Addis Ababa University

School of Business & Economics

Department of Accounting and Finance

Master of Science in Accounting and Finance Program

Enterprise Resource Planning (ERP) and its Accounting/Financial Management Module Implementation Challenges: The case of Ethio Telecom

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Chair of Department Graduate Program Coordinator

DECLARATION

I hereby declare that the thesis is my original work prepared under the guidance of Dr. Takele Fufa, and it has been written by me in the entirety. I have duly acknowledged all the sources of information which have been used in the thesis.

This thesis has also not been submitted either in part or in full for any degree in any other university previously.

Aweke Berhanu

Signature _____

Date _____

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Abstract

Enterprise Resource Planning (ERP) is a software solution that integrates different functional areas of an organization process and data into a single system that is shared within the organization. From the fact that more than two decades of experience regarding the adoption and implementation of ERP system with its different functional components in organizations, ERP's success is questionable. Though ERP success stories are published in past research studies, the failure rate of ERP systems is relatively high. The purpose of this study was to find issues and challenges and assess the degree of criticality of these issues during ERP in Ethio Telecom. The research carried out a descriptive study in evaluating the implementation challenges of ERP and its accounting/financial management process within Ethio Telecom. The evaluation was made based on the following eight Critical Success Factors which are Top Management support, Integration, Performance, Decision making, Employee Participation, Project Team Competency and Human Capability, Objective of ERP implementation, and IT infrastructure. The population of this study were employees and top- and low-level managers of Ethio Telecom. For the purpose of getting respondents who have good understanding of ERP a purposive sampling technique was used. Both primary and secondary data were collected. The study utilized both quantitative and qualitative data analysis techniques. Significant number of the respondents believed the implementation of an ERP system can be a complex and challenging undertaking. There are several technical problems that can arise during the implementation process, which can delay or even derail the project. Some of the most common technical problems that can occur during ERP implementation include incompatibility with existing systems, data migration, training, and user resistance. However, it is recommended that the following steps need to be taken to improve ERP implementation challenge. These steps include identify the root cause of the failure, developing a corrective action plan, implementing the corrective action plan, monitoring the implementation, and finally learning from the challenges.

Key words: (ERP) Enterprise Resource Planning system

: (PTC) Project team competency

: (TMS) Top management support

CHAPTER ONE

Introduction

1.1 Theoretical framework

Since 1990s, firms throughout the world have been adopting and using enterprise resource planning (ERP) systems to have a standardized and organized information system (Rajagopal 2002) that could enable them to manage their financial transactions or accounting, manufacturing, supply chain, human resource, and inventory systems in an integrated manner. ERP systems are integrated software that handles core organizational processes using a common database system. According to Zhelyazkov (2012), "ERP systems are comprehensive software packages that seek to integrate the complete range of a business process and functions in order to present a holistic view of the business from a single information and information technology architecture" (Wagaw, 2017)

According to Almgren & Bach (2014) an Enterprise Resource Planning system (ERP) is a fully integrated business management system covering functional areas of an enterprise like logistics, production, finance, accounting, and human resources. It organizes and integrates operation processes and information flows to make optimum use of resources such as human, material, money, and machine. ERP system is a strategic tool which integrates information and information-based processes within and across functional areas in an organization. The main objective of an ERP is to increase operating efficiency by improving business processes and decreasing costs. In addition, ERP standardizes and integrates process and data which in turn allows organizations to centralize and administrate their activities effectively.

The introduction of information technologies has necessitated the redefinition of such information systems. In fact, Chenhall (2003) argued that the mission of the Accounting/Financial management module has risen from the simple provision of formal and financial information to encompass a broader range of information. The use of enterprise resource planning (ERP) technology has facilitated the embodiment of this new vision.

Enterprise Resource Planning (ERP) software is an all-encompassing management software that integrates the function of each component of your business. Which means that all departments of your organizations interlink in a way that outputs from one part can become inputs for another system thereby automating many processes in the business that occur regularly. For example, sharing daily sales data for each product line with the production and

procurement departments to define production needs. In most cases the ERP accounting system is just a sub-component of an ERP.

Accounting/Financial management module is more specific in function and nature. Even though the Accounting/Financial management module is one component of the ERP it deals with the financial activities of the organization. Accounting/Financial management module processes by recording business transactions, i.e. Accounts Receivables / Accounts Payable, journal entries, and general ledger which are used to produce necessary financial reports such as income statements and balance sheets. Due to this limited focus, the Accounting Information System is identified as one of the components of ERP software.

An ERP is a complex set of computer applications designed to integrate the processes and functions within the same company. This system can present a holistic vision of the company's business by sharing a common and integrated database. In the era of the ERP system, the Accounting/financial management module has become richer. The amount of information has become more important, and the data is updated and relevant. We see, thus, the use of new management accounting techniques that meet the internal needs of the company. Thus, the Accounting/financial management module has become provides both historical and forecasting accounting information that covers financial accounting, management control and financial analysis. We wonder at this stage about the ability of such an information system to improve business performance.

Prior research has shown that conflict with consultants is one of the main managerial problems during the implementation period of ERP system (Themistocleous et al., 2001). Consultants can bring to the organization specialized skills, experience, and know-how that the organization needs when it is both time-consuming and expensive for it to build internally (Gable, 2003). They can also offer a firm-wide view, encourage unity between members, and they are usually neutral (Davenport, 1998). ERP implementation is by no means a purely technical system implementation it includes Business Process Reengineering (BPR). Consultants can perform the role of change facilitator and are involved in very important knowledge transfer. Consulting firms use techniques such as guided learning, formal training, and knowledge creation activities to direct clients to the necessary knowledge required for a successful implementation. This guidance saves the client considerable time and effort in knowledge search costs (Gable, 2003). It has been found that the mismatch between ERP and organization can have significant impacts on organizational adoption, and this could be the

main reason causing the ERP implementation failure (Umble et al., 2003). The need for greater customization of ERP software increased in this case, and the risks associated with the ERP implementation is much higher (Soh et al., 2000). According to Soh et al. (2000), there could be different levels of mismatch, namely business function, data, and output. Careful selection and evaluation of ERP systems is required in order to reduce the potential risk of software mismatch.

1.2 Statement of the Problem

Today's business operates in a rival and competitive environment. The exponential growth and advancement in IT (information technology) is a significant factor that influences today's business environment. This, of course, has made a rival competition among organizations. Therefore, if organizations wish to remain successful and to be competitive, managers need to employ technologies for the benefit of their organizations. This in turn helps organizations improve information flow, reduce costs, and streamline business, offer product variety, establish linkage with suppliers and reduce response time to customer needs and expectations, (Vonderembse &Nathan, Alavi & Leidner, 2001).

Ethio Telecom, the company under study, has been serving the public for a long period of time and because of the dynamically changing environment of the sector it is very challenging to continue with the existing independently working technology and management style. Therefore, the government planned a reengineering project which was undertaken from 2007 to 2010 and that was mainly designed to introduce world class business processes including the implementation of “Enterprise Resource Planning” software and its major component, Accounting/financial management module. This would transform Ethio Telecom by changing from the existed independently functioning systems and management style into an integrated system and management style. However, the research conducted to answer the following two questions: what are the challenges in implementing ERP software in general and its Accounting/financial management components in specific in the case of Ethio Telecom

Implementing an Enterprise Resource Planning (ERP) system can significantly improve the efficiency and effectiveness of Ethio Telecom’s business operations. However, the process comes with its own set of challenges.

Addressing these challenges requires careful planning, clear communication, and cooperation across all levels of the organization. It often involves engaging with experienced ERP consultants and leveraging proven implementation methodologies.

1.3 Purpose (Objective) of the Study

The objective of the study is to highlight the importance of implementing Enterprise Resource planning (ERP) in general and its Accounting/financial management component in specific and to study what are the challenges in implementing ERP and its Accounting/financial management module in the case of Ethio Telecom?

Studying ERP implementation challenges can help Ethio Telecom better understand and address potential obstacles that may arise during the implementation process. Some objectives of studying these challenges include:

1. Identifying Common Hurdles: By studying ERP implementation challenges, Ethio Telecom can identify common obstacles that businesses typically face when implementing an ERP system. This knowledge can help in proactively planning solutions to mitigate such challenges.

2. Improving Implementation Strategies: Understanding ERP implementation challenges can aid in developing more effective implementation strategies. Ethio Telecom can tailor its approach to address specific hurdles identified through such studies.

3. Enhancing Project Management: Studying implementation challenges can also contribute to improving project management practices. It allows Ethio Telecom to allocate resources more efficiently, set realistic timelines, and establish effective communication channels throughout the ERP implementation process.

4. Reducing Risks: By studying challenges, organizations can anticipate potential risks associated with ERP implementation and take proactive measures to reduce their impact. This can lead to a smoother implementation process with fewer disruptions.

5. Optimizing ROI: Addressing implementation challenges can ultimately help Ethio Telecom optimize the return on investment (ROI) from its ERP system. By overcoming obstacles efficiently, businesses can expedite the realization of benefits that the ERP system is expected to provide.

In general, studying ERP implementation challenges is essential for Ethio Telecom to aim to improve its ERP systems successfully. By understanding and addressing these challenges, Ethio Telecom improves its ERP implementation processes, reduce risks, and maximize the benefits derived from its ERP systems.

Furthermore, the objective of studying ERP implementation challenges was to present the findings about the impact of ERP and its accounting/financial management module implementations challenges in a day-to-day operation of Ethio Telecom.

Moreover, this research has tried to answer the following questions articulated below:

1. To what extent did the top management actively and persistently support ERP and its Accounting/Financial management module implementation process?
2. What makes the IT infrastructure a critical factor for ERP implementation?
3. To what extent ERP and its accounting/financial management module did integrate with other systems?
4. To what extent the accounting/financial management module improve the performance of Ethio Telecom?
5. To what extent does ERP and its Accounting/Financial management module provide relevant and timely information for decision making?
6. To what extent did employees of Ethio Telecom participate in the implementation process of ERP and its Accounting/financial management component?
7. To what extent the project team competency and Human capability affect the implementation process?

1.4 Significance of the study

Employing an Enterprise Resource Planning (ERP) with its most needed module system is an important task. Currently, ERP use is common in large firms. There are numerous complex parts involved in integrating fresh software into a company's essential business procedures. At the same time, not every business gets the profit from using the ERP system.

Many businesses have been tempted by the ERP system and its modules, in our case the Accounting/financial management modules success cases. Thus, they were prompted to switch to an ERP system, either out of necessity or favoring cutting-edge solutions. Yet, there is a dark side of ERP implementation. If not correctly applied, then the costs and damages would be enormous; even the suffering company may shut down or takeover.

However, the significance of this study is to discuss the implementation challenges of ERP and its Accounting/financial management module. As is observed from the literature there was research done with related title for other organizations. In the case of Ethio Telecom in addition to identifying ERP implementation challenges in general I extended the research in to one of from its top five modules called Accounting/financial management module implementation challenges.

Furthermore, Ethio Telecom will use the recommendations of this study as an input to incorporate it in their future ERP System improvement. Other companies who have a plan to implement ERP system could also learn from the result of this study. Most importantly, this study will be used as a literature reference on future research of related topics.

1.5 Scope of the study

The scope of this research is limited to conducting a single-case study of ERP and its accounting/financial management module implementation challenges in the case of Ethio Telecom. The scope of the study of ERP and its Accounting/financial management module implementation common challenges can include various aspects such as identifying the most common challenges faced during ERP implementation, the factors that contribute to these challenges, and the impact of these challenges on the implementation process and performance of the organization.

The study analyzed different phases of ERP implementation, such as planning, data migration, customization, testing, and deployment, and the unique challenges associated with each phase. Additionally, the study can explore the impact of organizational culture, change management, and training on ERP and its accounting/financial management module implementation success. Furthermore, the study can also discuss the role of different stakeholders, such as project managers, IT staff, end-users, and external consultants, in addressing and mitigating these challenges.

The study covers ERP and its accounting/financial management module implementation challenges in a selected different department under the head quarter and other entities of Ethio Telecom which are in Addis Ababa. Due to the dispersed branch locations across the country it’s uneconomical and redundant to conduct the research on all branches. All the respondents are employees of the company which are currently working in different levels of hierarchy.

1.6 Organization of the study

This paper is organized in the following manner: chapter one contains introductory which consists of introduction and theoretical framework, statement of the problem, purpose (objective) of the study, hypothesis/research questions, significance of the study and scope of the study. Chapter two discusses review of the literature, empirical review, summary of literature and research gaps, and conceptual/theoretical framework. Chapter three contains a Methodology part, which consists of general description, research design, sampling technique, source of data, types of data, data collection tools, data analysis. Chapter four discusses data presentation and analysis. Finally, Chapter five discusses summary of major findings, conclusion, limitation, and recommendation.

CHAPTER TWO

2. Review of the Literature

2.1Theoretical Review

Implementing ERP and its Accounting/financial management module software solution helps clients from small businesses to big size enterprises see more clearly. Integration of data across the enterprise ensures that you have greater visibility in all areas of your business, from daily operations to a strategic decision level. Insight into production, inventory and financial data makes it easy to identify opportunities for cost savings and efficiency improvements. A high-level view of key business indicators facilitates faster, and more accurate management decisions and an accounting/financial management module interface puts all of this at your fingertips when and where you want it. It is packed with powerful features, is extremely easy to implement and use, comprehensive in its scope, modular and flexible, fully customizable, totally secure, and incredibly robust. ERP systems include a variety of different modules. Each module supports specific business processes – like finance, procurement, or manufacturing – and provides employees in that department with the transactions and insight they need to do their jobs. Every module connects to the ERP system, which delivers a single source of truth and accurate, shared data across departments. (https://insights.sap.com/what-is-erp/)

ERP implementation is a complicated large-scale project, has far-reaching strategic and organizational implications, and can easily turn into a nightmare for implementing firms (Davenport, 1998). According to Robbins-Gioia survey conducted in 2001, only 51% American firms perceived their ERP implementation as unsuccessful (IT Cortex, 2003). Given the context differences between China and the US, we anticipate that the ERP success rate in China is even lower. It is estimated that the ERP success rate in China is approximately 10% (Zhang et al., 2003).

Mushayt (2000) and Ismail (2009) used Delone and McLean's model in accounting information systems. Mushayt (2000) showed that this model is valid, one-dimensional, and reliable in an Accounting/Financial management module context. In their model, Delone and McLean (1992) proposed that the success of information systems is determined by the information system quality (the technical quality of the system) and the output quality of the information system (the quality of information produced). These dimensions influence the use level and user response to the information system (user satisfaction). As a result, the user

attitude (individual impact) and organizational performance (organizational impact) are influenced. However, for mandatory uses, such as for ERP systems, the use of the technology is obvious. The success of information systems cannot, therefore, be measured by usage. Considering this criticism, Gable et al. (2003) revised the model of DeLone and McLean (1992) and reformulated their own model of information system success in an ERP context.

It's been reported that up to 29% of all ERP implementations fail. That's nearly one-in-three! In the hands of experts, implementing an ERP system should run relatively smoothly. Your data is imported without hiccups, and inventory, financial management records, and other integrations are transferred swiftly and efficiently. Many companies, however, aren't so lucky. Some of the world's largest (and most recognizable) brands have fallen victim to a botched ERP implementation, often with disastrous results.

Enterprise Resource Planning (ERP) is a multi- segment application software system that assists organizations to modernize their business processes. It transforms organizational transaction activities by replacing several stand-alone legacy systems with a system that enables organizational-wide integration. Malhotra and Temponi (2010) defined Enterprise Resource Planning (ERP) as software that attempts to integrate all departments and functions across a company into a single computer system that can serve all those departments 'needs. ERP has the capacity to integrate all software programs that serve the requirements of specified functions organized into a single, integrated software program that runs off a single database so that the various departments can easily share information and communicate with each other Umble et al., (2013).

Strategic planning is of vital importance for successful ERP implementation. Such facts may lead to the conclusion that ERP systems implementation is a challenging task, and its success still is questionable. The complex nature of ERP implementation despite advanced ICT and ample research in this area still needs to be understood for getting benefits expected. Some advocate that organizational approach seems to be essential to adopt ERP systems and gain its potential benefits (Bingi et al., 1999; Markus and Tanis, 2000; Kumar et al., 2003).

Most ERP products offered today come with accounting software as an entry-level (clerical) package known as an ERP accounting system. As your business grows, and your need for automating more complex data recording and reporting processes increases, you can add more process-specific modules; thereby converting your accounting software into an ERP. For example, typical accounting software offers financial management, planning, and

budgeting features as its basic package. But the same box can be integrated with other business operations such as project and supply chain management, reporting and analysis, and human resources management. In some cases, an I.T. management module can be added as well. Keep in mind that each module is usually licensed separately.

ERP implementation failures are quite common, despite decades of experience. ERP implementation success stories are common as well. It is instructive to study both failed and successful ERP implementations to learn what to do–and what not to do–when planning and executing your own ERP implementation. ERP implementation failure. By some estimates, almost one of every three ERP implementation projects ends in failure.

2.2 Empirical Review

An empirical review of ERP implementation challenges reveals several key findings. One study found that resistance to change is a significant challenge that organizations face when implementing ERP systems. This resistance can come from employees who are used to working with existing systems or who are concerned about job security. Another challenge identified in the literature is the integration of ERP systems with existing systems. This can be particularly challenging if the organization has multiple legacy systems that need to be integrated.

Abdullah S. Al-Mudimigh, Mohamed Zairi (2004) investigates the factors that influence the adoption of ERP systems in small and medium enterprises (SMEs) through a survey of 54 organizations in Saudi Arabia. The study identified that financial support, management involvement, strategic alignment, compatibility with existing systems, and employee training are the most important factors affecting ERP adoption in SMEs. The study also found that organizational size and ERP vendor reputation do not play a significant role in ERP adoption among SMEs. The findings of this study provide insights into the factors that must be considered when implementing an ERP system in SMEs.

S. Garg and D. Sharma (2014) investigate ERP implementation challenges faced by conducting a survey among 25 Indian organizations. The survey focused on areas such as project management, people management, technology management, and change management. The results showed that the top three challenges faced during ERP implementation were resistance to change, lack of skilled resources, and project management issues. The study recommends developing comprehensive strategies for managing change, effective communication, and training programs to address these implementation challenges.

Tao Xia, Timothy K. Shih (2010) presents a review of empirical studies on Enterprise Resource Planning (ERP) implementation. The authors conducted a systematic review and analysis of 98 empirical studies related to ERP implementation challenges. The results of the study suggest that the most significant challenges faced during ERP implementation include organizational issues, such as resistance to change, lack of top management support, and inadequate training; technical issues, such as data conversion and interface problems; and project management issues, such as cost overruns and schedule delays. The study also identified several factors that can affect the success of ERP implementations, including organizational readiness, top management support, user involvement, and effective project management strategies.

Engidayehu (2014) employed a descriptive nature by Ethio Telecom to assess its implementation of Enterprise Resources Planning and to recommend possible solutions for the gap created during the implementation. The result shows that the deployed ERP system is not properly implemented and practiced based on the selected effectiveness variables; it is observed that the ERP system is not effective across the divisions the system is implemented. In addition, problems which hinder the practice of the system were identified. As a result, lack of appropriate training for all system users was identified as the most serious problem while proper support from the integrators side and lack appropriate customization process in relation to the companies as well as countries regulatory framework were also identified as the next most serious problems.

A. Gunasekaran, Eric W.T. Ngai (2004) analyzes the factors contributing to the success of Enterprise Resource Planning (ERP) implementation in small and medium-sized enterprises (SMEs) by conducting a meta-analysis of previous studies. The study identified several critical factors that directly affect ERP implementation success, including management support, effective project management, software quality, user involvement, and training and education programs. The study also identified other factors that indirectly contribute to implementation success, including technical infrastructure readiness, compatibility between ERP systems and organizational processes, and external consultant expertise. Additionally, the study highlights the importance of customization of ERP solutions for SMEs as compared to large firms.

2.3 Summary of literature and Research Gaps

From all the literature I reviewed on ERP this is the summary and research gaps identified. ERP can be implemented by several organizations in different industries including those in public enterprises, service industries, manufacturing, nonprofit organizations, and construction. Organizations needing to manage their staff, customers and inventory can all rely on ERP benefits.

With the global ERP software market expected to be worth $41.69 billion by the beginning of 2021, the impact of these systems is evident. (Kim O'Shaughnessy, 8 Reasons Why ERP is Important, https://www.selecthub.com) It evident that Enterprise resource planning (ERP) systems have become essential tools for managing complex business operations. However, implementing and maintaining an ERP system presents several challenges for organizations, and these challenges have been well-documented in academic literature. Common challenges include high implementation costs, difficulty in integrating ERP with existing systems and processes, user resistance, and data quality issues.

The existing literature has provided valuable insights into these challenges, and there are still some gaps in knowledge that need to be addressed. For example, there is a need for more additional depth research for separate modules of ERP like Accounting/financial management module with the following same critical successes factors Top Management support, Integration, Performance, Decision making, Employee Participation, Project Team Competency and Human Capability, Objective of ERP implementation, and IT infrastructure, the impact of organizational culture on ERP implementation success, as well as on the challenges specific to small and medium-sized enterprises (SMEs). Additionally, there is a lack of agreement on how to measure ERP success, which complicates the evaluation of the effectiveness of ERP systems.

There is also a need for more research on how ERP systems can be used as part of broader digital transformation initiatives, and how organizations can effectively manage change when implementing or upgrading an ERP system. By addressing these gaps in knowledge, researchers and practitioners can develop more effective strategies for overcoming ERP challenges and improving the success rate of ERP implementation projects.

2.4 Conceptual/theoretical framework

A conceptual framework is a foundational review of existing theories that serves as a roadmap for developing the arguments in the research. Theories are developed by researchers to explain phenomena, draw connections, and make predictions. In a theoretical framework, the existing theories that support this research were explained, showing that the paper or dissertation topic is relevant and grounded in established ideas.

The theoretical framework is based on the problem statement, the research questions, and the literature review. The major objective of the study is to assess the implementing challenges of ERP and its Accounting/financial management module in the case of Ethio Telecom.

CHAPTER THREE

3. Methodology

3.1 General Description

The aim of this research is to come up with studied results of ERP and its accounting/financial management module implementation challenges in the case of Ethio Telecom. To achieve this goal, a mixed-methods research design was used to collect and analyze both quantitative and qualitative data.

The research questions that were guided this study include: “What are the challenges in implementing ERP and its Accounting/financial management components in the case of Ethio Telecom? What factors contribute to these challenges? How can these challenges be addressed more effectively?" The study took place in Addis Ababa, and the organization, Ethio Telecom, which recently implemented ERP, has been selected.

Ethio Telecom employees and managers, from different hierarchies, are involved in data collection to gather and rate various challenges occurred during the implementation process of ERP and its Accounting/financial management module.

Data analysis was made based on document review, the survey from questioner and the interview gathered from different hierarchy of Ethio Telecom employees and top managers. SPSS version-20 software was used, and any outcomes of this research will help future researchers.

3.2 Research Design

Research design is the framework of research methods and techniques chosen. The design allows researchers to improve on research methods that are suitable for the subject matter and set up their studies up for success.

3.3 Purpose

The purpose of this study is to identify ERP and its Accounting/financial management module implementation challenges faced by Ethio Telecom, recommend possible corrective actions, and include required information for future research on addressing the implementation challenges more effectively.

3.4 Research Questions

This study aims to answer the following research questions:

1. To what extent did the top management actively and persistently support ERP and its Accounting/Financial management module implementation process?
2. What makes the IT infrastructure a critical factor for ERP implementation?
3. To what extent ERP and its accounting/financial management module did integrate with other systems?
4. To what extent the accounting/financial management module improve the performance of Ethio Telecom?
5. To what extent ERP and its Accounting/Financial management module provide relevant and timely information for decision making?
6. To what extent did employees of Ethio Telecom participate in the implementation process of ERP and its Accounting/financial management component?
7. To what extent the project team competency and Human capability affect the implementation process?

3.5 Sample

Based on the information received from the division human resources office of Ethio Telecom, it has a total of 17,284 Permanent employees and among them 7,926 employees were assigned in 17 (Seventeen) different regional offices and 9,358 employees were assigned in Addis Ababa. However, from these 9,358 employees 2,594 of them were assigned in 6 (Six) different zone offices of Addis Ababa and the rest 6,764 employees were assigned in 26 (Twenty-Six) different division level and 4 (Four) domain level offices of the Head Quarter.

The research includes representatives of the total population. Because of the geographical constraint, the study is made only in Addis Ababa. At most effort is exerted to include all parties involved in ERP (Enterprise Resource Planning) implementation process are represented by the sample.

Ethio Telecom has five hierarchical levels within four operational domains. They are chief Officers, directors, managers, Supervisors, and Staffs. Management groups include the first three levels whereas non-management groups include the last two levels, both groups

included in the sampling process. In determining the actual sample size, it has considered the minimum required returned sample size, type of data analysis to be used and the expected rate of missing data.

Therefore, from among the 9,358 employees assigned in Addis Ababa 370 employees were represented in the sample. Moreover, studying employees of different regions would not bring significant difference since Ethio Telecom applies a centralized management system and most of the activities are similar. As a result, 9,358 employees were taken as a population for this study.

To determine the sample size, for a population that are large, Cochran (1963:75) developed the equation to yield a representative sample for proportions.

To determine the sample size, formula of Glenn D. Israel from University of Florida was used.

First the author developed a formula for a large population:

$$n_o = \frac{Z^2 pq}{e^2}$$

Equation 1

This is valid where:

n0 = sample size

Z2 = abscissa of the normal curve that cuts off an area α at the tails (1 – α equals the Desired Confidence level, e.g., 95%)

e = desired level of precision

p = estimated proportion of an attribute that is present in the population, and q is 1-p.

The value for Z is found in statistical tables which contain the area under the normal curve. Then, the sample size determined for the large population have been used to determine sample size for a finite population. Therefore, the following formula is derived from equation 1:

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}}$$

Equation 2

Where n is the sample size and N is the population size.

Hence, the sample size for the given population (9,358) at e = ±5%, confidence level = 95%, and p = 0.5 (maximum variability)

Equation 1:

$$\frac{(1.96)2\ (.5)\ (.5)}{(.05)2} = 385 = \text{given}$$

Finally, the sample size is determined using equation 2: -

$$n = \frac{385}{1 + \frac{(385-1)}{9{,}358}} = \textbf{370 Sample size}$$

Table 3.1 - Questionnaire distribution

Domain	Total Population			Sample Population (Distributed)			Collected
	Managerial	Non-Managerial	Total	Managerial	Non-Managerial	Total	
CEO	2	43	45	1	2	3	1
Commercial	145	2,996	3,141	7	87	94	88
Support	172	5,062	5,234	5	233	238	207
Technical	114	824	938	4	31	35	29
Total	**433**	**8.925**	**9,358**	**17**	**353**	**370**	**325**

Sources: Primary data, December 2023

3.6 Data Collection

To achieve the objectives, the research has been made based on both primary and secondary data. The primary data was collected through a questionnaire. It includes open-ended and closed-ended questions. According to Kothari, (2004), this instrument of data collection is quite popular, particularly in case of big enquiries.

The secondary data were collected from the company's work processes, policies, procedures, forms, and other documents which are linked with the ERP implementation challenges and from different literature made in the area.

Data for this study was collected through a combination of document review, interviews, and Questioner.

Interviews: interviews were conducted with employee and management members of Ethio Telecom to gain a deeper understanding of specific challenges and factors contributing to those challenges.

Questioner: questioner is a tool of collecting data through an instrument consisting of a series of questions and prompts to receive a response from individual employee of Ethio Telecom.

3.7 Data Analysis

The data collected in this study were analyzed using both quantitative and qualitative methods. Descriptive statistics were used to summarize the results of the surveys and content analysis was used to analyze the interview and document review.

Using tables and charts which have been expressed in the form of frequency, percentage and mean presentation of data is clearly applied in the collected data. Moreover, SPSS version-20 software is used as a main data analysis tool.

3.8 Validity Analysis

Validity is represented the truthfulness of findings [Altheide & Johnson, 1994], whereas reliability is referred to the stability of findings. Validity and reliability increase transparency and decrease opportunities to insert researcher bias in qualitative research [Singh, 2014].

Validity can also be thought of as utility. In other words, validity is the extent to which differences found with a measuring instrument reflect true differences among those being tested. Validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure Kothari, (2004).

3.9 Reliability Analysis

A test is seen as being reliable when it can be used by several different researchers under stable conditions, with consistent results and the results not varying. Reliability reflects consistency and replicability over time. Furthermore, reliability is seen as the degree to which a test is free from measurement errors, since the more measurement errors occur the less reliable the test (Fraenkel & Wallen, 2003; McMillan & Schumacher, 2001, 2006; Moss, 1994; Neuman, 2003). In the same way, Maree, and Fraser (2004) ask how far the same test would produce the same results if it was administered to the same children under the same conditions. This helps the researcher and educator to make comparisons that are reliable. The more errors found in an assessment the greater its unreliability, and vice versa. Reliability is a very important factor in assessment and is presented as an aspect contributing to validity and not opposed to validity.

3.10 Ethical Issues

There are several ethical issues that researchers should consider when conducting research on ERP and its Accounting/Financial management module implementation challenges. These include:

- **Informed consent**: Researchers must obtain informed consent from participants before collecting any data from them. This means that participants must be given a clear and comprehensive explanation of the research study, including its purpose, methods, and risks, and they must be given the opportunity to decline to participate.
- **Confidentiality:** Researchers must protect the confidentiality of participants' data. This means that data must be stored securely, and that participants' names and other identifying information must not be disclosed without their consent.
- **Respect for participants:** Researchers must treat participants with respect and dignity. This means that researchers must not exploit participants or put them in any situation that could harm them.
- **Avoidance of bias:** Researchers must strive to avoid bias in their research. This means that researchers must not let their personal beliefs or values influence their interpretation of the data.

By considering these ethical issues, researchers can help to ensure that their research is conducted in a responsible and ethical manner.

3.11 Limitations

The major limitation of this study is the number organization included in the research; it is only Ethio Telecom. As Ethio Telecom may be unique in some way, the conclusion and recommendation of the study obtained are based on the data collected from it and may not be generalizable to other companies. Moreover, as Ethio Telecom may change over time or may be affected by external factors the results of the study based on it may not be reliable.

CHAPTER FOUR

4. Results and Discussions

This chapter covers results and discussions from primary sources. Results and discussions are essential components of any research project. The way that data is presented can have a significant impact on the interpretation of the results, and the analysis methods used can help to identify patterns and trends.

There are several different ways to present data, including tables, graphs, and charts. The most appropriate method for presenting data depends on the type of data and the audience for whom it is intended. For example, tables are often used to present numerical data, while graphs and charts are more effective for visualizing trends and relationships.

Data analysis involves processing and analyzing the data to derive meaningful insights, while data interpretation involves making sense of the insights and drawing conclusions. Data presentation involves presenting the data concisely to communicate the research findings.

This chapter presents the descriptive analysis on variables of the study and results of regression analysis that constitute the main findings of this study. All the data were coded and entered into SPSS Version-20 software as well as inferences were made based on the statistical results.

A reliability test is used to assess consistency in measurement items. If a research tool is consistent, stable, predictable and accurate, it is said to be reliable. The greater the degree of consistency and stability in an instrument, the greater its reliability. (Bhattacherjee, 2012) defined reliability as the degree to which the measure of a construct is consistent or dependable. Internal consistency test was used to determine reliability of the questionnaire by calculating Cronbach's Alpha which is used to measure the internal consistency of the measurement items. If a coefficient alpha is between 0.6 and 0.7 it indicates that there is fair reliability, Higher Alpha coefficients indicate higher scale reliability (Joseph, 2003).

As shown in table 4.0 below scale reliability Cronbach Alphas coefficients for top management Support is 0.797, IT Infrastructure is 0.801, Financial Management Module is 0.799, Decision Making is 0.804, Employee Participation is 0.823, Project team competency is 0.809 and Objectives of ERP Implementation is .816. This study also demonstrates high

internal consistency, and the total Cronbach Alpha coefficient is 0.826. Therefore, this study demonstrates high reliability.

Validity refers to the extent of which a test measures what we wish to measure. The questionnaire was adapted from other research paper by (Selvakumar Swaminathan, 2011).

Pilot testing allows assessing the question's validity and the likely reliability of the data (Ranjit, 2011). It also enables the researcher to know whether the design of data collection instruments is successful in meeting the research objectives and in obtaining meaningful responses. In line with the above assumption pilot test was conducted and this validation was made regarding the reliability of the questionnaires with Cronbach's Alpha. Subsequently, when the pilot test was successful the researcher proceeded with the final distribution of the questionnaire.

Table 4.0 shows the reliability test Cronbach's Alpha coefficients for Assessment of ERP in the case of Ethio Telecom. The Cronbach's Alpha coefficients of the variables range from 0.797 to 0.823. And the overall Cronbach's Alpha coefficient for expected-scale items is 0.826. Based on the examination of the research scales and constructs, it can be concluded that each variable represents a reliable and valid construct.

Table 4.0 Reliability Test

Dimensions	Cronbach's Alpha coefficients
Top Management Support	0.797
IT Infrastructure	0.801
Financial Management Module	0.799
Decision Making	0.804
Employee Participation	0.823
Project team competency	0.809
Objectives of ERP Implementation	0.816
Reliability of Total Scale	0.826

Sources: primary data, December 2023

4.1 Demographic Information of the Respondents

It is observed that the majority of respondents mainly dominated by male employees it accounts 73.85%, in the same fashion when it comes to the managerial position of the organization again, the proportion of male employees are very high, and it's counted as 87.31% of the total managerial group of the company and the 12.69% is covered by female employees.

Most of the employees' ages are between 26 and 35 that counts 53.85% and the other 17.85% are in the age of 46 and above. Furthermore, 16.92% of the employees are at the age of between 36 and 45, and the remaining 11.38% of the employees are on the age of 25 or below. This indicates that the company is staffed with young and energetic employees.

When it comes to Ethio Telecom employee's education level, 58.15% of the employees have a first degree and the other 20.92% of the employees have a master's degree level and above, whereas 9.23% is diploma holders. However, some portion of the organization's employee's education level is below diploma and counts 11.69%. Therefore, even if most of the employees have at least a first degree and above the human resource office of the organization need to work hard in changing the education level status of employees with below diploma level.

Table 4.1- Demographic Information

Demographic Information	Classification	Frequency	Percentage
Gender	Male	240	73.85%
	Female	85	26.15%
	Total	**325**	**100%**
Age Group	Less than 25 years	37	11.38%
	Between 26 and 35 years	175	53.85%
	Between 36 and 45 years	55	16.92%
	46 and above years	58	17.85%
	Total	**325**	**100%**
Educational Status	Below Diploma	38	11.69%
	Diploma	30	9.23%
	BA/BSC (Degree)	189	58.15%
	Master and above	68	20.92%
	Total	**325**	**100%**
Years of Service in Ethio Telecom	Less than 5 years	25	7.69%
	Between 6 and 10 years	160	49.23%
	Between 11 and 15 years	77	23.69%
	16 and above years	63	19.38%
	Total	**325**	**100%**
Employee Category	Managerial	57	17.58%
	Non-Managerial	268	82.42%
	Total	**325**	**100%**
Managerial Category by Gender	Male	49	87.31%
	Female	8	12.69%
	Total	**57**	**100%**
Non-Managerial Category by Gender	Male	191	71.27%
	Female	77	28.73%
	Total	**268**	**100%**

Sources: primary data, December 2023

Ethio Telecom working team is built with young and product age that counts 53.85%, it is in between the age of 26 and 35 years. Most of its employees acquire BA/BSC Degree that counts 58.15% and remarkable number of employees acquire their master's and above level that counts 58.15%. furthermore, in the non-managerial position of the company female employees cover 28.73%, whereas the remaining 71.27% is covered by male employees. Therefore, from the fact extracted from the above Table 4.1, we can conclude that most of the

organization employees were at the productive age, with having first degree and above. However, Ethio Telecom human resource office need to work hard to change a highly male dominated composition and must maintain a reasonable sex composition of the organization's employees. The proportion of female employees in the non-managerial position is a bit better compared to the managerial position.

4.2 Enterprise Resource Planning (ERP) Implementation challenges

The are several factors that can affect ERP project implementation in Ethio Telecom. These factors include Lack of planning and coordination, resistance to change, management support, technical problems, IT infrastructure, Integration, inter departmental Communication, decision making, employee participation, and Human capability have been stated in the literature review and were analyzed as presented here below.

4.2.1 Top Management support in (ERP) Implementation

Top management support is essential for the successful implementation of an ERP system. In the case of Ethio Telecom top managers were involved mainly as a member of the steering committees, allocating resources and compose project teams from organization employees and external experts, their support was critical to the success of the ERP implementation project.

Top management communicated the importance of the project to employees that created a sense of urgency and commitment to the project. Top management provided leadership and direction for the project, this helped to keep the project on track and ensure that it was completed on time and within the budget limit.

For the question asked about whether top management has allocated all the required resources, only 38.10% of the respondents were agree, 6.40% of the respondents were neither agree nor disagree, and 55.50% of the respondents were disagree. And the respondent further asked about whether top management has understood objectives of the implementation, only 36.10% of the respondents were agree, 10.90% of the respondents were neither agree nor disagree, and 53.00% of the respondents were disagree. However, for the question asked about whether top management has delegate implementation authority, 60.20% of the respondents agreed, 6.70% of the respondents were neither agree nor disagree, and only 33.10% of the respondents were disagree. However, for the question asked about whether top management has delegate implementation authority, 60.20% of the respondents agreed,

6.70% of the respondents neither agree nor disagree, and only 33.10% of the respondents were disagree. However, for the question asked about whether top management has taken all the necessary risk and responsibility, only 33.30% of the respondents agreed, 15.60% of the respondents neither agree nor disagree, and 51.10% of the respondents disagreed. Moreover, for the question asked about whether top management has encouraged employee participation during the implementation process, only 15.90% of the respondents agreed, 27.70% of the respondents were neither agree nor disagree, and 56.40% of the respondents were disagree. Finally, for the question asked about whether top management has official implementation policies, 56.60% of the respondents agreed, 6.10% of the respondents neither agreed nor disagreed, and only 37.30% of the respondents disagreed.

For the purpose of assessing the top management support in the process of implementing ERP six questions were distributed. The final result showed that the mean of top management support is 1.9402 and the standard deviation is 0.55240. This means that top management had an appropriate support of ERP implementation regarding allocation of resource, delegation of authority, and motivation of employees. Overall, top management has played an instrumental role in the implementation process. The result obtained above was consistent to previous studies of (Huang, 2010), (Harrison, 1997), which considers TMS is one of the most important factors for success of ERP implementation.

Therefore, even though management support has been constantly recognized as the most vital and crucial success factor in ERP system implementation it is evident that from the above analysis, which was made based on the findings of primary data of Table 4.2 below, Ethio Telecom top management didn’t satisfactorily support the ERP and its accounting/financial management system implementation process.

Table 4.2- Management support in (ERP) Implementation

Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Top management has allocated all the required resources	15.70%	39.80%	6.40%	23.60%	14.50%	100.00%
Top management has understood objectives of the implementation	19.80%	33.20%	10.90%	28.70%	7.40%	100.00%
Top management has delegate implementation authority	9.90%	23.20%	6.70%	44.60%	15.60%	100.00%
Top management has taken all the necessary risk and responsibility	10.40%	40.70%	15.60%	21.80%	11.50%	100.00%
Top management has encouraged employee participation during the implementation process	8.80%	47.60%	27.70%	13.30%	2.60%	100.00%
Top management has official implementation policies	7.60%	29.70%	6.10%	37.40%	19.20%	100.00%

Sources: primary data, December 2023

4.2.2. IT infrastructure

Enterprise resource planning (ERP) systems are a critical part of the IT infrastructure for many businesses. They facilitate a platform for managing different aspects of any organization, from financials to operations to human resources. ERP systems can help businesses improve efficiency, visibility, and collaboration, and can also reduce risk and improve compliance issues.

However, ERP implementations can be complex and challenging. There are several factors that can affect the success of an ERP implementation, in our case:

- ✓ **The size and complexity of the organization**: Larger businesses with more complex operations require a more complex ERP system and this led them to more resource requirements that can increase the cost and complexity of the implementation. However, IT infrastructure required significant portion any ERP implementation budget.

For the purpose of assessing how IT infrastructure become a critical success factor of ERP implementation, the researcher distributed four questions.

For the question asked about whether required IT hardware was provided, 70.20% of the respondents agreed required IT hardware was provided, 17.50% of the respondents were neither agree nor disagree, and only 12.30% of the respondents were disagree. And the respondent further asked about whether required software was provided, 40.80% of the respondents were agreed, 40.70% of the respondents were neither agreed nor disagreed, and only 17.50% of the respondents were disagreed. Moreover, for the question asked about whether secured network integration platform was provided, 55.80% of the respondents were agreed, 10.00% of the respondents were neither agreed nor disagreed, and only 34.20% of the respondents were disagreed. Finally, for the question asked about whether Independent and secured data storage were provided, 60.10% of the respondents were agreed, 8.20% of the respondents were neither agreed nor disagreed, and only 31.70% of the respondents were disagreed.

Therefore, from the above analysis made to understand whether IT infrastructure a critical success factor or not, that was based on the findings of primary data of Table 4.3 below it is revealed that significant number of the respondents agree that IT infrastructure support ERP system implementation and most of the infrastructure was emplaced.

Table 4.3- IT infrastructure

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Required IT hardware was provided	3.50%	8.80%	17.50%	55.90%	14.30%	100.00%
Required Software was provided	6.60%	11.90%	40.70%	31.70%	9.10%	100.00%
Secured network integration platform was provided	17.90%	16.30%	10.00%	31.30%	24.50%	100.00%
Independent and secured data storage was provided	16.80%	14.90%	8.20%	37.90%	22.20%	100.00%

Sources: primary data, December 2023

4.2.3 Integrating of other systems and ERP systems

ERP integration is the process of connecting different enterprise resource planning (ERP) systems together with other systems, apps, and data sources, so that they can share information and work together effectively. This can be done in a variety of ways, including through the use of middleware, application programming interfaces (APIs), or cloud-based integration platforms. ERP integration can help organizations to improve efficiency, reduce costs, and increase agility.

ERP is modular software designed to integrate an organization's business processes into a single system running on a central database. The accounting and finance module shares data with other core business functions, including inventory management, production planning, purchasing and customer relationship management. When a transaction in one of these other modules has a financial impact or must be recorded in the accounting system, it usually triggers an action or transfer of data in the ERP finance module.

The main purpose of ERP (Enterprise Resource Planning) systems is to help the organization to transform, integrate and scale up the organization. Due to this expanding scope of functionality in ERP systems, the implemented ERP application must integrate with existing and other systems.

For the purpose of assessing Integrating ERP and its Accounting/Financial management module with other systems the researcher distributed six questions.

For the new ERP system and the existing system integration question, most of the respondents, 37.80% believe that the new ERP system didn’t work with the existing system in integration and significant number of the respondents, 18.40% found themselves neutral. And the respondent further asked about whether data synchronizations were performed easily, only 19.70% of the respondents were agreed, 11.20%of the respondents were neither agreed nor disagreed, and significantly high number 69.10% of the respondents were disagreed. The same way, for the question asked about whether ERP Implementation process completed on time, only 16.10% of the respondents were agreed, 12.30%of the respondents were neither agreed nor disagreed, and significantly high number 71.60% of the respondents were disagreed. However, for the question of whether top management assign a committee who follow the integration issues? most of the respondents, 38.90% appreciate the top management for their responsible decision of assigning an integration follow up team during

ERP implementation process. Moreover, for the question whether the existing system and the new ERP system works side by with ERP system most of the respondents, 56.20% are very happy and appreciate the management decision that create a comfortable working condition during the difficult initial transition period of ERP development life Cycle. Finally, regarding the question of whether top management has identified the gaps and inefficiencies of the existing system? Most of the respondents, 39.20% were believed that the management have many difficulties in identifying the gaps and inefficiencies of the existing system.

The analysis in Table 4.4 below revealed that most of the respondents were not satisfied with most of the questions related to integration of ERP and other systems. When asked if they agree or not integration of ERP and other systems were existed, only 20.00% of the respondents were agreed about integration existence, 18.40% of the respondents neither agree nor disagree about the existence of integration, and most of the respondents 61.60% of the respondents disagree about the existence of integration. When asked if they agree or not integration follow up team existence during ERP implementation, 61.30% were agreed the team existed, 8.30% of the respondents neither agree nor disagree about the existence the team, and 30.40% of the respondents disagree about the existence of the team. When asked if they agree or not ERP and existing system were working side by with ERP system, most of the respondents 72.80% were agreed the existing system and ERP working side by side, very few of the respondents 0.60% were neither agree nor disagree about the existing system and ERP working side by side, and only 26.60% of the respondents disagree about the existence of side by side working of the existing system and the new ERP. When they were further asked if they agree or not top management has identified the gaps and in efficiencies of the existing system, most of the respondents 74.70% were disagree about top management identification of the gaps and inefficiencies of the existing system, 7.30% of the respondents neither agree nor disagree about top management identification of the gaps and inefficiencies of the existing system and only 18.00% of the respondents agree top management identification of the gaps and inefficiencies of the existing system.

Therefore, from the above analysis, which was made based on the findings of primary data of Table 4.4 below, a significant number of the respondents believe an integration of ERP with other systems didn't successfully happen and this leads the system developers and Ethio Telecom to deploy extra resources.

Table 4.4- Integrating of other Systems and ERP

Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
The existing System Fully integrate with the new ERP	37.80%	23.80%	18.40%	13.80%	6.20%	100.00%
Data synchronizations were performed easily	38.70%	30.40%	11.20%	14.40%	5.30%	100.00%
ERP Implementation process completed on time	41.70%	29.90%	12.30%	11.70%	4.40%	100.00%
Top management has assigned a committee who is responsible for integration test	17.80%	12.60%	8.30%	38.90%	22.40%	100.00%
The existing System works side by side with ERP system	11.70%	14.90%	0.60%	56.20%	16.60%	100.00%
Top management has identified the gaps and in efficiencies of the existing system	35.50%	39.20%	7.30%	14.50%	3.50%	100.00%

Sources: primary data, December 2023

4.2.4Accounting/Financial management module of ERP and performance of Ethio Telecom operation

Accounting/financial management module of Enterprise Resource Planning (ERP) system is responsible for tracking and managing financial transactions. This includes recording journal entries, creating financial reports, and generating financial statements. The performance of this module is critical to the overall success of an ERP system, as it provides the information that managers need to make informed decisions about the financial health of their organization.

Traditionally the Accounting/financial management module of Enterprise Resource Planning (ERP) gathers financial data and turns them into ledgers and standard reports that include annual, semi-annual, and quarterly financial reports (profit and loss statement, and balance sheets).

The other financial management module of the ERP system in Ethio Telecom is that encompasses the function of banking industry transactions, Telebirr Transactions. Ethio Telecom currently enters in a new line of business, manly engaged in receipt, payment, and transfer of money, with the name Telebirr and monitored by independent executive branch of the organization.

For the purpose of assessing implementation impact of the accounting/financial management module on performance improvement of Ethio Telecom, the researcher distributed four questions.

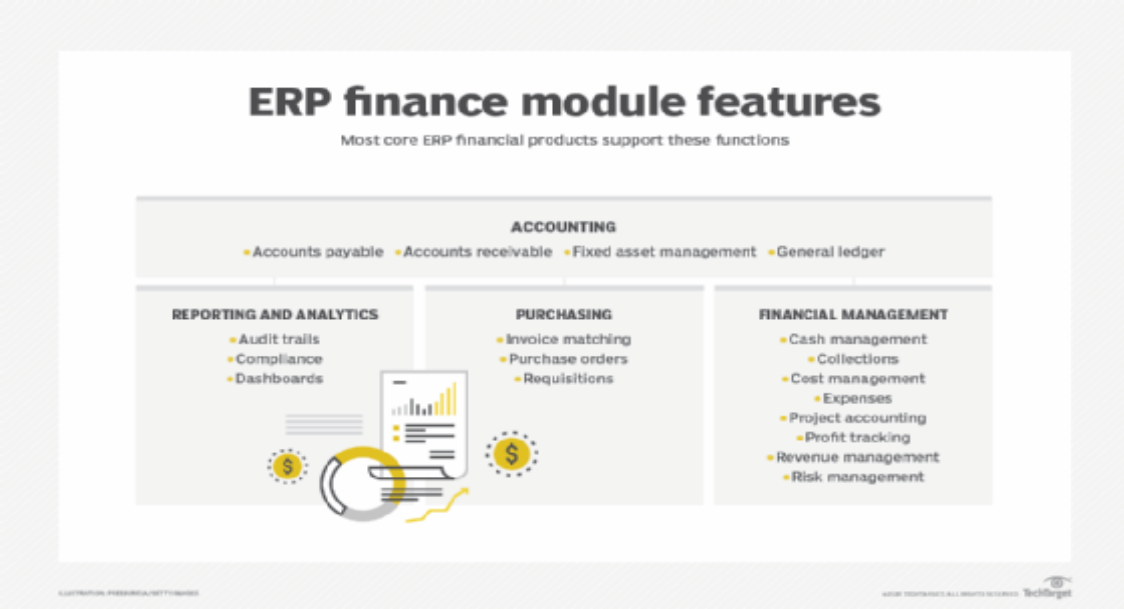

Figure 1: The most common ERP Accounting/ financial module features

For Telebirr financial service is a digital cash that enable user to access a variety of financial services question most of the respondents, 49.60% were believed Telebirr financial service enable user to access a variety of financial services. And the respondent further asked about whether ERP system improve cross-functional integrations among different organs, both horizontally and vertically, only 30.00% of the respondents were agreed, 11.40% of the respondents were neither agreed nor disagreed, and 58.60% of the respondents were disagreed. Finally, for the question asked about The ERP system was easily communicable and a user-friendly system, 73.30% of the respondents agreed, 3.90% of the respondents neither agreed nor disagreed, and only 22.80% of the respondents disagreed.

Therefore, from the above analysis, which was made based on the findings of primary data of Table 4.5 below, a significant number of the respondents believe implementing

accounting/financial management module improve the performance of Ethio Telecom as a whole.

Table 4.5- Accounting/financial management module ERP system and performance

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Telebirr financial service is a digital cash that enables customers to access a variety of financial services at ease.	2.50%	4.60%	38.30%	49.60%	5.00%	100.00%
ERP system improve cross-functional integrations among different organs, both horizontally and vertically	32.70%	25.90%	11.40%	13.70%	16.30%	100.00%
The ERP system was easily communicable and a user-friendly system	7.60%	15.20%	3.90%	18.50%	54.80%	100.00%

Sources: primary data, December 2023

4.2.5 Decision making and ERP System

There are a number of ways that ERP systems can support decision-making, and this can help businesses make better decisions about how to allocate resources and improve their operations, including:

- ✓ **Provide a single source of truth for all data**: This can help businesses make better decisions by ensuring that they are based on accurate and up-to-date information.
- ✓ **Improve visibility into business operations**: ERP systems can provide businesses with a comprehensive view of their operations, which can help them identify areas where they can improve efficiency and productivity.
- ✓ **Automate tasks**: ERP systems can automate many of the tasks that are involved in running a business, which can free up employees to focus on more strategic tasks.
- ✓ **Provide insights into business performance**: ERP systems can generate reports and dashboards that provide businesses with insights into their performance.

ERP systems can play an important role in supporting decision-making in businesses. They can help businesses improve efficiency, productivity, and visibility, and they can provide businesses with the information they need to make better decisions.

For the purpose of assessing how ERP System support decision making, the researcher distributed four questions.

For the question asked about ERP system aid decision making abilities, 77.60% of the respondents agree ERP system aid decision making abilities, 2.10% of the respondents were neither agree nor disagree, and only 20.30% of the respondents were didn't believe the implementation team were experienced in previous ERP implementation. And the respondent further asked about ERP system saves time and resources, 31.70% of the respondents were agreed, 7.90% of the respondents were neither agreed nor disagreed, and only 60.40% of the respondents were disagreed. Moreover, for the question asked about ERP enhances performance appraisal and internal controls, 65.40% of the respondents were agreed, 13.40% of the respondents were neither agreed nor disagreed, and only 21.20% of the respondents were disagreed. Finally, for the question asked about ERP enhances access to a timely and accurate data, 61.90% of the respondents were agreed, significantly high number 46.40% of the respondents were neither agreed nor disagreed, and only 27.20% of the respondents were disagreed.

Therefore, from the above analysis made to understand how ERP systems can support decision-making, that was based on the findings of primary data of Table 4.6 below it is revealed that significant number of the respondents agree that ERP system highly support decision making.

Table 4.6- Decision making and ERP System

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
ERP system aid decision making abilities	14.70%	5.60%	2.10%	34.20%	43.40%	100.00%
ERP system saves time and resources	11.30%	49.10%	7.90%	4.40%	27.30%	100.00%
ERP enhances performance appraisal and internal controls	11.50%	9.70%	13.40%	43.80%	21.60%	100.00%
ERP enhances access to a timely and accurate data	5.90%	21.30%	46.40%	10.90%	15.50%	100.00%

Sources: primary data, December 2023

4.2.6 Employee participation in the implementation process of ERP System

Employee participation in the implementation process of ERP is essential for a successful implementation. Employees are the ones who were using the system daily, so it is important to get their input and feedback on the design and implementation of the system. Employee participation can help to ensure that the system meets the needs of the users, and that it is implemented in a way that is efficient and effective.

There are several ways to get employee participation in the implementation process of ERP. One way is to hold workshops or meetings where employees can provide feedback on the system. Another way is to create a task force or committee of employees who were responsible for working with the implementation team to design and implement the system. It is also important to keep employees informed about the progress of the ERP implementation process, and to incorporate their feedback on any issues or concerns that they have.

Employee participation in the implementation process of ERP can help to ensure that the system is successful. By getting employee input and feedback, the implementation team can create a system that meets the needs of the users and that is implemented in a way that is efficient and effective.

For the purpose of assessing employee's participation in the implementation process of ERP and its Accounting/financial management module, the researcher distributed five questions.

For the question asked about whether employees were actively participating in ERP implementation process question, 21.60% of the respondents were agree, very few number 6.20% of the respondents were neither agreed nor disagree, and significantly high number 72.20% of the respondents were disagreed. Additionally, for the question asked about whether employees were supporting ERP implementation question, only 18.20% of the respondents were agree, 17.90% of the respondents were neither agreed nor disagree, and significantly high number 63.90% of the respondents were disagreed. Moreover, for the question asked about whether employees were receiving proper training, 52.00% of the respondents disagreed, only 2.10% of the respondents neither agreed nor disagree, and 45.90% of the respondents were agreed. However, for the question asked about whether employees were fully communicated during ERP Implementation, 47.10% of the respondents agreed that they were fully communicated during ERP Implementation, 1.80% of the respondents were neither agreed nor disagree, and 51.10 % of the respondents were disagree that they were fully communicated during ERP implementation. Finally, for the question

asked about whether employees were consulted about ERP implementation, 47.50% of the respondents were disagree, and 34.80% of the respondents were agree, and 17.70% of the respondents were neither agreed nor disagreed.

Therefore, from the above analysis, which was made based on the findings of primary data of Table 4.7 below, most of respondents believe there was no employee participation during ERP implementation process.

Table 4.7- Employees participation in the implementation process of ERP

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
Employees were actively participating in ERP implementation process	36.50%	35.70%	6.20%	20.30%	1.30%	100.00%
Employees were supporting ERP implementation	15.80%	48.10%	17.90%	12.80%	5.40%	100.00%
Employees were receiving proper Training	33.30%	18.70%	2.10%	3.80%	42.10%	100.00%
Employees were fully Communicated during ERP Implementation	27.70%	23.40%	1.80%	21.70%	25.40%	100.00%
Employees were Consulted about ERP implementation	30.90%	16.60%	17.70%	3.90%	30.90%	100.00%

Sources: primary data, December 2023

4.2.7 ERP Project team competency and Human capability

The success of an ERP implementation project depends on several factors, including the competency of the project team and the capabilities of the organization's employees. The project team is responsible for leading and executing the ERP implementation project. The team should have a mix of skills and experience, including:

- ✓ ERP implementation experience
- ✓ Technical skills
- ✓ Business process knowledge
- ✓ Communication skills
- ✓ Leadership skills

The project team should also be able to work effectively together and build consensus. the organization's employees must also be capable of using the ERP system effectively. This

includes having the necessary skills and knowledge to operate the system, as well as the willingness to change the way they work.

For investigating project team competency six questions were designed to all users of ERP. As represented in Table 4.10, the mean value 1.9864 for this variable showed that project team was competent. This means the project was composed of skilled, qualified and experienced people who had a good knowledge in business and technical aspects. The result concurs with results of a research done by (Joycelyn L. Harrison, 1997). (Emad Abu-Shanab, 2015), who showed PTC is one of the most important factors for successful ERP implementation. The low value of standard deviation, 0.54964 indicates a low dispersion of data and a consensus among the respondents on the mean.

For the purpose of assessing ERP Project team competency and Human capability, the distributed questions were six.

For the question asked about ERP implementation project team members were experienced in previous ERP implementation, 75.10% of the respondents believe the implementation team were experienced in previous ERP implementation, 12.50% of the respondents were neither agree nor disagree, and only 12.40% of the respondents were didn't believe the implementation team were experienced in previous ERP implementation. And the respondent further asked about ERP implementation project team members acquired required knowledge of ERP implementation, 71.30% of the respondents were agreed, 16.90% of the respondents were neither agreed nor disagreed, and only 1.80% of the respondents were disagreed. Moreover, for the question asked about ERP implementation project team members have carefully been selected based on their knowledge and ability to accept change, 72.20% of the respondents were agreed, 15.00% of the respondents were neither agreed nor disagreed, and only 12.80% of the respondents were disagreed. Additionally, for the question asked about ERP implementation project team members were qualified and skilled, 64.40% of the respondents were agreed, 26.60% of the respondents were neither agreed nor disagreed, and only 9.00% of the respondents were disagreed. Furthermore, for the question asked about ERP implementation project team members had business and technical knowledge, 60.50% of the respondents were agreed, 24.20% of the respondents were neither agreed nor disagreed, and only 15.30% of the respondents were disagreed. Finally, for the question asked about ERP implementation project team members has been the top and only priority for

the team, 51.20% of the respondents were agreed, 37.10% of the respondents were neither agreed nor disagreed, and only 11.70% of the respondents were disagreed.

Therefore, from the above analysis made to understand ERP project team competency and human capability, that was based on the findings of primary data of Table 4.8 below it is revealed that a significant number of the respondents agree that the project team was composed of experts having the necessary skills and knowledge to operate the system, as well as the willingness to change the way they work, all the necessary trainings were given to them, team selection was made based on knowledge and team members give priority to the team only.

Table 4.8- Project team competency and Human capability

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
ERP implementation project team members were experienced in previous ERP implementation	0.00%	12.40%	12.50%	40.50%	34.60%	100.00%
ERP implementation project team members acquired required knowledge of ERP implementation	1.30%	10.50%	16.90%	53.80%	17.50%	100.00%
ERP implementation project team members have carefully been selected based on their knowledge and ability to accept change	0.00%	12.80%	15.00%	53.00%	19.20%	100.00%
ERP implementation project team members were qualified and skilled	1.20%	7.80%	26.60%	54.80%	9.60%	100.00%
ERP implementation project team members had business and technical knowledge	0.00%	15.30%	24.20%	43.60%	16.90%	100.00%
ERP implementation project team members has been the top and only priority for the team	0.00%	11.70%	37.10%	43.70%	7.50%	100.00%

Sources: primary data, December 2023

4.2.8 Objective of implementing ERP System and its accounting/ management module

There are many objectives of implementing an ERP system, including:

- ✓ **Improving efficiency and productivity**: ERP systems can help businesses improve efficiency and productivity by automating processes, providing real-time data, and streamlining communication.

- ✓ **Visibility and control:** ERP systems can give businesses greater visibility and control over their operations by providing a single source of truth for all data. This can help businesses make better decisions and improve their bottom line.
- ✓ **Collaboration and communication**: ERP systems can help businesses improve collaboration and communication by providing a platform for employees to share information and collaborate on projects. This can help businesses be more agile and responsive to changing market conditions.
- ✓ **Risk management**: ERP systems can help businesses manage risk by providing a centralized view of all data and processes. This can help businesses identify and mitigate risks before they become problems.
- ✓ **Compliance**: ERP systems can help businesses comply with regulations by providing a single source of truth for all data. This can help businesses avoid costly fines and penalties.

ERP systems can help businesses improve efficiency, productivity, visibility, control, collaboration, communication, risk management, and compliance. This can lead to reduced costs, improved customer service, better decision-making, and improved compliance.

For the purpose of assessing the objective of implementing ERP system and its accounting/ management module, the researcher distributed five questions.

For the question asked about the improvement of operational efficiency after ERP implementation, only 58.00% of the respondents agreed, only 1.30% of the respondents neither agree nor disagree, and 40.70% of the respondents were disagreed. And the respondent further asked about whether business processes have been updated through use of ERP, only 10.60% of the respondents were agreed, 32.60% of the respondents were neither agreed nor disagreed, and significantly high number 56.80% of the respondents were disagreed. The same way, for the question asked about whether productivity of Ethio Telecom significantly improved after ERP implementation, 62.40% of the respondents were agreed, 18.00% of the respondents were neither agreed nor disagreed, and only 19.60% of the respondents were disagreed. However, for the question asked about Information gathering, interpretation and reporting were improved after ERP implementation, only 17.20% of the respondents were agreed, 14.30% of the respondents were neither agreed nor disagreed, and only 67.50% of the respondents were disagreed. Finally, for the question asked about Occurrence of error reduced after ERP implementation, 26.00% of the respondents were

agreed, 23.20% of the respondents were neither agreed nor disagreed, and 50.80% of the respondents were disagreed.

Therefore, from the above analysis made to understand the objective of implementing ERP system and its accounting/ management module, most of the respondents believe the objectives of implementing ERP was not successfully met.

Table 4.9- Objective of implementing ERP and its Financial management module

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total
After ERP implementation operational efficiency has been improved	24.30%	16.40%	1.30%	37.80%	20.20%	100.00%
Business processes have been updated through use of ERP	50.90%	5.90%	32.60%	1.50%	9.10%	100.00%
Productivity of Ethio Telecom significantly improved after ERP implementation	10.20%	9.40%	18.00%	48.20%	14.20%	100.00%
Integration, Information gathering, interpretation and reporting were improved after ERP implementation	12.30%	55.20%	14.30%	6.70%	11.50%	100.00%
Occurrence of error reduced after ERP implementation	21.20%	29.60%	23.20%	22.30%	3.70%	100.00%

Sources: Primary data, December 2023

CHAPTER FIVE

5. Summary, Conclusion and Recommendation

5.1Summary of Major Findings

- **Required resource allocation problem**: 55.50% of the respondents believed that the top management didn't provide all the necessary required resources to support ERP implementation.

- **Lack of employee participation**: 72.20% of the respondents believe the project team did not adequately involve employees in the implementation process and this led employees to resistance to change and feeling anxious and uncertain about the future. Furthermore, if the project team did not regularly consult with employees about their needs and requirements it creates employees feeling like their voices were not being heard.

- **Top management misunderstood objectives of the implementation:** 53.00% of the respondents believed that the top management didn't understand the objective of ERP implementation.

- **ERP system improves decision making abilities**: 77.60% of the respondents believed that believe that ERP supports decision making ability.

- **Technical problems**: The project team encountered several technical problems during the implementation process. These problems included:

1. Data migration issues: the project team had difficulty migrating data from the old system to the new ERP system.
2. System integration issues: 58.60% of the respondents believe that the project team had difficulty integrating the ERP system with other systems and this challenged them to problems with data synchronization and reporting.
3. Continued user training issues: 52.00% of the respondents believe that the project team did not adequately train employees in how to use the ERP system and this left users with errors and frustration.

- **ERP consumes more time and resources**: 60.40% of the respondents believed that the project team did not adequately plan for the implementation project, and this led to ERP project time delays and cost overruns and budget constraints. Additionally, the project team did not adequately account for the cost of downtime and lost productivity.
- **Mix Use of both the ERP and old system together**: 72.80% of the respondents believed that both methods were used for some process in a normal day-to-day operation of Ethio Telecom.
- **Accounting/Financial management module of ERP improves operational efficiency**: 58.00% of the respondents believed that Accounting/Financial management module of ERP improves operational efficiency of the organization.
- **Objectives of ERP Implementation**: 67.50% of the respondents believed that ERP implementation objective was not successfully achieved.
- **Unutilized modules of ERP system:** from system utilization point of view most of the respondents have stated that, even if the entire package of the system has been procured, there are number of ERP features which are not yet exploited by the company.
- **The project team members**: a significant number of the respondents agreed that the project team was composed of experts having the necessary skills and knowledge to operate the system and as well as the willingness to change the way they work.
- **IT infrastructure**: a significant number of the respondents agreed IT infrastructure is a critical success factor of ERP implementation and except software component Ethio telecom provide some of its infrastructure elements satisfactorily.

5.2Conclusion

Many of the respondents believed the required resource allocation problem in ERP implementation is a critical issue that organizations must address to ensure the successful deployment of their ERP system. The goal of resource allocation is to ensure that the right resources are available in the right place at the right time to complete the project on time and within budget.

Most of the respondents believed lack of employee participation in ERP implementation is a common challenge that can lead to project delays, cost overruns, and ultimately a failure of the project. There are several factors that can contribute to employee resistance to ERP implementation, including: Lack of understanding of the benefits of ERP, Employees may not understand how ERP benefit them personally or how it improves the organization, and this can lead to skepticism and resistance to change. Additionally, employees may fear that ERP will automate their jobs or make them redundant, and this can lead them to anxiety and resistance to change.

The findings from most of the respondents revealed that ERP systems can improve decision-making abilities in several ways. ERP systems provide a centralized view of all data, which makes it easier for decision-makers to identify trends and patterns. This information can be used to make more informed decisions about business operations. Moreover, ERP systems allow different departments to collaborate more effectively and help them to get better decision-making ability, as different perspectives are considered. ERP systems can automate many business processes, which frees up time for decision-makers to focus on more strategic tasks and it provides them with better reporting capabilities, which can help decision-makers track progress and identify areas for improvement.

Significant number of the respondents believed the implementation of an ERP system can be a complex and challenging undertaking. There are several technical problems that can arise during the implementation process, which can delay or even derail the project. Some of the most common technical problems that can occur during ERP implementation include incompatibility with existing systems, data migration, training, and user resistance.

The findings showed that there exist unutilized modules of an ERP system that can lead to problems, such as increased costs due to the organization is still paying license fee for them, inefficiency due to employees may have to use multiple systems to complete tasks that could

be done in one system if all modules were being used, and risk due to the organization may be exposed to risks that could be mitigated if the modules were being used.

A significantly high number of respondents believe that top management does not fully understand the objectives of the implementation, and this led the organization into a number of problems. When top management does not understand the objectives of the implementation, they are less likely to be involved in the planning process, they are less likely to support the implementation, and they are more likely to resist the implementation. However, this can lead to conflict and delays, which can also make the implementation more difficult and less successful.

The findings showed successful Integration, Information gathering, interpretation and reporting were the most desirable variables in assessing whether ERP implementation Objectives are achieved or not. However, most of the respondents believed that all the independent variables were not successfully achieved. Therefore, objectives of ERP implementation were not fully achieved.

The findings showed that project implementation team members were composed of experts having the necessary skills and knowledge to operate the system and as well as the willingness to change the way they work. project implementation team members' selection and assignment of core role was made based on their knowledge and expertise. In addition to these core roles, there may also be other project team members involved in the ERP implementation project, such as a data migration specialist, a security specialist, and a training specialist. The specific roles and responsibilities of the project team members varied depending on the size and complexity of the ERP implementation project. Moreover, the team receives all the necessary training and gives priority to the team only.

Finally, implementation of ERP system allows the organization to enjoy different software functionalities within a single system. However, having this different software functionalities within a single system helps Ethio Telcom in resolving most of its existing and future challenges, this including: decision making, IT infrastructure, performance of Ethio Telecom as a whole, Telebirr service, employee training, and others.

5.3 Recommendation

Based on the conclusion reached, I have recommended that Ethio Telecom to increase the availability of resources for its ERP implementation. Additionally, identification of the resources needed, and resource allocation plan should be placed in each ERP development phase. Furthermore, in order to overcome employee resistance, it is important to provide employees with clear and concise information about the benefits of ERP implementation.

The project team is expected to build trust with employees by being transparent and open about the ERP project and providing them with adequate training on all aspects of ERP project. This training should be tailored to the specific needs of the employees and should be provided in a timely manner. i.e., in resolving issues related to unutilized modules of the ERP system, Ethio Telecom should provide tailored and module specific training for users, simplifying the modules and making the modules compatible with existing systems.

Concerning the challenge of top management misunderstanding the objectives of ERP implementation educating top management on the benefits of ERP systems, involving top management in the planning process, and the project implementation team should communicate regularly with top management about the progress of the ERP implementation.

Finally, ERP implementation objectives may either fully or partially fail due to many known and unknown reasons. However, the researcher recommended actions that can be taken to correct the situation. These actions include identifying the root cause of the failure, developing a corrective action plan, implementing the corrective action plan, monitoring the implementation, and finally learning from the challenges.

5.4 Limitation and Further Research

- Strict internal documentation policy of Ethio Telecom.
- The sample size may not be large enough to represent the population of interest.
- Due to the unique nature of Ethio Telecom business the results of the study may not be generalizable to other populations or business settings.
- In general questionnaires were not returned on time and some of the respondents were not willing to cooperate.

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Appendixes

APPENDIX I:

Addis Ababa University
School of Business & Economics
Department of Accounting and Finance

Dear Respondent,

I am a student from Addis Ababa University School of Business & Economics conducting research for a master thesis in department of Accounting and Finance. First and foremost, I would like to thank you for your valuable time to fill out the questionnaire.

The main purpose of this questionnaire is gathering firsthand information about Enterprise Resource Planning (ERP) and its Accounting/financial management module implementation Challenges in the case of Ethio Telecom for the partial fulfillment of the requirements for Master of Science in Accounting and Finance program. The survey is confidential and will not be used for other purpose than this paper.

Therefore, your honest and timely response to the questions is vital for the quality and successful completion of the study. The correctness of the information you provide highly determines the trustworthiness of the study.

Thank you again for taking your valuable time to fill out the questionnaire. The outcome of this study will be used only for academic purposes. I appreciate your collaboration in advance.

Contact Address:

Aweke Berhanu
Tel. +251 911 13 28 04
E-mail: aweke2020@gmail.com

I. Personal Information

1. Gender:

☐ Male ☐ Female

2. Age Group

☐ Less than 25 years ☐ Between 26 and 35 years

☐ Between 36 and 45 years ☐ 46 years and above

3. Educational Status:

☐ Below Diploma ☐ Diploma

☐ BA/BSC (Degree) ☐ Master and above

4. Years of service in Ethio Telecom:

☐ Less than 5 years ☐ Between 6 and 10 years

☐ Between 11 and 15 years ☐ 16 years and above

5. The Position you hold in Ethio Telecom:

☐ Chief Officer ☐ Director ☐ Staff

☐ Manager ☐ Supervisor

☐ Other _____

II. The Questionnaire Related with the study area:

Please rate the following research questions in terms of an Enterprise Resource Planning (ERP) system and its Accounting/Financial management module implementation challenges and circle your choice. To ease the questionnaire for each respondent a defined equivalent meaning is given to the numbers below. Hence;

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

1. To what extent did the top management of Ethio Telecom actively and persistently support ERP and its Accounting/Financial management module implementation process?

No.	Statement	Scale				
1.1	Top management has allocated all the required resources for ERP and its Accounting/Financial management module implementation.	1	2	3	4	5
1.2	Top management has understood the implementation objectives of ERP Software and its Accounting/Financial management module.	1	2	3	4	5
1.3	Top management has delegated implementation authority for project managers.	1	2	3	4	5
1.4	Top management taken all the necessary risk and responsibilities during ERP Software and its Accounting/Financial management module implementation.	1	2	3	4	5
1.5	Top management has encouraged employee to participation during the implementation process	1	2	3	4	5
1.6	Top management has set official ERP Software and its Accounting/Financial management module implementation policies.	1	2	3	4	5

2. IT Infrastructure requirement

No.	Statement	Scale				
2.1	Required IT hardware was provided	1	2	3	4	5
2.2	Required Software was provided	1	2	3	4	5
2.3	Required network integration platform was provided	1	2	3	4	5
2.4	Independent and required data storage was provided	1	2	3	4	5

3. To what extent did ERP and its Accounting/Financial management module integrate with the existing systems?

No.	Statement	Scale				
3.1	The existing system fully integrate with the implemented ERP software and its Accounting/Financial management module.	1	2	3	4	5
3.2	Top management has set a committee who is responsible to test and identify the integration problems during the implementation process of ERP Software.	1	2	3	4	5
3.3	The existing system works side by side with the new ERP system during the initial phase of ERP software implementation life cycle.	1	2	3	4	5
3.4	Ethio telecom top management identified the gaps and inefficiencies of the existing systems they want to address with an ERP system implementation that enhance the integration.	1	2	3	4	5

4. To what extent does the Accounting/Financial management module improve the performance of Ethio Telecom operation?

No.	Statement	Scale				
4.1	ERP implementations improve cross-functional integrations among different organs, both horizontally and vertically	1	2	3	4	5
4.2	The ERP system was easily communicable and a user-friendly system	1	2	3	4	5
4.3	Telebirr financial service is a digital cash that enables customers to access a variety of financial services at ease.	1	2	3	4	5

5. Does ERP and its Accounting/Financial management module provide relevant and timely information for decision making?

No.	Statement	Scale				
5.1	ERP systems aid decision making abilities.	1	2	3	4	5
5.2	ERP System saves time and Resources.	1	2	3	4	5
5.3	Performance appraisal and internal controls greatly enhanced by ERP software implementation.	1	2	3	4	5
5.4	ERP software implementation highly enhances access to a timely and accurate data.	1	2	3	4	5

6. To what extent did employees of Ethio Telecom participate in the implementation process of ERP and its Accounting/financial management component?

No.	Statement	Scale				
6.1	Employees were actively participating in ERP implementation process	1	2	3	4	5
6.2	Employees were supporting ERP implementation	1	2	3	4	5
6.3	Employees were receiving proper Training	1	2	3	4	5
6.4	Employees were fully Communicated during ERP Implementation	1	2	3	4	5
6.5	Employees were Consulted about ERP implementation	1	2	3	4	5

7. Does the project team competency and Human capability affect the implementation process?

No.	Statement	Scale				
7.1	ERP implementation project team members were experienced in previous ERP implementations.	1	2	3	4	5
7.2	ERP implementation project team members acquired the required knowledge of the key issues relating to ERP implementation.	1	2	3	4	5
7.3	ERP implementation project team members have carefully been selected based on their knowledge and ability to accept change	1	2	3	4	5
7.4	ERP implementation project team members were qualified and skilled.	1	2	3	4	5
7.5	ERP implementation project team members had business and technical knowledge.	1	2	3	4	5
7.6	T ERP implementation project team members has been the top and only priority for the team.	1	2	3	4	5

8. Do you think Ethio Telecom achieved the objective of implementing ERP system and its major Accounting/Financial management module of ERP Software?

No.	Statement	Scale				
8.1	Business operational efficiency has been improved after the ERP software implementation.	1	2	3	4	5
8.2	Business processes have been updated through use of ERP.	1	2	3	4	5
8.3	The productivity of Ethio Telecom significantly improved after ERP software implementation. .	1	2	3	4	5
8.4	The availability of timely information gathering interpretation and reporting were improved after the ERP software implementation.	1	2	3	4	5
8.5	The occurrence of error was not inevitable after the ERP software implementation.	1	2	3	4	5

Please, write down anything you might think relevant in connection with implementation challenges of ERP and its Accounting/Financial management module.

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Thank You Again!