

**CHALLENGES TO COMPUTERIZED ACCOUNTING SYSTEM  
SOFTWARE-IBEX IMPLEMENTATION IN DAWRO ZONE  
FINANCE AND ECONOMIC DEVELOPMENT OFFICES**

**A Thesis submitted to the school of graduate studies of Jimma  
University in a partial fulfillment of the requirements for the award of  
the degree of Masters of Accounting and Finance (M.Sc.)**

By:

**ABRHAM AKALU ALODE**



**JIMMA UNIVERSITY  
MSC PROGRAM**

**November, 2016  
JIMMA, Ethiopia**

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Under the guidance of:

Deresse Mersha (Ph.D)

Amina Ahmed (M.Sc)



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**JIMMA UNIVERSITY  
COLLEGE OF BUSINESS AND ECONOMICS  
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**Jimma University**  
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**Board of Examiners Thesis**  
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**November, 2016**  
**JIMMA, Ethiopia**

# DECLARATION

I hereby declare that this thesis entitled "*Challenges to Computerized Accounting System software –IBEX implementation in Dawro Zone Finance and Economic Development Offices*", has been carried out by me under the guidance and supervision of Deresse Mersha (Ph.D) and W/ro Amina Ahmed.

The thesis is original and has not been submitted for the award of any degree or diploma to any university or institution.

Researcher's Name

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Signature

Abrham Akalu

26/11/2016

\_\_\_\_\_.

## **CERTIFICATE**

This is to certify that the thesis entitles "*Challenges to Computerized Accounting System software-IBEX implementation in Dawro Zone Finance and Economic Development Offices*", submitted to Jimma University for the award of the degree of Master of Science (MSC) and is a record of authentic research work carried out by Abraham Akalu Alode, Under our guidance and supervision.

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26/10/2016

## **Abstract**

*Computerized Accounting System has become the backbone of almost every organization and Computerized Accounting System software is crucial for Accountancy. Efficient computerized accounting system software enhances individuals, firms or public businesses by helping to reach their goals and to maximize profits in a systematic way effectively. The study was undertaken with the objectives to assess the challenges in computerized accounting system software -IBEX faced by DZFEDOs. The study was also conducted by the use of descriptive research design; and its sampling technique was purposive sampling technique and the sample size was 96 from 234 office workers. The data were collected from one zonal office, five wereda's and one town administration Finance and Economic Development offices by questionnaire and the study used both questionnaire and interview. The respondents were officers; accountants in the accounting department, auditors and ICT support core process. The study used SPSS v.20 to analyze the descriptive statistics compare means like ANOVAs test and non parametric statistical measures such as Pearson chi-square test for relationship between and among the distribution. The survey pointed out that the study area offices were implemented IBEX at good condition, the main challenges in computerized accounting system software-IBEX were power failure, lack of skilled man power and lack of supervision; the effects for IBEX error in work experience and age group as explained by statistically significant mean scores 95% confidence interval. The study also wrapping up on the bases of the interpretations and provide constructive suggestion that would help the concerned officers to undertake measures for the improvement of computerized accounting system software-IBEX in the DZFEDOs and training is one of the key issue to fill the skill gap, failure in power will be solved by power saving in UPS and lack of supervision need critical follow up in offices and the future study will solve same problem.*

**Key words:** *Computerized Accounting system, CASS, IBEX, Implementation, DZFEDOs.*

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May God bless you all!

## **Acronyms and Abbreviations**

<b>AAA</b>	American Accounting Association
<b>ASB</b>	Accounting Standard Board
<b>BDA</b>	Budget Disbursement and Account
<b>BIS</b>	Budget Information System
<b>BOFED</b>	Bureau of Finance and Economic Development
<b>CAS</b>	Computerized Accounting System
<b>CASS</b>	Computerized Accounting System Software
<b>DSA</b>	Decentralization Support Activity
<b>DZFEDOs</b>	Dawro Zone Finance and Economic Development Offices
<b>IBEX</b>	Integrated Budget and Expenditure System
<b>ICT</b>	Information Communication Technology
<b>IFMS</b>	Integrated Financial Management System
<b>IMA</b>	Institute of Management Accountant
<b>IMS</b>	International Management Standard
<b>MAS</b>	Manual Accounting System
<b>MOFED</b>	Ministry of Finance and Economic Development
<b>SNNPR</b>	Southern Nation's Nationality and People Region
<b>SPSS</b>	Statistical Package for Social Science
<b>UPS</b>	Uninterrupting Power Supply



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# **CHAPTER ONE**

## **INTRODUCTION**

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

Information technology has existed almost at every stage of human existence but being reflected differently at each stage (Haigh, 2011). The use of computer technology has made a tremendous global impact in all sectors of life and has made a huge transformation particularly in the way of doing business both within and across countries. Since 1950's when information storage and processing using computers started, it became easier and quicker to handle massive data and produce more accurate and timely reports (Kharuddin, 2010). Since then, most organizations have been changing their ways of transacting business to increase their levels of profitability (Elliot, 1992; Fisher et al., 2000). The evolution of computer technology has completely transformed accounting systems, and studies have shown that financial outcome of a firm will always depend on how much one invests and improves the computerized accounting system being used (Imeokparia, 2013). In the area of accounting and finance, the use of manual financial reporting has been replaced by the use of computer software's to enable quick reporting and easy processing and storage of financial information, hence due to facilitation of accounting software's, preparation and access of financial statements and use of accounting procedures has been made easy (Kharuddin, 2010). In the current business world, failure to use computer software almost implies that financial information may not be accurate, delays in financial reporting, and that financial information may not be stored for a long time.

Accounting is an essential part of any business, large or small owners, profit making or not for profit organizations. Many small enterprises do their accounting manually and they are satisfied. Others may be considering using a computerized system, since accounting software is much affordable. Manual and computerized accounting systems perform basically the same processes, the accounting principles and concepts are the same with differences lying in the technicalities of the process. Although computerized

accounting system is expensive, its advantages lie on speed and being able to store information.

According to Saleh (2011), CAS assists a company to conduct its operations and activities as well as provides information to the variety interest of users. It is seen as the combination of technology and human interaction that could be employed by small business companies to achieve an efficient and excellent operation. Accountants role are crucial in decision making process associated with CAS and it helps to ease the accountant's task of record keeping for which computerized accounting and accounts management were more customized. Thus, CAS contributed to accuracy of information and time efficiency which in turn, leads to cost efficiency. Revolution of information technology has increase the accounting efficiencies since CAS base software made things smarter and cost effective, aligned with the government's target to have better records and ultimately improving the business management.

In Ethiopia context, currently the government uses *Integrated Budget and Expenditures system-IBEX* for tracking revenues and expenditures of all federal and regional budgetary institutions. This IBEX software capture the accounts module records the financial transactions of the budgetary institutions and their aggregated monthly accounting reports and provides accounting reports for ledgers, financial statements, management reports, transactions, expenditures, and revenues. Further, at federal level Ministry of Finance and Economic Development (MOFED) has been consolidating the budget and accounting data for the entire country. This allows for the generation of regional and national consolidated report according to MOFED manual, 2016.

In addition, Asegid,(2015) assured that at Ministry of Finance and Economic Development, public treasury functions associated with cash management and disbursing funds between public financial institutions captured using IBEX system. Hence, this study therefore, assess whether the existing IBEX enhance budgeting and financial management, the extent to which the information system provide, timely quality and

adequate information, and the adequacy of computers for undertaking budgeting and financial management practices.

In this regard, the researcher assume that the Finance and Economic Development Bureau has the great role for serving the society due to economic, social and political benefits; nowadays computerized Accounting System software-IBEX is one of the pillar in Ministry of Finance and Economic Development to enhance the flow of information and networking the system works as the researcher had evaluated from the past experience of working in the zonal level.

## 1.2 Background of the study area

The study area, Dawro Zone, is one of the 14 zonal administrations in SNNPRS which was established in 1993 E.C. and covers a total area of 4436.7 sq. km. It lies between 6.59-7.34 latitude and 36.68 to 37.52 longitudes, with an elevation ranging 501-3000 meters above sea level. This zone has 5 “woredas” (Viz. Essera, Gena Bosa, Loma, Mareka and Tocha) and one town administration (Tarcha Town Administration) that all comprise a total population of 588,499 (Dawro Zone Finance and Economic Development Department information and statistical abstract core process report, 2016).

DZFEDOs are one of Government office’s, which is rendering services for public purpose. These offices are playing an important role in their local governmental structure and make financial and economic stability for the mentioned zonal society. Offices have the same mission, vision and values commonly to achieve the goals.

## 1.3 Statement of the problem

The aim of bookkeeping through computerized accounting system is to hold better records, efficient book management, to avoid more errors and ultimately improving the management of their business (Musa and Ahmed, 2006).

Rezaee and Reinstein (1998) argued that Computerized Accounting System has made inputting information for transactions and events more simple and evaluating the related controls and results more critical. Computerized Accounting System increases the accuracy and speed of transaction processing, and can even lead to competitive advantages for many organizations in terms of operation efficiency, cost saving and reduction of human errors (Cannon and Crowe, 2004).

Furthermore, computerized accounting systems ease auditing and have better access to required information such as cheque numbers, payments, and other transactions which help to reduce the time needed to provide this type of information and documentation during auditing. In recent decades many organizations have started to adopt the computerized accounting system due to its significance and to cope with technological changes. Some of the organizations deploying this system include; Nigeria public sector organizations, Saudi organizations, Malaysia public sector organizations, Tanzania public sector organizations and Tanzania investment Bank according to McBride (2000).

As per researcher point of view, the offices have frequently experienced late and inaccurate financial reports; this resulted in the offices loss of current information, high financial loss, and lack of transparency among others are common features. By means of related to integrated budget and expenditure system works for arrangement and interpretation of the relevant information to specific users, decision-making and optimization of resource allocation there is a skill gap.

All these could be make delay in the offices IBEX implementation to end users. To overcome the above inefficiencies, the BOFED and MOFED have offered training to the staff in the accounting and procurement, and public financial management core process and especially in accounting skills offering more benefits to encourage employees.

However, the offices have continuously faced a problem of delayed and passive response on processing financial information needed to facilitate decision making, planning and evaluating the performance of the offices according to the internal auditor's report 2015.

If this problem continues, the offices may practice financial losses arising due to poor financial decisions that are made based on inexact and obsolete financial information. Therefore, there is a need for a study to how practically done, identify the challenges and investigate the effects to computerized accounting system software- integrated budget and expenditure system in the offices.

## 1.4 Research questions

Based on what has been mentioned previously, the problem of the study lies in investigating and identifying the challenges to computerized accounting system software-IBEX through answering the following questions:

- 1) How does computerized accounting system software-IBEX being practiced at Dawro Zone Finance and Economic Development Offices?
- 2) What are the challenges of computerized accounting system software-IBEX implementation in DZFEDOs?
- 3) What effect does computerized accounting system software -IBEX have on the process of financial information?

## 1.5. Objectives of the Study

### 1.5.1. General objective:

The main objective of this study is to assess the challenges of computerized accounting system software-IBEX implementation in Dawro zone finance and economic development offices.

### 1.5.2. Specific objectives

- a) To assess the practice of computerized accounting system software- IBEX at the DZFEDOs.
- b) To identify the major challenges of CASS-IBEX implementation at DZFEDOs.
- c) To investigate the effects of computerized accounting system software - IBEX on processing financial information at DZFEDOs.



## 1.6 Scope and limitation of the Study

The study was carried out at SNNPR, Dawro zone, Zone Finance and Economic Development department, 5 weredas and Tarcha town administration offices. The researcher had investigated the computerized accounting system software-IBEX and how the system helped to get financial information's in DZFEDOs.

The study was limited to the challenges of computerized accounting system software - IBEX due to the fact that the study is confined to in Dawro zone offices, since it should include wider range of the other zonal level and also there would have limited number of sophistications CASS (computerized accounting system software)-IBEX user in the study area, which are implementing the Computerized Accounting System Software-IBEX. The other limitation is shortage of related literature review in Ethiopian context in this area. Though its introduction nature in Ethiopian context, it was enabled to be complete without compromising its quality through uninterrupted effort from the side of the researcher.

## 1.7 Significance of the study

The study will help the DZFEDOs to know what was wrong in the office's computerized accounting system software –IBEX and to decide on the best solutions to overcome such challenges. And it will help the DZFEDOs to evaluate the reliance on the computerized accounting system software-IBEX by processing to get financial information to achieve the goals at DZFEDOs. Besides, the study will establish the relevance of computerized accounting system software –IBEX and its effect on financial information at DZFEDOs. The study will use by other researchers when doing research on the similar problems and it will support the researcher get more knowledge about computerized accounting system software –IBEX and its implementation.

Furthermore, it will be help similar offices and other interested parties to examine the contribution of computerized accounting system software in relation to financial information.

## 1.8 Organization of the Report

This research report has five chapters. The initial chapter of the research report deals with introductory parts of the study that comprises background, problem statement, research questions, and objectives of the study, its significance, scope and limitations. The second chapter presents the literature review. Chapter three is the methodology part and shows the research design and methods and tools used to approach the problem. The fourth chapter is about data analysis, discussion and interpretation of the results. Finally, the last fifth chapter concludes the report and forwarded feasible.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0. Introduction**

The computerized accounting system is thus essential in providing reliable, relevant, significant and useful information for the users of financial data (Kalcinskaite, 2009). Organizations especially those in the government sector, in order to survive in the changing environment, have to emerge with good computerized accounting system that can contribute to financial reporting provision.

In Ethiopia, before the introduction of computerized system of accounting, the manual systems were inaccurate and inconsistent for many organization needs especially reporting of financial information. This is because the system was associated with errors since data was collected, analyzed, journalized and a trial balance and balance sheet prepared (Indira, 2008).

#### **2.1 Theoretical literature**

In simple saying Accounting is a language of business as many scholars agreed. It is used in the business world to describe financial transactions entered into by all kinds of organizations. Accounting is defined as a discipline which records, classifies summaries and interprets financial information about activities of a concern so that intelligent decision can be made about a concern.

Accounting Association of America (AAA) defines accounting as the process of identifying, measuring and communicating economic information to permit informed judgments and decisions by the users of information (Larson, 1998).

### **2.1.1 Information system**

It refers to the systematic manner of tool for handling and transmitting information within an organization. An information system is the combination of people, facilities, technology, media, procedures and controls that are intended to maintain essential communication process, certain routine types of transmission and other external and internal events. Information system is therefore a set of interrelated components that collect, process, store and distribute information to support decision making, coordination and control in an organization. Imeokparia, L. (2013).

### **2.1.2 Manual versus Computerized accounting system**

(Weber, 2011) emphasizes that every company applies accounting because it is generally accepted that companies have to reveal certain financial and management information to the government and public users and of course because accounting is an indispensable tool in business decision-making process, it has led to the development of information technologies and many computer products (software in terms of accounting packages) that make accounting as easy as ABC for those who use them. From this point accounting can be divided into two basic categories: those which apply manual accounting and those which prefer computerized accounting systems. This topic therefore targets the main features of manual and computerized accounting, their benefits and shortcomings, and their comparison.

Computerized accounting has been defined by (Alan & Frank, 2005), as a total suit of components that together comprises all inputs, storage, transactions, processing, collecting and reporting of financial transaction data, manual accounting on the other hand implies that employees perform the whole accounting cycle manually on a periodic basis: they calculate trial balances, journalize transactions, prepare financial statement reports and other routines.

Whether manual or computerized, accounting in itself is known to have a cycle that includes the following steps: journalizing the transactions, posting them to ledger accounts, preparing trial balance, making adjustment entries, preparing adjusted to end-of-period trial balance, preparing financial statements and appropriate disclosures, journalizing and posting the closing entries, and preparing after-closing trial balance at last(Weber, 2011).

Manual accounting uses several paper ledgers and journals where accountants record financial information. The general ledger includes miscellaneous transactions and the aggregate balance of all subsidiary ledgers and journals. Whereas Manual accounting is very detailed, since accountants must carefully enter information into physical books, Computerized accounting uses software programs designed from traditional manual accounting systems and involves the use of computers, spreadsheets and programs designed to record and report financial information electronically (Osmond, 2011).

### **2.1.3 Computerized accounting system**

It should be noted that Computerized Accounting Systems (CAS) and Information Technology (IT) - based Accounting Systems mean one and the same thing. Both of these will be used interchangeably in this research paper. Computerized Accounting System is the system of records a business keeps maintaining its accounting system. This includes the purchase, sales, and other financial processes of the business. The purpose of CAS is to accumulate data and provide decision makers (investors, creditors, and managers) with information to make decisions. While this was previously a paper-based process, most modern businesses now use accounting software such as Sage, Peachtree, and Pegasus etc.

According to Lanier (1992), an IT- based accounting system is a set of organized procedures used to collect and record accounting data with the use of Accounting is an important part of every private company and governmental organization. Businesses are required to keep books on their credits and debits.

(Marivic,2009) described a computerized accounting system as a method or scheme by which financial information on business transactions are recorded, organized, summarized, analyzed, interpreted and communicated to stakeholders through the use of computers and computer based systems such as accounting packages. Marivic emphasized that it's a mechanized process of facilitating financial information inflows as well as the automation of accounting tasks such as database recording and report generation.

Marivic added that keeping accurate accounting records is a vital part of any organization. Apart from helping it to keep its float financially and legal, it is a requirement of funding bodies or donors. However, computerized accounting system involves the use of computers to handle large volume of data with speed, efficiency and accuracy aimed at overcoming fundamental challenges which do not change the principle. The principle of accounting remains the limitations of many accounting and hence producing quality and reliable work.

(McRae, 1998) adds that computerized accounting systems are advantageous in consolidating information channels meaning that files that were previously been duplicated by several departments will now be consolidated into single file. A computerized accounting system is a delivery system of accounting information for purpose such as providing reliable accounting information to users (Nash and Hearly, 2003). Computerization of system can certainly help in minimizing some errors when preparing accounting records.

Mc Rae added that computerized systems are advantageous in consolidating information channels meaning that files which had previously been duplicated by several departments are now consolidated into a single file. A computerized accounting system is a system that uses computers to input, process, store and output accounting information in form of financial reports. It records all transactions that routinely deal with the events that affect the financial position and performance of the entity.

Computerized accounting system (CAS) refers to the integration of different component systems to produce computer books of accounts and computer-generated accounting records and documents. Computerized accounting system involves the use of computers to handle large volumes of data with speed and efficiency aimed at overcoming physical limitations of manual accounting and producing quality reports.

### **2.1.3.1 Computerized Accounting System Software- IBEX**

IBEX is financial software developed for the Ministry of Finance and Economic Development.

According to MOFED manual, IBEX is intended to meet the government policy of implementing the accounts and budget reforms nation-wide and use the new Information Communications Technology (ICT) infrastructure. Briefly, IBEX automates public financial management and fiscal devolution of financial management to the level of local government.

It combines what were two previously separate applications called Budget Information System (BIS) and Budget, Disbursement and Accounts (BDA). It is access through a web browser such as Internet Explorer and deployed in two configurations:

1. *Server* – The distributed configurations exists as a multi-user IBEX system that will be installed in centralized location (usually the regional financial center) and will serve browsed-based application to all clients that are connected to the server on LAN network.

2. *Standalone* – Replace the non-networked installation of BIS/BDA systems as replacement to the BIS/BDA desktop application. IBEX and BIS/BDA coexists BIS/BDA as standalone versions

#### ***Status of Usage in MOFED***

Since 1998 E.C(2006 G.C) IBEX (Integrated Budget and Expenditure System) has begun its operation by the budget module then after the other 5 modules added to the system i.e. Accounts, accounts consolidation, budget control, budget adjustment, disbursement.

IBEX has now been implemented and is use in all regions (We have 11 Regions). BOFED users connect to IBEX using the local BOFED LAN. Users at Zones and Weredas connect to IBEX via:

- ✚ ETC's Terrestrial Network (Leased Line)
- ✚ Woreda Net VSAT network
- ✚ Local IBEX standalone installations (Zones and Federal Public Bodies only)
- ✚ Standalone installations will use data migration utilities to synchronize their data with the BOFED IBEX server found at MoFED / Federal, Budget, Accounts and Disbursement in MoFED and it is implemented in 165 Federal Reporting Unit.

The IBEX system developed under the DSA project of Harvard University together with six Ethiopian IT Engineers and other American IT experts. Around 4 million USD deployed to establish the system and the sources are from: Irish AID for upgrading some of the module for IBEX 2, the PBS-II fund, government treasury, USAID, and Harvard University.

Before the starting of IBEX, BIS was a supportive software for MOFED as (Emiru Dibaba, 2014) his assessment of IBEX implementation in east Wollega zone study. Emiru elaborated that BIS was a computer application that captures government budget data at the lowest level i.e., from budget submission forms of public bodies, and produce reports that are required at the different levels of the government budget preparation process whereas BDA used to record government financial transactions including all items of expenditure, revenue, disbursements and budget adjustments. The BDA produces reports used in the day-to-day management of government accounts and yearly accounts closing procedures. The BIS and BDA applications had currently been rolled out to all zones in the four largest regions in Ethiopia, namely Tigray, SNNP, Amhara, Oromia, as well as Benishangul/Gumuz, Addis Ababa and the federal government (IBEX Executive summary, 2005).

The application was managing approximately ninety five percent of all public expenditure (IBEX Executive Summary, 2004).The project was providing technical



assistance to the Government of Ethiopia in the areas of expenditure planning, budgeting and accounting reform (Brief on status of DSA IT System, 2005). In the evolution of assistance, DSA had acquired government financial management systems to continue with technical assistance that supported greater financial reform. In September 2003, the DSA Project conducted an externally-led assessment of the BIS and BDA systems in Ethiopian finance and economic development office.

(Emiru, 2014) in his assessment concluded that overall the information systems developed met user requirements and, in areas in which they had been implemented, greatly improved the efficiency and quality of the budget and accounts processes. The result of the assessment of the existing automated systems was the design of an upgraded financial management information system that provided a more tough and integrated solution for the automation of current and future financial reform procedures. This was the basis of developing the integrated budget and expenditure system (IBEX) platform, which is now actively operating in Ethiopia Finance and Economic Development office and other government sectors those who have finance and accounting departments (MOFED, 2010).

(Emiru, 2014) added that IBEX represents a truly integrated financial management system that addresses the core functions of financial management (Budgeting, Accounting and Disbursements) in the short term, and is flexible enough to allow for the inclusion of non-core functions in the future. Unlike BDA and BIS, IBEX is an integrated application that used to perform budget processing, budget controlling activities, transaction registers, activities of budget transfer and supplement and finally generates necessary reports.

In all regions of Ethiopia, since 2006 IBEX has begun its operation with the modules of Administration, Accounts, Accounts Consolidation, Budget Control, Budget Adjustment and Disbursement (MOFED, 2010).

In all zones of SNNP region, including Dawro Zone, IBEX is on operation with the modules of Account, Budget Control and Budget Adjustment in order to serve their potential customers at zonal, wereda and town administration offices as I have observed currently in my local. The following figure showed the payroll system in BOFED.

#### **2.1.4 Benefits of Computerized Accounting System**

According to (McBride,2000), computerized packages can quickly generate all types of reports needed by management for instance budget analysis and variance analysis. Data processing and analysis are faster and more accurate which meets the managers need for accurate and timely information for decision making.

(Frank wood,1999) consented to the speed with which accounting is done and further added that a computerized accounting system can retrieve balance sheets, income statement or other accounting reports at any moment. He consented that computerized accounting system allow managers to easily identify and solve problems instantly.

(Indira,2008) pronounced the improvement in business performance as a result computerization of the accounting systems as it is a highly integrated application that transforms the business processes with the performance enhancing features which encompass accounting, inventory control, reporting and statutory processes.

Indira then says, this helps the company access information faster and takes quicker decisions as it also enhances communication.

McBride stated that managers cannot easily satisfy statutory and donor reporting requirements such as profit and loss account, balance sheet and customized reporting without using computerized accounting systems. With the system in place, this can be done quickly and with less effort. Computerized accounting systems ease auditing and have better access to required information such as check numbers, payments, and other transactions which help to reduce the time needed to provide this type of information and documentation during auditing.

According to (Carol, 2002), it is easy to do accounting functions using computerized accounting systems. Posting transactions to the ledger, the principle of double entry can largely be automated when done through the use of computerized accounting system.

(Meigs, 1986) stresses that risk of improper human intervention with the computer programs and computer files. Employees in the organization may temper with the computer programs and computer based records for the purpose of deliberately falsifying accounting information. This may result into distortion of information that would essential be for decision making.

### **2.1.5 Challenges of Computerized Accounting System Software -IBEX.**

Despite the numerous benefits of accounting information Systems that can be listed they are not without challenges. As the scholars view the following challenges are crucial.

#### **2.1.5.1 System failure**

One of the accounting information system challenges is system failure. When the computers work with their program, the system failure has been encountered in practices. The next key points are Causes of System Failure pointed out by (William, 1989) in Poor development practices, incorrect assumptions with regard to system requirements, poor user interface, faulty hardware, inadequate user training/ user error, Poor fit between systems and organization (Travis,1999).

#### **2.1.5.2 Power Failure**

(S. NORA, 1981) stated that, dealing with accounting programs, you should consider electrical power as a major limitation of the system. Without electricity, most small-business accounting systems are useless, that means no data can be input or reports generated. Any electrical fluctuation can have a negative impact on accounting data, deleting information and creating confusion. Another consideration that limits the usage of accounting systems is the network where the program may live in. If the computer

network is not properly set up, the software cannot be accessed and cannot be utilized. Most organizations are faced with frequent power failure that slows the rate at which operations are executed in organizations. This leads to loss of data hence taking more time to be retrieved.

### **2.1.5.3. Computer Virus**

The major stressing challenges in the whole world are the problem of computer viruses. (Cohen, 1990) summarized in his course on computer virus; viruses are programs that replicate, evolve, and/or infect. They spread from program to program, user to user, computer to computer, and network to network. Their unique properties are generality, persistence and extent. They are an integrity problem, not a secrecy problem. Therefore, improving computer security to keep secrets better does not eliminate the virus problem. Similarly, old risk assessment techniques do not apply. Finally, most current systems are extremely vulnerable. (S. NORA, 1981), affirm that computer viruses usually infect systems introduced via external storage devices which have already been infected. This has led to loss of data most of which is very costly to get back as it will need experts who are invited to install and design new packages. System security concerns can pose limitations on accounting software. Besides worrying about viruses and worms, small-business owners also should be concerned with unauthorized access of computerized accounting data. IDs and passwords are common minimum security measures businesses can use to protect the accounting software against intrusion, but they may not be enough. According to Kiplinger magazine, hacking is very common with small businesses; however, only one in five small firms owns antiviral software and over half don't use encryption on wireless connections.

(Wahab,2003) stated that the threat of computerized system is the computer virus. A computer virus is a computer code or program specially designed to damage or cause irregular behavior in other programs on the computer. The adverse effect is that it may lead to breakdown of the hardware thus leading to loss of valuable information (for instance in financial institutions information such as customer's accounts, previous financial report, information pertaining loans advanced among others).

#### **2.1.5.4 Computer Hacking**

(Chang, 2004) analyzed in detail that the incidences of computer hacking have increased dramatically over the years. Computer hackings have grown at an alarming rate and the effects are widespread and costly. Each year hackers steal millions of dollars worth of proprietary information from companies and organizations. Hackers can cause severe damage to computer systems by altering or deleting data files and disabling software. In addition to proprietary information, hackers also steal personal information from these organizations and corporations including their customers' credit card numbers, account numbers, and social security numbers.

## **2.2 Empirical Literature**

### **2.2.1 The effectiveness and efficiency in CAS**

The researcher reviewed various studies which discusses the contributions of CAS to the effectiveness and efficiency in computerized environment. The following are the empirical findings from different researchers;

In the study of (Mark,2011) assessed the impact of CAS on financial reporting in manufacturing firms in Uganda, a case study of Uganda breweries limited. The findings indicated that CAS minimizes errors and allows easy posting of transactions on ledgers. On examining the qualities of financial reports generated by the firm, the results revealed that financial reports produced are reliable. The researcher found out that Uganda breweries runs a fully CAS in financial reporting thus benefiting from the system. The firm is able to maintain the financial report qualities of timeliness, reliability and accuracy because of CAS.

Theobald (2008) assessed the impact of computerized accounting system on auditing process case study of Tanzania investment bank. The results of the study revealed that CAS has positive impact on the auditing process. Since, the system contributes to effectiveness and efficiency on the auditing process by 85%. Also the study showed that

CAS has improved the accounting operations through speed communication, accuracy and easiness. The traditional view of small business record keeping suggest that it is a paper based and hand of to the accountant firm to prepare the annual tax return. Porter & Millar (1985) mentioned in this competitive advantage, over the years, information technology had played a major role, changing the nature of business who knows its effects. With the introduction of new technology and more user friendly software, computerized accounting system (CAS) appears to reduce the problems in book record keeping practice. Furthermore, with the new and rapid financial information, new updates and changes will be available for others in making decisions. Managers and Auditors who deal with IT-based accounting systems can be provided with a wider and more up to date variety of information than those who deal with manual systems. This will ensure that the operations of the business are run effectively and efficiently (Taylor and Glezen, 1994).

Wilkinson, Cerullo, Raval and Wong-On-Wong (2000),noted that huge numbers of daily accounting transactions can be undertaken and recorded smoothly using computerized processing; the computerized accounting systems simplifying the accounting procedure by increasing the accuracy of the calculation, speeding-up transaction processing, decreasing the cost of processing the transactions and other data, and increasing the productivity of employees. 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).

Technology permit auditors to increase their productivity as well as that of the audit function (Brazel et al., 2004; Reed et al., 1990). For example, computerized assisted auditing can automate previously manual audit tests therefore reducing total audit hours expended. Generally computers was being used for accounting since last three decades by government bodies, industries, companies, schools and other micro, small or medium business in Libya. They used computer in making their task easier and convenient and to produce a more reliable and accurate records (Breen, Sciulli and Calvert, 2003)

Cengage (2011) investigated the impact of accounting information system knowledge and audit effectiveness in Thailand. The results of the study revealed that, knowledge of CAS, the risk assessment competency and quality planning judgments are the factors which affect audit effectiveness in computerized environment.

Cohen and Sayag (2010) examined the effectiveness of internal auditing. An empirical examination of the study was done in Israel organizations. The findings showed that the quality of audit work, professional proficiency, and career and advancement are determinants of the effectiveness of internal auditing. While organization independence, the sector to which an organization belongs and top management supports are determined as not the factors which affect effectiveness of internal auditing.

El- Dalabeeh (2012) aimed to identify the role of computerized accounting information systems in reducing the costs of medical services at King Abdullah University Hospital, and his findings were that computerized accounting information systems play an important role in reducing the costs of medical services at King Abdullah University Hospital compared with non-computerized systems, which usually require bigger costs and do not contribute to reduce the costs of medical services.

Another recent study was done by Otieno and Oima (2013) they studied the Effect of Computerized Accounting Systems on Audit Risk Management in Public Enterprises, the study reflected that only 36% of the institutions reported that they had a regular program or equivalent in place while another 24% were in the process of implementation of the computerized system. More than 40% of the participating institutions lacked computerized audit implementation plan.

### **2.2.2 The major challenges organization faces in CAS**

(Pogribna and Nikitenko,2012) studied that using a computerized accounting system comes with its own set of problems, such as the need to protect against data loss through power failure or viruses, and the danger of hackers stealing data. Computer fraud is also a concern, and you need to instigate a system of controls for who has access to the

information, particularly customer information. If there is a security breach and data is stolen, management can be held personally liable for the loss of data.

(Musa ,2006) investigated the perceived threats of computerized accounting information systems (CAIS) in Saudi organizations. The results of the study revealed that almost half of the responded Saudi organizations suffered financial losses due to internal and external CAIS security breaches. The results also revealed that accidental and intentional entry of bad data; costs such as training and software updates; accidental destruction of data by employees; employees' sharing of passwords; introduction of computer viruses to CAIS; suppression and destruction of output; unauthorized document visibility; and directing prints and distributed information to people who were not entitled to receive are the most significant perceived security threats to CAIS in Saudi organizations. The study introduced some suggestions and recommendations to strengthen the IT security controls and to enhance the awareness of CAIS security issues in Saudi organizations in order to manage the IT risks and to achieve a better protection to their CAIS and IT internal controls.

(Kunkel ,2004) also noted that implementation of CAS at many corporations has led to increased audit related risk due to automated interdependencies among business processes, and integrated relational database. There are many types of risk associated with CAS; this includes loss of computer assets, erroneous record keeping, increased risk of fraud, competitive disadvantages if wrong IT selected, loss or theft of data, privacy violations, and business disruption (Warren et al 1998; Gelinis et al 1999; Hermanson et al 2000; Hadden et al 2003)

According to Al-Fehaid (2003), the adoption of IT based accounting systems by clients has reduced certain problems such as human errors. However, it creates new challenges or risks for auditors such as the possibility of error in programming, the loss of audit trail, the lack of segregation between duties and Change of legal regulation and company policies.



Lauren, (2012) noted that the following are the problems organizations face in CAS; Updating a traditional accounting department to use a computerized system can represent a significant cost, especially for a larger business. Hermanson et al. (2000) conducted an exploratory study to examine the IT-related activities of internal auditors in the US organizations. Information gathered from over 100 internal audit directors indicated that internal auditors focus primarily on traditional IT risks and controls, such as IT asset safeguarding, application processing, and data integrity, privacy, and security. However, other areas such as risks related to systems development and acquisition received little attention from internal auditors. The results also revealed that several factors have been associated with internal auditors' performance of IT evaluations, including the nature of the audit objective, the prevalence of computer audit specialists on the internal audit staff, and the existence of new CIS.

The potential for observing errors or fraud in IT-based accounting systems is less than in manual accounting systems (Cosserat, 2000). This is because, in the IT-based accounting systems, data is stored in a machine-readable form rather than a visible form which could be deliberately accessed and altered through computer facilities on different sites. Also, the reduced number of staffs involved in handling computer transactions can lead to the obscuring of errors, which would be more easily discovered where information and documents are dealt with manually (Wasik, 1991).

(Mwasalwiba ,2006) noted that there are problems encountered with auditing process in computerized accounting system. These problems include; the challenge of paperless audit trail, changing technology, control and security concerns, process oriented-not results oriented, complexity of the practice, professional integration, sources of errors and inconsistency and personal computer environment.

However, the dynamic growth of the electronic data processing environment requires auditors not only to be independent but also to be literate in computer appreciation (Okoye, 2011).

## **2.3 Summary of Literature Review**

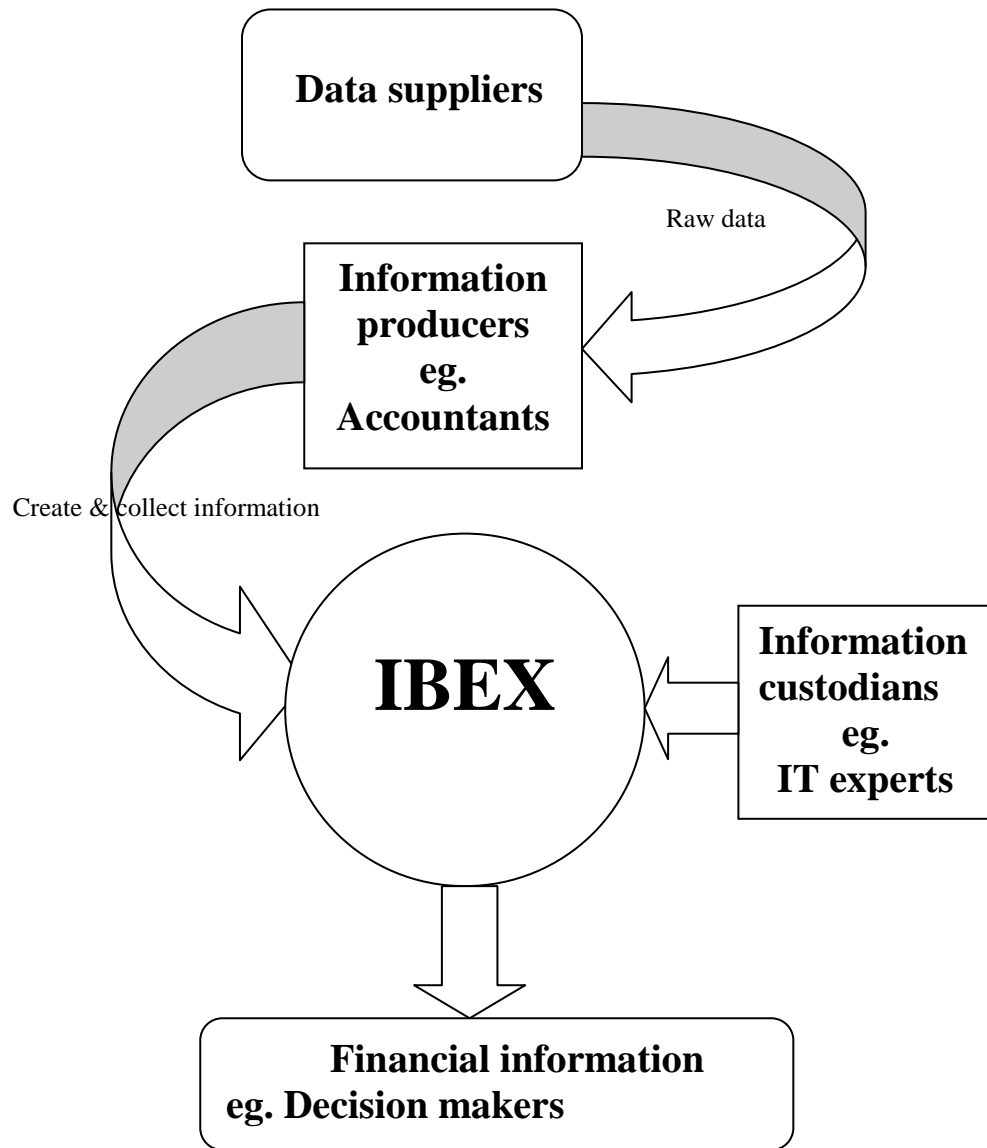
Computerized accounting systems appear to have significant influence on processing financial information from previous empirical studies, Present review of literature shows that studies in Ethiopia have only attempted to evaluate the implementation of computerized accounting systems software on organizations, other studies related the customer satisfaction on IBEX, the gap exist in that not sufficient studies has done to the depth of studying the challenges to computerized accounting systems software-IBEX in Dawro zone finance and economic development offices.

## **2.4 Conceptual frame work of the study**

As the researcher understood from several scholars view, computerized accounting system made integrity accountants and IT experts used inputs by processing financial information.

As the properties of information continue to change, the accounting system should become flexible enough to meet the need of users.

To this end the following diagram shows the conceptual frame work of the study.



*Figure 2.1. The conceptual framework for understanding Computerized Accounting System Software- IBEX implementation.*

# **CHAPTER THREE**

## **RESEARCH DESIGN AND METHODOLOGY**

### **3.1 Introduction**

The first chapter of this paper introduces research design and methodology of the study. It defines and identifies the problem statement and research questions that to be assessing the challenges in computerized accounting system software-IBEX in public sector. This chapter presents the methodology that will be utilized to determine the challenges in computerized accounting system software -IBEX in Dawro zone finance and economic Development offices. The main objective of this section is to recognize the sampling, data sources and statistical measures that will enhance the analyses of the research framework of the study. Hence, this chapter gives details of the research design that represents the overview of the research methodology focused on the target population, sampling size, development of survey instrument and its administration, analytic methods and techniques use for data analysis.

### **3.2. Research design**

The *research design* provides a general plan how the research questions was answered and the process for collecting, analyzing, and interpreting the data (Saunders, Lewis, & Thornhill, 2007). The purpose of this study is to assess the challenges in computerized accounting system software- IBEX in public sector. The study is structured within the framework of descriptive research approach. Descriptive research studies are designed to obtain information, which concerns the present status of phenomenon (Saunders, Lewis, & Thornhill, 2007). This approach is chosen because of the researcher would not control the variable but to describe the phenomenon that existed at the time of the study. The use of descriptive research was enable the researcher to bring to light the factors that contribute to the challenges to Computerized Accounting System Software-IBEX.

However, the descriptive practice-oriented research falls short of discovering new insights into a phenomenon. Because it does not influence the variables concern and it only focused on explaining what has already happened. This means, it expresses the variables within a broader category, which is already indicated in the research question of the study. Further, this method may also produce unpredictable results because it may explore into personal and emotional matters that respondents may not be completely truthful about it. Other than these disadvantages, the descriptive research design considered the most appropriate for assessing the challenges to computerized accounting system software-IBEX in Dawro zone finance and economic development offices.

### 3.3. Research Method

#### 3.3.1. Data Collection

Primary data was chosen to this study. For primary data collection, the researcher used structured questionnaire and guided interview from the offices. Because guided approach enables to collect the same general areas of information from different interviewee of the offices. Further, the researcher can able to triangulate the questionnaires result obtained from the offices.

#### 3.3.2 Population and sample

The population comprised members of staff from Account and payment, inspection, procurement, demographic information, development planning, public finance and Information Technology core processes. The researcher used purposive sampling technique in the area of those offices. Because the study addresses the system works which includes the skilled and familiar with the relationship between accounting information system and financial reporting in the Dawro Zone Finance and Economic Development Offices staffs.

From 234 Dawro Zone Finance and Economic Development Offices employee's questionnaire were administered for 96 office experts. This employee's having different positions in their offices or departments. 94 complete questionnaire booklets were returned i.e., the response rate is 98%. In selecting the respondent for questionnaires and guided interview in the sample more priority will be given to the public finance and treasury administration department managers and accountants. The reason is that, all the above stated units are principally involved in the preparation of payroll, strategic budgeting and financial management processes of the offices. Moreover, it is obvious that the accountants and financial managers have better understanding and further possess the requested information needed for the study.

### **3.3.3 Sample size and sampling Technique**

As described above, of the *ninety six* populations of the study, the researcher select *twenty eight* respondents from Zonal department, *twelve* respondents from Tarcha town, *twelve* respondents from Mareka wereda, *forty four* respondents *eleven* from each wereda's (Loma wereda , Tocha wereda, Esera wereda and Gena Bosa wereda) those who were taken from the offices purposively.

Further, in order to check the validity of the findings of the questionnaires and to enhance confidence, the researcher conducted guided interview purposively. In this regard, for this interview, the researcher is more interested in head, office or work process coordinator. The reason is that the head, offices and work process coordinator are the core users for their planned operation and decision making.

## **3.3 Data Collection Tools/Methods**

The researcher used questionnaires accompanied by interview guide, which addressed the Dawro zone finance and economic development office officers and managers. The following data instrument helped for collecting data's from the respondent's.

### **3.3.1 Questionnaires**

The questionnaire that was used in this study comprises both closed ended and open ended questions. Closed-ended, mainly Likert-scaled, questions have been used to collect data from respondents except for questions related to demographic characteristics of the respondents.

The questionnaire has three parts. The first part was designed to gather demographic data of the respondents. The second part was used to gather information on the practice of computerized accounting system software-IBEX in the mentioned offices and involves five closed-ended items. The third part was used to gather information for the challenges to computerized accounting system software-IBEX in those offices and contains twelve closed ended items such as likert scale and one open-ended item of rating their challenges. The last five closed and one open ended questions were prepared to take information from impact of computerized accounting system software-IBEX on processing financial information.

However, opportunities were given to the respondents to say more about the challenges faced in each section through open-ended questions. The questionnaire was validated and translated into Amharic language. (Both of the questionnaire versions were attached to this report at appendix I and II).

### **3.3.2 Interview**

For this study, semi-structured interviews were used to get more information on the reflections of some head, offices' opinion on response of structured questionnaires. This was conducted after preliminary transcriptions of the questionnaires result of the respondent in the sample. The interview will be very short and generic focusing on this forward-looking questions and recommendations that to drawn from the emerging themes collected from the questions dealt with in the questionnaire.

Face to face interviews were focused on the top management and clients to cross check the response from the questionnaire. These were designed in a way that more specific and truthful answers have got. These help to capture information not provide by the questionnaires. The method used Interview guide to capture the respondents' views (Interview questions was attached to this thesis at appendix III).The interview had been structured and organized in a manner that would enable the researcher to assemble information from offices while implementing Computerized Accounting System Software-IBEX.

Key informants interview was accomplished with 7 respondents. The interview schedule was structured to gather in depth information concerning the challenges accounting information system that was exercising in IBEX. From the questionnaire, analysis of closed ended items was performed using SPSS and data from open-ended items in the questionnaire and the interview schedule were summarized for the patterns in each of the issues raised in this study about impacts of accounting information system on processing financial report.

### **3.4 Methods of data analysis**

Once the data were captured from the two intended sources, then data analysis were followed to make the raw data ready for interpretation and report writing. The data analysis was an important and main part of the study. So a wider time and a greater care should be given for this part of the study.

#### **3.4.1 Data Processing**

The data processing mainly included compiling, tabulating, grouping and computing of the data where necessary. But, before stating the process of analysis, the raw data were edited and checked for errors and omissions. Then after the edit, data were analyzed and evaluated and judged in relation to assumed variables.

#### **3.4.2 Data analysis**



Data was analyzed by the use of frequency distribution tables, pie charts, graphs, Chi-squares, and analysis of variances (ANOVAs) by using statistical package for social scientists SPSS V.20. This was chosen due to its simplicity, objectivity, reliability and explanatory notes.

Next, the analyzed data was interpreted and discussed. Finally, sequential and systematic reports that forward recommendation to some of the office's accounting irregularities were prepared for presentation.

## CHAPTER FOUR

### RESULTS AND DISCUSSIONS

#### 4.1 Introduction

In the quest for computerized accounting system software-IBEX challenges in Dawro Zone, the data was obtained from finance and economic development offices. They are seven administrative units (*Tarcha Town Administration, Mareka wereda, Loma Wereda, Gena Bosa wereda, Esera wereda, Tocha wereda and Zonal Departement*). In this research endeavor questionnaire was used as main survey tool for the data collection. Key informants interview was also used to support the responses gathered by questionnaire. Interviews were used to get more information on the reflections of some head, offices' opinion on response of structured questionnaires.

#### 4.2 Respondents Demography

The respondents were employees of DZFEDOs since DZFEDOs are the subjects of this study. Respondents who participated in zonal sector are 26(27.7%), Tarcha town administration and Mareka worda each of them are 12(12.8%), the rest four worda's (Loma,Gena bosa,Tocha and Esera) each of them are 11(11.7%). The following table shows different demographic variables;

**Table 4.1 showing core process of respondents.**

<b>Demographic variables</b>	<b>frequency</b>	<b>Valid percent</b>	<b>Cumulative percent</b>
<i>Core process</i>			
Account and payment	23	24.5	24.5
Public finance	36	38.3	62.8
ICT	4	4.3	67.1
Procurement	10	10.6	77.7
Demographic information	7	7.4	85.1
Inspection	9	9.6	94.7
Development planning	5	5.3	100
Total	94	100.0	

Table 4.1 analyses the core process of respondents in the study area. Most of the respondents 38.3% were from public finance core process in which the IBEX was the center for their financial report. 24.5% of respondents from account and payment core process. Both two core processes are the nearest and closely related to IBEX. The least number of respondents were from ICT core process 4.3%, they were back bone of the offices that build the system in a systematic way. But the experts in this core process were not stable for sustaining the system works.

***Table 4.2 showed the sex and age of the respondents.***

<b>Demographic variables</b>	<b>frequency</b>	<b>Valid percent</b>	<b>Cumulative percent</b>
<b><i>Sex</i></b>			
Male	<b>68</b>	<b>72.3</b>	<b>72.3</b>
Female	<b>26</b>	<b>27.7</b>	<b>100</b>
Missing system	<b>0</b>	<b>0</b>	
Total	<b>94</b>	<b>100</b>	
<b><i>Age</i></b>			
18-25yrs	<b>9</b>	<b>9.6</b>	<b>9.6</b>
26-35yrs	<b>54</b>	<b>57.4</b>	<b>67</b>
36 and above	<b>30</b>	<b>31.9</b>	<b>98.9</b>
Missing system	<b>1</b>	<b>1.1</b>	<b>100</b>
Total	<b>94</b>	<b>100</b>	

***Source: Output of the Survey Data (2016)***

The above table showed that gender of respondents who participated in the study. The majority 72.3% were male compared to 27.7% female respondents in the study. The ratio of male to female who participated in the study has great difference but gender had less meaning in respect to assessing the challenges to computerized accounting system software-IBEX in DZFEODs.

However, gender main streaming is an important factor that should not be ignored in any social study if its results are to be recognized as gender sensitive.

From the study findings, the study population was mainly composed of people from different age groups. Respondents aged between 18 – 25 years comprised only 9.6%,

those aged between 26 – 35 years comprised of 57.4% where as those aged thirty five years and above comprised of 31.9%.

As mentioned above, the variations in age structure were pointed out as a result of various factors, the major one being the fact that people lying in the age bracket of 18 – 25 are the youth who nowadays largely engaged in the offices was employed with expectation of actively participating and gave response with in short period of time to bosses, because of striving new work environment, a long side fresh brains. But they couldn't fulfill the given minimum requirement of job specification with current work experience and educational level. So it was forbidden legally by citing regulations, proclamations and directives. Above 25 years they were largely opted for such efficiency yearning to offices.

**Table 4.3 described educational level and work experience.**

<b>Demographic variables</b>	<b>Frequency</b>	<b>Valid percent</b>	<b>Cumulative percent</b>
<b><i>Educational level</i></b>			
Masters	2	2.1	2.1
BA	81	86.2	88.3
Diploma	10	10.6	98.9
Missing system	1	1.1	100
Total	94	100	
<b><i>Work experience</i></b>			
< 2yrs	15	16.3	16.3
3-5yrs	40	43.5	59.8
5-10yrs	28	30.4	90.2
5yrs and above	9	9.8	100
Missing system	2	2.1	
Total	94	100	

*Source: Output of the Survey Data (2016)*

From the above table, the educational background of respondents was critical to this study. Professionally 88.3% of respondents were BA and above. The rest 10.6% were Diploma holders. So, from above information we understand the computerized accounting system software was dominated by better experts.

From the above table 4.3, Respondents gave response about their duration of stay/work in the study area that is DZFEDOs. It was hoped that the workers time of the stay on work influenced their impact in the area. Those who had stayed longer in the study area were further believed to have witnessed several changes, trends and patterns of work or services offered by the offices to its customers. 16.3% of the respondents had worked below two years, 43.5% had stayed in DZFEDOs for a period of 3 to 5 years. 30.4% of the respondents had worked with DZFEDOs for a period of five to ten years and the rest of the respondents 9.8% had worked / stayed with DZFEDOs for a period of ten years and above. Hence those over two years were more skillful than those below two years. As indicated from the above table, among 94 respondents 78(83%) were using computer to analyze, interpret and communicate to end users in the offices. The rest were not using computers. More specifically nowadays new technology was functional in the local area.

### 4.3. Practice of computerized accounting system software-IBEX in DZFEDOs

The study showed that the computerized accounting system software-IBEX had in the study areas. The following table described the respondent's positive response, yes (97.8%), no (1.1%) and not sure (1.1%). The analysis showed that computerized accounting system software-IBEX in the DZFEDOs were functional.

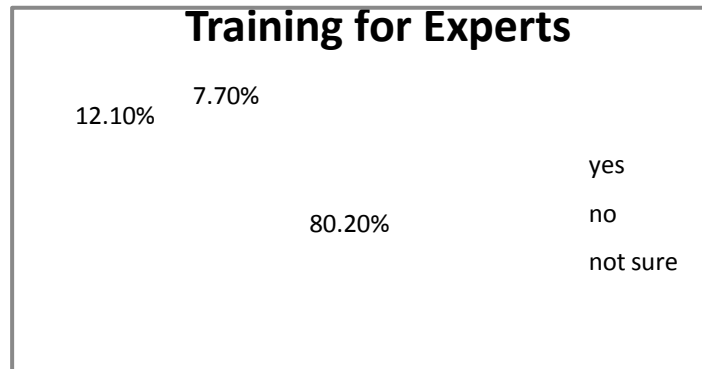
*Table 4.4 showed that having CASS –IBEX in offices.*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	90	95.7	97.8	97.8
	No	1	1.1	1.1	98.9
	not sure	1	1.1	1.1	100.0
	Total	92	97.9	100.0	
Missing	System	2	2.1		
Total		94	100.0		

*Source: output of survey data (2016)*

From the findings, it is clear that almost all the respondents were given information that CAS practically active in the study area. This shows that the use of a computerized accounting system is much more effective and efficient as compare to the manual accounting system option, as far as financial management and reporting is concerned.

*Figure 4.1 showed training for expert in IBEX*

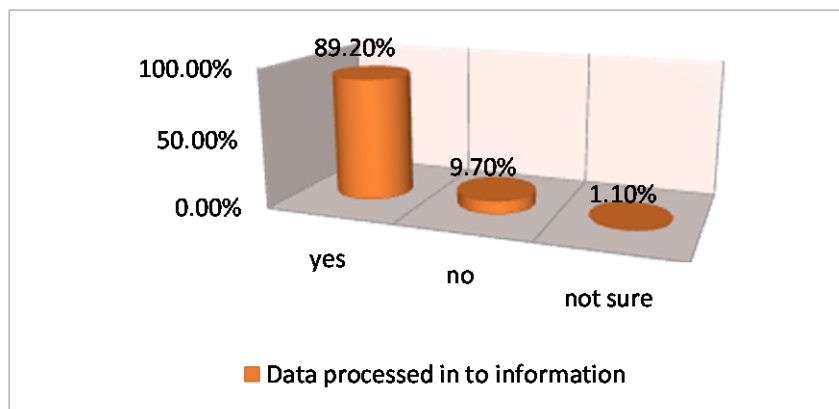


*Source: output of survey data (2016)*

From the above pie chart, 80.2% of the respondents gave yes information, 12.1% were returned No answers and the rest 7.7% did not exactly know about training information. This showed the majority of experts either by BoFED or ZoFED have taken training to develop their skill which enables the employee's have done their jobs with quality and reliable outputs.

DZFEODs were obtaining inputs from concerned bodies and make process then get information (output). The following graph described the respondents return.

*Figure 4.2 Data processed in to information*



*Source: output of survey data (2016)*

When the offices obtain inputs from the concerned bodies as the survey showed the system is processing data. The data which processed into information were critical to the system. The information included in the system are: accounts information, budget control information, payroll information, inventory information, expenditure information, receivable information and payment information.

*Table 4.5 showed the offices used IBEX*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	92	97.9	98.9	98.9
	No	1	1.1	1.1	100.0
	Total	93	98.9	100.0	
Missing	System	1	1.1		
Total		94	100.0		

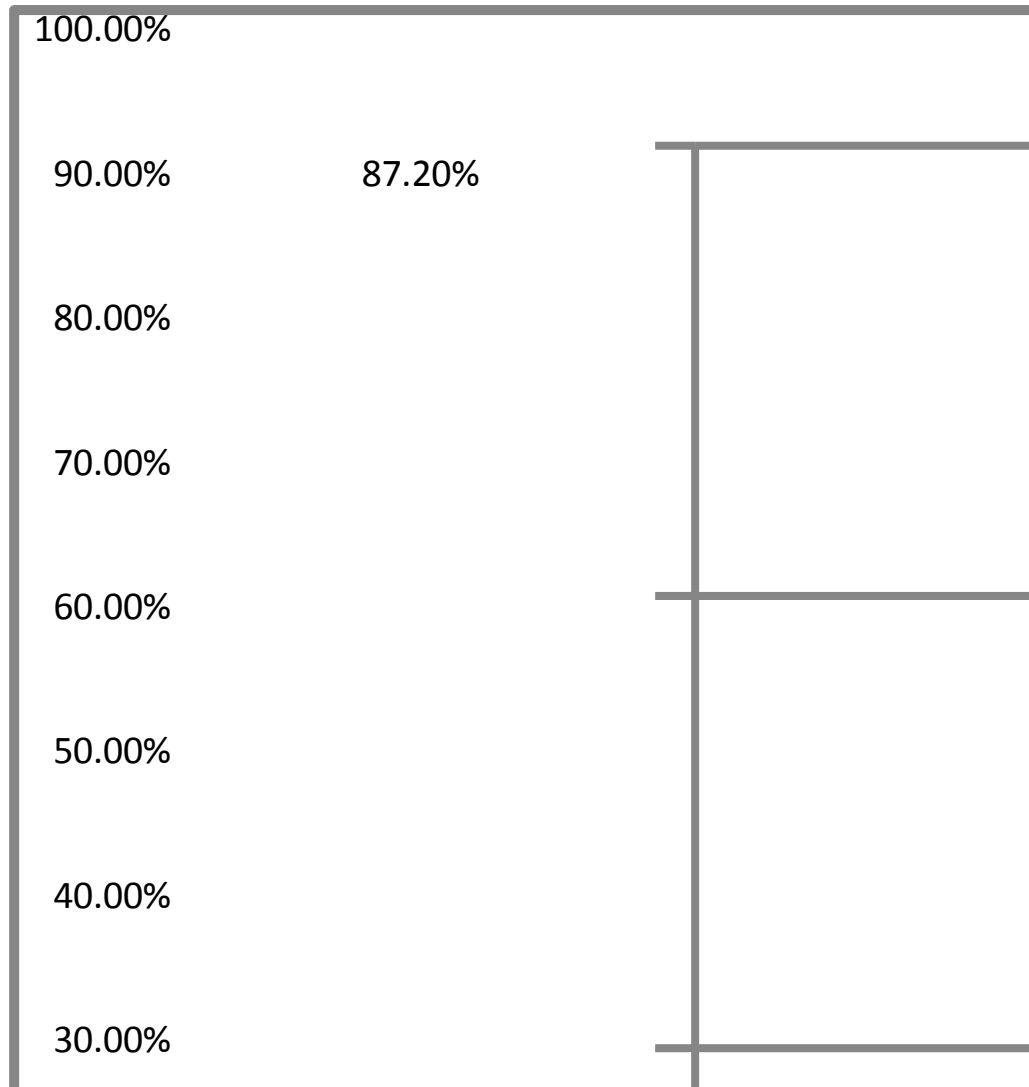
*Source: output of survey data (2016)*

To assure the study of computerized accounting system software-IBEX, 98.9 percent respondents were given yes. From the survey, DZFEDOs used IBEX to deal every information either external or internally.

#### **4.4. Challenges of Computerized Accounting System software-IBEX in DZFEDOs.**

In the observed data from the questionnaires, the computerized accounting system software-IBEX challenges are faced the DZFEDOs 87.2 %( yes), 6.4 %( no) and 3.3% (not sure). It showed there were challenges to the computerized accounting system software-IBEX in DZFEDOs. Majority of the respondents confirm that the system has its own challenges, and they respond in their open -ended response.

Figure 4.3 shown challenges of IBEX in DZFEDOs.



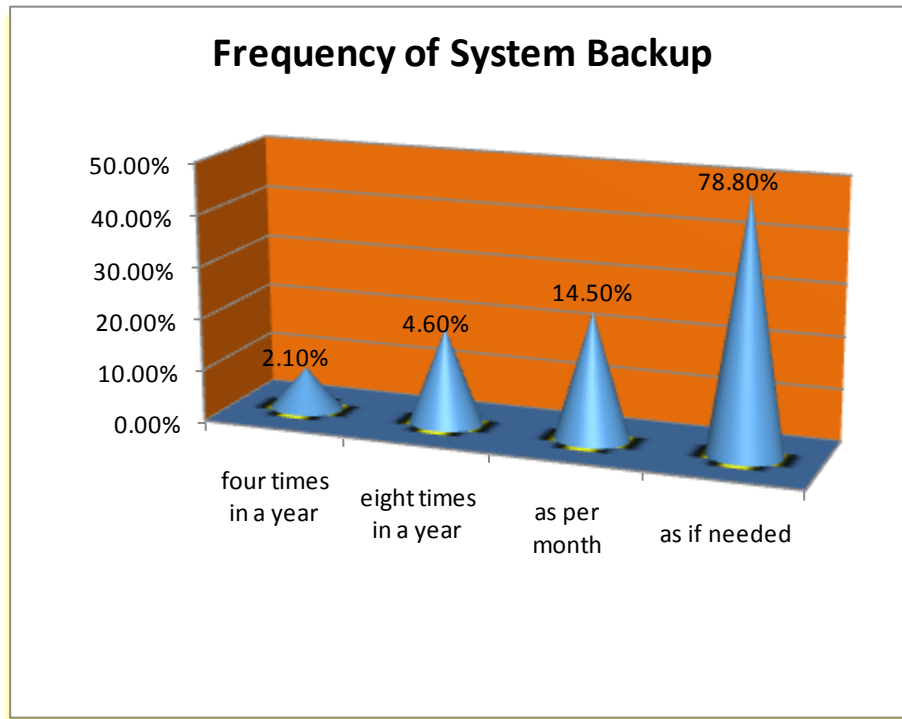
Source: output of survey data (2016)

Technologies are ongoing and new things are happening every day. So, software's are innovated to fulfill human beings need; some of them were encountered failure. The system in the age of information, would update constantly. The response for the question that asks whether there was the system backup or not, majority of the respondents answered yes (86.5%), no (6.7%) and not sure (6.7%) were clearly known.



If the system damaged, the data backup were done by IT experts. In DZFEDOs the data backup has been done per month or when ever needed, as respondents and key informant interview confirmed from the given data schedule.

*Figure 4.4 reflected the frequency of system backup*



*Source: output of survey data (2016)*

Challenges in DZFEDOs for CASS-IBEX were indicated by respondents (who filled questionnaire and key informants' schedule). Among worldwide challenges; such as lack of skilled man power, system failure, lack of adequate manuals, lack of supervision, power failure, computer virus and computer hacking. The following challenges to IBEX implementation are indicated by table.

Table 4.6 depicted the challenges in CASS-IBEX in DZFEDOs.

	<i>Lack of skilled man power</i>	<i>System failure</i>	<i>Lack of adequate manuals</i>	<i>Lack of supervision</i>	<i>Power failure</i>	<i>Computer virus</i>	<i>Computer hacking</i>
<b>Strongly agree</b>	58.5%	20.2%	10.6%	17%	71.3%	50%	7.4%
<b>Agree</b>	36.2%	60.6%	34%	44.7%	28.7%	34%	11.7%
<b>Neutral</b>	1.1%	11.7%	19.1%	13.8%	-	8.5%	47.9%
<b>Disagree</b>	1.1%	2.1%	29.8%	21.3%	-	3.2%	18.1%
<b>Strongly disagree</b>	2.1%	3.2%	5.3%	3.2%	-	3.2%	11.7%
<b>Missing system</b>	1.1%	2.1%	1.1%	-	-	1.1%	3.2%
<b>Total</b>	100%	100%	100%	100%	100%	100%	100%

Source: *output of survey (2016)*

From the above mentioned challenges, respondents and key informants interview boldly respond the lack of skilled man power, power failure and lack of supervision that were put in administration area addressed in DZFEDOs.

Table 4.7 showed the lack of skilled man power means, standard deviation, variance, range and median among administration area.

<b>Administrative area</b>	<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>	<b>Variance</b>	<b>Range</b>	<b>% of Total Sum</b>	<b>Median</b>
Mareka woreda	2.50	10	1.650	2.722	4	17.9%	2.00
Loma woreda	1.75	12	.452	.205	1	15.0%	2.00
Esera woreda	1.45	11	.522	.273	1	11.4%	1.00
Tocha woreda	1.36	11	.505	.255	1	10.7%	1.00
Gena bosa woreda	1.27	11	.467	.218	1	10.0%	1.00
Tercha town administration	1.17	12	.389	.152	1	10.0%	1.00
Zone Department	1.35	26	.485	.235	1	25.0%	1.00
<b>Total</b>	<b>1.51</b>	<b>93</b>	<b>.775</b>	<b>.601</b>	<b>4</b>	<b>100.0%</b>	<b>1.00</b>

Source: *output of survey (2016)*

From above information the lack of skilled man power among administration area Mareka wereda had the largest mean value, standard deviation and range than the rest administration areas, this shows the mentioned wereda had serious problem in skilled man power than other administration areas.

*Table 4.8 ANOVAs for lack of skilled man power among administration area*

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	50.383	4	12.596	2.926	.025
Within Groups	378.864	88			
Total	429.247	92			

*Source: Output of Survey Data (2016)*

Table 4.8 described in the administration area that the respondents were respond successfully at DZFEDOs to run the computerized accounting system software- IBEX, the lack of skilled man power had been a serious problem. One way ANOVA was used to see whether skilled man power was equally a problem to all weredas. The result showed that, there is statistically significant difference among the weredas at  $P < 5\%$ . This indicates that lack of skilled man power is very serious in remote weredas as compared to zonal offices and some relatively developed weredas.

The result in this lack of skilled man power were instable in their work area because of great difference on salary and incentives through their work experience and educational level compared with those from other than organizations for instance; share companies, NGOs, co-operations.

One of the challenges in CASS-IBEX in the study area was power failure. If the power was not functional in the area the system works stopped and every works related with this system was lagged. This was leading the external and internal customers had rumor to the offices and service rendering slow down in that area. The researcher has tried to see

whether power failure is equally a problem to all wereda's and the statistical result is presented in table 4.9 below.

*Table 4.9 power failure among administration area.*

Administrative area	Mean	N	Std. Deviation	Variance	Range	% of Total Sum	Median
Mareka woreda	1.67	12	.492	.242	1	16.5%	2.00
Loma woreda	1.18	11	.405	.164	1	10.7%	1.00
Esera woreda	1.27	11	.467	.218	1	11.6%	1.00
Tocha woreda	1.09	11	.302	.091	1	9.9%	1.00
Gena bosa woreda	1.36	11	.505	.255	1	12.4%	1.00
Tercha town administration	1.42	12	.515	.265	1	14.0%	1.00
Zonal sector	1.15	26	.368	.135	1	24.8%	1.00
Total	1.29	94	.455	.207	1	100.0%	1.00

Source: output of survey data (2016)

The above table showed that the number had closely nearest each other. Because the mean value and standard deviation in the table indicates the problem of power failure in administration area are common.

*Table 4.10 ANOVAs for power failure in DZFEODs*

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2.873	6	.479	2.482	.029
Within Groups	16.786	87	.193		
Total	19.660	93			

Source: output of survey data (2016)

From table 4.10, it can be seen that there is a statistically significant difference among the seven offices with respect to power failure at  $P < 5\%$ . This indicates that Power failure is a

serious problem in remote weredas as compared to zonal offices and some developed weredas. It means power was the master key for sustaining CASS-IBEX in DZFEODs.

*Table 4.11 showed the description in lack of supervision*

Administrative area	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
Mareka woreda	12	2.00	.739	.213	1.53	2.47	1	3
Loma woreda	11	1.82	.751	.226	1.31	2.32	1	3
Esera woreda	11	1.64	.674	.203	1.18	2.09	1	3
Tocha woreda	10	2.00	.816	.258	1.42	2.58	1	3
Gena bosa woreda	11	2.00	.894	.270	1.40	2.60	1	4
Tercha town Administration	12	1.42	.515	.149	1.09	1.74	1	2
Zonal office	25	1.36	.490	.098	1.16	1.56	1	2
Total	92	1.68	.710	.074	1.54	1.83	1	4

Source: Output of Survey Data ( 2016)

The other challenge in computerized accounting system software-IBEX is lack of supervision, the table shown in administration area. From the given data the total means value 1.68 and the standard deviation 0.710. The difference between two is 0.970, this depicted the gap between them are small. Which shown the lack of supervision in the DZFEODs, are critical problem.

*Table 4.12. ANOVAs test in lack of supervision.*

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	7.000	6	1.167	2.552	.025
Within Groups	38.858	85	.457		
Total	45.859	91			

**Source:** survey data (2016)

The data given in the above table is statistically significant (0.025) .This shows the lack of supervision in the study area is serious. There is statically significant difference in lack of supervision among the weredas. In remote weredas, supervision is a serious problem

## 4.5 Effect of computerized accounting system software-IBEX on processing financial information.

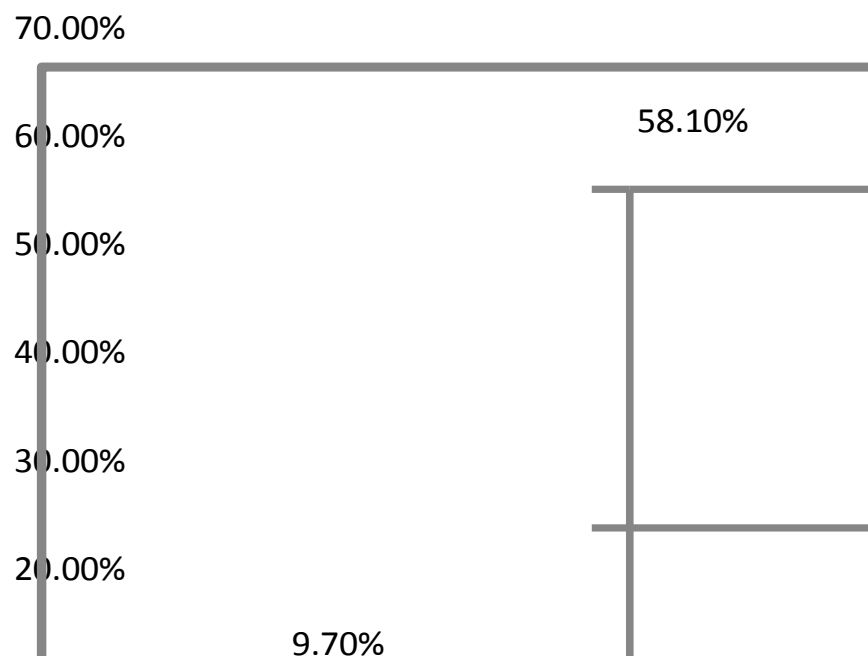
Every software's in the world either application or system software had its own advantage and disadvantage. When an IBEX expert make posting error, to correct it takes time and should needed IT expert to delete the first data and replace new data and other official processes exchange information with management.

### With the factor of age group:

“If someone doing something either known or unknown, errors are constant.”

What kind of error always occurred in the study area in processing with IBEX? It was a big question. See the following figure 4.5.

*Figure 4.5 age factor in IBEX error*



*Source: primary data output (2016)*

The figure 4.5 depicted that the age of the respondents were the factor for the error in IBEX. If the error were incorrect entry, reversal of double entry or manipulation of

figure, the age group 18-25 made a few errors. On the contrary, the age group 26-35 was made a big mistake. It showed us the employee's in this age group most of the time adapted the office atmosphere and bored with the same working situation and also they primarily challenge their bosses for the benefit of personal case than other age groups. In this case we expected more errors from them. The age group 36 and above was matured group and responsible for their work environment. Because of this they were thoroughly done their work if the more delay was there.

*The table 4.13 Chi- square test in age group and IBEX error.*

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.599	4	.013
Likelihood Ratio	8.744	4	.068
Linear-by-Linear Association	2.099	1	.147
N of Valid Cases	93		

*Source: survey data (2016)*

The Pearson chi-square measured that the respondent's age had again assured the factor to IBEX error. The statistical significance 0.013 is less than 0.05. It means active work age in this study (18-25) was actively worked in the Computerized Accounting System Software-IBEX in the offices by giving dynamic response. This implies there is statistically significant association between errors committed and age of the officers. Young officers make fewer mistakes as compared to older officers.

### **With the factor of work experience**

As the researcher believed and many scholars agreed, work experience is one of the criteria to provide work for the job finder and to give reward for the employee. From this stand point the respondents work experience was the key factor in this study.

*Table 4.14 described work experience and error in IBEX*

		work experience			Total	
			> 5 years	3-4years	<2years	
Error in IBEX	incorrect entry	Count	56	8	5	69
		Expected Count	51.0	11.2	6.8	69.0
	reversal of double entry	Count	2	6	2	10
		Expected Count	7.4	1.6	1.0	10.0
	manipulation of figures	Count	10	1	2	12
		Expected Count	9.6	2.1	1.3	13.0
Total	Count	68	15	9	92	
	Expected Count	68.0	15.0	9.0	92.0	

Source: Survey Data (2016)

Majority of respondents had 5 years and above work experience which was (74%), 3-4 years experience (16.3%) and less than 2 years (9.7%).

*Table 4.15 Described chi-square test in work experience and error in IBEX*

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.617	4	.001
Likelihood Ratio	16.393	4	.003
Linear-by-Linear Association	2.436	1	.119
N of Valid Cases	92		

Source: Survey data (2016)

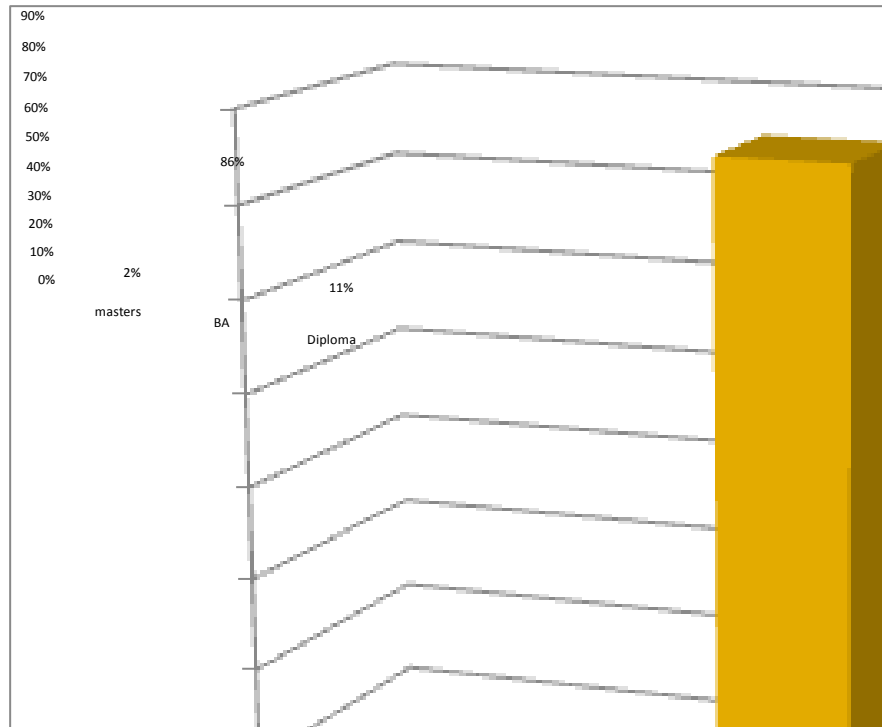
The above Pearson chi-square depicted the statistical inference, which asymptotic significance (2-sided) 0.001 mean it was statistically significant. Errors in IBEX were happened either early employed experts or more experienced officials. There is statistically significant association between errors committed and experience of the officers.



## With the factor of educational level

The level of education is one of the factors in computerized accounting system software-IBEX.

*The figure 4.6 showed IBEX with educational level*

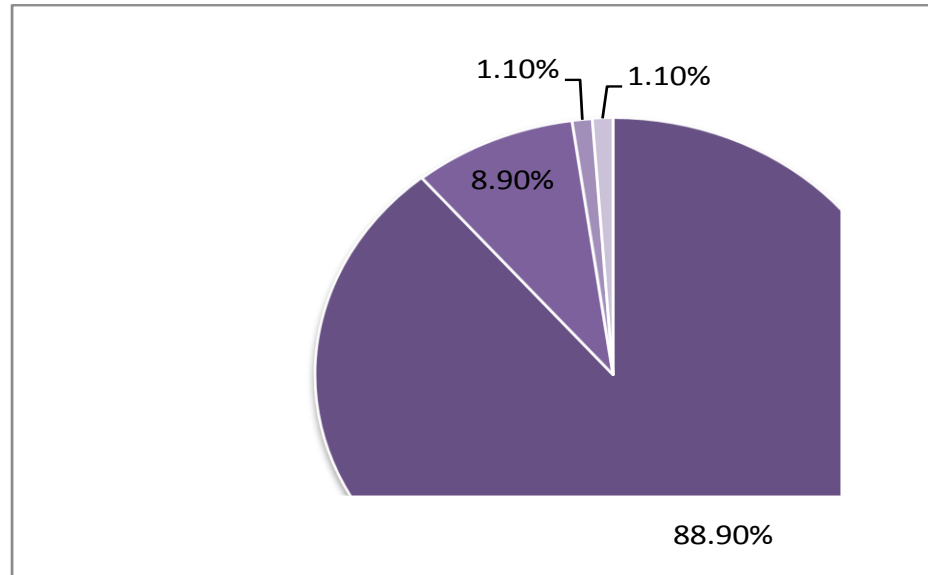


*Source: survey data (2016)*

The above figure showed the minimum educational level was Diploma and 88% included BA and MA educational level. This revealed majority of officials were experts.

The Pearson chi-square analyzed that the asymptotic sig. 0.676. This was statistically insignificant. To interpret this figure, the educational level was not affected the IBEX error. By processing the IBEX, errors were made in each step. The steps in computerized accounting system were as we knew input, processing, storage and output.

Figure 4.7 described the respondent feedback.



Source: primary data output (2016)

The above pie chart showed 88.9 percent error was made by input stage. 8.9 percent were lie down in processing stage. The result was focused on input stage. So processing in IBEX needed thoroughly done with input stage when the record and transfer were happened accordingly.

Of ninety four respondents 77(82%) were respond in their open- ended response an IBEX system has been used for a long period of time it took or occurred a number of errors such as it was taking a repetition of voucher number by changing period of months and years for the same transaction and voucher numbers.

#### 4.6 Key informants interview response

In the study area, Dawro zone finance and economic development offices key informants(managers and work process coordinators) gave information for computerized accounting system software- IBEX, which was helping them to decide in their offices by processed information.

Most of them agreed that computerized accounting system software-IBEX implementation challenges were continued from day- to -day and it was the setback for future organizational changes.

It was seen that key informants interview boldly emphasize the power failure, lack of skilled man power and lack of supervision that were put in administration area addressed in DZFEDOs.

Power failure in the study area is critical problem in processing computerized accounting system software-IBEX. Getting information by processing inputs or raw data should need power. Without power the huge machines or electric systems did not work properly. Most of the time IBEX's working process is interrupted incase of power failure. Data is processing in to information. To get information within a short period of time data's registered, processed and analyzed properly managed with time management. If did not do this, there was a lag in every flow of system works either the accounting or financing part of the system.

"The skilled man power is very essential for every organization to achieve their goal" said one of the interviewee. He also added that at wereda level the skilled man power was really scarce. "To fill this gap the government must intervene in this area because human resource is the foremost resource of all other resources" the interviewee said.

Offices are not disturbed in system failure because information technology experts are controlling the system works and if it needs the system maintenance, the system backup has done by them.

The other key issue reflected by interviewee is lack of supervision. Supervision by nature is not same as inspection. If experts are working in the IBEX may be erroneously registered or analyzed, specialists or information technology experts should check steps and make corrections.

Currently, IBEX is practically at good condition in offices. For sustaining it the government must give attention by updating software or developing new IBEX software's to prevent hacking and allocate the large capacity computer (high GB) computers.

#### **4.7. Discussion of major findings from the Study**

The study showed that DZFEDOs actually makes use of computerized accounting system software-IBEX. This is evidenced by the results given by the respondents in agreement with the use of the system in the offices by implementing IBEX. Where the uses of computerized accounting system software in the study area context IBEX are; the system's ability to perform data entry, data processing, data security and data reproduction or reporting such as the generation of financial information's. All these functions of the system have enabled the offices run its operations smoothly in a much more effective and efficient manner.

Findings revealed that there was a computerized accounting system software-IBEX in DZFEDOs. According to results, 97.8% of the 94 respondents that were respond YES. Findings also revealed that there was computerized accounting system has engaged in the offices and helps to maintain error free records while providing easy timely financial information for decision making, easy transaction processing as well as easy storage, reference and access to information. The study also revealed that over the time, staff of DZFEDOs has since gain sufficient experience in dealing with the computerized accounting system software-IBEX as daily activity reports can automatically generated on a daily basis. This according to the findings has improved operational efficiency and effectiveness amongst the officials.

From the respondent's data 87.2% experts were trained to encounter the computerized accounting system software-IBEX.

Data was one of the pillars in CAS; the offices obtain inputs from the concerned bodies, as the survey showed 96.8% were seen. This depicted that the system was running by processed data. The data which processed into information were critical to the system. The information include in the system are: accounts information, budget control information, payroll information, inventory information, expenditure information, receivable information and payment information this all are inputs to IBEX.

To assure the study of CAS challenges, in government offices the computerized accounting software -IBEX was the core issue. Of 94 respondents 98.9 percent were give the response YES. From the survey, DZFEODs used IBEX to deal a piece of information horizontally in the office level and vertically out of offices such as bureau of FED in the state (SNNPR) level.

Generally speaking, nowadays five wereda's, Tarcha town administration and zonal office had been integrated in IBEX to do their jobs efficiently and effectively.

According to the findings of the study, a computerized accounting system software-IBEX is of a great importance to the running of the offices but is also associated with its own weaknesses that sometimes hinder efficiency in the office's work environment. The most prominent challenges of the system being: lack of skilled man power, system failure, lack of adequate manuals, formats or documents, lack of supervision, power failure, computer virus and computer hackers. With all these challenges were happen, it is clear that the system actually fails its operations and the working environment were at bad condition. For example, system failure could be solved through consistent upgrading of the system and it was controlled by avoiding long working hour on computers and operation through working shifts.

From findings, the skilled man power in the administration area that except Mareka wereda, the rest were closely related with skilled man power. But Mareka wereda had lack of skilled man power for mean included lower bound (1.54) and upper bound (3.73) and ANOVAs test showed that the value indicated as 95% confidence interval (sig.0.025) in DZFEODs statistically significance. This was critically burden for the office when

asking urgent issue to gave automatic response promptly. The result for this lack of skilled man power were instability in their work area in case of imbalanced payment with their work experience and educational level compared with those from other than government offices for instance; share companies, NGOs, co-operations; they fulfilled optimum office condition, and work based incentives.

Secondly, critical challenge in the study area was power failure. The **ANOVAs** test showed that power failure in the study area (sig. 0.029) below 5% that 2.9% was statistically significance in 95% confidence interval. It means power was the master key for sustaining CAS in DZFEDOs.

The lack of supervision in the study area was also the challenge in the study area. The ANOVAs test assured (sig. 0.025) mean statistically significant.

## **CHAPTER FIVE**

### **CONCLUSION AND RECOMMENDATION**

#### **5.1 Conclusion**

No one can deny the fact that Computerized Accounting System Software great contribution for quick response in working environment in world wide. This has also been seen in this survey in the study area, Dawro zone, where the system works sometimes not functioned. From the findings, response is high that the offices run its financial operations through IBEX, giving training for experts, data entry, and data processing and safety measures to the end point of data reporting of a financial nature in a computerized manner. It is therefore fair to conclude that Dawro Zone Finance and Economic Development offices actually make use of accounting information system.

The results revealed that computerized accounting system software –IBEX in DZFEODs have got challenges; such as system failure, power failure, lack of skilled man power, lack of supervision, lack of documents, computer virus and computer hackers. Of challenges, power failure, lack of skilled man power and lack of supervision were serious to the offices. The error which had been occurred on the system in input stage specially.

The study also recognized the impacts of computerized accounting system software-IBEX on processing financial information. From these findings, qualities of reports were mentioned and it is evident that financial information's generated through IBEX have much more paramount and better qualities. So majority of respondents were shared their idea that the study area had qualified financial information and the accuracy was better accordingly.

## 5.2 Recommendation

As seen from the earlier chapter, computerized accounting system software-IBEX perform huge everyday jobs which if performed correctly provide the office with accurate, efficient and timely reports. The researcher recommends that

- 🌟 Of challenges in CASS-IBEX as the raw data of respondents were analyzed in the study area; lack of skilled man power and power failure were major challenges in all administration area. The researcher point out to DZFEODs, to break through and solve these setbacks of CASS-IBEX the offices should intervene and give quick response. In case of lack of skilled man power offices may hire skilled experts. These are not quite enough. Hiring new faced experts were not remedy for sustaining the system works. But, to fill the skill gap for the offices former experts by giving training and make optimum work environment to them by preparing incentives.
- 🌟 Nowadays, Power failure is common problem for the country. To minimize this problem, office should use generator for temporary solution and also the system works discontinued when power were interrupted and the processed data lost immediately. Thus, to cut this challenge the offices should acquire UPS to save files with in short period of time.
- 🌟 The lack of supervision is appeared in the study area. The offices should supervise the system works diligently.
- 🌟 IBEX errors are less in younger's than aged officer. To solve this problem office give training to experts as much as possible.

The study recommends the following for future empirical studies:

- Future research should investigate the impact of computerized accounting system on the economy of Ethiopia.
- Future research should investigate Do Ethiopian financial institutions are ready to computerized accounting system software?



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## APPENDIX –I RESEARCH QUESTIONNAIRE

Dear Respondents, The researcher is a student of Jimma University pursuing Masters of Science in Accounting and Finance and the title to this thesis is “Challenges to computerized Accounting system software-IBEX in Dawro zone finance and economic development offices”.

This questionnaire is designed for academic purposes and for partially fulfillment of the Award of Masters of Science in Accounting and Finance in Jimma University. It’s only through your response that the work can be completed well. Therefore any information disseminated will be handled with maximum confidentiality. I therefore kindly request you to respond appropriately to the following questions.

Thank you in advance for your  
hospitality.

May God bless you!

*Abrham Akalu (M.Sc candidate in Acct & Finance)*

Mobile number 0916601449

Dawro zone, Tarcha,SNNPR, ETHIOPIA.

### **i. Background of the respondent**

1. Position hold/ responsibility .....

2. Core process :

Accounting & payment  public finance  ICT

Procurement  demographic info  Inspection

Development planning

3. Sex : male  female

4. Age: 18-25yrs  26-35yrs  36 and above

5. Educational Level: Certificate  Diploma   
 Degree  Masters
6. For how long have you worked for the office?  
 < 2 years  3-5 years  5-10 years   
 > 10 years
7. Does your work involve the use of computers?  
 Yes  No  not sure

**ii. Practice of Computerized Accounting System Software-IBEX at Dawro zone Finance and Economic development offices.**

8. Does the office have the Computerized Accounting System Software-IBEX?  
 Yes  No  not sure
9. Does the office have qualified Computerized Accounting System software-IBEX expert?  
 Yes  no  not sure
10. If yes, does the office have necessary training for the system experts?  
 Yes  no  not sure
11. Does the office obtain inputs to make process and get information from concerned bodies?  
 Yes  no  not sure
12. If yes, what is/are that information include/s?  
 a) Accounts information  
 b) Budget control information  
 c) Payroll information  
 d) Inventory information  
 e) Expenditure information  
 f) Receivable/payment information  
 g) All the above given information are included.

**iii. Challenges of Computerized Accounting System Software -IBEX in DZFEDOs.**

13. In your view, do you think the Computerized Accounting System Software -IBEX has challenges to finance and economic development office?  
 Yes  No  not sure
14. In your office, do you think if the system damage the data backup is happen?

Yes  No  not sure

15. If yes, for how many times the data backup is done?

Four times in a year  eight times in a year

As per month  as if needed

16. What kind of error always occurs in the Computerized accounting system software -IBEX ?

Incorrect entry  reversal of double entry

Manipulation of figures

17. At which stage is/are more errors made?

Input  processing

Storage  output

**Read carefully the following statements and Put “√” in one of responses about your opinion (strongly agree=SA, agree=A, neutral=N, disagree=DA, strongly disagree= SD**

	CASS-IBEX challenges	SA	A	N	DA	SD
18	There is a lack of skilled man power					
19	There are system failures in the offices					
20	There are lack of adequate manuals, procedures, formats or documents					
21	There is lack of supervision					
22	There is power failures					
23	The finance and economic development office encounter computer virus					
24	The finance and economic development office encounter computer hackers					

25. If any additional challenges to IBEX please specify.....

.....



.....  
 .....  
 .....

**iv. The impact of computerized accounting system software-IBEX on processing financial information.**

		SA	A	N	DA	SD
26	The use of CASS-IBEX at DZFEDSs are adequate					
27	The CASS-IBEX provide information on time					
28	Financial information depend on CASS-IBEX.					
29	CASS-IBEX is the source for preparation of financial information.					

30. Does the office always take care for the reporting process due to quality and accuracy?

Yes  no  not sure

31. If possible, please list the impacts for computerized accounting system software-IBEX on processing financial information's.

.....  
 .....  
 .....  
 .....

## APPENDIX-II AMHARIC VERSION QUESTIONNAIRE

የተከበራችሁ መላሾች፣ ይህ የመረጃ ማሰባሰቢያ ቃለ መጠይቅ የተዘጋጀው በዳውሮ ዞን ባሉ የፋይናንስና ኢኮኖሚ ልማት ሴክተሮች በኮምፒውተር የሒሳብ ሥርዓት ሶፍትዌር-አይቤክስ ችግሮች ላይ ዳሰሳ ጥናት ለማድረግ እንዲያስችል ነው። የጥናቱ ዓላማ የመመረቂያ ጽሑፍ ለማዘጋጀት ሲሆን በእኔ አብርሃም አካሉ በጅም ዩኒቨርሲቲ በአካውንቲንግ እና ፋይናንስ የ2ኛ ዲግሪ (MSC) ተማሪ የተዘጋጀ ነው። ጥናቱን ውጤታማ ለማድረግ እያንዳንዱ መላሽ የሚያደርገው ትብብር ከሁሉም የላቀ ድርሻ ስላለው የእርስዎን እውነተኛና ትክክለኛ ምላሽ እጠብቃለሁ። የሚሰጡትም መረጃ/ምላሽ ሚስጢራዊነቱ የተጠበቀና ለጥናቱ አገልግሎት ብቻ የሚውል ነው። በመሆኑም የእርስዎ የሆነውን የግል ምላሽ የሚጠይቁትን መጠይቆች በባዶ ቦታዎች የራስዎን አስተያየት በመስጠት እንዲሁም አማራጭ መልሶች ያሏቸውን መጠይቆች "✓" ምልክት በማድረግ ያሰፍሩብታል።

ለትብብርዎ በቅድሚያ ምስጋናዬን አቀርባለሁ!

### ሀ. የመላሾች ጥሬ ሀቅ/ መረጃ

1. የሥራ ድርሻ ኃላፊነት .....
2. ሥራ ሂደት :
  - ሒሳብና ክፍያ  ግዢ  የመንግሥት ፋይናንስ  አይቲ
  - ሥነ ህዝብ መረጃ  ኢንሰፔክሽን  ልማት ዕቅድ
3. ጾታ: ወንድ  ሴት
4. ዕድሜ: 18-25  26-35  36 እና ከዚያ በላይ
5. የትምህርት ደረጃ: ስርተፍኬት  ዲፕሎማ  ዲግሪ  ማስተርስ
6. ለምን ያህል ጊዜ በሴክተሩ ሠርተዋል ?
  - ከ2 ዓመት በታች  ከ3 እስከ 5 ዓመት  ከ5 እስከ10 ዓመት በላይ
  - ከ10 ዓመት በላይ
7. ሥራዎ ከኮምፒውተር ጋር ቀጥታ ግንኙነት አለዉ?
  - አዎን  አይደለም  እርግጠኛ አይደለሁም

ii. በዳወር ዞን ዉስጥ ባሉ የፋይናንስና ኢኮኖሚ ልማት ሴክተሮች የአይቤክስ የተግባር አፈጻጸም

8. ሴክተሩ አይቤክስን ይጠቀማል?  
አዎን  አይደለም  እርግጠኛ አይደለሁም
9. ሴክተሩ የሰለጠነ የሒሳብ መረጃ ሥርዓት ባለሙያ አለው?  
አዎን  አይደለም  እርግጠኛ አይደለሁም
10. መልስዎ አዎን ከሆነ ባለሙያዎቹ ሥልጠና ወስደዋል?  
አዎን  አይደለም  እርግጠኛ አይደለሁም
11. ሴክተሩ መረጃዎችን ለማደራጀትና ለማሠራጨት ከሚመለከተው አካል ግብአት የሚሆኑ መረጃዎችን ያገኛል።  
አዎን  አይደለም  እርግጠኛ አይደለሁም
12. አዎን ከሆነ መረጃው ምንን ያካተተ ነው?  
ሀ. የአካዉንት መረጃ  
ለ. የበጀት ቁጥጥር መረጃ  
ሐ. የፔይሮል መረጃ  
መ. የንብረት ቁጥጥር መረጃ  
ሠ. የወጪ መረጃ  
ረ. የተሰብሳቢና ተከፋይ መረጃ  
ሰ. ሁሉም ከላይ የተጠቀሱ መረጃዎች ይካተታሉ።

iii. በዳወር ዞን ዉስጥ ባሉ ፋይናንስና ኢኮኖሚ ልማት ሴክተሮች የአይቤክስ ችግሮች

13. በእርስዎ አመለካከት የአይቤክስ ችግሮች በመ/ቤትዎ አሉ?  
አዎን  አይደለም  እርግጠኛ አይደለሁም
14. ሲስተሙ ሲበላሽ የእንደገና መመለስ ሥራ ይሠራል?  
አዎን  አይደለም  እርግጠኛ አይደለሁም
15. መልስዎ አዎን ከሆነ በዓመት ምን ያህል ጊዜ ማስተካከያ ይደረጋል?  
በዓመት አራት ጊዜ  በዓመት ስምንት ጊዜ   
በወር አንድ ጊዜ  እንደአስፈላጊነቱ
16. በአይቤክስ የተግባር አፈጻጸም ወቅት ከሚከሰቱ ችግሮች የትኛውን ይጠቅሳሉ?  
ትክክል ያልሆነ አመዘጋገብ  የዴቢትና ክሬዲት ቦታ መቀያየር  የአሀዞች(የቁጥሮች) ስህተት
17. በየትኛው የሲስተም ሥራ የጎላ ስህተት ይፈጸማል?

- መረጃዎችን በማስገባት       መረጃዎችን በመተንተን   
 መረጃዎችን በማከማቸት       መረጃዎችን ወደ ዉጤት በመቀየር

ቀጥሎ ባለዉ ሠንጠረዥ ዉስጥ ያሉትን መጠይቆች በጥንቃቄ በማንበብ “√” ምልክት ያድርጉ።

		በጣም እስማማ ለሁ	እስ ማማ ለሁ	አላ ዉቅ ም	አልስማ ማም	በጣም አልስማ ማም
18	የመረጃ ሥራን ለማቀላጠፍ የሠለጠነ ባለሙያ እጥረት አለ					
19	የመረጃ ሥራ እየተተገበረ የኮምፒዉተር ሲስተም መበላሸት ችግር ያጋጥማል።					
20	በቂ ማኑዋሎች፣ መመሪያዎች ፎርማቶች እጥረት አለ					
21	የክትትልና ድጋፍ እጥረት አለ					
22	የኃይል/የሙብራት መጥፋት/ ችግር አለ					
23	የኮምፒዉተር ቫይረስ ሲስተሙን ያጠቃዋል					
24	መረጃዉን ለሚዘርፉ ባለሙያዎች ተጋላጭ ነዉ					

25. ሌሎች ከዚህ ጋር ተያያዥ ችግሮች ካሉ ይጥቀሱ.....  
 .....  
 .....  
 .....  
 .....

**iv. አይቤክስ በፋይናንስ መረጃ ሂደት ላይ የሚያመጣዉ ዉጤት**

		በጣም እስማማለ ሁ	እስማ ማለሁ	አላዉቅ ም	አልስማ ማም	በጣም አልስማማ ም
26	የሒሳብ መረጃ ሥርዓት አጠቃቀም በበቂ ደረጃ ላይ ይገኛል።					
27	ሲስተሙ መረጃን በወቅቱ ያዘጋጃል።					
28	የሪፖርት ሥርዓቱ በሲስተሙ ተመርኩዞ ይሰራል።					
29	ሲስተሙ የፋይናንስ ሪፖርት ለማዘጋጀት የመረጃ ማዕከል ሆኖ ያገለግላል።					

30. ሴክተሩ በሪፖርት ሂደት ለጥራትና ለርግጠኝነት ጥንቃቄ ያደርጋል?

አዎን  አይደለም  እርግጠኛ አይደለሁም

31. ሌሎች ከሲስተሙ ጋር በተያያዘ በፋይናንስ መረጃ ዝግጅት ወቅት የሚያጋጠሙ ችግሮች ካሉ ይጥቀሱ።

.....  
.....  
.....  
.....

## **APPENDIX –III INTERVIEW QUESTIONS**

**Interview questions for the purpose of research to the staff of Dawro Zone Finance and Economic Development offices.**

1. What is your name Sir/Madam? \_\_\_\_\_
  
2. What is your department/work process? \_\_\_\_\_
  
3. What position do you hold in this office? \_\_\_\_\_
  
4. Does your office use computerized accounting system software? If yes, what is that software? If no, what is the reason for not using the software? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  
5. Do you mention the practices associated with using these computerized accounting system software? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  
6. What are the challenges you have derived from using the computerized accounting system software-IBEX? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. What strategies are used to improve the efficiency of IBEX in your offices? \_\_\_\_\_

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---

8. Do you elaborate the function of CASS-IBEX on processing financial information in your office? \_\_\_\_\_

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9. Where do you see your office from 5 years now with this software in operation? \_\_\_\_\_

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10. What is your suggestion related with sustainability of this software? \_\_\_\_\_

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