business the number of transactions increased. The manual method of keeping and maintaining records was found to be unmanageable. With the introduction of computers in business, the manual method of accounting is being gradually replaced. And finally, the database technology has revolutionized the accounts department of the public organizations (Collier, 2008).

Breen, & Sciull (2003) stated that while this was previously a paper-based process, most modern businesses now use computerised accounting software such as Sage, Peachtree, Pegasus, Oracle Financial, Iris etc. These are referred to as Computerised Accounting Information System (CAIS). It should be noted that Computerised Accounting Information Systems (CAIS) and IT- based Accounting Systems mean one and the same thing. Both of these will be used interchangeably in this dissertation. Dyt, R., & Halabi, A. (2007) aslos content that technology has had a radical impact on business processes in both developed and developing countries. It plays a major role in many, if not most, of the everyday operations of today's business world. This advancement in technology has fostered the creation of computerised accounting information systems, which enables accounting tasks to be accomplished with increased speed and accuracy. An accounting information system is the systems of records a business keeps to maintain its accounting systems. This includes purchases, sales and other financial processes of the business.

For decades now, the accounting systems in many businesses in many developing countries were mostly manual, for example financial records were manually maintained (paper-based), but with the increased growth in the usage of computerised information accounting systems in many developing countries and the increased risk posed by such systems such as accidental and intentional entry of bad data, organised fraud etc, the main question is if the audit risk placed by auditors on businesses using these systems have changed due to the increased usage of these systems.

Islam (2010) argues that technology has dramatically changed the accounting profession. One response to this change is the development of accounting programs that emphasize Accounting Information Systems (AIS) (Strong, et al, 2006). The rapid change in information technology, the wide spread of user-friendly systems and the great desire of organizations to acquire and implement up-to-date computerized systems and software have made computers much easier to be used and enabled accounting tasks to be accomplished much faster and accurate than hitherto. On the other hand, this advanced technology has also created significant risks related to ensuring the security and integrity of computerized accounting information systems (CAIS) (Musa and Abu, 2005).

With the expansion of business the number of transactions increased. The manual method of keeping and maintaining records was found to be unmanageable. With the introduction of computers in business, the manual method of accounting is being gradually replaced. And finally, the database technology has revolutionized the accounts department of the business organizations (Musa, 2005).

### **Statement of the Problem**

Lack of management of state funds and public institution in general continue to cause huge losses to the government, this situation continue to increase as organizations try to adopt themselves to the use of these developments it may now be said that every large business organization and most medium sized business are making at least some use of computers, given these condition its essential that accountant have a general understanding of how computers function, how they are programmed and the manner in which they are used in automated processing of accounting related data by means of what is commonly referred to as EDP .

In this information age, dysfunctional and ineffective public institutions and weak governance are increasingly seen to be the heart of the economic development challenge. To cope with the above mentioned challenges, there is no doubt, accounting have to be developed and improved over the years to solve new problems and to adapt to new situations in which organization, business found themselves (computer based).

Thus it is on this background that the researcher intends to investigate how computerized accounting can effectively influence organization development in public institution.

### **Purpose of the Study**

The following are the reason why this study were proposed:(1) to test the hypothesis of no significant relationship between the extent of computerized accounting and the level of organizational development;(2) to validate existing information related to the theory to which the study is based;(3)to generate new information based on

the findings of the study;(4) to bridge the gaps identified in the previous studies.

### **Research Objectives**

**General:** To determine the correlation between computerized accounting and organization development in selected public institution in Kigali, Rwanda.

**Specific:** The study sought the following:

1. To identify the profile of the respondents in terms of gender, age, education, qualification and length of experience.
2. To determine the extent of computerized accounting in selected public institution.
3. To determine the level of organization development in selected public institution.
4. To establish if the extent of computerized accounting are significantly correlated with the level of organization development.

### **Research Questions**

This study sought to answer the following research questions:

1. What is the profile of the respondents in terms of gender, age, education, qualification and length of experience in computerized accounting in selected public institution in Kigali, Rwanda?
2. What is the extent of computerized accounting in the selected public institution?
3. What is the level of organization development of the selected public institution?

4. Is there a significant relationship between the extent of computerized accounting and the level of organization development?

### **Hypotheses**

**HI:** There is no significant relationship between the extent of computerized accounting and the level of organization development.

### **Scope**

The **geographical scope:** This research carried out in Rwanda Revenue Authority (RRA) and Energy Water and Sanitation Authority (EWAS) two public institutions located in Kigali city/Rwanda.

The **content scope:** The study examined the extent of computerized accounting and the level of organization development in selected public institution in Kigali, Rwanda.

The **Time Scope:** this research considered the period from January 2006 to December 2010

The **Theoretical Scope:** The study was based on Rogers' theory of innovation diffusion (Rogers, 1995). Diffusion of Innovations is a theory that seeks to explain how, why, and at what rate new ideas and technology spread through cultures (Rogers 1962 5th ed, p. 283). The concept was first studied by the French sociologist Gabriel Tarde (1890) and by German and Austrian anthropologists such as Friedrich Ratzel and Leo Frobenius. The study proved the Theory from the research findings.



### **Significance of the Study**

The following disciplines will benefit from the findings of the study.

The **accountants** of the selected public institution will recognize the roles they have to play in computerized accounting and organization development and how their institution can become effective on the basis of the computerized accounting and their organization development.

The **selected private institution** will aim at achieving the goal of organization development based on the use of computerized accounting towards a better level in terms of quantity and quality.

The **Ministry of Public Function** will use the findings as empirical information to monitor within quality standards the computerized accounting and organization development in institutions.

The **future researchers** will utilize the findings of this study to embark on a related study.

### **Operational Definitions of Key Terms**

#### **Computerized accounting**

Computerized accounting system performs the mechanical functions of a manual-based system, including adding items to ledger accounts, preparing schedules, updating account balances, making reports and others.

#### **Organization Development**

Organization development (OD) is a conceptual, organization-wide effort to increase an organization's effectiveness and viability.

**Technology** is the making, usage, and knowledge of tools, machines, techniques, crafts, systems or methods of organization in order to solve a problem or perform a specific function. It can also refer to the collection of such tools, machinery, and procedures. Technologies significantly affect human as well as other animal species' ability to control and adapt to their natural environments. The term can either be applied generally or to specific areas: examples include construction technology, medical technology, and information technology.

**Organizational Structure** consists of activities such as task allocation, coordination and supervision, which are directed towards the achievement of organizational aims. It can also be considered as the viewing glass or perspective through which individuals see their organization and its environment

**Manpower** is the set of individuals who make up the workforce of an organization, business sector or an economy. "Human capital" is sometimes used synonymously with man power, although human capital typically refers to a more narrow view; i.e., the knowledge the individuals embody and can contribute to an organization.

**Process** Sequence of interdependent and linked procedures which, at every stage, consume one or more resources (employee time, energy, machines, money) to convert inputs (data, material, parts, etc.) into outputs.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **Introduction**

This chapter includes the views of experts, theoretical perspectives and related studies.

#### **Concepts, Opinions, Ideas from Authors/ Experts**

##### **Computerized Accounting**

The computerized accounting is one of the database-oriented applications wherein the transaction data is stored in well- organized database. The user operates on such database using the required interface and also takes the required reports by suitable transformations of stored data into information. Therefore, the fundamentals of computerized accounting include all the basic requirements of any database-oriented application in computers.

According to Natacha, (2010), computerized accounting system replace cumbersome manual systems Gone are the days when recordkeeping entailed hours of painstaking manual work, sifting through piles of accounting ledgers and maintaining endless records of transactional data. Computerized accounting systems (or software) have replaced manual-based accounting in virtually all businesses and organizations, providing accountants, managers, employees and stakeholders access to vital accounting information at the touch of a button. Computerized accounting systems automate the accounting process improving efficiency and cutting down costs.

According to Comley, L, Cuthbert, et al, (1992), a computerized accounting system performs the mechanical functions of a manual-

based system, including adding items to ledger accounts, preparing schedules, updating account balances, making reports and others. Computerized accounting systems, according to Robert W. Ingram and Thomas L. Albright (2006) in the book "Financial Accounting: Information for Decisions," are made up of programs called modules. Each module automates a particular accounting activity and/or business process. A computerized accounting system, therefore, is a set of component modules, such as production module, general ledger financial reporting module, human resources module, employees module, vendors module, customers module, sales module, financial management module and others.

Bassett, (1990) states that the most popular system of recording of accounting transactions is manual which requires maintaining books of accounts such as Journal, Cash Book, Special purpose books, ledger and so on. The accountant is required to prepare summary of transactions and financial statements manually. The advanced technology involves various machines capable of performing different accounting functions, for example, a billing machine. This machine is capable of computing discount, adding net total and posting the requisite data to the relevant accounts. With substantial increase in the number of transactions, a machine was developed which could store and process accounting data in no time. Such advancement leads to number of growing successful organizations. A newer version of machine is evolved with increased speed, storage, and processing capacity. A computer to which they were connected operated these machines.

Bassett, (1990) further adds that, as a result, the maintenance of accounting data on a real-time basis became almost essential. Now maintaining accounting records become more convenient with the computerised accounting. The computerised accounting uses the concept of databases. For this purpose an accounting software is used to implement a computerized accounting system. It does away the necessity to create and maintain journals, ledgers, etc., which are essential part of manual accounting. Some of the commonly used accounting soft wares are Tally, Cash Manager, Best Books, etc. Accounting software is used to implement a computerized accounting. The computerized accounting is based on the concept of database. It is basic software which allows access to the data contained in the data base. It is a system to manage collection of data insuring at the same time that it remains reliable and confidential.

### **Development of organization**

According to Sullivan (2010), Organization Development (OD) is a deliberately planned effort to increase an organization's relevance and viability. Newton Margulies (1972) referred to OD as, future readiness to meet change, thus a systemic learning and development strategy intended to change the basics of beliefs, attitudes and relevance of values, and structure of the current organization to better absorb disruptive technologies, shrinking or exploding market opportunities and ensuing challenges and chaos. Sullivan (2010) further added that Organization Development is an ongoing, systematic process of implementing effective organizational change. Organization development is known as both a field of applied behavioral science focused on understanding and managing organizational change and as a field of scientific study and inquiry. It is interdisciplinary in nature

and draws on sociology, psychology, and theories of motivation, learning, and personality.

More scholars like Nonaka, and Takeuchi (1995), stated that Organizational Development is a long range effort to improve organization's problem solving and renewal processes, particularly through more effective and collaborative management of organizational culture, often with the assistance of a change agent or catalyst and the use of the theory and technology of applied behavioral science. Although behavioral science has provided the basic foundation for the study and practice of organizational development, new and emerging fields of study have made their presence known. Experts in systems thinking, leadership studies, organizational leadership, and organizational learning (to name a few) whose perspective is not steeped in just the behavioral sciences, but a much more multi-disciplinary and inter-disciplinary approach have emerged as OD catalysts. These emergent expert perspectives see the organization as the holistic interplay of a number of systems that impact the process and outputs of the entire organization.

Newton Margulies (1972), Richard Beckhard (1969) have similarly noted that Organization Development is a "contractual relationship between a change agent and a sponsoring organization entered into for the purpose of using applied behavioral science and or other organizational change perspectives in a systems context to improve organizational performance and the capacity of the organization to improve itself.

Technology has affected society and its surroundings in a number of ways. In many societies, technology has helped develop more

advanced economies (including today's global economy) and has allowed the rise of a leisure class and aided the development of organizations in human society. Many technological processes produce unwanted by-products, known as pollution, and deplete natural resources, to the detriment of the Earth and its environment. Various implementations of technology influence the values of a society and new technology often raises new ethical questions. Examples include the rise of the notion of efficiency in terms of human productivity, a term originally applied only to machines, and the challenge of traditional norms (Borgmann, Albert 2006).

According to Donald (1999), technology can be viewed as an activity that forms or changes culture. Additionally, technology is the application of math, science, and the arts for the benefit of life as it is known. A modern example is the rise of communication technology, which has lessened barriers to human interaction and, as a result, has helped spawn new subcultures; the rise of cyber culture has, at its basis, the development of the Internet and the computer which has enhanced organizational development. Not all technology enhances culture in a creative way; technology can also help facilitate political oppression and war via tools such as guns. As a cultural activity, technology predates both science and engineering, each of which formalize some aspects of technological endeavor.

According to Jacobides (2007), the set organizational structure may not coincide with facts, evolving in operational action. Such divergence decreases performance, when growing. E.g., a wrong organizational structure may hamper cooperation and thus hinder the completion of orders in due time and within limits of resources and budgets.

Organizational structures shall be adaptive to process requirements, aiming to optimize the ratio of effort and input to output. He adds that organizational structure has helped many organizations do their work in a systematic way and this has facilitated organizational development in many ways within organizations (Jacobides, 2007).

Elwood (1996) states that in the corporate vision, manpower is viewed as assets to the enterprise, whose value is enhanced by development. Hence, companies will engage in a barrage of human resource/manpower management practices to capitalize on those assets. Elwood (1996) adds that manpower in any organization is needed for organizational development/performance and that there is no way the organizations can operate without manpower in to foster their success.

In regard to how individuals respond to the changes in a labor market, the following must be understood:

- Geographical spread: how far is the job from the individual? The distance to travel to work should be in line with the pay offered, and the transportation and infrastructure of the area also influence who applies for a post.
- Occupational structure: the norms and values of the different careers within an organization. Mahoney (1989) developed 3 different types of occupational structure, namely, craft (loyalty to the profession), organization career (promotion through the firm) and unstructured (lower/unskilled workers who work when needed).
- Generational difference: different age categories of employees have certain characteristics, for example, their behavior and their expectations of the organization.



According to Gary (1974), many organizations have systematic ways of operation and procedures are used/followed to perform particular tasks. These processes help in organizational development as everything is done at its appointed time to avoid time and resource wastages in organizations.

### **Theoretical Perspectives**

This study was based on Rogers' Theory of Innovation Diffusion (Rogers, 1995). Rogers outlined the desirable characteristics of an innovation in terms of its relative advantage, compatibility, complexity, observability, and trial ability (as cited in Breen et al., 2003, p. 3). Applying Rogers' theory to the adoption of accounting software as the innovation, the software must be perceived better than the predecessor system (most likely a manual accounting system); must be consistent with the needs of the adopter; must be easy to learn and use; must have apparent results; and the accounting software must be available on a trial basis (as cited in Breen et al., 2003,

Diffusion of Innovations is a theory that seeks to explain how, why, and at what rate new ideas and technology spread through cultures (Rogers 1962 5th ed, p. 283). The concept was first studied by the French sociologist Gabriel Tarde (1890) and by German and Austrian anthropologists such as Friedrich Ratzel and Leo Frobenius. Its basic epidemiological or internal-influence form was formulated by H. Earl Pemberton, who provided examples of institutional diffusion such as postage stamps and compulsory school laws.

In 1962 Everett Rogers, a professor of rural sociology published *Diffusion of Innovations*. In the book, Rogers synthesized research from over 508 diffusion studies and produced a theory for the adoption of innovations among individuals and organization. Rogers proposed four (4) main elements that influence the spread of a new idea: the innovation, communication channels, time, and a social system. That is, diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. Individuals progress through 5 stages: knowledge, persuasion, decision, implementation, and confirmation. If the innovation is adopted, it spreads via various communication channels (Wejnert, Barbara, 2002). During communication, the idea is rarely evaluated from a scientific standpoint; rather, subjective perceptions of the innovation influence diffusion. The process occurs over time.

### **Related Studies**

#### **The Extent of Computerized Accounting in Selected Public Institutions**

The rapid change in information technology, the wide spread of user-friendly systems and the desire of organizations to acquire and implement up-to-date computerized systems and software have made computers much easier to use and enabled accounting tasks to be accomplished with increased speed and accuracy (Al-Fehaid, 2003). There are two types of Computer-based accounting systems. These consist of: Integrated Accounting Systems and Stand Alone Accounting Systems (Dodd, 1992; Lanier, 1992; Fardon, 2002).

As the lifeblood of any competitive business, accounting information is a critical resource for all enterprises. The concept of

accounting information system (AIS) is quite well established and numerous commercial packages as well as tailor-made systems have been developed. However, the business world is best by accounting systems that have varying levels of efficiency and excessive costs for such information (Yau et al., 2000). Advancements in information technology (IT) have enabled companies to use computers to carry out their activities that were previously performed manually. Accounting systems that were previously performed manually can now be performed with the help of computers. Therefore, improvements in the information technology have facilitated the use of cost and management accounting procedures.

Today, almost all organizations are using computers in their daily businesses. As computers become smaller, faster, easier to use, and less expensive, the computerization of accounting work will continue. Accounting activities that were previously performed manually can now be performed with the use of computers. That is, accountants are now able to perform their activities more effectively and efficiently than before (Dalchi and Tennis, 2004).

In computerized system computers are used in processing data and in disseminating accounting information to interested users. Now-a-days most of the small business organizations eventually replace their manual accounting system with computerized accounting system. Computerized accounting systems are software programs that gather the various accounting information related to sales, purchases, receivables, payables, cash receipts, cash disbursements, and payroll. And in this procedure the financial statement is generated (Islam, 2010).

Most of the accounting information is generated from transactions. Transactions of firms have both accounting and non accounting attributes. During the early days of computerization of AISs, accounting system used to be isolated from other information systems and served as operational; support systems. Today, as more powerful, flexible, economical, and user-friendly software and hardware have become available, the trend is toward a logical arrangement where a single system can support both accounting and operational needs. In sum, today's accounting systems are closely tied into and may even be fully integrated with other information systems (Wilkinson et al, 2000).

### **The Level of Organization Development in Selected Public Institutions**

With the advent of computer and its related technologies, the use of computerized accounting is still minimal in many public institutions in many developing countries. According to Mintzberg, since public institutions tend to have highly centralized structures, with the owner making most of the critical decisions, the central role of the owner suggests that the characteristics of the CEO are even more critical in the decision of public institutions to adopt information systems (Thong, 1999, p. 188).

Furthermore, the adoption of computerized accounting is their tendency to employ generalists rather than specialists (Blili & Raymond, 1993). They have difficulties attracting and retaining skilled information systems staff because of the limited career paths available in a small business (Gable, 1991). This results in a lack of information

systems knowledge and technical skills in organizations (DeLone, 1988), which in turn decreases the possibility of computerized accounting adoption (Attewell, 1992). The information systems literature has also been reviewed to understand how Information Technology (IT) has been used to support information requirements in accounting. In general, results of prior studies indicate that IT adoption has grown tremendously within organizations (Thong, 1999; Cragg & Zinatelli, 1995).

More recent studies by Bridge and Peel (1999) and Foong (1999) further confirmed that computers in accounts are mainly used for administrative and operational tasks rather than for strategic planning. Fuller (1996) argued that the key problem of the lack of strategic computer usage in accounts relates to the poor fit between what the software tools are offering and what is needed, with neither the users nor the suppliers in a strong position to communicate with each other.

According to Pierson and Ramsay, most businesses require some type of accounting information system to collect, process, and report their financial performance operations (Dyt & Halabi, 2007, p. 1). Having a strong accounting system provides benefits to the different stakeholders of the company, may it be the management, employees, investors, creditors, or regulators. This view is in line with Stefanou's (2006) position, stating that the fundamental purpose of an accounting information system is the collection and recording of data and information regarding events that have an economic impact upon organizations and the maintenance, processing, and communication of information to internal and external stakeholders. This information is

then used for the evaluation of the financial position of the organization and for decision-making purposes.

Published works show that a number of studies have been conducted to identify factors affecting the use of IT among SMEs (e.g. DeLone, 1981; Raymond, 1985; Lees, 1987; Montazemi, 1988; Davis, 1989; Kagan *et al.*, 1990; Chan & Kelvin, 1990; DeLone & McLean, 1992; Adam *et al.*, 1992; Wilson and Sangster, 1992; Yap *et al.*, 1992; Cragg and King, 1993; Shahrum *et al.*, 1996; Igbaria *et al.*, 1997; Foong, 1999; Thong, 1999, 2001).

In spite of the various government programs and incentives, including technology acquisition and skill-building programs, the adoption and effectiveness of technology adoption among public organizations is still an issue of great concern to the government. Shahrum *et al.*, (1996), for example, found that computerized accounting adoption among public organizations in the Northern Region of Peninsular Malaysia was only fifty-one percent. They further found that only fifty three percent of the firms used computers for financial and accounting purposes. The percentage is fairly low compared to the computerized accounting adoption among public organizations in developed countries. Duschinsky and Dunn (1988), for example, found that eighty-six percent of the established small firms in the UK had computerized their accounting systems. This slow adoption is a critical issue because public institutions constitute the vast majority of the total government agencies.

One possible explanation for the low adoption level is that most of the public institutions are apprehensive of IT (Peter, 1999) due to

their unfamiliarity of the technology (Soon, 1990) or they are not aware of the incentives offered by the supporting agencies. In this regard, Raman and Yap (1996) argued that the lack of a coherent national IT plan and disintegration of IT training at various levels of agencies might contribute to the slow adoption rate of IT among organizations in developing countries.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **Research Design**

This study employed the descriptive correlation design specifically the descriptive comparative and descriptive correlational strategies. Descriptive studies are non-experimental researches that describe the characteristics of a particular individual, or of a group. It deals with the relationship between variables, testing of hypothesis and development of generalizations and use of theories that have universal validity. It also involves events that have already taken place and may be related to present conditions. Further, descriptive surveys are used to discover causal relationships (descriptive correlational), to provide precise quantitative description and to observe behavior.

#### **Research Population**

The target population included a total of 276 people with 55 financial manager, 55 chief accountants and 166 employees from Rwanda Revenue Authority and Energy Water and Sanitation Authority.

#### ***Sample Size***

The study used the SLOVEN'S FORMULA for determining the sample size.

$$\text{Formula to get sample: } n = \frac{N}{1 + N (0.05)^2}$$

Where n sample size

N = study population

0.05 = level of significance or margin of error.



The application of the formula in the previous section as shown below gives 164 respondents. The number of respondents of each category was determined by using legal of three simple.

**Table 1**

This table shows the number of respondents such as population and sample.

<b>Respondents</b>	<b>Population</b>	<b>Sample</b>
Rwanda Revenue Authority (RRA)	141	84
EWAS	135	80
<b>Total</b>	<b>276</b>	<b>164</b>

### ***Sampling Procedures***

The selection of the respondents sample size was based on the simple random sampling which is a type of sampling technique that allows researchers to collect data in which each element in the population has a known and equal probability of selection. This technique was convenient to achieve the research objectives because the respondents had the same chance to be in sample.

### **Research Instruments**

The research tools that were utilized in this study included the following: (1) face sheet to gather data on the respondents' demographic characteristics (gender, age, qualifications, number of years of experience, number of qualified accountant and number of licensed accountant); (2) researcher devised questionnaires to determine the extent of computerized accounting and the level of organization development. The response modes and scoring are as

follows: for computerized accounting and organization development are indicated as: strongly agree (4); agree (3); disagree (2); strongly disagree (1).

### ***Validity and Reliability of the Instruments***

Content validity ensured by subjecting the researcher devised questionnaires on computerized accounting and organization development to judgment by the content experts (who estimated the validity on the basis of their experience) such as associate professors (1) and senior lecturers (3) from the colleges of higher degrees and research.

The test-retest technique was used to determine the reliability (accuracy) of the researcher devised instruments to ten qualified respondents. These respondents were not included in the actual study. In this test- retest technique, the questionnaires was administered twice to the same subjects. If the test is reliable and the trait being measured is stable, the results were consistent and essentially the same in both times.

### **Data Gathering Procedures**

#### ***Before the administration of the questionnaires***

- An introduction letter was obtained from the School of Post Graduate Studies and Research for the researcher to solicit approval to conduct the study from respective heads of public institutions and obtained approval form to collect data.
- After approval, the researcher secured a list of the qualified respondents from the public institution in charge and selected through systematic random sampling from this list to arrive at the minimum sample size.

- The respondents were explained to about the study and were requested to sign the Informed Consent Form (Appendix 3).
- Reproduced more than enough questionnaires for distribution.
- Selected research assistants who assisted in the data collection; brief and orient them in order to be consistent in administering the questionnaires.

#### ***During the administration of the questionnaires***

- The respondents were requested to answer completely and not to leave any part of the questionnaires unanswered.
- The researcher and assistants emphasized retrieval of the questionnaires within three days from the date of distribution.
- On retrieval, all returned questionnaires were checked if all are answered.

#### ***After the administration of the questionnaires***

The data gathered were collated, encoded into the computer and statistically treated using the Statistical Package for Social Sciences (SPSS).

#### **Data Analysis**

The frequency and percentage distribution were used to determine the demographic characteristics of the respondents.

The mean and standard deviations were applied for the levels of computerized accounting and organization development. An item analysis illustrated the strengths and weaknesses based on the indicators in terms of mean and rank. From these strengths and weaknesses, the recommendations were derived.

The following values and interpretation were used to analyze the data obtain from the respondents.

<b>Mean Range</b>	<b>Response Mode</b>	<b>Interpretation</b>
3.26-4.00	Strongly Agree	Very Satisfactory
2.51-3.25	Agree	Satisfactory
1.76-2.50	Disagree	Fair
1.00-1.75	Strongly Disagree	Poor

A multiple correlation coefficient to test the hypothesis on correlation (Ho #1) at 0.05 level of significance using a t-test was employed. The regression analysis  $R^2$  (coefficient of determination) was computed to determine the influence of the independent variables on the dependent variable.

### **Ethical Considerations**

To ensure that ethics is practiced in this study as well as utmost confidentiality for the respondents and the data provided by them, the following were done: (1) coding of all questionnaires; (2) the respondents were requested to sign the informed consent; (3) authors mentioned in this study was acknowledged within the text, (4) findings shall be presented in a generalized manner.

### **Limitations of the study**

The threats to validity in this study were as follows:

1. Intervening or confounding variables which were beyond the researchers control such as honesty of the respondents and personal biases. To minimize such conditions, the researcher requested the respondents to be as honest as possible and to be impartial / unbiased when answering the questionnaires
2. The research environments were classified as uncontrolled settings where extraneous variables influenced on the data gathered such as comments from other respondents, anxiety, stress, motivation on the part of the respondents while on the process of answering the questionnaires. Although these were beyond the researcher's control, efforts were made to request the respondents to be as objectives as possible in answering the questionnaires.
3. Testing: the use of research assistants rendered inconsistencies such as differences in conditions and time when the data was obtained from respondents. This was minimized by orienting and briefing the research assistants on the data gathering procedures.
4. Instrumentation: The research instruments on resource availability and utilization are not standardized. Therefore a validity and reliability test was done to produce a credible measurement of the research variables.

## CHAPTER FOUR

### PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

#### Profile of the Respondents

Demographics can be defined as the physical characteristics of a population such as age, sex, marital status, education, geographical location and occupation. The socio-demographic characteristics measured in this research are sex, age, level of education, and experience.

**Table 2**  
**Demographic Information of the Respondents**

Background information	Category	Frequency	Percentage
Gender	Male	75	57.7
	Female	55	42.3
	<b>Total</b>	<b>130</b>	<b>100</b>
Age	Below 20	5	4
	20-30	35	27
	30-40	43	33
	40-50	29	14
	50-60	16	12
	Above 60	2	1.5
	<b>Total</b>	<b>130</b>	<b>100</b>
Education level	Certificate	12	9
	Diploma	43	33
	Bachelor	49	38
	Masters	19	15
	PhD	7	5
	<b>Total</b>	<b>130</b>	<b>100</b>
Experience	Less than a year	6	5
	1-2	36	32
	3-4	41	30
	5-6	42	32
	7 years and above	3	2
	<b>Total</b>	<b>130</b>	<b>100</b>

*Source: Field data, 2012*

The field data in Table 2 shows that out of 130 respondents chosen for the study, 75 of them were male (representing 57.7%) and 55 were female (representing 42.3%). The table shows a fair gender representation in the organizations, although females had a better representation as compared to the males.

Table 2 also indicates that the ages of the respondents were divided into six categories; (below 20, 20-30, 30-40, 40-50, 50-60 and above 60 years of age. Minority (5) of the respondents were below 20 years (representing 4%), 35 of the respondents were aged between 20-30 years (representing 27%). The majority of the respondents were aged between 30-40 years (representing 33%), 29 were aged between 40-50 years (representing 14%), 16 respondents were between 50-60 years (representing 12%) and the remaining 2 of the respondents were above 60 years of (representing 1.5%). These figures show that all the working age groups were considered when employing human resource in these two public institutions in Rwanda.

The respondents were asked of their academic qualifications. The results from the table 3 show that; 12 were certificate holders (representing 9%), 43 were diploma holders (representing 33%). The results further show that majority (49) of the respondents were bachelor's degree holders (representing 38%), 19 were Master's degree holders (representing 15%), 7 of the respondents were Ph.D. holders (representing 5%).

The information in Table 2 also considered working experience obtained by the respondents; that is to say the numbers of years

worked in the present positions of the respondents. The results showed that 6 of the respondents had worked for less than a year (representing 5%), 36 of the respondents (representing 32%) have at least 1-2 years working experience, 41 (representing 30%) have worked for 3-4 years, 42 have worked for 5-6 and more years (representing 32%), and rest of the three respondents have worked for more than 7 years (representing 2%). These results show that a majority of the respondents have worked between 3-4 years and more years in RRA and EWAS.

### **The Extent of Computerized Accounting in Selected Public Institution**

This sub section targets objective 2 of the study. The independent variable in this study was the extent of computerized accounting. The respondents were asked the on extent of computerized accounting in selected public institution. Responses were scaled ranging from 1-4; where 4=Very Good, 3=Good, 2=Fair and 1=Poor. The key to the rating is: Poor (1:00-1.75), Fair (1.76-2.50), Good (2.51-3.25), Very good (3.26-4.00). The responses were analysed using the mean computed through the SPSS program, and are shown in Table 4, below.



**Table 3**  
**The Extent of computerized Accounting in Selected Public Institution**

Category	Mean	Interpretation	Rank
Public institutions have programs and networks of modern communication	3.62	Very Good	1
Public institutions have enough databases	3.50	Very Good	2
Public institutions have enough computers that contribute to computerized accounting system	3.48	Very Good	3
The computerized accounting system is characterized by easiness of usage more than the manual system	3.36	Very Good	5
Public institutions have qualified staff in dealing with accounting system computerized	3.35	Very Good	4
Public institutions have qualified staff in dealing with accounting system	3.35	Very Good	6
Public institutions have qualified staffing programming	3.32	Very Good	7
The expected benefit obtained from applying a computerized accounting system	3.32	Very Good	8
The staffs that are working in the current system have sufficient experience	3.32	Very Good	9
Facilities for extracurricular and supplemental activities support of instruction are available	3.28	Very Good	10
The computerized accounting system provides easy reference and access to the information	3.25	Good	11
There are advantages of using computerized accounting in public organization	3.24	Good	12
Public institution provides training programs for human resource, using computerized accounting systems	3.22	Good	13
There are common problems that affect computerized accounting in organization	3.16	Good	14
The computerized accounting system is more flexible	3.12	Good	15
The managerial performance in the computerized accounting system assesses deviations of individuals	3.08	Good	16
Public institution had fair criteria to upgrade the employees, and giving them financial/moral incentives	2.98	Good	17
There are enough financial allocations	2.91	Good	18
Public institutions are seeking to achieve perfection	2.90	Good	19
The staffs that are working in the current system have the ability to use computer	2.89	Good	20
<b>Average mean</b>	<b>3.24</b>	<b>Good</b>	

*Source: Field data, 2012*

<b>Mean Range</b>	<b>Response Mode</b>	<b>Interpretation</b>	<b>Rank</b>
3.26-4.0	Strongly Agree	Very Good	4
2.51-3.25	Agree	Good	3
1.76-2.50	Disagree	Fair	2
1.00-1.75	Strongly Disagree	Poor	1

The results in Table 3 show the extent of computerized accounting in selected public institutions in Rwanda. On the extent of computerized accounting, majority of the respondents agreed that; public institutions have enough databases that contribute to the implementation of the computerized accounting system (mean 3.50); public institutions have programs and networks of modern communication (mean 3.62); public institutions have enough computers that contribute to the development of the computerized accounting system (mean 3.48); public institutions have qualified staff in dealing with computerized accounting system (mean 3.35). Furthermore, public institutions were found to be having qualified staff in programming and have a background in dealing with electronic programs (mean 3.32); public institutions have already implemented computerized accounting (mean 3.41).

The findings also show that due to use of computerized accounting in public institutions in Rwanda, there are advantages of using computerized accounting in public organization (mean 3.16); facilities for extracurricular and supplemental activities support of instruction are available (mean 3.28); public institution provides training programs for human resource, using computerized accounting systems (mean 3.22); public institutions are seeking to achieve

perfection through training courses for the staff in computerized accounting (mean 2.90).

In determining the level of computerized accounting in public institutions, the findings further show that many respondents agreed that; public institution had fair criteria to upgrade the employees, promotions and giving them financial and moral incentives (2.98); the staffs that are working in the current system have sufficient experience that keep pace with the computerized accounting system (mean 3.32); the staffs that are working in the current system have the ability to use computer (mean 2.89); there are enough financial allocations for the processing of building a modern network to receive the computerized accounting system (mean 2.91); the expected benefit obtained from applying a computerized accounting system is greater than the cost of obtaining it (mean 3.32); the managerial performance in the computerized accounting system assesses deviations of individuals better than manual system (mean 3.36); the computerized accounting system is characterized by easiness of usage more than the manual system (mean 3.08).

In addition, the results in Table 3 further reveal that; the computerized accounting system is more flexible than manual system (mean 3.12); and that the computerized accounting system provides easy reference and access to the information (mean 3.25). In general, the results in this research objective showed that the majority of the respondents agreed that computerized accounting is fully used by the two public institutions (Rwanda Revenue Authority and EWAS). This is represented by the high mean scores recorded in the study.

The higher means indicate that the respondents strongly agreed and agreed respectively with the services extent of adoption of computerized accounting in Rwanda public institutions. Public institutions were found but by the respondents to have programs and networks of modern communication (mean 3.62), and have enough databases that contribute to the implementation of the computerized accounting system (mean 3.50). The lower means on the other hand show low adoption of computerized accounting services in such a way that it found not to provide easy reference and access to the information (mean 3.12), and the computerized accounting system was not fully flexible (mean 3.12). Likewise, some public institutions are seeking to achieve perfection through training courses for the staff in computerized accounting (mean 2.90), and the staffs that are working in the current system have no sufficient experience that keep pacez with the computerized accounting system (mean 2.89).

### **The Level of Organization Development in Selected Public Institutions**

The dependent variable in this study was the level of organizational development. The third objective of the study was therefore to establish the level of organizational development in selected public institutions. The respondents here were asked to describe how computerized accounting contributes to organizational development in the two selected public institutions in Rwanda. The responses were analyzed using SPSS' summary statistics showing mean, interpretations and rank as shown below:

**Table 4**  
**The Level of Organization Development in Selected Public**  
**Institutions**

<b>Category</b>	<b>Mean</b>	<b>Interpretation</b>	<b>Rank</b>
Public institutions have workers in all levels	<b>3.55</b>	Very Good	1
The manpower in public institutions are annotative	<b>3.45</b>	Very Good	2
Public institutions all have reliable, fast/speedy, and fulltime internet connections	<b>3.45</b>	Very Good	3
Public institutions have qualified staffs to management computerized accounting	<b>3.44</b>	Very Good	4
The upward and downward communication between employees and employers	<b>3.42</b>	Very Good	5
Public institutions use computerized softwares for their accounting programmes	<b>3.41</b>	Very Good	6
The leadership norms of this organization help its progress	<b>3.38</b>	Very Good	7
Public institutions introduce new policies and procedures	<b>3.38</b>	Very Good	8
Public institutions provide training programmes for human resources using computerized accounting	<b>3.33</b>	Very Good	9
Power stabilizations gargets are used in public institutions to control power instabilities	<b>3.32</b>	Very Good	10
There many enough work workforce in public institutions in Rwanda	<b>3.30</b>	Very Good	11
Management of public institutions pay strict adherence to fulfillment of organizational aims	<b>3.30</b>	Very Good	12
Public institutions in Rwanda use computers to aid in their accounting tasks	<b>3.28</b>	Very Good	13
The workers understand the organizational objectives	<b>3.26</b>	Very Good	14
The workers aim at achieving organizational goals and objectives in public institutions	<b>3.24</b>	Good	15
Public institutions use networked computers to perform their daily accounting tasks	<b>3.12</b>	Good	16
The management of pubic institutions usually consult with employees before introducing policies	<b>2.36</b>	Fair	17
The hierarchical setting in public institutions is liked by both employees and management	<b>2.32</b>	Fair	18
There is a good management structure in public institutions	<b>2.28</b>	Fair	19
<b>Average Mean</b>	<b>3.12</b>	<b>Good</b>	

*Source: Field data, 2012*

Table 4 shows the level of organization development in selected public institutions and the majority of the respondents were found to have agreed with the contribution of computerized accounting in organizational development. On manpower, it is showed that public institutions have qualified staffs to management computerized accounting (mean 3.44); there many enough work workforce in public institutions in Rwanda (mean 3.30); public institutions have workers in all levels, right from skilled to unskilled manpower (mean 3.55); the manpower in public institutions are annotative enough and the able to work in dynamic work environment (mean 3.45); and that public institutions provide training programmes for human resources using computerized accounting (mean 3.33).

Furthermore, on the process of organizational development in public institutions in Rwanda, Table 4 shows that; the workers understand the organizational objectives and missions of public institutions (mean 3.26); the leadership norms of this organization help its progress (mean 3.38); public institutions introduce new policies and procedures that are easily adaptable by the employees (mean 3.38); management of public institutions pay strict adherence to fulfillment of organizational aims, and missions, and objectives (mean 3.30); and the workers aim at achieving organizational goals and objectives in public institutions (mean 3.24).

However, on how the organizational structure in public institutions affects organizational development, many of the respondents disagreed that; there is a good management structure in public institutions (mean 2.28); employees have good relationships with their employers in public institutions (mean 2.21); the upward and

downward communication between employees and employers in public institutions is favorable (mean 3.42); the hierarchical setting in public institutions is liked by both employees and management (mean 2.32); and that the management of public institutions usually consult with employees before introducing policies (mean 2.36).

On the contributions of technology on organizational development, Table 4 showed that; public institutions use networked computers to perform their daily accounting tasks (mean 3.12); public institutions all have reliable, fast/speedy, and fulltime internet connections which are used by accountants (mean 3.45); public institutions use computerized softwares for their accounting programmes (mean 3.41); public institutions in Rwanda use computers to aid in their accounting tasks (mean 3.28); and power stabilizations gargets are used in public institutions to control power instabilities and ensure unnecessary loss of data due network loss (mean 3.32).

According to the findings on the level of organization development in selected public institutions it was found that many respondents agreed that computerized accounting affects organizational development with exception of technology which was found not be affecting the organizational development in Rwanda Revenue Authority and EWAS which are the two selected public institutions of the study. The higher ranks like public institutions have workers in all levels, right from skilled to unskilled manpower (mean 3.35), the manpower in public institutions are annotative enough and the able to work in dynamic work environment (mean 3.45) were found to be higher than the hierarchical setting in public institutions is liked by both employees and management (mean 2.32), there is a good management structure in

public institutions (mean 2.28) because many respondents agreed with the services of public institutions but it does not determine the outcome of the performance of public institutions. Computerized accounting does not directly influence the performance of public institutions in Rwanda. The weak points show that the organizational structures of public institutions in Rwanda are very weak and this was shown by the weak means from the results. The organizational structure was found to be very bad (mean 2.28). The services are there but there is a problem in instituting these programs since the management/organizational structure is very weak.

#### **Significant Relationship between Computerized Accounting and the Level of Organizational Development in Public Institutions in Rwanda**

Research objective 4 sought to establish if there is a significant relationship between the level of computerized accounting and the extent of organizational development in selected public institutions in Rwanda. It was hypothesized that the two variables are not significantly correlated. To test the hypothesis, Pearson's Linear Coefficient was used. Summary of r-value of those variables are presented in table 5.



**Table 5**  
**Pearson's Linear Correlation Coefficient for Level of**  
**Computerized accounting and extent of organizational**  
**development**

		<b>Level of Computerized accounting</b>	<b>Organizational development</b>	<b>Interpretation</b>	<b>Decision on Ho</b>
Computerized accounting	Pearson Correlation	1	.257	Significant	Rejected
	Sig.		.000		
Organizational development	Pearson Correlation	.265	1		
	Sig.	.000			

*Source: Field data, 2012*

Table 5 above shows the Pearson's Linear Correlation Coefficient for Level of computerized accounting and the extent of organizational development and it was revealed that; there is a significant positive relationship between the level of computerized accounting and the extent of organizational development in public institutions in Rwanda. For example, level of computerized accounting is significantly correlated with the extent of organizational development ( $r=0.257$ ,  $\text{sig}=0.000$ ). Basing on these results, since the sig. value (0.000) was less than 0.05 which is the minimum required level of significance in social sciences, there is a significant relationship between the level of computerized accounting and the extent of organizational development

in Rwanda Revenue Authority and EWAS which are the two selected public institutions in Rwanda

**Table 6**  
**Regression Analysis between the Dependent and Independent Variables**

<b>Variables Regressed</b>	<b>Computed F-Value</b>	<b>R<sup>2</sup></b>	<b>Interpretation</b>	<b>Decision on Ho</b>
1.Computerized accounting 2.Organizational development	0.242	0.017	Significant effect	<b>Rejected</b>

From The Table 6, it is clear that ( $R^2=0.017$ ) of the dependent variable is explained by the independent variable. The model is significant ( $F=0.242$ ,  $P=0.017$ ). The study concludes that there is a significant correlation at  $P=0.017$  which is less than 0.05, leading to a conclusion that computerized accounting affects organizational development in Rwanda Revenue Authority and EWAS which are the two public institutions for this study. The results further suggested that computerized accounting directly affect organizational development in Rwanda Revenue Authority (RRA) and in EWAS.

## **CHAPTER FIVE**

### **FINDINGS, CONCLUSIONS, RECOMMENDATIONS**

This chapter dealt with the findings, conclusions and recommendations of the study.

#### **FINDINGS**

##### **Profile of Respondents**

On the demographic profiles of the respondents in terms of gender, the study found that the majority of the respondents were males 57.7% while 42.3% were female, meaning there was a fair gender representation in the organizations involved in the study. On respondents' age, the study revealed that minority (4%) of the respondents were below 20 years, 27% of the respondents were aged between 20-30 years. The majority (33%) of the respondents were aged between 30-40 years, 14% were aged between 40-50 years, 12% respondents were between 50-60 years and the remaining 2% of the respondents were above 60 years of age. These figures show that all the working age groups were considered when employing human resource in these two public institutions in Rwanda.

The findings also show that 33% were certificate holders (representing 9%), 43 were diploma holders. The results further show that majority (38%) of the respondents were bachelor's degree holders, 15% were Master's degree holders, and 5% of the respondents were Ph.D. holders. The study also investigated the working experience of the respondents and the findings revealed that; 5% of the respondents had worked for less than a year, 32% of the respondents have at least 1-2 years working experience, 30% have

worked for 3-4 years, 32% have worked for 5-6 and more years, and 2% of the three respondents have worked for more than 7 years. These results show that a majority of the respondents have worked between 3-4 years and more years in RRA and EWAS.

### **The Extent of Computerized Accounting**

On the extent of computerized accounting in selected public institutions in Rwanda, majority of the respondents agreed that computerized accounting has been adopted in Rwanda Revenue Authority and EWAS and that the use of computerized accounting is high in these institutions. The findings generally showed that the respondents agreed that computerized accounting is fully used by the two public institutions (Rwanda Revenue Authority and EWAS). This is represented by the high mean scores recorded in the study.

### **The Level of Organization Development**

On the level of organization development in selected public institutions, the majority of the respondents were found to have agreed with the contribution of computerized accounting in organizational development. The level of organization development in selected public institutions was found to be high as recorded by high means that many respondents agreed that computerized accounting affects organizational development with exception of technology which was found not to be affecting the organizational development in Rwanda Revenue Authority and EWAS which are the two selected public institutions of the study.

### **Significant Relationship between Computerized Accounting and the Level of Organizational Development in Public Institutions in Rwanda**

On the significant relationship between computerized accounting and organizational development, the study finding reveal that there is significance at the 0.05 level of significance, that computerized accounting affects organizational development in Rwanda Revenue Authority and EWAS which are the two public institutions for this study. The results further suggested that computerized accounting directly affect organizational development in Rwanda Revenue Authority (RRA) and in EWAS. The findings reveal that computerized accounting influences organizational development in the selected public institutions in Rwanda.

### **CONCLUSIONS**

Based on the study findings presented, the following conclusions were drawn;

On the respondents' profile, the study concluded that the majority of the respondents were males 57.7% while 42.3% were female. On respondents' age, the study revealed that minority (4%) of the respondents were below 20 years, 27% of the respondents were aged between 20-30 years. The majority (33%) of the respondents were aged between 30-40 years, 14% were aged between 40-50 years, 12% respondents were between 50-60 years and the remaining 2% of the respondents were above 60 years of age. On academic qualifications of the respondents, the study concluded that 33% were certificate holders (representing 9%), 43 were diploma holders. The results further show that majority (38%) of the respondents were bachelor's degree holders, 15% were Master's degree holders, and 5%

of the respondents were Ph.D. holders. The study also investigated the working experience of the respondents and the study concluded; 5% of the respondents had worked for less than a year, 32% of the respondents have at least 1-2 years working experience, 30% have worked for 3-4 years, 32% have worked for 5-6 and more years, and 2% of the three respondents have worked for more than 7 years. The study concluded that the majority of the respondents have worked between 3-4 years and more years in RRA and EWAS.

On the extent of computerized accounting in selected public institutions in Rwanda, the study concluded that computerized accounting has been adopted in Rwanda Revenue Authority and EWAS and that the use of computerized accounting is high in these institutions. The study concluded that computerized accounting is fully used by the two public institutions (Rwanda Revenue Authority and EWAS).

On the level of organization development in selected public institutions, the study concluded that the level of organization development in selected public institutions is hence leading to a conclusion that computerized accounting affects organizational development.

On the significant relationship between computerized accounting and organizational development, the study concluded that that there is a significant relationship between computerized accounting and organizational development because computerized accounting affects organizational development in Rwanda Revenue Authority and EWAS

which are the two public institutions for this study, the hypothesis was rejected.

In testing the hypothesis, the Rogers' Theory of Innovation Diffusion was proven to be applicable in this study since the adoption of accounting software as the innovation, the software are perceived better than the predecessor system (most likely a manual accounting system); must be consistent with the needs of the adopter; must be easy to learn and use; must have apparent results; and the accounting software must be available on a trial basis. Diffusion of Innovations theory therefore explained how, why, and at what rate new ideas and technology spread through RRA and EWAS.

### **RECOMMENDATIONS**

The following are suggested in view of the finding;

On the respondents' profile, the study recommends that there should be equal gender representation when employing human resource in public institutions in Rwanda. This because the study found the majority of the respondents was males 57.7% while 42.3% were females. Similarly, different ages, should be considered while employing labor in public institutions in Rwanda because the majority (33%) of the respondents were aged between 30-40 years and the minority (4%) of the respondents were below 20 years, 27% of the respondents were aged between 20-30 years.

Furthermore, on the extent of computerized accounting in selected public institutions in Rwanda, the study recommends that more has to be done on the adoption and use of computerized accounting in Rwanda Revenue Authority and EWAS although

preliminary findings already show that the use of computerized accounting is high in these institutions.

In addition, on the level of organization development in selected public institutions, the study recommends that although computerized accounting affects organizational development, more has to be especially on technology which was found to be poor.

Finally, on the there should be a direct significant relationship between computerized accounting and organizational development because the study found that to some extent, there is a significant relationship between computerized accounting and organizational development because computerized accounting affects organizational development in Rwanda Revenue Authority and EWAS which are the two public institutions for this study. This extent cannot be conclusive to the study since computerized accounting should directly affect organizational development in public institutions in Rwanda.

### **Areas for Further Research**

Given the findings of the study, the researcher suggests that further research be done on computerized accounting and management performance in public institutions in Rwanda.

Furthermore the research ought to be done on the efficacy of computerized accounting on organizational performance.



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**OFFICE OF THE COORDINATOR, BUSINESS AND MANAGEMENT  
COLLEGE OF HIGHER DEGREES AND RESEARCH (CHDR)**

**RE: REQUEST FOR TWATSINZE DUSEMIGENA ADELARD  
MBA/31725/102/DUTO CONDUCT RESEARCH IN YOUR ORGANIZATION**

The above mentioned is a bonafide student of Kampala International University pursuing a Masters of Business Administration (Finance and Accounting)

He is currently conducting a field research of which the title is **"The Computerized Accounting and Organization Development in Selected Public Institution in Kigali, Rwanda."**

Your organization has been identified as a valuable source of information pertaining to his research project. The purpose of this letter is to request you to avail him with the pertinent information he may need.

Any information shared with him from your organization shall be treated with utmost confidentiality.

Any assistance rendered to him will be highly appreciated.



**Business and Management, (CHDR)**