ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES

ASSESSMENT OF THE EFFECTIVENESS OF ACCOUNTING INFORMATION SYSTEM IN THE CASE OF INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE IN ETHIOPIA

A Thesis submitted to the Department of Accounting and Finance St. Mary University School of Graduates in Partial Fulfillment of the Requirements For The Degree of Master of Business Administration in Accounting and Finance

Submitted by: Ephream G/Yohannes

Advisor: AsmamawGete (Asst. Prof.)

June 2020

Addis Ababa, Ethiopia

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DECLARATION

I the undersigned graduate student hereby declares that this thesis "Assessment of the effectiveness of accounting information system in ILRI" is my original work, and that all source of the material used for this thesis have been acknowledged. This research study is being submitted in partial fulfillment of The Degree of Master of Business Administration in Accounting and Finance complies with the regulations of the St. Mary's university school of graduate's studies and meets the expected standard with respect to originality and quality.

Name of Student: Ephream G/Yohannes

ID. NO.: SGS/0167/2008B

Signature:_____

Date:_____

CERTIFICATION

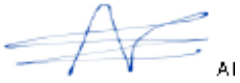
ASSESSMENT OF THE EFFECTIVENESS OF ACCOUNTING INFORMATION SYSTEMIN THE CASE OF INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE IN ETHIOPIA

Ephream G/Yohannes
ID. NO.: SGS/0167/2008B

The present thesis has approved by the thesis committee as master's thesis at

St. Mary University School of Graduate Studies

APPROVED BY:

Dr Asmamaw Gete (Asst.Prof)		August 19, 2020
Advisor	**Signature**	**Date**
Dr. Abraham Gebregiorgis (Asst. Prof)		August 19, 2020
Internal Examiner	**Signature**	**Date**
Dr Misrak Molla		August 19, 2020
External Examiner	**Signature**	**Date**
Chair of Department Graduate Program Coordinator	**Signature**	**Date**

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ABSTRACT

The main objective of this study was to assess the implementation and effectiveness of accounting information system employed in ILRI Ethiopia office especially IDS, CAFM, HR4U and unit4 Agresso from October 1, 2015 to December 31, 2018. Users of information system in ILRI were selected as the total population. The sample size determination techniques were judgmental sampling techniques. Primary data and questionnaire with Likert scale was used to measure the strength of respondent's agreement with a clear statement on five-point ratings. Descriptive statistic and Statistical Package for Social Scientists (SPSS) were used to analyze the data. The result reveled that using different software is wastage of time, incurred unnecessary expense and it create a duplication of work. Also, most of respondents agreed on using unit4 Agresso integrated AIS software which is reliable and already employed in ILRI. The finding indicated that there is not enough training intervention to capacitate employees on the system. Insufficient training and inexperience will lead to error and delay also the success or failure of the integrated system can be linked to this. There is well Infrastructure, usefulness, security and flexibility of ILRI AIS. CAFM training is given only to engineering unit and this software is used by one unit only, there is also a knowledge Gap on IDS. Fast pay software neutral response is high because there is no training given except one accountant even to other accountants. About 51% agree on using unit4 Agresso for payroll transaction recording. And most of respondents are disagree and neutral to use HR4U software rather than unit4 Agresso software for payroll transaction record.

Keywords: accounting system, information system, computerized accounting information system, IT infrastructure.

TABLE OF CONTENT

LIST OF TABLES

ACRONYMS

AIS	Accounting Information System
CAFM	Computer Aid Facility Management (Software)
CGIAR	Consultive Group of International Agricultural Research
ERP	Enterprise Resource Planning
HR4U	Human resource 4U (Software)
IDS	Intrusion Detection System (Software)
ILCA	International Livestock Center For Africa
ILRI	International Livestock Research Institute
IS	Information System
IT	Information Technology
SPSS	Statistical Package for Social Scientists

CHAPTER ONE
INTRODUCTION

1.1. Background of the Study

Generally, information is a processed data, data that is collected for the specific purpose. Information is data that have been organized and processed to provide meaning and improve the decision-making process. When we want to process data, we must design organization-oriented Information system (IS) and better to use information technology (IT) for accuracy and timely submitted in an organization. A computer-based information system is a collection of computer hardware and software designed to transform data into useful information. Availability of information at the right time is necessary to the success of every organization and accounting information to be useful for management decision, it must meet the basic requirements of Relevance, Reliability, Comparability, Consistency (Akinniyi, Akinola & Olagunju, *2018).*

Accounting information system is to collect, process and analyze data to give information for internal and external users that will help them in decision making for planning and controlling various activities of the organization. Accounting information system is the whole related components that are put together to collect information, raw data and transform them into financial data for the purpose of reporting them to the decision makers (Salehi et al., 2010). Accounting Information Systems (AIS) like the other business resources of raw materials, capital and labor is vital to the survival of the organization (James, 2011). The accounting information system comprises the processes, procedures, and systems that capture accounting data from business processes; record the accounting data in the appropriate records; process the detailed accounting data by classifying, summarizing, and consolidating; and report the summarized accounting data to internal and external users (Leslie, Andrea & Mary, 2017). Accounting information systems are critical to the preparation of quality accounting information on a timely basis and the communication of that information to the decision makers.

AIS are considered as important organizational mechanisms that are critical for effectiveness of management decision and control in organizations (Sajady, Dastgir and Nejad, 2008). Until recently, most organization uses a stand-alone system that was designed to the specific needs of users. With separate applications to manage different business functions, organizations had to develop complex interfaces for the systems to communicate with in the

organization. Today the trend in information systems is toward implementing highly integrated, enterprise-oriented systems. These are not custom packages designed for a specific organization. Instead, they are generalized systems that incorporate the best business practices in use. Organizations mix and match these prefabricated software components to assemble an enterprise resource planning (ERP) system that best meets their business requirements(James, 2008).These modules are integrated together and can access the same data and execute complex business processes. Today, Cloud-based accounting information systems are increasingly popular for both small and large organizations.

1.2. About International Livestock Research Institute (IlRI)

ILRI is an international livestock research institute with its headquarters in Kenya and cohosted by the government of Ethiopia in Addis Ababa. It works through a network of regional and country offices and projects in East and Southeast Asia, South Asia, East, Central, Southern and West Africa and in Central America. In 2018, ILRI had 761 permanent staff Out of the total number of permanent staffs, 146 were internationally recruited staff of whom 34% were female. Only 302 staffs are located at Ethiopia. Most of the staff members (81%) are nationally recruited largely from Kenya and Ethiopia. The International Livestock Research Institute (ILRI) is a member of the Consultive Group of International Agricultural Research (CGIAR) Consortium, a global research partnership that unites organizations engaged in research for a food-secure future.

ILRI's mission is to improve food and nutritional security and to reduce poverty in developing countries through research for efficient, safe and sustainable use of livestock "ensuring better lives through livestock". ILRI works with partners worldwide to enhance the roles that livestock play in food security and poverty alleviation, principally in Africa and Asia. The outcomes of ILRI research partnerships help people in developing countries keep their farm animal's alive, increase and sustain their livestock and farm productivity, find profitable markets for their animal products, and reduce the risk of livestock-related diseases.

ILRI's three strategic objectives are with partners, to develop, test, adapt and promote science-based practices that being sustainable and scalable achieve better lives through livestock. With partners, to provide compelling scientific evidence in ways that persuade decision makers from farms to boardrooms and parliaments that smarter policies and bigger livestock investments can deliver significant socio-economic, health and environmental dividends to both poor nations and households. With partners, to increase capacity among

ILRI's key stakeholders to make better use of livestock science and investments for better lives through livestock.

ILRI and Accounting Information system

ILRI use various accounting information system software's in finance units since its establishment in the year 1974 as International livestock center for Africa (ILCA). Currently ILRI employed unit4 Agresso business world since October 1, 2015 as an accounting information system for finance and supply chain unit only. Starting from October 2015 till now only some modules of unit4 Agresso implemented by giving short on job training to the staff who are based at Kenya and Ethiopia, In October 2015 all accounting data are migrated from SUN system accounting software to Unit4 Agresso business world software. And starting from 1st October 2015, Current period transactions are recorded on unit4 Agresso business world with the help of system administrators from Unit4 Agresso and ILRI ICT department.

Currently ILRI employed different AIS software's for different unit's use. Finance and supply chain unit use unit4 Agresso software for financial transaction, Finance use Fast pay software to prepare payroll, Housing and catering unit use intrusion detection system (IDS) software to record sales and stock, Engineering unit use Computer Aid Facility Management (CAFM) software for fixed asset register and Job card registration, People and organizational development (P&OD) use Human Resource 4U (HR4U) software for leave management.

1.3. Statement of the Problem

Accounting Information System add value to organization by providing accurate and timely information by improving the quality and reducing the cost of services, improving efficiency, improving decision making capabilities, increasing the sharing of knowledge (Hall, 2010). Well designed AIS add value to an organization by supply of information, quality and timely reporting, increase employee's efficiency and effectiveness and improving internal control of the organization. The availability of integrated accounting information system that can be relied upon to prepare financial report for finance, program leader and management on timely base is vital to the organizations. An integrated AIS system offers live information that facilitates business agility and improves communication, coordinate activities, and reduce duplication of works and decrease cost of information system. Reliable information system improves work quality and enables the organization to solve complex problems and helps in integration of woks in all departments.

Accounting information systems are considered as important organizational mechanisms that are critical for effectiveness of decision of management and control in organizations (Sajady, Dastgir and Hashem, 2008). Integrated AIS system is a decision support tool that gives management with real-time information and permits timely decisions that are needed to improve performance. Below the researcher wants to assess the main problems in effectively utilizing computerized AIS's employed in ILRI and can be formulated in the following questions:

First, In ILRI different units use different AIS software's, one transaction is recorded in different units with different software in different period (months).

Secondly As indicated indicates in Journal of human resource costing and accounting that Skillful and specialized human resources are of vital importance for an organization just like its physical properties and investments. Managers of the organizations spend a lot of money for training and educating their workers and employees to increase the efficiency of the organization under their control (Flamholtz, Kannan, & Bullen (2004). Here the researcher wants to assess about the training given at the time of purchase of different software and to ask weather new employees are getting the training and to assess the impact of training on employee's performance.

Third Since purchasing of different computerized AIS software's from different suppliers, installation, and license renewal cost is high. Based on the above reason, the researcher wants to assess how to use effectively currently employed different accounting information system software's and the effects of using different software's in terms efficiency, employees training and software purchase cost

1.4. Research Questions

As per the above stated research problem in mind, on this study will be conducted to answer the following research questions:

1. How much effective is using currently employed different Accounting information system in ILRI.
2. Does using different accounting information system is effective and efficient to record and processes AIS in ILRI Ethiopia?
3. What type of training is given to accounting information system users?

4. What are the effects of giving inadequate training to accounting information system users in ILRI Ethiopia?
5. What are the effects of purchasing, installation, and license renewal cost of different accounting information systems?

1.5. Objectives of the Study

1.5.1. General Objective

The main objective of this study was to assess the effectiveness of accounting information system employed in ILRI Ethiopia office especially IDS, CAFM, HR4U and unit4 Agresso.

1.5.2. Specific Objectives

- ✓ To assess accounting information system that is reliable to ILRI which help to avoid duplication of work in different unit and
- ✓ To find a way for the implementation of one integrated AIS software for recording and reporting to each unit of the institute.
- ✓ To find which AIS software is reliable from already employed in ILRI.
- ✓ To examine the relation between the users training and employee efficiency and the impact of the training.
- ✓ To assess the currently employed AIS status of the infrastructure, security, usefulness of AIS, problem faced, and challenges associated with effectively using different AIS systems.

1.6. Significance of the Study

Recently study examine whether organizations systematically vary the AIS designed to support their chosen strategy, by recognizing that AIS have the potential to facilitate strategy management and enhance organizational performance (Gerdin and Greve, 2004). This study is of key importance to ILRI as well as other firms to determine the benefits/effects of using one integrated AIS for the implementation of the Real-Time Reporting, reduction of software purchase cost, reduction of different software employee training cost. Also, Identification of performance of ILRI AIS's and gives clues to management in order to improve the AIS design and implementation. And the study is useful to other researchers interested in the problem under investigation as the study has laid a platform on which further studies related to the subject can be undertaken. The study would provide a theoretical basis about ERP based accounting information system successful adoption to firms.

1.7. Scope and Limitation of the Study

Scope of the study: Since Accounting information system is a multidimensional concept,this study had focused on the assessment of accounting information systems implementation and effectiveness in ILRI Ethiopia. The effectiveness was based on the design and implementation of the AIS. With scope only from October 1, 2015 to December 31, 2018.

Limitations of the study: The researcher limits the study and sampling frame with in ILRI Ethiopia office. Eventually, there is a need for more studies on this area to support the results of the current study and to expand the literature on this important issue.

The time frame was very limited which have been done by increasing the number of sample organization. There was limitation of resource especially with respect to time and finance to travel to other office of ILRI outside of Ethiopia to find more data. And primarily uses qualitative data to test the effectiveness of Accounting Information Systems.

Since the study is limited only to International livestock research institute Ethiopia office, which could make it difficult to generalize the findings to all accounting information users and other researchers. Hence, potential researcher could conduct similar studies by elongating to other organization. Finally, lack of finance, and limitation time are critical limitations of this study. Thus, future researcher can consider this paper as additional reference to produce relevant study.

1.8. Organization of the Study

This research paper is organized in five chapters. The first chapter contains introduction of the study which consists of background of the study, background of the organization, statement of the problem, objectives of the study, significance of the study, scope and limitation of the study and organization of the paper.

Chapter two comprised of Various definitions of AIS, assessment of different literatures both on the area which discusses various theories and concepts on AIS and different types of AIS software's. On Chapter three Research Design and methodology, sampling technique, data source, collection and analysis methods are discussed. Chapter four includes presentation, analysis and interpretation of the data and chapter 5 brings the study to final, by presenting summary of the study, conclusion and recommendations.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1. Theoretical Review

An accounting information system is generally a method for recording accounting transactions in conjunction with information technology resources. AISs can support an automation of processing large amount of data and produce timely and accuracy of information. Accounting information system would be elaborated as follows. Accounting could be described into as information system, language of business, and source of information. Information is a valuable data processed that provides a basis for making decision, action taking, and fulfilling legal obligation. And system can be described as an integrated entity, where the framework is focused on a set objective.

The information value generated by accounting information system to shareholders and stake holders in making investment decisions is valuable. Accounting information systems could be described as systems used to record the financial transactions of a business or organization. Organizations systematically vary the AIS design to support their chosen strategy, recognizing that Accounting information system have the potential to facilitate strategy management and enhance organizational performance. While there are different types of AIS's they all have one common characteristic that is to meet the organizations' needs of accounting information as efficiently as possible The financial managers need the financial and accounting data provided by accounting information system to evaluate the firm's past performance and to map the future (Gerdin and Greve, 2004).

Early accounting information systems were designed for payroll functions. Initially, accounting information systems were developed "in-house" as no packaged solutions were available. Today, many accounting information systems are more commonly sold as prebuilt software packages from large vendors such as ebizframe10, SAP Business One, Microsoft dynamics 365, Sage Group, Oracle Corporation-Oracle and others where it is configured and customized to match the organization's business processes. Small businesses often use accounting lower costs software packages such as Tally, MYOB, and QuickBooks.

2.2. Various Definition of AIS

Accounting information system was defined by different scholars at different time. Below let us see some of them. The system of collecting and processing transaction data and

communicating financial information to decision makers is known as the accounting information system. Most business use computerized accounting systems (Electronic data processing) System (Paul, Jerry & Donald, 2012). An Accounting information system (AIS) is a collection of resources, such as people and equipment, designed to transform financial and other data into information. Hence accounting information systems could be described as systems used to record the financial transactions of a business or organization. This system combines the methodologies, controls, and accounting techniques with the technology of the Information industry to track transactions provide internal reporting data, external reporting data, financial statements, and trend analysis capabilities affect organizational performance (Urquia, 2010).

Information is significantly improving decision-making better. Availability of information at the right time is necessary to the success of every organization and failure to leverage on accounting information system often proof counterproductive towards the achievement of goals in organization. The quality of accounting information is depending on the quality of accounting information system. Accounting information are qualitative and quantitative details in readable and understandable form to assist various stakeholders. Management is requiring good quality and reliable information. In an accounting information system, the quality of the information provided is imperative to the success of the systems (Hongjiang, 2010). Accounting information system includes three sorts of information the organization need in their activities. This information is the information to be presented to the internal users, the information to be presented to the external users, and the necessary information for assessment (Metin, 2011). An Accounting information system should provide relevant information in real time and should frequently report on the most important events and provide rapid feedback on the previous technology (Hazar& Mohamed, 2013). An AIS defined as a set of interrelated components that collect (or retrieve), process, store, and distribute information to support decision making and control in an organization.

As the need for connectivity and consolidation between other business systems increased, accounting information systems were merged with larger, more centralized systems known as enterprise resource planning (ERP). Before, with separate applications to manage different business functions, organizations had to develop complex interfaces for the systems to communicate with each other. In ERP, a system such as accounting information system is built as a module integrated into a suite of applications that can include manufacturing,

supply chain, human resources. These modules are integrated together and can access the same data and execute complex business processes.

Today, Cloud-based accounting information systems are increasingly popular for both small and large organizations at low costs. Cloud computing describes the increasing trend for data processing capabilities to be provided as a service via the Internet. Cloud is simply a synonym for the Internet, and cloud computing is the use of cloud-based data processing services and data storage (George & William, 2013).

2.3. Basic Parts of an Accounting Information System

The Accounting information system should be the organization's primary information system and that can provide users with the information they need to perform their jobs. The AIS must collect, enter, process, store and report data and information. For this to be practical the following components should be organized. The people who use the system such as Accountants, managers, and business analysis's. The procedure and instruction, that are the ways that data are collected, stored, retrieved, and processed. Data that goes into an AIS. Accounting information system is the whole of the related components that are put together to collect information, raw data or ordinary data and transform them into financial data for the purpose of reporting them to decision makers (Salehi et al., 2010).

AIS are systems used to record the financial transactions of a business or organization. This system combines the methodologies, controls, and accounting techniques with the technology of the IT industry: user interface, computers, and sophisticated software. The software used to track transactions provides internal reporting data, external reporting data, financial statements, and trend analysis capabilities.

Accounting information systems as systems operate functions of data gathering, processing, categorizing, and reporting financial events with the aim of providing relevant information for the purpose of score keeping, attention directing and decision-making. (Boochholdt ,1999) Accounting Information Systems (AIS) are incorporated into the field of Information and Technology systems (IT), AIS designed to help the management for control of organization economic and financial area. Software's, computer programs used for data processing. Information technology infrastructure included all the hardware used to operate the AIS. And finally, the internal control that is the security measures used to protect data (Marshall & Paul, 2018).

2.3.1. Users of accounting information

Accounting information system includes three sorts of information the business enterprises need in their activities. This information is the information to be presented to the internal users, the information to be presented to the external users, and the necessary information for assessment (Metin, 2011). The users of accounting information fall into two broad groups, external and internal. External users include stockholders, investors, creditors, government agencies, customers and vendors, competitors, labor unions, the public at large, and other external users utilize a firm's general- purpose financial statements to evaluate past performance, predict future performance. The information value generated by AIS to shareholders and stakeholders in making investment decisions is invaluable. Financial managers need the financial and accounting data provided by AIS to evaluate the firm's past performance and to map future of the organization. Internal users consist of managers; whose requirements depend on their level in an organization or on the specific function they perform.

2.3.2. A well-designed AIS that can add value to an organization

Supplying of information is useful for making decisions, because improved decision making is vitally important to the organization, the information given by employees should be correct and on time, including producing managerial reports and financial reports. According to these contributions, it can be said that AIS add values toward planning, developing, and improving of operational and financial situations of organization. In addition to supporting decision making, coordination, and control, information systems also may help managers and workers analyze problems, visualize complex subjects, and create new products (Azhar, 2016).

AIS are critical to the production of quality accounting information on a timely basis and the communication of that information to the decision makers. While there are different types of AIS's they all have one common characteristic to meet the organizations' needs of accounting information as efficiently as possible. All Organizations systematically vary the accounting information system design to support their chosen strategy and recognizing that AIS has the potential to facilitate strategy management and enhance organizational performance. So many studies begun to examine whether organizations systematically vary the AIS design to support their chosen strategy, recognizing that AIS have the potential to facilitate strategy management and enhance organizational performance (Gerdin and Greve, 2004).

Effective information system improved work quality and enables the organization to solve complex problems and help in integration of internal external records. Benefits of accounting information system can be evaluated by its impacts on improvement of decision-making process, quality of accounting information, performance evaluation, internal controls and facilitating company's transactions. Accounting information system add value to organization by providing accurate and timely information also by improving the quality and reducing the cost, or services, improving efficiency, improving decision making capabilities, increasing the sharing of knowledge. Well-designed AIS can also an organization profit by improving the efficiency and effectiveness of its supply chain (Hall, 2010).

By well-designed Internal controls typically center around the company's accounting information system, which is the primary function for moving financial information through a company. Therefore, internal controls help managers to monitor and measure the effectiveness of their accounting operations on performance (Osmond Vitez, 2010). AIS finance can improve the quality of report and can establish and implement a real time reporting standard. A Real time reporting is recording and reporting an event when it occurs. With real time reporting, companies can view and access their financial and other data right as it is happening. Improving efficiency, timely getting information, as it requires constant, accurate, up-to-date information is very much important to the management decision. An AIS with the proper internal control structure can help protect systems from fraud, errors, system failures, and disasters. Make sure controls are in place and accurately record and process data (Marshall & Paul, 2018).

Benefits of accounting information system can be evaluated by its impacts on improvement of decision-making process, quality of accounting information, performance evaluation, internal controls and facilitating company's transactions. Accounting information system according to the perceived usefulness of four information attribute namely scope, timeliness, level of aggregation, and integration. Scope refers to the measures being used and to the extension of AIS in time and space. Then information could focus on future vs. historical events or external vs. internal events. Also, the information could be quantified in monetary or non-monetary terms.

Timeliness refers to the frequency, speed of reporting and the orientation of the information (e.g. short or long run).

Aggregation refers to the way data is aggregated in time periods, functions or in accordance with decision models.

Finally, integration refers to the need of providing information to reflect the interaction and coordination effects of several functions in the organization. These four attributes have been analyzed for comparing AIS and organizational strategies and performance (Gerdin and Greve, 2004).

2.3.3. Advantage and disadvantage of accounting information system

Cost effectiveness, time effectiveness and accuracy are some advantages of AIS. With Cost Effectiveness each organization is moving towards cost cutting with the use of AIS. AIS have helped to reduce manual efforts and can perform the same operation more cost-effectively. With time effectiveness AIS has assisted business organizations to reduce the amount of time involved in recording, classifying, reporting any financial information. A large of manual work can be completed by AIS with fewer efforts and time involved. Easy Access Data stored in AIS can be retrieved via information system connected with internet anywhere and at any time. And accuracy, with the AIS, the reliability of data is increased. An AIS follows a predefined set of instructions, therefore chances of error-prone information are less and therefore AIS have an added advantage of accurate data.

Some of Disadvantages are initial cost of installment and training, An AIS is cost-effective, and the same may not be true in the case of small business enterprises. Cost of initial setup may be high and may not actually generate value to the organization. Manual intervention, AIS needs manual intervention, which cannot be eliminated at a certain point of time which may bring inefficiency in the system. Error cannot be completely eliminated, AIS reduces chances of error but there are chances of wrong coding in software which may lead to error-prone results. Confidentiality, AIS data can also be disastrous for an organization If such information is hacked i.e. stolen. An intruder may amend the information, or he can disclose sensitive financial information. Virus attack, any data stored on AIS can be infected with a virus which may lead to disruption, modification of financial information stored on AIS (Mahdi, 2010).

2.3.1. The Strategic Role of the Accounting Information System

Accounting information systems evolution is mostly related with disruptive changes in a wide variety of societal and environmental factors. Three factors of the main antecedents of

accounting information system changes are Technology, Management practices and models, and Accounting rules.

Technological change such as the Internet deeply influenced accounting information systems, and web technology has had an impact both on how an accounting information system is built, and on how it is used. Some of management practice such us strategic is searching new ways to combine information and read economic and competitive events and as an important support for internal decision-making processes. The accounting information system as being synonymous to organizational innovation, efficiency, reliability of information, and relevance of information for internal and external stakeholders.

Even if the applicable accounting rules and management practices are important sources of innovation in accounting information systems, the main change driver is the globally competitive arena. In this sense 'strategic' means the ability of the accounting information system, as an integrated system, to satisfy external information needs for decision making and to ensure the required levels of transparency, accountability, and disclosure. To collect in real time, select, process, and distribute data really necessitates a profound knowledge of the company as well as external consensus rooted in transparency (D. Mancini et al. (eds.), 2013).

The main advantages of an optimal use of AIS in an organization are better adaptation to a changing environment, better management of arm's length transactions and a high degree of competitiveness. There is also a boost to the dynamic nature of firms with a greater flow of information between different staff levels and the possibility of new business on the network and improved external relationships for the firm, mainly with foreign customers accessed through the firm's web (Grande et al., 2010).

2.3.2. Accounting Information Systems and Management report

In managing an organization and implementing an internal control system the impact of accounting information system (AIS) is essential. An important question in the field of accounting and management decision-making concerns the fit of Accounting information system with organizational requirements for information communication and control. Benefits of accounting information system can be evaluated by its impacts on improvement of decision-making process, quality of accounting information, performance evaluation, internal controls and facilitating company's transactions.

The accounting information system is designed for accounting reporting and for management report and control purpose. The architectural model of an accounting information system integrates both financial and management accounting, and management accounting to management control since management accounting information is used for management control purposes.

Accounting information systems are often regarded as machines which transform input raw data into pre-defined output in high volumes. Accounting information systems provide lots of information, also process data, by organizing, retrieving, and selecting to meet the manager's information needs. A simplified model of an accounting information system shows the system organized in three levels. At the basic level, there are business processes that produce elementary data regarding simple business operations, collected by the operational accounting system.

At the intermediate level there is the financial accounting system where elementary data are reorganized, to respond the financial accounting standards and to produce the financial statements and some other financial information. At the top level there is the management accounting system where both operational and financial data are processed to produce information and perhaps knowledge to support managerial and strategic decisions (D. Mancini et al. (eds.), 2013).

2.3.4. Enterprise resource planning (ERP)

ERP involves combining the various functional integrated information systems under the umbrella of a single software package and a single database. Enterprise resource planning (ERP) system has been one of the most popular business management systems, providing benefits of real-time capabilities and seamless communication for business in large organizations (Ibrahim, 2010). Enterprise resource planning (ERP) emerged as the solution to too-loosely connected functional information systems. Human Resource Management, Operations, Services, Financial, and Governance can be integrated with on ERP system. The Operations grouping included in one system, and the Financial grouping includes financial and management accounting, as well as finance and supply chain management.

Enterprise Resource planning as a System**,** collects, processes, and stores data and provides the information to managers and external parties need to assess the company. A properly configured ERP system uses a centralized database to share information across business processes and coordinate activities. Employees are more productive and efficient because

they can quickly gather data from both inside and outside their own department. An ERP can consolidate multiple permissions and security models into a single data access structure.

2.3.5. Types of ERP based accounting information systems software

The following are some of ERP based accounting information system software, unit 4 Agresso, Oracle, J.D. Edwards, SAP Business one, Microsoft Dynamics 365, Lawson, ebizframe10, Change point and Microsoft Business Solutions. On the basis of computer, the applied accounting systems, since they are rapid, precise, and very reliable, are chosen for the organization. The accounting software of today is graphic based and easy to use and has remote accessible feature. Today's accounting software reached the point of ERP systems having integrated information operation systems or modules of accounting and financing. Let us see features of some ERP based AIS software as a sample:

2.3.5.1. Ebizframe10 accounting information system

Manually compile various accounting and administrative reports led to a substantial delay in the generation of summarized reports. To solve these problems implementation of a powerful and versatile enterprise resource planning (ERP) software which is modular, and web enabled should be mandatory and could be deployed seamlessly across the various departments. This would reduce time and effort to make consolidated reports and achieved a high degree of managerial control over their global operations.

The following modules of ebizframe10 ERP were incorporated: Sales, Procurement, Inventory, HR & Payroll, Finance, Fixed Assets, Maintenance, Property Management and Executive Information System. The most important aspects of this ERP implementation are: Automation of Property Management Operations, System generated Multi-Currency Statements from the ERP System Consolidation of operations in multiple currencies into a single base currency makes management much easier, Provision of generation of Historic Reports from the system, Automation of the Invoicing System which would later also be integrated

Benefits of using ebizframe10 software; Inventory position visible to user before requisition, Pay slips sent to users online via email, Considerably simplified and faster Bank Reconciliation Process, Complete statutory compliance of all stringent, Users provided access and authority level depending on their functional responsibilities and requirements Increased accountability, more value-added responsibility, Privileged Access assigned on temporary basis automatically expires on the due date, Easy and fast user acceptance due to simple and

easy-to-use, User Interface and structured User Training. ebizframe10 offers flexibility & convenience to massage data from ERP & outside sources and convert it into useful information. It is possible to import data from external sources for one time set up as well as during regular routine operations. Users can also export their data in multiple formats to external systems. It is possible to have multiple levels of approvals for various transactions and these levels can move up and down the organization pyramid depending upon their nature and value of transaction. Ebizframe10 can be completely implemented on cloud. Ebizframe10 can be deployed on premise or on the Cloud, based on client preference.

2.3.5.2. SAP Business One accounting information system

With centralized database, provides an integrated, enterprise-wide, single view of the organization's data and financial situation. Storing all corporate information in a single database breaks down barriers between departments and streamlines the flow of information. Data input is captured or keyed once, rather than multiple times, as it is entered into different systems.

Some features of SAP Business One

Sap business one Improve margins, reduce errors, and automate the handling of all key accounting processes such as journal entries, accounts receivable, and accounts payable. Manage cash flow, track fixed assets, control budgets, and monitor project costs with greater accuracy and efficiency. Simplify the management of your fixed assets with a virtual function, eliminating the need for repetitive manual data entry. Process reconciliations, and payments faster through various methods including checks, cash, and bank transfers. Create standard or customized reports from real-time data to improve your business planning and audit review processes. And Consolidate and streamline core human resources (HR) and payroll processes with a cloud based. HR organizations can define and execute better people strategies, provide actionable insight, and focus on value-add activities that support the business.

About Real-time reporting and decision-making, the SAP Business One provides the ability to obtain business insight through real-time reporting at a moment's notice. The ability to print out financial reports such as a profit and loss statement or a balance sheet helps management for decision making and determines whether the organization is reaching their goals. SAP Business One provides comprehensive support for Moving to a single system that

can not only manage your accounting, sales, inventory, and reporting needs but also give you real-time access to business intelligence for better decision making.

2.3.5.3. Microsoft dynamics 365 accounting information system

Microsoft Dynamics is an accounting system that is widely used by small and midsized businesses. This accounting system provides sophisticated supply chain management features and functions. Its business portal functionality provides employees, suppliers, and customers Web access to supply chain functions, documents, and information. Automate and prioritize tasks to save time, reduce errors, and get more done with integrated tools and applications you're familiar with, such as Office 365. Minimize costs and optimize spending across business geographies with process automation, budget control.

Compete globally with Dynamics advanced multi-company, multi-currency capabilities. Ensure international compliance with complicated laws, regulations, policies and business rules. Improve financial control with integrated accounting, budgeting and forecasting capabilities (general ledger, fixed assets, accounts payable/receivable and project costing). Simplify human resource functions with automated tools including benefits administration, absence management, compensation management, employee development and more.

2.3.5.4. Unit4 Agresso Business world accounting information system

UNIT4 Agresso Business World is a fully integrated role-focused ERP system, ideal for service or people-based organizations that need financial accounting and other back office software integrated with a broader range of core business functions in a single unified system. Some of core business functions of unit4 Agresso are Financial Management, core financial/accounting solution, plus multi-company, multi-currency, and multi-lingual capabilities. Human Resources & Payroll the hire-to-retire cycle and processes payroll. Project Costing & Billing Enables optimal use of resources and tight management for all processes in a project from project initiation through to resourcing and costing, to billing, reporting, and analysis. Procurement Management Supports, automates and standardizes all stages of the procurement cycle - from requisitioning to paying vendors. This includes identifying the need for a product or service, expenditure approval, electronic data and information exchange with suppliers, goods delivery, expediting and inspection, invoice matching, and payment to supplier. Reporting & Analytics easy to use tools to meet the diverse information requirements of users. And purpose-built and fully integrated across all modules. Automation Management and administration tools for asset maintenance, inventory

management, contract management, resource allocation, regulatory reporting, time and billing.

Unit4 Agresso business world Business Financial Management is an integral part of the Business World solution, a fully integrated suite of ERP solutions for companies in the professional services and public sectors. Some of the modules are, General Ledger Business World's is an information store for data integrated with all other Business World applications. Business World allows fast and efficient data entry through its user-friendly design, automatic code completion and automatic reversing and accrual features, among many other features.

Fixed Assets Business World's application handles both the financial accounting rules for fixed assets and the management of assets within an organization. It includes automatic update from General Ledger, Accounts Payable and Purchasing. Business World Fixed Assets supports multiple depreciation methods. It also provides automation and all back-office processes for purchasing, from requisition to invoicing, to posting with the capability to automate and standardize their entire purchasing process.

2.4. Empirical Review

Rehahleh & Siam (2007) evaluated the effectiveness of computerized accounting information systems in the Jordanian commercial banks in light of technological development through testing the quality, flexibility, simplicity and confidentiality of these systems. Therefore, they developed a questionnaire and distributed questionnaire to the financial departments in commercial banks listed on the Amman Stock Exchange. Only questionnaire was returned and satiable for statistical analysis purposes. They found that the computerized accounting information systems in the banks has high quality, flexible simple and reliable.

Only recently have studies begun to examine whether organizations systematically vary the AIS design to support their chosen strategy, recognizing that AIS have the potential to facilitate strategy management and enhance organizational performance (Gordon & Miller, 1976). Hunton (2002) study, which investigated the relationship between automated accounting information system and organizational effectiveness; showed that there was strong relationship between accounting information system and organizational effectiveness, which means access to accounting information will lead to organizational effectiveness. Several recent studies on value of accounting information for equity valuation, share price

and earnings prediction have queried current financial reporting model in the developed world.

Chenhall (2003) asserted that AIS plays a proactive role in the strategy management, acting as a mechanism that enables organizational strategy. Strategy has been extensively used in management literature (Ponemon & Nagoda, 1990). So many studies begun to examine whether organizations systematically vary the AIS design to support their chosen strategy, recognizing that AIS have the potential to facilitate strategy management and enhance organizational performance (Gordon & Miller, 1976).

Due to the novelty of this subject the researchers found few studies regarding the impact of human resources on the accounting information systems of firms. Also, it should be noted that almost all the studies found addressed the subject of the impact of human resources on the AIS in a general way.

There are many researchers such as Scapens & Jazayeri, (2003); Spathis & Constantinides, (2004); Nicolaou, (2004); and Galani, et al, (2010) studied the relationship between (ERP) and quality of accounting information. For example; Scapens & Jazayeri, (2003) who aimed to identify the system as a result of the implementation of Enterprise Resources Planning (ERP) system in the management accounting, especially after the wide spread use of these systems, particularly in large companies. They indicated that there is a lack of addressing the issue of ERP in the accounting literature. They explored the experience of the American system (SAP) and concluded that the implementation of the Enterprise Resources Planning (ERP) system deceases the routine administrative functions provides the managers directly with useful information and increases of the role of managerial accountants. They recommended for further studies to be carried out on the application of ERP system and managerial accounting. Also, Spathis & Constantinides, (2004) studied the improvements offered by the ERP system to the process of accounting information in business and to identify the ways to develop ERP system therein in the future. They surveyed a sample of (26) Greek companies applying ERP system using a questionnaire. They used the mean and standard deviation to describe the collected data. They found that the ERP system improves the effectiveness of internal control in business organizations as well as improves the quality of accounting information and increase its reliability.

2.5. Summary of Literature Review

Accounting information systems are critical to the production of quality accounting information on time and communicate that information to the decision makers. Accounting information system is a collection of resources, such as people and equipment designed to transform financial and other data into information. And the quality of accounting information system is depending on the quality of accounting information system. In AIS, the quality of the information provided is imperative to the success of the system (Hongjiang, 2010).

For accounting information system to be practical the following components should be organized. The people who use the system, the procedure and instruction, the data, the software, IT infrastructure and internal security. And the output of this information system is to be presented to the internal and external users. A well designed AIS can improve the quality of report and can help to establish and implement a real time reporting system. Cost and time effectiveness are some of the advantages of accounting information system. Since Initial cost of installment and training cost is part of the disadvantages.

Enterprise resource planning (ERP) system has been one of the most popular business management systems, providing benefits of real time capabilities and seamless communication for business in large organization (Ibrahim, 2010). ERP systems consolidate multiple permission and security models into a single database access structure.

Today there are many ERP based accounting information systems available. Some of these are MS-dynamics, Ebizframe10, SAP business one, and unit4 Agesso. On one of these software's we can record sales, procurement, inventory, HR & payroll, fixed asset and property management and producing different financial and management report.

CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

3.1. Introduction

This chapter of the study starts with the description of research methodology and design, and research type, followed by describing the target population, sample size and sampling technique, source of data and methods of collection are discussed.

3.2. Research Methodology and Design

Research methodology is a way to systematically solve the research problem. A research method refers to the techniques that the researcher uses to gather information. Research design thus tells what is to be done at what time and tells how the goals of a research project can be accomplished.

This study is a qualitative research by its nature and used descriptive survey method as appropriate methodology to analyze and describe the current status of AIS and it addresses major objectives and research questions proposed in the study adequately. Descriptive researches are those studies which are concerned with describing the characteristics of individual, or of group and it includes surveys and fact-findings enquire of different kinds (Sakaran, 2003). Also, proposed that primary data was considered for this study.

3.3. Sampling Techniques and Sample Size

A sample is a sub selection of the research population. For this study users of information system in ILRI were selected as the total population. From all users of theses software's data were collected. Sample characteristics should closely resemble those of the entire population

(Polit and Beck, 2012) the sample size determination techniques were judgmental sampling techniques, because the sample size was users of information system in ILRI. The reasons for selecting these techniques were first it will enable the researcher to select the appropriate respondent that fits for his question and have connection with theses software's and workers of ILRI.

3.4. Data Sources

For primary data collection questioner were distributed for ILRI accounting information user staffs. That are from Finance 12, ICT 4, internal audit 2, program staffs 7, Support unit 17, (support unit encompass Supply chain, Housing and catering, engineering, and Human resource unit) total of 42 staffs were invited to participate

3.5. Data Collection Method

In order to collect the primary data, the researcher used structured close ended questioner. The questions were a Likert scale type. Likert scale was used to measure the strength of respondent's agreement with a clear statement on five-point ratings. And the language of the questionnaire was in English with the belief that it would provide maximum opportunity for appropriate communication of ideas between the researcher and the respondents. The researcher himself collects primary data by contacting users of information systems in ILRI. Since this research is for academic purpose with a limited time frame the researcher plan to collect the data with structured questioner.

3.6. Data Analysis Method

On this research data analysis is an important and main part of the study. Data was analyzed using the Statistical Package for Social Scientists (SPSS) where conclusions were drawn from tables, figures from the Package (Mawanda, 2008). Once the data have captured from the respondent, then data were recorded in SPSS version 20 data analysis software. And before starting the process of analysis, the raw data was edited and checked for errors and omissions. Then the edited data were analyzed, evaluated and judged. The response from the questioner were analyzed by descriptive statistic then interpreted and discussed.

3.7. Ethical Issues

In this paper all the materials and sources are properly acknowledged. The response from respondent of the questioner are strictly confidential and only used for academic purpose. The

identities of the respondents are not be disclosed. And the study was done not by using any confidential documents of the institute. Any confidential information given about the institutes from respondents were disregarded from data analysis.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

The purpose of this study is to assess effectiveness of accounting information system in ILRI Ethiopia office and This chapter involves data presentation, analysis, and interpretation of the response of participant is done below. In this research a total of 42 staffs were invited to participate in the questioner and out of these 42 staff's only 40 about 95% of the staff's gives response. This chapter has two sections. The first part shows the profile of respondents showing Gender, Age, educational level, work experience and work group using cross tabulation tables & Graph. The second part presents the analysis of the study by tables and percentages and frequency finally the discussion of results and overall response are presented. It structured into Demographic, Infrastructure, Usefulness, Security, and Flexibility, Challenges associated with using unit4 Agresso, CAFM, IDS, Fast pay, and HR4U software

4.1. Demographic Information of the Respondents

Gender proportion based on employee's category, according to the collected data, the participant in the questioner, 25% are Female and 75% are males.

The below tables show that 2.5% of participants are between ages of 18-25, 20% are between ages of 26-35, 55% are between ages of 36-45, 15% are between ages of 46-55, and 7.5% are above ages of 55. This shows that most of users of AIS in the institute are energetic employees and at the productive age group.

According to the collected data, educational level of employees of the institute, 81% of the employees are first degree holders and the other 14% of the employees have specialization at a master's degree level and above, no employees are participated below diploma and diploma holders.

Therefore, majority of the employees have at least a first degree and we can say that human resource profile of the institute in terms of educational background is in a good status.

As shown on the below table section 4.1.4 7.5% of the respondents are between 0-1 years of experience, 15% are between 3-5 years, 40% are between 6-10 years, 22.5% are between 11-15 years and 15% are above 15 years of experience.

On the figure below shows that the percentages of respondents to whom questionnaires was distributed and returned are presented. One respondent from finance and One respondent from program staffs are not returned the questioner.

Table 4.1: Demographic Information of the respondents

Demographic Information		Frequency	Percent
Gender of respondents	Male	30	75%
	Female	10	25%
Age of respondent	18-25	1	2.50%
	26-35	8	20%
	36-45	22	55%
	46-55	6	15%
	Above 55	3	7.50%
Educational level	First Degree	24	60%
	Masters And Above	16	40%
Work experience	0-2	3	100%
	3-5	6	7.50%
	6-10	16	15%
	11-15	9	40%
	Above 15	6	22.50%
Work group	Finance Staff	11	27.50%
	ICT Unit Staff	4	10%
	Program & Project Staff	6	15%
	Support Unit	17	42.50%
	Inernal Audit	2	5%

Source: Field Survey (2020)

4.2. AIS and Infrastructure of ILRI

As per the table section 4.2, the request for the required equipment and materials in ILRI 27 plus 5 respondents out of 40 are agree and strongly agree, which means equipment and materials to use AIS are almost fully facilitated. And 6 out of 40 respondents are neutral and only 2 respondents out of 40 disagree.

As shown in table, 30 plus 7 out of 40 respondents are satisfied with internet connection to use for AIS in ILRI and only 3 out of 40 respondents are neutral. And 26 plus 5 out of 40 respondents are satisfied and more, with IT staff support, eight out of 40 respondents are neutral and only one respondent is disagreed.

Table 4.2: AIS and Infrastructure of ILRI

	Work group	Disagree	Neutral	Agree	Strongly Agree	Total
Work There are the required equipment and materials to use AIS software in ILRI	Finance staff	0	0	10	1	11
	ICT unit staff	0	0	3	1	4
	Program & project staff	1	2	2	1	6
	Support unit staff	0	4	11	2	17
	Internal audit staff	1	0	1	0	2
	Total	2	6	27	5	40
ILRI have stable & good internet connection that can use for various AIS software's	Finance staff		1	10	0	11
	ICT unit staff		0	3	1	4
	Program & project staff		0	5	1	6
	Support unit staff		2	11	4	17
	Internal audit staff		0	1	1	2
	Total		3	30	7	40
IT staffs are adequately giving support to use various AIS software's in ILRI	Finance staff	0	0	11	0	11
	ICT unit staff	0	0	3	1	4
	Program & project staff	1	0	4	1	6
	Support unit staff	0	7	7	3	17
	Internal audit staff	0	1	1	0	2
	Total	1	8	26	5	40

Source: Field Survey (2020)

Generally, most of the respondents confirmed that facilities and materials used for AIS software's in ILRI are almost to the standard level. Related to internet, the respondents assure that ILRI has stable & good internet connection that can use for various AIS software's. Also, above 75% of the respondents gives high score for IT staff support on using ILRI's various accounting information systems. This indicates that ILRI infrastructure, status of internet connection and IT staff support is good. Therefore, ILRI infrastructure is supportive to the effectiveness accounting information system in ILRI.

4.3. AIS and Perceived Usefulness of ILRI

As shown on Table 4.3, the respondents 22 and 8 out of 40 who use Unit4 Agresso are agree and strongly agree about processing of large amount of financial information, 9 respondents are natural and only one of the respondents disagree about the processing of large amount of information.

Table 4.3: AIS and Perceived usefulness of ILRI

	Work group	Disagree	Neutral	Agree	Strongly Agree	Total
Unit4 Agresso software allows me to process large amounts of financial information	Finance staff	0	3	8	0	11
	ICT unit staff	0	0	3	1	4
	Program & project staff	0	3	2	1	6
	Support unit staff	1	2	9	5	17
	Internal audit staff	0	1	0	1	2
	Total	1	9	22	8	40
Unit4 Agresso software enabled me to accomplish tasks easily & quickly	Finance staff	0	2	9	0	11
	ICT unit staff	0	0	4	0	4
	Program & project staff	0	1	4	1	6
	Support unit staff	1	5	8	3	17
	Internal audit staff	0	0	1	0	2
	Total	1	8	26	4	40
Unit4 Agresso software improved the reliability of financial reports of ILRI	Finance staff	0	1	10	0	11
	ICT unit staff	0	1	3	0	4
	Program & project staff	0	3	2	1	6
	Support unit staff	1	3	11	2	17
	Internal audit staff	0	1	0	1	2
	Total	1	9	26	4	40

Source: Field Survey (2020)

The respondents also required how quickly and easily accomplish their task in unit4 Agresso. 26 and 4 out of 40 respondents are agree and strongly agreed, 8 out of 40 are neutral and the remaining 2 are disagreed. This shows that more than 75% are accomplish their tasks easily and quickly on unit4 Agresso software. Table 4.3 depict that of 26 and 4 respondents out of 40 are agreed and strongly agreed on unit Agresso improved the reliability of financial reports of ILRI, the remaining 9 are neutral and 1 is disagree.

As shown in the above table 4.3, most of the respondents replies that they can process large amount of financial information using Unit4 Agresso software. And about 30 staffs out of 40 respondents are agree and strongly agreed, 8 out of 40 are neutral, may be these 8 staffs are new for the software and may be because of the training they have got is not enough. 75% of respondents gives agree and strongly agree point, this share us that unit4 Agresso is well designed software to prepare reliable report.

Generally, the software has the capacity to processes large amount of information at a time, most of the users are qualified staffs and the software is friendly to the users. And it is easy to do what they want to do. But the response shows us that the software support to enable the users to complete their data recording easily and more quickly.

4.4. AIS Security Of ILRI

Table 4.4: AIS security of ILRI

	Work group	Neutral	Agree	Strongly Agree	Total
Password protection & restriction for specific & general system protection	Finance staff	0	9	2	11
	ICT unit staff	0	4	0	4
	Program & project staff	0	3	3	6
	Support unit staff	1	13	3	17
	Internal audit staff	0	1	1	2
	Total	1	30	9	40
There is an effective data security control in ILRI	Finance staff	0	10	1	11
	ICT unit staff	0	4	0	4
	Program & project staff	0	3	3	6
	Support unit staff	4	10	3	17
	Internal audit staff	0	1	1	2
	Total	4	28	8	40
ILRI has adequate security measure to prevent unauthorized transaction	Finance staff	0	9	2	11
	ICT unit staff	1	3	0	4
	Program & project staff	2	1	3	6
	Support unit staff	5	10	2	17
	Internal audit staff	0	1	1	2
	Total	8	24	8	40

Source: Field Survey (2020)

Table 4.4 indicated that 30 plus 9 of the respondents are agreed and strongly agreed on password restriction and on general system protection in ILRI accounting information system only 1 person is neutral. 28 plus 8 out of 40 respondents are agreed and strongly agreed and only 4 out of 40 are neutral about an effective data security control in ILRI. Also 24 plus 8 out of 40 respondents are agree and strongly agree that and 8 out 40 respondents are neutral about ILRI has adequate security measure to prevent unauthorized transaction.

As shown in table 4.4, above 97% of respondents agree and strongly agree or satisfied on the status of password protection and restriction on the accounting information system in ILRI.

90% of the respondents agrees and strongly agree and have understanding that ILRI accounting information system data security control is effective. And also 80% of the respondents agree and strongly agree that security measure to prevent unauthorized transaction is adequate.

In general, the accounting information system and data security control is in ILRI is well designed and most of users know this control.

4.5. AIS Flexibility of ILRI

Table 4.5: AIS flexibility of ILRI

	Educational level	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
Unit4 Agresso software enable to generate report with different format						
	First degree		2	5	14	3
	Masters and above		1	4	8	3
	Total		3	9	22	6
Unit4 Agresso software enable to import data from the system to different file type	First degree		1	6	14	3
	Masters and above		1	4	8	3
	Total		2	10	22	6
Unit4 Agresso software of ILRI is well designed by integrating accounting modules	First degree	2	12	7	2	1
	Masters and above	2	7	2	3	2
	Total	4	19	9	5	3
Unit4 Agresso software enables you to see financial and accounting information on real time reporting	First degree	12	7	3	2	
	Masters and above	8	4	3		1
	Total	20	11	6	2	1

Source: Field Survey (2020)

As shown in table 4.5, 22 plus 6 out of 40 respondents are agree and strongly agree, 9 out of 40 respondents are neutral and 3 out of 40 are disagreed to the question unit4 Agresso enable to generate report with different format. 22 and 6 out of 40 respondents agree and strongly agree respectively, 10 out of 40 respondents are neutral and 2 out of 40 disagree for Unit4 Agresso enable to import data from the system to different file type. on Table 4.5, out of 40 respondents are strongly disagree, 19 out of 40 are disagree, 9 out of 40 are neutral 5 out of 40 are agree and 3 out of 40 are strongly about unit4 Agresso software of ILRI is well designed by integrating accounting modules. 20 plus 11 out of 40 response are strongly

disagree and disagree, 6 out of 40 are neutral 2 out of 40 agree and 1 out of 40 strongly agree on question Unit4 Agresso software enables you to see financial and accounting information on real time reporting way.

About flexibility of unit4 Agresso software on table 4.5 shows that about 70% of the respondents agree and strongly agree that unit4 Agresso enabled them to generate report with different file format (excel, word, PDF, etc.…), about 22% of respondents are neutral. 70% of respondents agree and strongly agree and 10% of respondents are neutral that unit4 Agresso enabled them to import data from different file type (excel, word, PDF, etc.…), the design and integrity of accounting modules in unit4 Agresso, about 57% of the respondents disagree and strongly disagree and about 22% of the respondents are neutral. And 77% of the respondents is disagree and strongly disagree and about 15% of the respondents are neutral about seeing financial and accounting information on real time reporting.

As we can see on the above tables 4.5 most of respondents are neutral and agree and on the same table most respondents are disagreed on well-designed unit4 Agresso and on real time reporting respectively.

4.6. Challenges Associated With Using Unit4 Agresso in ILRI

Table 4.6 shows that 2 out of 40 respondents strongly disagree, 2 out of 40 respondents disagree, 1 out of 40 respondents neutral, 33 out of 40 respondents agree, and 2 out of 40 respondents strongly agree about the question there is in adequate on job training for users and finance staff related with unit4 Agresso software. 1 out of 40 respondents, 13 out of 40 respondents are disagree, 23 out of 40 respondents neutral, 2 out of 40 respondents agree and 1 out 40 respondents strongly agree about their knowledge on fixed asset management modules availability in unit4 Agresso software. 6 out of 40 respondents, disagree, 26 out of 40 respondents, neutral, 6 out of 40 respondents, agree and 2 out of 40 respondents, strongly disagree about the knowledge about payroll management modules in unit4 Agresso software. Table 4.6 indicated that 7 out of 40 respondents disagree, 28 out of 40 respondents neutral and 5 out of 40 respondents agree on staff leave management software in unit4 Agresso software. 16 out of 40 respondents disagree, 3 out of 40 respondents disagree, 16 out of 40 respondents are neutral, 1 out of 40 respondents agree and 1 out of 40 respondents strongly agree on question you can integrate CAFM, IDS, and FAST PAY software output with unit4 Agresso software.

Table 4.6: Challenges associated with using unit4 Agresso in ILRI

4.6.1							
There is in adequate on job training for users and finance staff related with unit4 Agresso software	Educational level	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree	Total
	First degree	2	0	1	19	2	24
	Masters and above	0	2	0	14	0	16
	Total	2	2	1	33	2	40
There are no fixed asset management modules in unit4 Agresso software	First degree	1	9	13	1	0	24
	Masters and above	0	4	10	1	1	16
	Total	1	13	23	2	1	40
There are no payroll management modules in unit4 Agresso software	First degree		3	18	2	1	24
	Masters and above		3	8	4	1	16
	Total		6	26	6	2	40
There is no staff leave management Modules in unit4 Agresso software	First degree		4	17	3		24
	Masters and above		3	11	2		16
	Total		7	28	5		40
You can integrate CAFM, IDS, and FAST PAY software output with unit4 Agresso software	First degree	12	0	8	0	1	21
	Masters and above	4	3	8	1	0	16
	Total	16	3	16	1	1	37

Source: Field Survey (2020)

In this section the training given to users of unit4 Agresso and the relation between unit4 Agresso and CAFM, IDS and Fast pay payroll system software's are requested and answered by the respondents. On table 4.6 about 87% of the respondents are agreed with inadequate on job training given to the users. 13% of the respondents disagree and 57% of the respondents neutral

for question there are no fixed asset management modules in unit4 Agresso software**.** On table 4.6 65% of the respondents are neutral, 15% of respondents agree and 15% are disagreed on the question there are no payroll management modules in unit4 Agresso software. 70% of respondents re neutral, 17% of the respondents re disagree and 12% of the respondents are agree on question There is no staff leave management software in unit4 Agresso software on table 4.6, 51% of the respondents disagree and 43% of respondents are neutral on question You can integrate CAFM, IDS, and FAST PAY software output with unit4 Agresso software.

On this section of the research most of the responses are neutral, with this in his mind the researcher estimates that there is a knowledge gap on unit4 Agresso because of the application of these modules are not implemented and training given to the users are not enough.

4.7. Using CAFM Software's rather Than Unit4 Agresso in ILRI

Table 4.7 show that 27 out of 39 respondents strongly disagree, 4 out of 39 respondents disagree, 6 out of 39 respondents neutral and 2 out of 39 respondents agree on You have got enough training on CAFM software for fixed asset management.

10 out of 40 respondents are strongly disagree 10 out of 40 respondents are disagree 18 out of 40 respondents are neutral and 2 out of 40 respondents are agree on question It is appropriate for you to use CAFM software for fixed asset management rather than unit4 Agresso. 3 out of 40 respondents are strongly disagree, 1 out of 40 respondent disagree, 12 out of 40 respondents are neutral, 19 out of 40 respondents are agree and 5 out of 40 respondents are strongly agree for question You can use unit4 Agresso software to record or read fixed asset transactions & management.

Table 4.7 Using CAFM software's rather than unit4 Agresso in ILRI

	Work group	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
You have got enough training on CAFM software for fixed asset management	Finance staff	9	1	0	0	
	ICT unit staff	3	1	0	0	
	Program & project staff	2	1	3	0	
	Support unit staff	12	1	2	2	
	Internal audit staff	1	0	1	0	
	Total	27	4	6	2	
You can use CAFM software for ILRI fixed asset management	Finance staff	3	6	2	0	0
	ICT unit staff	2	1	1	0	0
	Program & project staff	3	0	1	1	1
	Support unit staff	5	1	10	1	0
	Internal audit staff	1	0	1	0	0
	Total	14	8	15	2	1
It is appropriate for you to use CAFM software for fixed asset management rather than unit4 Agresso.	Finance staff	2	4	5	0	
	ICT unit staff	0	2	2	0	
	Program & project staff	3	0	1	2	
	Support unit staff	4	4	9	0	
	Internal audit staff	1	0	1	0	
	Total	10	10	18	2	
You can use unit4 Agresso software to record or read fixed asset transactions & management.	Finance staff	1	0	4	5	1
	ICT unit staff	0	0	0	4	0
	Program & project staff	1	0	2	1	2
	Support unit staff	0	1	6	9	1
	Internal audit staff	1	0	0	0	1
	Total	3	1	12	19	5

Source: Field Survey (2020)

On this section CAFM software and users' relations are analyzed. 79% of the respondents are disagree and 15% of the respondents are neutral abut question training on CAFM software for fixed asset management. 55% of respondents are disagree and 37% of the respondents are neutral for question You can use CAFM software for ILRI fixed asset management. 50% of the respondents are disagree and 45% of the respondents are neutral for question It is appropriate for you to use CAFM software for fixed asset management rather than unit4 Agresso. About 60% of the respondents agree and about 30% of respondents are neutral to the question It is appropriate for you to use CAFM software for fixed asset

management rather than unit4 agresso. The researcher concludes that CAFM training is given only to engineering unit staffs and this software is used by one unit only.

4.8. Using IDS Software's Rather Than Unit4 Agresso In ILRI

On Table 4.8 out of 40 respondents strongly disagree, 2 out of 40 respondents disagree, 4 out of 40 respondents agree, 5 out of 40 respondents agree and 1 out of 40 respondents strongly agree for question you have got enough training on IDS software.

10 out of 40 respondents strongly disagree, 5 out of 40 respondents disagree, 17 out of 40 respondents neutral, 7 out of 40 respondents agree and 1 out of 40 respondents strongly agree on You can use IDS software for ILRI housing & catering unit question. 7 out of 39 respondents strongly disagree, 5 out of 39 respondents disagree, 21 out of 39 respondents neutral, 5 out of 39 respondents agree and 1 out of 39 respondents strongly agree on the question It is appropriate for you to use IDS software for ILRI housing and catering unit records rather than unit4 Agresso. 6 out of 40 respondents disagree, 18 out of 40 respondents neutral, 13 out of 40 respondents agree and 3 out of 40 respondents strongly agree on question You can use unit4 Agresso to record or read housing sales transaction.

On table 4.8 75% of the respondents did not take IDS software training, 10% of the respondents are neutral on training given on IDS only about 15% respondents have got training in ILRI & in another organization. About 20% of the respondents can use IDS, 43% of respondents are neutral and 37% of respondents disagree on using IDS software for ILRI housing & catering unit. 31% of the respondents is not believing on using IDS software for Housing and catering unit, 54% of the respondents are neutral and only 15% of respondents agree on using IDS software rather than Unit4 Agresso software. 15% of respondents disagree, 45% of the respondents are neutral and 40% of respondents can use unit4 Agresso for housing and catering unit transaction recording.

When we summarize the response most of the respondents are not trained on IDS software, only 20% of respondents can use IDS, only 15% of are agree on using IDS software rather than Unit4 Agresso software. And around 50% of respondents are Neutral on their response about IDS software, this indicate that there is a knowledge Gap on IDS and unit4 Agresso software in the institute.

Table 4.8 Using IDS software's rather than unit4 Agresso in ILRI

	Work group	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
You have got enough training on IDS software	Finance staff	9	0	1	0	1
	ICT unit staff	3	1	0	0	0
	Program & project staff	3	0	0	3	0
	Support unit staff	13	1	2	1	0
	Internal audit staff	0	0	1	1	0
	Total	28	2	4	5	1
You can use IDS software for ILRI housing & catering unit	Finance staff	3	2	4	1	1
	ICT unit staff	2	1	1	0	0
	Program & project staff	1	0	2	3	0
	Support unit staff	4	2	9	2	0
	Internal audit staff	0	0	1	1	0
	Total	10	5	17	7	1
It is appropriate for you to use IDS software for ILRI housing and catering unit records rather than unit4 Agresso	Finance staff	3	1	6	0	1
	ICT unit staff	0	2	2	0	0
	Program & project staff	1	0	2	3	0
	Support unit staff	3	2	10	1	0
	Internal audit staff	0	0	1	1	0
	Total	7	5	21	5	1
You can use unit4 Agresso software to record or read housing sales transaction	Finance staff		2	4	4	1
	ICT unit staff		1	1	2	0
	Program & project staff		0	4	1	1
	Support unit staff		3	7	6	1
	Internal audit staff		0	2	0	0
	Total		6	18	13	3

Source: Field Survey (2020)

4.9. Using Fast Pay Software's Rather Than Unit4 Agresso In ILRI

On Table 4.9, 30 out of 39 respondents strongly disagree, 3 out of 39 respondents disagree 3 out of 39 respondents neutral and 3 out of 39 respondents agree on You have got enough

training on Fast pay software question. 18 out of 40 respondents strongly agree, 8 out of 40 respondents disagree, 9 out of 40 respondents neutral, 4 out of 40 respondents agree and 1 out of 40 respondents strongly agree. On you can use Fast pay software for ILRI payroll transaction record question. 10 out of 40 respondents strongly agree 5 out of 40 respondents disagree, 24 out of 40 respondents neutral and one out of 40 respondents agree for question It is appropriate to use Fast pay software for ILRI payroll transaction records rather than unit4 Agresso software. 8 out of 39 respondents strongly agree, 2 out of 39 respondents disagree, 16 out of 39 respondents neutral 11 out of 39 respondents agree and 2 out of 39 respondents strongly agree for question You can use unit4 Agresso software to record or read payroll transactions.

On this section 85% of the respondents are not taking training on fast pay software, 8% of respondents are neutral and currently only 7% of respondents are taking on job training. only 12% percent of respondents (5 respondent) can use fast pay software for ILRI payroll transaction records, 23% of respondents are neutral and 65% respondents can’t use Fast pay software.

Table 4.9: Using Fast pay software's rather than unit4 Agresso in ILRI

	Work group	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
You have got enough training on Fast pay software	Finance staff	10	0	1	0	
	ICT unit staff	2	1	0	1	
	Program & project staff	5	0	0	1	
	Support unit staff	11	2	2	1	
	Internal audit staff	2	0	0	0	
	Total	30	3	3	3	
You can use Fast pay software for ILRI payroll transaction record	Finance staff	4	2	4	1	0
	ICT unit staff	1	2	1	0	0
	Program & project staff	4	1	0	1	0
	Support unit staff	7	3	4	2	1
	Internal audit staff	2	0	0	0	0
	Total	18	8	9	4	1
It is appropriate to use Fast pay software for ILRI payroll transaction records rather than unit4 Agresso software	Finance staff	2	1	8	0	
	ICT unit staff	0	1	3	0	
	Program & project staff	4	1	1	0	
	Support unit staff	3	2	11	1	
	Internal audit staff	1	0	1	0	
	Total	10	5	24	1	
You can use unit4 Agresso software to record or read payroll transactions	Finance staff	2	1	3	5	0
	ICT unit staff	0	0	3	1	0
	Program & project staff	1	1	2	0	1
	Support unit staff	3	0	8	5	1
	Internal audit staff	2	0	0	0	0
	Total	8	2	16	11	2

Source: Field Survey (2020)

38% of respondents are not agreeing to use fast pay software rather than unit4 Agresso software, 60% percent of respondents are neutral and 2% (1 person) is agreeing to continue using Fast pay software. 26% of respondents disagree on using unit4 Agresso for payroll transaction, 41% of respondents neutral and 33% agree to use unit4 Agresso to record payroll transaction.

In this section neutral response is high because there is no appropriate training on Fast pay and unit4 Agresso users trading. Secondly. Even payroll transaction processes are specific activity, when there is replacement need arise it become difficult to organize without training.

4.10. Using HR4U Software's Rather Than Unit4 Agresso In ILRI

Table 4.10 Using HR4U software's rather than Unit4 Agresso in ILRI

	Work group	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
You have got enough training on HR4U software	Finance staff	4	2	5	0	0
	ICT unit staff	1	1	0	1	1
	Program & project staff	2	2	0	2	0
	Support unit staff	8	3	3	3	0
	Internal audit staff	1	0	0	1	0
	Total	16	8	8	7	1
You can use HR4U software for ILRI leave management transaction records	Finance staff		1	1	6	2
	ICT unit staff		0	1	1	1
	Program & project staff		1	0	5	0
	Support unit staff		1	9	4	2
	Internal audit staff		0	0	2	0
	Total		3	11	18	5
It is appropriate for you to use HR4U software for ILRI leave transaction records rather than unit4 Agresso	Finance staff	0	2	5	2	1
	ICT unit staff	0	0	2	2	0
	Program & project staff	2	1	3	0	0
	Support unit staff	1	5	9	1	0
	Internal audit staff	1	0	1	0	0
	Total	4	8	20	5	1
You can use unit4 Agresso software to record or read leave transaction.	Finance staff		0	5	5	0
	ICT unit staff		0	2	1	1
	Program & project staff		2	2	1	1
	Support unit staff		2	5	6	2
	Internal audit staff		0	0	2	0
	Total		4	14	15	4

Source: Field Survey (2020)

On Table 4.10, 6 out of 40 respondents strongly disagree, 8 out of 40 respondents disagree, 8 out of 40 respondents neutral, 7 out of 40 respondents agree and 1 out of 40 respondents strongly agree for question you have got enough training on HR4U software. 40% of

respondents didn’t take training on HR4U software training, 20% of respondents neutral, 20% of respondents agree on training given on HR4U training.

3 out of 37 respondents disagree, 11 out of 37 respondents neutral, 18 out of 37 respondents agree and 5 out of 37 respondents strongly agree for question You can use HR4U software for ILRI leave management transaction records. Table 4.10.3 4 out of 38 respondents strongly disagree, 8 out of 38 respondents disagree, 20 out of 38 respondents neutral, 5 out of 38 respondents agree and 1 out of 38 respondents strongly agree for question It is appropriate for you to use HR4U software for ILRI leave transaction records rather than unit4 Agresso. 4 out of 37 respondents disagree, 14 out of 37 respondents neutral, 15 out of 37 respondents agree and 4 out of 37 respondents strongly agree for question You can use unit4 Agresso software to record or read leave transaction.

On this section analysis is done for HR4U software based on the respondent comment 40% of respondents didn’t take training on HR4U software training, 20% of respondents neutral, 20% of respondents agree on training given on HR4U training. 8% of respondents disagree, 30% are neutral and 62% of respondents agree on using HR4U software for leave management record. 32% of respondents disagree, 53% percent of respondents are neutral and 15% of respondents are agreeing to use HR4U software rather than unit4 Agresso software for payroll transaction record. 11% of respondents disagree, 38% neutral and 51% agrees on using unit4 Agresso for payroll transaction recording.

Based on the above table training is not given to the users of AIS especially finance, most of the staff can use HR4U to fill leave application and approval only. Most staffs are disagree or neutral on selection between HR4U and Unit4 Agresso. And most of staffs are neutral and agree to record leave transactions on unit4 Agresso.

CHAPTER FIVE

SUMMARY, CONCLUSION & RECOMMENDATION

5.1. Summary of the Study

The main aim of this study was to measure the effectiveness of the different Accounting Information Systems employed in ILRI based on the various dimensions including the purpose of each AIS, number of users, the level of training given to staff, the output or report from each software in relation to unit4 Agresso software.

On the first part of the data the researcher evaluated the demographic data of the users of each accounting information. On the second part of the study infrastructure, usefulness, security, flexibility, and the impact of using different software in one institute is evaluated. Also, the study that ILRI facilities and materials used for AIS software's are almost to the standard level. Respondents assure that ILRI has stable & good internet connection that can use for various AIS software's. Also, IT staff support on using ILRI's various accounting information systems. Most of the respondents replies indicate that Unit4 Agresso software has the capacity to processes large amount of information at a time, and the software is friendly to the users and enable the users to complete their data recording easily and more quickly. About flexibility of unit4 Agresso software that enabled them to generate report with different file format (excel, word, PDF, etc.…), and enabled them to import data from different file type (excel, word, PDF, etc.…), the design and integrity of accounting modules in unit4 Agresso, are not accepted by the users the respondents also disagree and strongly disagree about seeing financial and accounting information on real time reporting.

Lack of proper training given to users of unit4 Agresso and the relation between unit4 Agresso and CAFM, IDS and Fast pay payroll system software's are requested and most of the respondents are agreed with inadequate on job training given to the users. There are no fixed asset management modules, there are no payroll management modules, there are no staff leave management modules in unit4 Agresso software**.** Mostrespondents are neutral on question You can integrate CAFM, IDS, and FAST PAY software output with unit4 Agresso software. On this section of the research most of the responses are neutral, with this in his mind the researcher estimates that there is a knowledge gap on unit4 Agresso, because some of these modules are not implemented and training given to the users are not enough.

5.2. Conclusion

The summary of the conclusion based on the analysis of study result will be presented as follows. Performance of any firms in general and each department of firms in particular can be measured and improved through implementing effective AIS And the integration of accounting information system in ILRI or other organization would increase the relevance of accounting information system and reduce the degree of uncertainty to the decision maker.

As per the findings and respond from majority of the respondents that using different software is wastage of time, incurred unnecessary expense and it create a duplication of work. Also, most of respondents agreed on using unit4 Agresso integrated AIS software which is reliable and already employed in ILRI

The implementation of an ERP information system can be influenced by employees training and education. Intensive Employees training is one of the many important factors for an organization to consider when implementation of new integrated AIS system. The finding indicates, as majority of the respondents replied that there is not enough training intervention to capacitate employees on the system. Insufficient training and inexperience will lead to error and delay.Also, the success or failure of the integrated system can be linked to this.

As per response from the respondents Infrastructure, usefulness, security, and flexibility part of ILRI AIS gives agree and strongly agreed this shows that employees are satisfied. And on the challenges associated with using effectively different AIS. On this data analysis the researcher concludes that CAFM training is given only to engineering unit and this software is used by one unit only. Most of respondents disagree and around 40% of respondents are Neutral on their response about IDS software, this indicate that there is a knowledge Gap on IDS. Fast pay software neutral response is high because there is no training given except one accountant even to other accountants. Secondly. About 51% agree on using unit4 Agresso for payroll transaction recording. And most of respondents are disagree and neutral to use HR4U software rather than unit4 Agresso software for payroll transaction record.

5.3. Recommendation

Based on the analysis of study and result, the summary of the recommendation will be presented as follows. Accounting information system design and implementation could make possible the enhancement of quality of financial and management report to better decision making by managers.

As we can see in this study ILRI different unit uses different software, and there is a difference in recording income, expenses, and capitalization of fixed asset between finance and other units with types of report prepared. Performance of firms in general and each department of firms can be measured and improved through implementing effective AIS.A properly configured ERP system uses a centralized database to share information across business processes and coordinate activities. This is important because an activity that is part of one business processes often triggers a complex serious of activities throughout many different parts of the organization (Romney & Marshall, 2015).

With this condition ILRI management cannot get Real time or updated accounting and management report of the institute. Therefore, Management should evaluate the current AIS policies which are used in company to get the financial and accounting information in easy and understandable way and on proper time.

As a finding of this study showed that and as per the assessment of the effectiveness of AIS in ILRI, currently employed Unit4 Agresso software can serve for all units accounting information. Using unit4 Agresso accounting information system has a positive and significant impact on preparation of financial and management reports

In ILRI according to response on the questioner the training given to the user is not enough, currently no training is given to the new employees. Because of this insufficient training, we can see inefficiency, delay in recording and committing errors in recording transaction in finance and other units. Therefore ILRI should consider the complexity of the unit4 Agresso information system and give standard training to current and new employees.

Finally, the infrastructure, usefulness, security, and flexibility of AIS, as per response from questioner indicate is that of reliable. And about the challenges of using different AIS software, since different units that are users of different accounting information system should have got intensive users training on unit4 Agresso and shift their records to which is currently employed unit4 Agresso software one integrated accounting information system.

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APPENDIX

Research Questionnaires to be filled by users of Accounting Information System ILRI Ethiopia

The purpose of this questionnaire is to collect data for a research thesis entitled "***Assessments of the effectives of Accounting Information systems of the International Livestock Research Institute***". This is an independent research being conduct in partial fulfillment of MBA in Accounting and Finance by a prospective graduating student from Saint Marry University. All information you give will be used for only academic purpose. So, please be sincere with your response.

Thank you in advance for taking time to fill the questionnaires.

Part I: - : For this section please circle which is appropriate for you.

Demographic information of respondents

4.1.1 Sex: 1. Male 2. Female

4.1.2. Age: 1. 18-25 2. 26-35 3. 36-45 4. 46 – 55 5. Above 55

4.1.3 Educational Level: 1. Below Diploma 2. Diploma 3. First degree 4. Masters and above

4.1.4 Work experience: 1. 0-2 2. 3-5 3. 6-10 4. 11 – 15 5. Above 15

4.1.5 Work group: 1. Finance Staff 2. ICT Unit staff 3. Program staff 4. support unit staff 5. Audit

Part II: Assessing the accounting information systems in ILRI

Please evaluate the degree of your agreement with the following criterions

Key: 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree

4.2	**Infrastructure**	**1**	**2**	**3**	**4**	**5**
4.2.1	There are the required equipment and materials to use AIS in ILRI					
4.2.2	ILRI have stable and good internet connection that can use for AIS various software					
1.3	The IT staffs are adequately giving support to use AIS and various software's in ILRI the Unit4 Agresso.					

4.3	**Perceived usefulness**	**1**	**2**	**3**	**4**	**5**
4.3.1	Unit4 Agresso allows me to process large amounts of financial information					
4.3.2	Unit4 Agresso enabled me to accomplish tasks easily and more quickly (easy to do what I want to do)					
4.3.3	Unit4 Agresso improves the reliability of financial reports of ILRI					
4.4	**Security**	**1**	**2**	**3**	**4**	**5**
4.4.1	There is a password protection and restriction for specific and general system protection					
4.4.2	There is an effective Data security control in ILRI.					
4.4.3	ILRI has adequate security measure to prevent unauthorized modification of the accounting transactions.					
4.5	**Flexibility**	**1**	**2**	**3**	**4**	**5**
4.5.1	Unit4 Agresso enable to generate report with different file format (word, excel, PDF, …)					
4.5.2	Unit4 Agresso enable to import data from different file type (word, excel, PDF, ...) to the system.					
4.5.3	I assure that unit4 agresso is well designed by integrating all accounting modules (stock, general account, Payroll, Fixed asset, Human resource, procurement etc.…) effectively in ILRI					
4.5.4	Unit4 agresso of ILRI enables you to see financial information on real time reporting way					

4.6	**Challenges associated with using Unit4 Agresso in ILRI**	1	2	3	4	5
4.6.1	There is inadequate on-job training for users and finance staff related with ERP system based Unit4 Agresso in ILRI					
4.6.2	There is no fixed Asset management software in Unit4 Agresso.					
4.6.3	There is no payroll management software in Unit4 Agresso					
4.6.4	There is no staff leave management software in Unit4 Agresso					
4.6.5	You can integrate records of CAFM, IDS, FAST pay HR4U with ERP based Unit4 agresso					

4.7	**Using CAFM software's rather than Unit4 Agresso in ILRI**	1	2	3	4	5
4.7.1	Do you have enough CAFM (Computer Aid Facility Management) training					
4.7.2	Can you use CAFM for ILRI's fixed asset management					
4.7.3	Is it easy for you to use CAFM (Computer Aid Facility Management) for ILRI's fixed asset management rather than Unit4 Agresso					
4.7.4	Can you record or read fixes asset transaction on Unit4 Agresso					
4.8	**Using IDS software's rather than Unit4 Agresso in ILRI**	1	2	3	4	5
4.8.1	Do you have enough training on **intrusion detection** system (IDS)					
4.8.2	Can you use IDS for ILRI;s housing and catering unit transaction records					
4.8.3	Is it appropriate for you use IDS for ILRI's housing and catering unit records rather than Unit4 Agresso					
4.8.4	Can you record or read housing sales transaction on Unit4 Agresso					
4.9	**Using Fast pay software's rather than Unit4 Agresso in ILRI**	1	2	3	4	5
4.9.1	Do you have enough training on Fast pay software					
4.9.2	Can you use Fast pay software for ILRI payroll transaction records					
4.9.3	Is it appropriate for you to use Fast pay software for ILRI's payroll transaction records rather than Unit4 Agresso					

4.9.4	Can you record or read payroll transaction on Unit4 Agresso					
4.10	**Using HR4U software's rather than Unit4 Agresso in ILRI**	1	2	3	4	5
4.10.1	Do you have enough training on HR4U					
4.10.2	Can you use HR4U for ILRI leave management transaction records					
4.10.3	Is it appropriate for you to use HR4U for ILRI's leave record transaction records rather than Unit4 Agresso					
4.10.4	Can you record or read leave transaction on Unit4 Agresso					

THANK YOU VERY MUCH FOR PARTICIPATING IN THIS STUDY

Please return the questionnaire to:

Ephream G/Yohannes

Contact number: -0911-65-58-55