

# ST. MERY'S UNIVERSITY COLLEGE SCHOOL OF GRADUATE STUDENT

# SUCCESS FACTORS OF ENTERPRISE RESOURCE PLANNING (ERP) IMPLEMENTATION: THE CASE OF ETHIOPIA POSTAL SERVICE ENTERPRISE

BY

**TEWODROS BERIHUN** 

June, 2019

ADDIS ABABA, ETHIOPIA

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A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY COLLEGE, SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINSTRATION (GENERALMANGEMENT)

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**ADDIS ABABA, ETHIOPIA** 

## ST. MARY'S UNIVERSITY COLLEGE SCHOOL OF GRADUATE STUDIES

## DEPARTMENT OF GENERAL MBA

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## DECLARATION

I the undersigned declare that this thesis is my original work, prepare under guidance of Assistant Professor Tiruneh Legesse. All source of materials used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted ether in part or in full to any other higher learning institution for the purpose of earning any degree.

Declared by Confirmed by Advisor

Name: Tewodros berihu

Signature -----

St. Mary's University College, Addis Ababa June, 2019

# ENDORSMENT

This thesis has been submitted to St. Mary's University College, school of graduate studies for examination with my approval as a university advisor.

Advisor Name: Asst. Prof. Tirunh Legesse

Signature -----

St. Mary's University College, Addis Ababa June, 2019

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# LIST OF ABREVATION AND ACRONOMYS

ERP	Enterprise Resource Planning
EPSE	Ethiopia Posta Service Enterprise
E-Business	Electronic Business
CSR	Critical Success Factor
SCM	Supply Chain Management
MIE	Mesfin industrial Engineering

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#### Abstract

Enterprise Resource Planning (ERP) systems are software systems for business management, encompassing modules supporting functional areas such as planning, manufacturing, sales, marketing, distribution, accounting, financial, human resource management, project management, inventory management, service and maintenance, transportation and e-business. When implementing an integrated and ERP packages in to an organization, assessing the factors that affect the implementation and sharing experience is very important. Because ERP systems are complex and need huge budget investment, company re-arrangements and the implementation, success depends on various technological, organizational and individual factors of the companies and countries. Ethiopia postal service enterprise is implementing the ERP into its organization. Focusing on this company, the purpose of this study is to identify and analyze the organizational, external and internal factors and their benefits and limitation of ERP implementation. Based on detail review of literatures, the researcher selected and used research model for the study that consists of major constraints of implementation in the organization, internal and external and also the benefits and limitation of factors of ERP implementation of ERP system. The data were obtained through questionnaires that were distributed to 159 employees of the EPSE at head office in which 113 were fully completed and returned. The questionnaire was distributed to the employees based on the census method to get the perspective of the ERP implementation participant. The findings of the study indicated that ERP implementation supported the Organization by reducing the financial cycle time, decision making cycle time and procurement lead time. On the other hand, there are challenges related to, lack of appropriate training for all system users, high resistance from employee to use ERP, lack of Leadership commitment and support regarding to arrange effective project management methodology Finally, the reporting formats as per the user friendly nature of the system has been identified as a major challenge in relation to the decision making activity and other stakeholders usage.

Key words: Enterprise resource planning (ERP), ERP Implementation

## **CHAPTER ONE**

### NTRODUCTION

This introduction section includes background of the study, statement of the problem, objectives of the study, research questions, and significance of the study, scope and organization of the paper.

## **1.1 Background of the Study**

Enterprise resource planning (ERP) system has been one of the most popular business management systems, providing benefits of real-time capabilities and seamless communication for business in large organizations. However, not all ERP implementations have been successful. Since ERP implementation affects entire organizations such as process, people, and culture, there are a number of challenges that companies may encounter in implementing ERP systems.

An ERP implementation takes many years to complete and requires a large amount of IT Investment and their effectiveness are hard to evaluate. Today organizations of any magnitude have implemented or in the process of implementing Enterprise Resource Planning (ERP) in order to reap the benefits of integration and to remain competitive in the market.

Enterprise Resource Planning (ERP) systems are becoming popular among business organizations globally as well as locally. The main reason is that the corporate benefits gained through such implementations. However, in the event of such a project failing, the company has to incur a huge loss. Therefore, identifying the issues involved with the ERP implementation is of paramount importance. This paper aims to identify successes factors of ERP implementation of ERP projects, find out the level of practice of each factor in Ethiopia post office and recommend best practice to minimize the ERP Project failures.

According to Gupta (2008) ERP systems have gained widespread appeal in the 21st century owing to their "does it all" approach to organizational management. With more users seeking to link application systems to departmental processes, Ethiopian postal service are seeking ways to integrate their service operations in a bid to cut on operational costs, offer timely response to their clients and interact with their stakeholders in "real-time".

Enterprise resource planning (ERP), the most complex and largest enterprise system, is the core business process management software for organizations, which provides cost savings, improved planning and operations ,and organizational growth as cited by MohamedA.Lofty (2015). ERP is a suite of application modules that can link back office operations to front-office operations as well as internal and external supply chains and ERP allows a company to manage its business with potential benefits of improved process flow, reduced inventories, better data analysis, better customer service, and improved profit margins Dezdar, S., & Ainin, S.(2011). "Despite ERP's promises to benefit companies and a substantial capital investment, not all ERP implementations have successful outcomes.

An enterprise resource planning (ERP) is an enterprise-wide application software package that integrates all necessary business functions into a single system with a common database. The system basically integrates and streamlines the business processes of an organization across departmental and geographical borders. According to Nah and Lau (2001) ERP is a packaged business software system that enables a company to manage the efficient and effective use of resources (materials, human resources, finance, etc.) by providing a total integrated solution for the organization information-processing needs(Nah and Lau, 2001).

Specifically, ERP is the process of integrating all the business functions and processes in an organization to achieve numerous benefits first, a single point of data entry helps to reduce data redundancy while saving employees time in entering data thereby reducing labor and overhead costs. Secondly, the centralization of information, decision-making, and control leads to increases in efficiencies of operations and productivity as well as coordination between departments, divisions, regions, and even countries Thirdly the sharing of a centralized database provides business managers with accurate and up-to-date information to make well-informed business decisions Fourthly, functional integration will consolidate all sorts of data, such as financial, manufacturing, and sales, competitive advantage over competitors(Jacobs, Whybark, 2000)

## **1.2 Statement of the Problem**

Today, many public and private organizations worldwide are implementing ERP systems in place of the functional legacy systems that aren't anymore well-compatible with modern business environment. ERP system is a modular integrated business software system that facilitates an organization to use its resources efficiently and effectively. The integration brought by ERP enables organizations to respond to competitive forces and market opportunities, to improve product portfolio, to reduce carrying costs and to maintain supply chain relations strictly (Mishra et al. 2011).

Companies invest in ERP systems because they believe the investment of cash and other resources will provide a greater return than committing those resources in a different manner. The first role of executive management is to define the key metrics of measurable value the system should provide and the budget for achieving the expectations.

Various organizations have different working practices that depend on their culture and nature of business (Kibebework, 2015). The organizational culture of banking industries differs from the culture of other organizations. In addition, the different ERP systems have their own unique implementation methodologies and technical requirements. Other researchers, Markus and Tenis (2000) suggested that ERP success factors are variable and have different degrees of importance depending on the phase of ERP implementation.

Implementing an integrated and big ERP packages in developing countries, assessing the factors that affect the implementation and sharing experience is very important (Sintayehu, 2014). Because ERP systems are complex and need huge budget investment, company re-arrangements and the implementation, success depends on various social, cultural and technical factors of the companies and countries (Roman, 2009).

To name, but some of the challenges common to organizations implementing ERP include implementation is done in stages, appropriate training, proper analysis, support from senior management, compatibility issues with ERP modules, cost overheads, and investment in infrastructure (Holland, C. P., & Light, B. 1999).

So here it is rational posing questions as "are these challenge common to EPSE?" are there any new factors peculiar to Ethiopian post office in relation to implementing ERP? " and so "what likely solutions could be recommended as some ways forward?"

These are pressing issues that need be dealt with so as to make progress as envisioned by the company. Therefore, the common factors faced taken in to account, it is deemed important to factors affect and evaluate the overall success factors of ERP implementing in Ethiopia postal service.

# **1.3 Research Question**

The study is dedicated to answer the following major questions:

- > What does the process of the ERP system implementation in Ethiopia post office look like?
- > What are the major ERP system implementation constraints in Ethiopia post office?
- What are the external environment success factors that affected the implementation of ERP at Ethiopian post office?
- What are the internal environment success factors that affected the implementation of ERP at Ethiopian post office business?
- What are the major benefits and limitation of implementing and using ERP systems at Ethiopian post office?

# 1.4 Objectives of the Study

# **1.4.1General Objective**

Following the problem statement stated above the general objective of this study is to identify factors that effect of ERP system implementation in Ethiopia post office.

# **1.4.2 Specific Objectives**

The specific objectives of the study that emanate from the general objective are as under:

- > To identify ERP system implementation process at Ethiopian post office.
- To explore the major constraints that Ethiopian post office face while implementation of ERP.
- > To identify internal environmental factors when ERP systems implementation.
- > To identify external environmental factors when ERP systems implementation.
- ➤ To explore the major benefits and limitation that related with ERP systems implementation and using ERP system.

# **1.5 Significance of the Study**

The finding of the study is having many advantages for all practitioners and academicians by providing useful information about realized benefits and faced barriers in Ethiopian post office. It also useful for organization's management by providing information about actual and potential ERP factors, benefit and limitation and also very important for academic purpose by providing information in regard to statement of the problem..

This study has dedicated to identify success factors of ERP implementing in Ethiopia postal service enterprise for further corrective actions. In addition, the study will share any success stories to other organizations planning to implement ERP system in near future.

# 1.6 Scope of the Study

The research is intended to study the success factors of ERP implementing in Ethiopia specifically in the Ethiopia postal service enterprise. The study focuses in what are the factors affecting Ethiopia post office implemented ERP system and sees if there is any per implementation challenges. The research has only focused on the company's Head Quarter.

# **1.7 Organization of the study**

This report contains a total of five chapters. Chapter one of the study focuses only introductory aspects including background of the study statement of the problem, objectives of the study, significance, scope and limitation of the study. Chapter two presents the review of related literature. Chapter three presents the research design and methodology including data source and method of data collection, sampling techniques used, and measurement and analysis parts, chapter for focus on data analysis interpretation and also the final chapter five present finding, conclusion and recommendation .

## **CHAPTER TWO**

## LITERATURE REVIEW

This chapter presents the review of related literatures and imperial facts. It were includes the conceptual understanding of what ERP mean, and the benefits to be obtained through ERP implementation, the historical background of the system and its related challenges, detail review of risk and their relationship. In addition, ERP implementation success factors and failure human factors will be elaborately present in literature review part.

## **2.1 Theoretical Review**

## 2.1.1. Definition of ERP

Enterprise resource planning systems or enterprise systems are software systems for business management, encompassing modules supporting functional areas such as planning, manufacturing, sales, marketing, distribution, accounting, financial, human resource management, project management, inventory management, service and maintenance, transportation and e-business (Rashid, et al, 2002).

The enterprise resource planning (ERP) system incorporates asset of programs that provides supportformainorganizationalactivitiessuchasmanufacturingandlogistics, finance and accounting, sales and marketing, and human resource. It also helps for sharing of data and knowledge among different parts of the organization as well as reducing costs, and improves management of business processes (Adel, 2001).

The architecture of the software facilitates transparent integration of modules, providing flow of information between all functions within the enterprise in a consistently visible manner. Corporate computing with ERPs allows companies to implement a single integrated system by replacing or re-engineering their mostly incompatible legacy information systems. American Production and Inventory Control Society (2001) has defined ERP systems as "a method for the effective planning and controlling of all the resource needed to take, make, ship and account for customer orders in a manufacturing, distribution or service company."

"ERP (enterprise resource planning systems) comprises of a commercial software package that promises the seamless integration of all the information flowing through the company–financial, accounting, human resource, supply chain and customer information" (Davenport, 2000).

An ERP system is a vast information system, which enables decision-makers to have an enterprise wide view of the information they need in a timely, reliable and consistent fashion (Kumar and Hillsgersberg, 2000).

ERP packages are integrated software packages that cover the techniques and concepts employed for the integrated management of businesses that help effective use of resource, to improve the efficiency of an enterprise (Ahmed, 2003).

ERP systems are configurable information systems packages that integrate information and information-based processes within and across functional areas in an organization (Kumar& Hillsgersberg, 2000). One database, one application and a unified interface across the entire enterprise (Tadjer, 1998). ERP systems are computer-based systems designed to process an organization's transactions and facilitate integrated and real-time planning, production, and customer response (O'Leary, 2001).

## 2.1.2. A Brief History of ERP

The evolution of ERP systems closely followed the development in the field of computer hardware and software systems and the history of ERP systems starts with efforts of automating inventory controlsystemsinthe1960swhenmostorganizationsdesigned, developed and implemented centralized computing systems for their inventory control systems (Rashid et al, 2002).

During the 1960s most organizations designed, developed and implemented centralized computing systems, mostly automating their inventory control systems using inventory control packages (IC). These were legacy systems based on programming languages such as COBOL, ALGOL and FORTRAN. Material requirements planning (MRP) systems were developed in the 1970s, which involved mainly planning the product or requirements according to the master production schedule.

Following this route new software systems called manufacturing resource planning (MRP II) were introduced in the1980s with an emphasis on optimizing manufacturing processes by

synchronizing the materials with production requirements. MRP II included areas such as shop floor and distribution management, project management, finance, human resource and engineering (Rashid et al, 2002).

ERP systems first appeared in the late 1980s and the beginning of the 1990s with the power of enterprise-wide inter-functional coordination and integration. Based on the technological foundations of MRP and MRP II, ERP systems integrate business processes including manufacturing, distribution, accounting, financial, human resource management, project management, inventory management, service and maintenance, and transportation, providing accessibility, visibility and consistency across the enterprise (O'Leary, 2001).

During the 1990s ERP vendors added more modules and functions as "add-ons" to the core modules giving birth to the "extended ERPs". These ERP extensions include advanced planning and scheduling (APS), e-business solutions such as customer relationship management (CRM) and supply chain management (SCM) (Rashid et al 2002).

### 2.1.3. Characteristics of ERP

An ERP system can be defined as an adaptable and evaluative commercial package that supports, in real time and in an integrated manner, the management of most if not all of a firm's business processes. One can attempt to better define it by looking at its characteristics. In this regard, an attentive observer of both the research and professional literature will denote quite a number of attributes deemed to be possessed by ERP systems.

For a better understanding, Sylvester (2004:71) has categorized characteristics of ERP system under three dimensions in regards to their nature, namely technical, organizational and informational. The technical dimension regroups characteristics that refer to the capabilities or facilities for applications development offered by ERP systems in comparison to traditional systems.

This includes two basic characteristics: flexibility (adaptability) and openness (evolutionary). The organizational dimension refers to the system's deployment in the firm. These are the characteristics that best reflect the impact of an ERP system on the organization, on its structure as well as its practices. This includes integration, completeness (generic function), homogenization, transversally (process-oriented view) and best practices.

The informational dimension regroups characteristics that relate to the quality and usefulness of the information provided by the system, namely real-time (update and consultation) and simulation (of actual business processes).

## 2.1.4. Implementation of ERP

(Jose M. Esteves, 1999) argued that ERP system goes through different life-cycle stages during its whole life within the hosting organization. The complete ERP life-cycle is divided into six generic stages. These stages are adoption decision phase, acquisition phase, implementation phase, use and maintenance phase, evolution phase and retirement phase.

#### **ERP Life-Cycle Stages**

- ✓ Adoption Decision
- ✓ Acquisition phase
- ✓ Implementation phase
- ✓ Use and maintenance phase
- $\checkmark$  Evolution phase
- ✓ Retirement phase

Source: (Esteves, 1999).

### 1. Adoption Decision Phase

In this phase, the need for ERP system is reviewed and decided while selecting an information systemwhichbestaddressesthecriticalbusinesschallengesandimprove organizational strategy. It is in this stage that the system requirements, its goals and benefits are defined. Analysis of the impact of ERP adoption at a business and organizational level is done here.

#### 2. Acquisition Phase

AcquisitionphaseisselectionofERPproductsystemwhichbestfitstherequirementsofthe organization and minimizes customization needs. Consulting company is selected in this phase to help in the next phases of the ERP life-cycle. Issues of price, training and maintenance services are analyzed and a contractual agreement is defined here. Return on investment analysis of the selected product should also be done in acquisition phase.

#### **3. Implementation Phase**

In this phase, the acquired ERP system is customized, parameterized and adapted to the needs of the organization. This phase is usually done with the help of consultants and implementer partners who provide implementation methodologies, know-how and training.

#### 4. Use and Maintenance Phase

This is the stage when the system must be used in a way that returns expected benefits and minimizes disruption. This is referred to as Establishment Period, the period after go live until the system gets stabilized. In addition, once a system is implemented it must be maintained to correct malfunctions and optimize its functionality.

#### 5. Evolution phase

Evolution phase is the integration of more capabilities to the ERP system and expanding it to incorporate new benefits and functionalities.

#### 6. Retirement phase

This phase is the time when decision is made to replace the ERP system with other information systemsduetoitsinadequacytothecurrentneedsoftheorganizationoravailabilityofnew technologies.

ERP systems can be complex and difficult to implement, but a structured and disciplined approach can greatly facilitate the implementation.

### 2.1.5. Risks in ERP Implementation

There are unique challenges and risks involved in ERP implementation projects. Sumner (2005) lists four different categories of risks that pose a threat to successful implementation project. These four risk categories are: technology, organization, people and project size. The common risks associated with ERP projects are discussed in this section in accordance with Sumner's categories. Technology risks vary according to how well the new system fits with the current corporate technology infrastructure and operating system environment.

When a company implements a technology that is inconsistent with current operating system, database and network environments, the system implementation will require fundamental changes

in technology infrastructure. Changing the technology infrastructure will raise the technology risk and might lead to a situation where the company's internal technical expertise is inconsistent with the new infrastructure. To keep the technology risks low, the technical requirements for the chosen ERP system should be consistent with the company's technical know-how and the technology infrastructure.

Despite the efforts to mitigate these risks, technological bottlenecks often occur when implementing a new ERP software package, especially when attempting to build bridges to legacy applications. These issues pose risks to the project and can result in lack of integration. Technological issues must be taken into account when selecting the ERP software package in order to avoid unnecessary exposure to technology risks. (Sumner 2005: 116-118)

The organizational risks deal with company's business processes and organizational factors (Sumner 2005: 116). When the features of the ERP software do not fit the company's business requirements there are two possible strategies in implementing the software. First option is to redesign the business processes to fit the software with minimal tailoring and the second possibility is to modify the software to fit the processes.

The first option should reduce errors and help to take advantage of newer versions and updates of the system. On the other hand, changing business processes to fit the system could mean changes in established ways of doing business, which can lead to worker resistance and even to loss of competitive advantage as discussed in the ERP disadvantages section (see p15).

The second option includes modification of the software, which slows down the project and raises implementation costs, could affect the stability of the system, and make managing future releases more difficult. On the other hand, modifying the software implies less organizational changes. (Themistocleous 2005) For the success of ERP implementation project, in terms of project constraints, the less modifying needed, the lower the risk of budget overrun and schedule delays.

The organizational risks also vary according to the amount of business processes that the ERP implementation project affects. If the scope of the project affects nearly all the company's business processes, the risk is greater than if it affects only 25% of the processes, for example. (Sumner 2005: 116-118)

The third area of risk is associated with people resources. If the company's IT professionals are familiar with the application-specific ERP modules, then the probability of successful implementation is enhanced. Insufficient training and re-skilling of the staff and failure to efficiently mix internal and external expertise raise the risks of project failure.

People factors that affect the level of risk also include the know-how of the ERP user staff and their involvement in the project. Inadequate training of end-users, ineffective project communications and lack of sensitivity to user resistance all lower the chances of success. Risk of failure raises significantly if the users are not fully committed to completing their activities in the implementation project. (Sumner 2005: 117-118)

The fourth source of risk deals with project size. As an ERP implementation project can be the largest single investment in corporate technology for many organizations, the sheer size of the project poses considerable risk. Any project, that is as large and important as an ERP implementation project, needs senior management support, a proper management control structure and effective communications in order to be successful. (Sumner 2005: 117-118)

# 2.1.6. Critical Success Factors

- Top management support
- Project management
- Use of consultants
- Business process reengineering
- Change management
- Interdepartmental communication
- User training on software and Education

### **Top Management Support**

Top management support has been constantly recognized as the most vital and crucial success factor in ERP system implementation projects. Top management support in ERP implementation has two main facets:

A. Providing leadership and

B.Providing the necessary resources

To implement ERP system successfully, management should monitor the implementation progress and deliver clear direction of the project. They must be willing to allow for a mindset change by accepting that a lot of learning has to be done at all levels, together with themselves (Bhatti T., 2002).

(Bradford, 2000). Stated that one organization characteristic, top management support, was contributory in explaining ERP implementation success. Top management must take a dynamic role in leading the ERP implementation. The success of a main project like an ERP implementation totally depends on the strong, sustained commitment of top management. This obligation when transferred down through the organizational levels results in an overall organizational commitment (Bingi, 1999).

Management must be involved in every step of the ERP implementation. Some companies make the serious mistake of handing over the responsibility of ERP implementations to the technology department. This risks the entire company's existence because of the ERP system's profound business implications. An overall organizational commitment that is very noticeable, welldefined, and felt is a sure way to ensure a successful implementation (Umble, 2002).

Similarly,(Glaser,1999).Stated that there must be an established strong commitment to successfully implementing then E-Systems by presentation strong leadership from senior management, restrictive the initial scope of the project, and working towards achieving an early success.

#### **Business Process Reengineering (BPR)**

(Bingi,1999).Definite that implementing an ERP system involves reengineering the existing business process to the greatest business process standard. ERP systems are constructed on best practices that are followed in the industry. According to (Umble, 2002).Automating existing redundant or non-value-added processes in the new system can cause an implementation to fail. The combined environment of the new ERP system will require the organization to conduct business in a dissimilar way. The proper implementation of an ERP system should force key

business processes to be reengineered and cause a consistent rearrangement in organizational control to tolerate the effectiveness of the reengineering efforts.

An ERP system will clearly change the normal style of operation within and between functions, but it will also change many social systems throughout the organization.

When organization implements ERP A certain level of BPR should be involved, as the packaged software may be incompatible with the needs and business processes of the organization. In order to improve the functionality of the software in accordance with the needs of the organization, an organization should reengineer business processes to fit the software instead of trying to modify the software to fit the organization's current business processes (Ngai,2008). To achieve the greatest welfares provided by an ERP system, it is authoritative that the business processes are aligned with the ERP system. Both the reengineering literature and the ERP literature suggest that anERPsystemalonecannotimproveorganizationalperformanceunlessanorganization restructures its business processes (Somers T.M., 2001).

A crucial part of working with the ERP functionality is the ability to modernize operations. When implementing a system, many organizations fail to specify their organizational objectives. Job skills are raised by the requirements of the new, post-implementation company. Some customization will always be required in order to meet individual needs (Themistocleous, 2001). But Modifications should be avoided to reduce errors and to take advantage of newer versions (Rosario, 2000). Process modeling tools help aid customizing business processes without changing software code (Holland, 1999). Broad reengineering should begin before choosing a system. In conjunction with configuration, a large amount of reengineering should take place iteratively to take advantage of improvements from the new system. Then when the system is in use reengineering should be carried out with new ideas (Wee, 2000).

#### User training on software and Education

User training on software should a company give an attention. But when this issue is ignored, mainlyitdoesnothavethelargestquantifiablebenefitforacompanywhoimplementERP, expenses are greatly increased in the long run. By treating resource training with little respect and financial support, it is not hard to realize the reality of delay, confusion and financial ruin that may result. Some companies preserve on assigning a fixed cost or percentage to the training effort, regardless

of need or variable conditions (Gargeya, 2005). This mistake has surely been the cause of many failed implementation efforts. Fortunately, it has also been a source for others to learn from such experiences and avoid repeating the mistake (Gargeya, 2005).

(Gargeya, 2005). State that people must be handled on two levels. First, employees must be trained on then E-Systems in order to use it to day-to-day processes. The second level is educational experience. Training, re-skilling and professional development of the IT workforce is serious. User training should be highlighted, with substantial investment in training and re-skilling of developers in software design and methodology (Sumner, 1999).

Employees need training to know how the system will change business processes. There should be additional or extra training and on-site support for staff as well as managers throughout implementation. A support organization like help desk, online user manual is also critical to meet user's needs after installation (Wee, 2000). A company will never get benefits from the ERP system until the employees have no information that how to operate the new system (Jarrar. Y. F.,2000).The main reason of user training and educationprogramtosafeguardthatemployeesareeasywiththeERPsystemandtorisethe expertise and knowledge of users (Holland, 1999).ERP system installation without fitting training can lead the system to failure (Jarrar. Y. F., 2000).

Therefore training doesn't mean only to work the new system but also to know the new processes and the incorporation within the system that how the work of one user operates the work of other user (Holland, 1999). some authors in the literature has described that user training is not only limited to the users but also needed for the project team, but all others agreed specifically on the user training(Finnery,2007).ERP is a complex system and without suitable training it is complex to use the system even the user have strong IT skill. It is significant for both end users and technical staff to focus on.

#### **Change Management**

Change management is another crucial and important critical success factor of ERP project implementation. To introduce ERP project in a company, change management is an important factor for successful implementation to structure the change management strategies and business process methodology to accomplish its goal (Jarrar. Y. F., 2000).

Change management is vital, starting at the project phase and continuing throughout the entire life cycle. Enterprise wide culture and structure change should be managed (Falkowski et al., 1998), which include people; organization and culture change (Rosario, 2000). Unpredictably, the most common failure factor reported was that of readiness for change. Implementing ERP system completely changes the culture of the organization (Gargeya, 2005).

Many companies make simplicity assumption of how an implementation will affect the culture within the organization. All changes like cultural and perception change should handle utmost care (Davenport, 2000). If people are not ready or willing to change, change simply will not occur. All managers must be charged with the responsibility of controlling worker anxiety and resistance to the ERP system (Aladwani, 2001). Organizations should have a strong corporate identity that is open to change.

An emphasis on quality, a strong computing ability, and a strong willingness to accept new technology would aid in implementation efforts (Nah et al., 2001). Management should also have a strong commitment to use the system for attaining companies business aims (Roberts, 1992). Users must be trained before a company tries to implement a new system, and concerns must be addressed through regular communication, working with change agents (Rosario, 2000).

As part of the change management efforts, users should be involved in all design and implementation of business processes, and formal education and training should be provided to help all employees (Bingi, 1999).

Change management system believes on changing the business process for an organization, so careful attention must be given to change management system. Organizational change refers to the body of knowledge that is used to ensure the complex change. The change management approach will try to ensure the acceptance and readiness of the new system, allowing the organization to get the benefits of its use. A successful organizational change approach relies in a proper integration of people, process and technology.

BasedonbecauseERPsystemcompletelychangesthecultureoforganizationswheremany companies found hard to accomplish this successfully. Also, many companies identified that ERP implementationfailtoaccomplishthedesiredbenefitsbecausetheyunderestimatetheefforts involved in change management (Bhatti T. R., 2005).

#### **ERP** Consultants

(Welti, 1999) argues that the success of a project depends on the capabilities of the consultants, because they have in-depth knowledge of the software. (Somers T.M., 2001). Point out those consultants should be involved in different stages of the ERP project implementation, Because of rapid growth within the ERP software market, there has been a shortage of competent consultants.

Finding the right people and keeping them through the implementation can be a major challenge. ERP implementation demands multiple skills functional, technical, and interpersonal. Consultants with specific industry knowledge, such as public sector, are fewer in number. The success or failure of the project depends on how well the organization can manage consultants and the necessary knowledge transfer between consultants and internal employees (Bingi, 1999).

#### **Project management**

Effective project management is critical for the successful ERP implementation Umble, et al., (2003) found that "a lack of proper understanding of the project needs and the inability to provide leadership and guidance to the project" are the main factors when ERP implementation fails.

Thus, effective project management should define clear project objectives, develop a work and resource plan, and carefully track the project's progress.

#### **Interdepartmental communication**

Communication is like the engine for the company who implement ERP system that keeps everything working properly. Communication is as a key component across all factors of their Project Implementation Profile and maintained that "communication is crucial within the project team, between the team and the rest of the organization, and with the client". Poor communication between reengineering team members and other organizational members was found to be a problem in business process reengineering implementations. Communication and cooperation should be of two kinds: inwards the project team and outwards to the whole organization. It is necessary to create an understanding and an approval of the implementation (StephanA. Kronbichler, 2009)..

### **2.1.7 Core ERP components**

ERP system is commonly viewed as a back-office support system. But practically it is also affront office system. Components or modules of ERP system are divided in to two as core ERP components and extended ERP components. Core ERP components are the traditional components which are included in most ERP systems and they primarily focus on internal (back-office) operations (Aladawani,A.M).Extended ERP component are extra components that meet the organizational needs not covered by the core components and primarily focus on external (front-office) operations. Core ERP components are accounting and finance (FI), human capital management (HCM) and logistics (LOG) which contains production and materials management.

Extended components are modules such as business intelligence, customer relationship management and portal. These core and extended ERP modules are themselves comprised of different sub-modules. Finance core module includes general ledger, receivables, payables, asset management and related sub-modules. Payroll, personnelplanningandtimemanagementaresomeofthesubmodulesinhumanresources core module while materials management and production planning are sub-modules of logistics core component(Ibid). Some of the ERP main modules are explained as here below.

### **Financial Accounting - FI**

This module collects all the data relevant to financial accounting into an integrated General Ledger. It provides comprehensive and consolidated financial reports and integrates the different sources of financial data including Accounts Payable, Accounts Receivable, Asset Management and Treasury. It also provides up-to-date or real time information for enterprise wide control and planning. The FI module is for external reporting purposes and it is compatible with the international accounting standards (Ibid).

#### Human Capital Management – HCM

HCM is the other common ERP module. ERP HCM module is used as the core employee record with details of personnel actions, benefits administration and payroll, position management and compliance with government regulations. HCM consists of three sub modules namely Organizational Management (OM), Time Management (TM) and Payroll (PY) (Ibid).

#### **Materials Management – MM**

MM module supports the procurement or purchasing process to optimize the logistics chain within the enterprise. MM enables automated supplier evaluation and can lower procurement and warehousing costs with accurate inventory and warehouse management. It also integrates invoice verification. Tools for inventory control and purchasing information help to identify trends and plan accordingly (Ibid).

#### **Production Planning – PP**

This is a module which supports production planning, manufacturing processes, and analysis and production control. PP covers the production process from the creation of master data to production planning, material requirement planning and capacity planning up to the production control and costing (Ibid).

#### **Project System – PS**

Project system module coordinates and controls all phases of a project with direct cooperation with Purchasing and Controlling, from quotation to design and approval, to resource management and cost settlement (Ibid).

### 2.1.8 Challenges of ERP Implementation in Business

In spite of ERP's significant growth from the late 1990s to the present day, there are a number of challenges that companies may encounter when implementing ERP. Today, most multinational firms are using ERP and that more small and midsize companies have begun to adopt ERP. However, despite ERP"s promises to benefit companies and a substantial capital investment, not all ERP implementations have successful outcomes. ERP implementations commonly have delayed an estimated schedule and overrun an initial budget. Furthermore, ERP implementations have sometimes failed to achieve the organization's targets and desired outcomes. Much of the research reported that the failure of ERP implementations was not caused by the ERP software itself, but rather by a high degree of complexity from the massive changes ERP causes in organizations (Scott & Vessey, 2000; Helo et al., 2008).

These failures can be explained by the fact that ERP implementation forced companies to follow the principle of 'best practices' in most successful organizations and form appropriate reference models. According to Helo et al., (2008), "Unlike other information systems, the major problems of ERP implementation are not technologically related issues such as technological complexity, compatibility, standardization, etc. but mostly [about] organization and human related issues like resistance to change, organizational culture, incompatible business processes, project mismanagement, top management commitment, etc... For instance, Huang, Chang, Li and Lin (2004) presented the top ten risk factors causing ERP implementations failure.

Priority	Name
1	Lack of senior manager commitment
2	Ineffective communications with users
3	Insufficient training of end-users
4	Failure to get user support
5	Lack of effective project management methodology
6	Attempts to build bridges to legacy applications
7	Conflicts between user departments
8	Composition of project team members
9	Failure to redesign business process
10	Misunderstanding of change requirements

# 2.1.9 Top ten risk factors of ERP risk

Source: Huang et al., 2004

The risk factors depicted in the table above illustrate various organizational considerations: organization fit, skill mix, project management and control, software system design, user involvement and training, and technology planning.

Since ERP implementation inevitably causes organizational changes, it requires the engagement of senior management from across the organization that is able to resolve conflicts. Without the commitment of senior management; ERP implementation has a high risk of failure. In other words, due to changes in business processes across an organization, there can be resistance to adopting the ERP system. ERP connects and integrates all business functions within the organization. Therefore, it is critical that management staff be committed, and particularly that they equip employees who are using business functions influenced by ERP with clear channels of communication.

Excellent project management is also needed for successful ERP implementation. Project teams should have clear guidelines to execute ERP implementation from their project objectives and work plan to their resource allocation plan. Without good project management, ERPimplementationprojectsthatarelargeinscaleandmusttakeplaceoverlongertime periods may end in failure. Furthermore, the composition of team members plays a crucial role in ERP implementation.

ERP integrates diverse business functions across an organization into one single system, necessitating a complex and integrated software package. If a project team does not clearly understand the changes in its organizational structure, strategies, and processes from ERP implementation, it will not be in a position to benefit from ERP's competitive advantage. In order to best implement ERP, project team members should be selected with a balance between members with business experience within the organization and external experts with specialties in ERP.

# 2.1.10 internal environment Factors Influencing ERP Systems Implementation

#### • Top Management Support

The most important factor when adopting and implementing ERPS is the top-level management's commitment to the strategic direction itself. Hammer (2008) believes that reengineering must be driven from the topmost level. The primary ingredient for project success is top leadership, either the CEO or someone in a position to compel the compliance of all parties involved in reengineering. Line responsibility is said to be the key, and reengineering is top-down, autocratic rather than through a democratic process. This is undoubtedly a prerequisite for strategy implementation. Therefore, top managers must demonstrate their willingness to give energy and loyalty to the performance management implementation process (Grint, 2011).

#### • ERP Cost Elements and Project Complexity

Considering that ERPs are expensive (Yang et. al., 2010) and financial limitation the operational and economic threat are clear evident than the compensations. Straight expenses are those that are

openly connected with the implementation of a system (Love et. al., 2004). The other cost element recognized in the literature is the implementation cost. That contain the initial cost of the, customization costs; costs of migrating data from the old system to the new ERP system; costs of integrating different modules; annual maintenance costs of the ERP system; and vendor project management (Haddara, 2011)

#### • Staff Training

According to Ackon (2009), training "refers to learning experiences designed to enhance the short term and/or long-term job performance of individual employees". In this respect, training is viewed as part of an on-going developmental process. Training needs to be linked with the organizational mission. So, when governments plan their training activities, they need to provide the link with the organizational mission and local budget and implementation.

Considerate the occurrence of employee training needs understanding of all the modifications that take place as a result of learning. As the producer of new skills, workers' training is located inside a broader planned background of human resources management, i.e. worldwide managerial organization, as a designed staff education and development, both individual and group, with the goal to benefit both the organization and employees. According to Bingi et. al, (2009) in his book Personnel and Human Resource Management, training is a movement intended for gaining of accurate knowledge and skills for the purpose of an occupation or chore.

#### • Organization culture

Implementation of ERP will change the organizational culture and is one of the critical factors that can determine whether the implementation will be a success or failure. Organizational culture is considered as an element which consists of way of communication (either formal or informal), interaction method, and assumptions in the organization.

#### • User involvement

Users should be introduced and familiarized to ERP during the early implementation stage to obtain an early idea about the system. User involvement during the early stage can help the project team understand their needs to develop a better functioning system. In addition, user involvement during the implementation process can increase user satisfaction and their level of acceptance towards the new system.

# 2.1.11 External environment Factors Influencing ERP Systems Implementation

External expertise factors can be from both the vendor and the consultant. Effective and reliable external expertise will contribute to the ERP system implementation's success. The ERP system vendor plays a big role in assisting their client's ERP system implementation process as they have the most knowledge about the ERP system. However, the company needs to be careful when choosing the vendor as the wrong choice can lead not only to implementation failure, but also to investment loss. On the other hand, a consultant can support the ERP system implementation through coaching, training, teaching, and even advising to the hiring company.

## 2.2Empirical Literature of ERP Implementation

### **ERP** Implementation in Universities

ERP systems have found widespread usage in large organizations across various continents. To keep up with the management demands in the 21st century as observed by Nyandiere et al (2012), universities have turned to ERPs to replace their legacy systems. Though initial implementation was observed in manufacturing industries, universities have taken up the systems to provide institutional-wide automation for their processes (Ferrell, 2003).

This has aided them automate their core business areas in student administration, finance, staffing, client management among others. On implementation, these systems are anticipated to provide increased efficiency and effectiveness of processes, reduce overhead costs in ICT, improve decision making, improve resource management as well as building business innovation while supporting strategic change (Sullivan and Bozeman, 2010).

Pollock(2004) in a study aimed on ERP systems use in a UK university points out that the uniqueness of a university set up makes most business ERP systems incompatible with their functions. This necessitates a custom development of a system compatible with the structure and functions of a specific university. The choice of either a custom development or adoption of a readily available system should be informed by informed by a thorough systems analysis and design evaluation while putting the institutional strategic objectives into consideration (Basoglu and Kerimoglu, 2007). This can be achieved by drawing up an elaborate implementation framework to guide the process.

According to Abbas (2011), the major benefits of ERP implementation are improved productivity and reduced cost. Particularly, the central repository that stores data can give universities to easy and up-to date access to users. Also, he indicated that "One of the common goals of all the educational institutions is a paper free environment and these ERP systems need to be able to facilitate this change". By implementing ERP system, MIT converted many paper processes to ERP system processes. Although some processes still allow a paper work for handling exceptions, this resulted in decreasing manual work. Universities have turned to ERP systems as a means of replacing existing management and administration techniques by use of computer systems.

#### **Ethio Telecome ERP Implementation**

According to Servile and Halingten (2003), ERP systems are used to connect back-office operations such as manufacturing, financial and human resources into one system. In the current decade, enterprise resource planning has evolved to a suite of application modules that are used to link back-office operations to front-office operation as well as internal and external supply chains. Ethio Telecom has been serving the public for long period of time. However, it was very challenging to continue with the existing management style and technology as a result of the dynamic environment of the sector.

According to Engidayehu (2014) ERP implementation in Ethio Telecome had some encountered challenges an overall observation of the system, the system lacks some integration with the existing commercial system named Zsmart. Hence employees are forced to work on two separate systems to know the financial position of the company. Management of the company are not giving due attention for the proper implementation of the system and they are not conducting periodic review to check the efficiency of the system and employees who are working on it. Luck of expertise from the company side is still a challenge for the system utilization, in addition the company not yet considering the lessons obtained from the first phase deployment.

#### **MIE's ERP Implementation**

According toAbiotet.al,(2012),StudyConductedinMesfineIndustrialEngineering(MIE) recognize that the adoption of ERP System was the most significant factor that could be enable the company to overcome the challenges and lead the business success. The Implementation Project team expected a high acceptance of the system in areas that Provide just as good or better functionality
than the old system. However some of functions and processes might not get the full appreciation the legacy system once had. The new system requires the retrieval of old data from the legacy systems that has to be normalized, screened and stored in sensible data format with in the new system data repository. The depilated data was a major concern that MIE had to addres.

# **CHAPTER THREE**

### **3. RESEARCH DESIGN AND METHODOLOGY**

In this chapter three encompasses research design, sampling techniques, data collection, Data Presentation and Analysis, population, Validity and Reliability and Ethical Considerations.

# **3.1 Research Design**

The objective of the study as put above is to identify success factors of ERP implementing in Ethiopia postal service, which by nature following describing what is going on in the company with regard to ERP implementation. Hence, for the study with the aforementioned objectives Descriptive type of research was chosen because it describes the characteristics of objects, people group, organization or environments. In other words, descriptive research tries to paint a picture of a given situation by addressing who, what, when, where and how questions.

The researcher is mainly use primary data sources. These sources include Ethiopia post office management group, Team leader, Experts, ERP key users, ERP IT Team and project team members. In addition, secondary data sources such as management reports and ERP project related documentations would be used.

# 3.2 Population and Sampling Techniques

The population of study is all 22 department managers, 46 department team leaders, 20 human resource department Experts,31 finance department experts,23 Sourcing and facility department experts. Besides to this, for the purpose of more information clarification and most of the ERP issues are prepared and followed by the help of 8 members of ERP project office and then 9 IT experts team is purposively included in the population.

Therefore, the total number of target population of the study has 159.

### Table3.0. Census sampling method

No	Target populations	Number of population	Remark
1	Department managers	22	
2	All department Team leaders	46	
3	HR experts	20	
4	Finance experts	31	
5	Sourcing and facility experts	23	
6	ERP project office	8	
7	IT experts team	9	
	TOTAL	159	

Source: Own Survey, 2019

### **Sampling Techniques**

Sampling helps to select the respondent according to the purpose of the study. In this study the researcher take all the population who is appropriate for the study. Generally all of the total population has been taken in the research study. All parties involved in the implementation process of Enterprise Resources planning System are represented by the sample. Based on census, the total sample size is 159 users of ERP. The questionnaire will be distributed to all ERP users in each brewery and the project team.

### 3.3 Data collection

In order to achieve its objectives the research is be based on both primary and secondary data. The secondary data is collect from the company's work processes, policies, procedures, forms and other documents which are linked with the ERP implementation and also different literatures on the area. The primary data is collect through questionnaire. It includes open ended and close ended questions. According to (Kothari, 2004:32), this instrument of data collection is quite popular, particularly in case of big enquiries.

### 3.4 Data Presentation and Analysis

The data collected were organized in line with the objective of the study and both qualitative and quantitative analytical procedures are used. In the qualitative analysis, employee's opinions, feelings, behaviors and experiences were investigated in a deep manner to discover the factor

affecting of ERP system implementation. While in the case of quantitative analysis, the data are analyzed and interpreted using some statistical techniques such as: tables, percentages and charts. Meanwhile, SPSS (appropriate version) use as the main tool to manipulate the data.

# 3.6 Validity and Reliability

### 3.6.1. Validity

According to Leedy et al (2005), validity is the ability of an instrument used to measure what it is intended to measure or how truthful the research results are. These issues are addressed by the content validity, internal validity and external validity.

### **Content validity**

It is the extent to which the measuring instrument provides adequate coverage of the investigative questions and the degree to which it measure. In order to check content validity for the descriptive survey studies, sources of evidence chain evidence and having key informants reviewing draft of the study report is vital Leedy et al (2005). In this case to ensure content validity the target groups included were those who know better about the issue being assessed? In addition the questionnaire will carefully design and tested with a few members of participants for further improvement. Accordingly feedback is collected about clarity of a sentence, correctness of a language and grammar, as well as whether the designed instrument can fully assess the research topic prior to administering the survey.

### Internal validity

Since this research follows a descriptive method, it is a tool that is used to ensure validity during the data analysis phase where pattern matching was the technique followed. The aim was to ensure that the data gathered from Questioners matches the data derived from the literature.

### **External validity**

There would be no problems in this case since the researcher includes all the population in the study by using census method.

#### 3.6.2. Reliability

The test of data reliability is an important test of sound measurement. A measuring instrument is reliable if it provides consistent results, (Kothari, 2004).Moreover, reliable measuring instrument does contribute for validity. Hence, to prove reliability of the instrument, the researcher distributed some questionnaires as a pilot test and then makes some adjustments accordingly.

According to Sekaran (2003), reliabilities less than 0.6 are considered to be poor, those in the 0.7 range to be acceptable and those over 0.8 are good. The reliability coefficient closer to 1 is better. Therefore, cronbach's alpha coefficient of the pilot study was calculated over all.

Cronbach's Alpha	No. of Items
.77	15

Source: pilot survey, 2019

# **3.7 Ethical Considerations**

Regarding privacy of the respondents, their responses are strictly confidential and only used for academic purposes. The study is in line with the organizations policy in relation to any Intellectual property rights of the organization. It could not be ethical to access some confidential documents of the organization. So, the organization's code of ethics taken in to account without significantly compromising the findings of the study. Concerning references, all the materials and sources are properly acknowledged.

# **CHAPTER FOUR**

# ANALYSIS AND INTERPRETATION

# 4.1 Introduction

This chapter deals with the interpretation and analysis of the data obtained from the respondent. The study was conducted to success factors of ERP implementing in Ethiopia post office Addis Ababa. A total of 159 copies of questionnaires were distributed, out of which, 113 or 71% were fully completed and returned while 34 copies were not returned and 12 of them are incomplete. In addition to the questionnaires interview was conducted with the three Human resources, finance, facility and sourcing department in addition all EPSE chef officers, managers, project office and ERP IT team also included. Therefore, 159 questionnaires were considered for the study as respondents working in the selected organization. The data received from the respondents are analyzed with help of statistical software program SPSS-20. The following are the data analyzed and interpreted using some statistical techniques such as tables, percentages and charts used to ensure easily understanding of the analysis.

# 4.2 Demographic Characteristics

Under this section the researcher gathered information about the general background of the respondents, Such as age group, Gender, Educational background and year of service in the Organization.

	Variables	Frequency	Percent
Age Group	Less than or equal to 25	25	22.1
	26 up to 35	55	48.7
	36 up to 40	22	19.5
	41 and above	11	9.7
	Total	113	100.0
Gender	Male	71	62.8
	Female	42	37.2
	Total	113	100.0
Educational back	Secondary education	2	1.8

Table 4.1 Demographic Characteristics of the Study Population

ground	College diploma	5	4.4
	BA or BSc	86	76.1
	Masters and above	20	17.7
	Total	113	100.0
Your service	Less than or equal to 5	18	15.9
year	6 up to 10	47	41.6
	11 up to 15	27	23.9
	16 up to 20	12	10.6
	21 and above	9	8.0
	Total	113	100.0

Source: Own Survey, 2019

Age of the respondents is one of the most important characteristics in understanding their views about the particular problems by small and large age indicates level of maturity of individuals in that sense age becomes more important to examine the response. It is evident from the table that based on the response rate of the age, 48.7% of the employees are between the age 26 and 35, and the other19.5% are between 36 and 40. Furthermore, 9.7% of the employees are at the age of 41 or above and the remaining 22.1% of the employees are either they are on the age of 25 or below that. This indicates that the company staffed with young and energetic employees. In other words, most of the employees are belonging in the productive age group.

Demographic characteristics of the respondents are summarized in Table 4.1 out of 113 participants 62.8% and 37.2% respondents were male and female respectively. Therefore, the majority of the respondents are male.

Education is one of the most important characteristics that might affect the person's attitudes and the way of looking and understanding any particular social phenomena. In a way, the response of an individual is likely to be determined by his educational status and therefore it becomes imperative to know educational background of the respondents. Based on the above table the educational level of employees of the company, 76.1% of the employees are first degree/ BSc holders and the other 17.7% of the employees have specialization at a master's degree level and above, and 4.4% is covered by diploma holders whereas the remaining 1.8% covered by secondary education. It can be conclude from the above table, majority of the employees have at

least a first degree and we can say that human resource profile of the company in terms of educational background is in a good status.

Based on service year of sample respondents, 41.6% of them have 6-10-year service in the organization. 23.9% of respondents have from 11-15 years of service and 15.9% has less than five years of service and 10.6% of respondents are 16-20 and 8.0% of respondents are 21 and above years of service in the Organization. From this result we can say that, these study target respondents have different work experience in the organization and have knowledge to reply the questions regarding the existing factor that affect implementation of ERP.

The position you hold in the organization									
Variable		Frequency	Percent	Valid Percent	Cumulative Percent				
	Staff(expert)	37	32.7	32.7	32.7				
	Supervisor	10	8.8	8.8	41.6				
Job position	Team leader	44	38.9	38.9	80.5				
	Chef officer	22	19.5	19.5	100.0				
	Total	113	100.0	100.0					

Table 4.2 job positions of the respondents

Source: Own Survey, 2019

From the point of view of the job positions that the ERP users hold in the company the respondents were divided in to managerial and non-managerial positions. Accordingly, majority 38.9 % of the respondents are team leaders and 32.7 % are staff (expert) the remaining share 19.5% and 8.8% of workers goes to chef officers and supervisors respectively. Therefore, the results of descriptive analysis reveal that enterprise resource planning is exercised in managerial positions than non-managerial positions relatively.





Figure 1.0 Division of the respondents

Divisions of the respondents are summarized in figure 2.0. Out of 113 participants 36.3% are from finance department and 22.1% respondents are from sourcing and facility department and also 18.6% of respondents are from human resource department. Therefore, the majority of the respondents are from those three departments. The rest of the respondents are 8.0% from IT department 7.1% from ERP project office and the last 8.0% of respondent are from other divisions.

# 4.3 Analysis of collected Data

### **Descriptive Analysis**

A Likert Scale is a type of rating scale used to measure attitudes or opinions. With this scale, respondents are asked to rate items on a level of agreement. in this description analysis measuring instrument used to calculate issues related to ERP implementation, major constraints, external and internal factors and also benefits and limitations of ERP are scaled 1 to 5. 1= strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree. Accordingly, a factor takes its average for the questions under it with no decimal point

# 4.4 Issues related with ERP Implementation process

							TOTAL
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Functional and technical support of integrators are success	Ν	0	10	15	72	16	113
full in relation to knowledge transfer	0/	0	0.0	12.2	(27	14.0	100
	%	0	8.8	13.3	63.7	14.2	100
The project team fully understands the customization	Ν	0	16	26	65	6	113
Process with the company policy and procedure							
	%	0	14.2	23.0	57.5	5.3	100
Ethiopia post office super users are trained in a way can full	Ν	4	7	25	68	9	113
replace the integrators support							
	%	3.5	60.2	22.1	6.2	8.0	100
Training was given exhaustively for all users	N	2	70	10	16	15	113
	%	1.8	14.2	8.8	61.9	13.3	100
The training given on the system was adequate and useful to	N	2	8	20	56	27	113
your functional module	%	1.8	7.1	17.7	49.6	23.9	100
Users interface of the system is easily understandable	N	13	51	23	21	5	113
	%	11.5	45.1	20.4	18.6	4.4	100

Source: Own Survey, 2019

In the above table respondents were asked various questions issues related to ERP implementation process. As shown on the above table, respondents were asked as to Functional and technical supports of integrators are success full in relation to knowledge transfer. In response to this the majorities of the respondents comprising 77.9% are agreed and strongly agree to the statement. And 13.3% respondents are neutral the rest of 8.8 % are disagree.

Regarding the second item which says The project team fully understands the customization Process with the company policy and procedure, the majority of the respondents expressed with percent of 62.8 agreed to the statement and 14.2 % of respond is disagree the rest 23% respondents are not agree or disagree they are neutral.

Regarding super users are trained in ways that can fully replace the integrators support activity 63.9% not agreed that the super users are not trained in ways that fully replace the integrators

support activity. On the other hand, 14.2% respondents agreed that super users are trained in ways that can fully replace the integrators. The remaining 22.1% have neutral attitude about this aspect. So from this response we can conclude that Super users are trained in ways that cannot fully replace the integrator support activity. This implies that the role of super user within the organization not answer system functionality and business process questions in addition they cannot provide immediate response for end users for business process help on operational activities. So if super user can have trained in the way that can replace integrator the company depend on internal integrators.

The training given on the system was adequate and useful to your functional module the respondents agreed and strongly agree to the statements with 73.5% and 8.9% of response shows that disagree and strongly disagree the rest 17.7% of respondent's response is neutral. This shows that Training is one of the most important factors to ensure every employee can do his/her job confidently so more than 75 percent of respondents are agreed up on the adequacy and usefulness of the training.

In the last item Users interface of the system is easily understandable the respondents neutralized the statement with 20.4% and 56.6% of respondent response strongly disagree and disagree this number show us the user interface of the ERP system is not easy. On the other hand, 23% of response shows agreed about the user interface is easy. This implies that the ERP system user face is challenging to remember and it has huge number of function to run.

Item		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	TOTAL
Adoption and implementation of ERP system supported by	N	3	43	26	33	8	113
the management in line with the Organization mission and		2.65	38.1	23.0	29.2	7.1	100%
vision	%						
Luck of effective project management methodology	Ν	0%	6	9	53	45	113
Luch of encester project management methodology	%	0%	5.3	8.0	46.9	39.8	100%
Misunderstanding of (resistance to) change requirement	N	0%	8	14	36	55	113
insurversament of (resistance to) change requirement		0%	7.1	12.4	31.9	48.7	100%
Conflicts between user department	N	3	3	16	41	50	113

# 4.5 Items about major constraints that EPSE face while implementation

	%	2.7	2.7	14.2	36.3	44.2	100%
The management consider ERP implementation is part ofour	N	0%	23	27	43	20	113
Organization long term strategy	%	0%	20.4	23.9	38.1	17.7	100%
Work Culture that favors collaboration is Important to ERP	N	0%	6	10	50	47	113
implementation	%	0%	5.3	8.8	44.2	41.6	100%

Source: Own Survey, 2019

Concerning major constraints of ERP system implementation supported by the management in line with the organization mission and vision; 40.70% from the respondents are strongly disagree and disagreed grand 36.8% are respond that the adoption and implementation of ERP system supported by management in line with the organization mission and vision is good. On the other hand 23% of respondent's response neutral. From this fact we can infer that the management not considers adoption and implementation of ERP system as an organization mission and vision.

When we see about lack of effective project management methodology 6% of respondents are disagree about lack of effective project management methodology applying by the organization is one of the major constraints but 86.7% of respondents are agree and strongly agree the ERP project management methodology is the major constraint and the rest 8% of respondents are neutral. From those numbers we can see the EPSE project management methodology is not good.

Misunderstanding of change requirement or resistant to change is one of the major constraint to implement ERP so in this item the majority of 80.6% respondents are agreed and strongly agreed in the resistant to change in the organization is very high. 12.4% of respondents are neutral they are neither agreed or disagreed the rest of 7.1% of respondents are they disagree or strongly disagree they say there is no resistant to change in the organization to implement ERP. But the highest percent of the respondents which is 80.6 percent of respondents are agreed on there is high resistant to change from the old working system/process to the new ERP system.

For the question raise the management considers ERP implementation is part of our Organization long term strategy 55.8% respond that the management is considers ERP implementation as long term strategy. On the other hand, 20.4% respond that the management is not considers ERP implementation as long term strategy. The remaining 23.9% their responses are neutral. From the given response we can conclude that the management do considers ERP implementation as long term organizational strategy.

Regarding work Culture that favors collaboration is important to ERP implementation 0% and 5.3% from the respond that work culture does not favors for collaboration of ERP implementation. On the contrary 85.8% respond that work culture that favors collaboration for smooth implementation of ERP system. The remaining 8.8% respond that neither of the two. From this fact we can conclude that work culture favors collaboration for smooth implementation of ERP system.

Item		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Country's policies and Procedures	Ν	0	7	8	63	35	113
are considered during integration	%	0	6.2	7.1	55.8	31.0	100
Dose the consultant full aware about	N	2	17	46	42	6	113
the organization culture	%	1.76	15.0	40.7	37.2	5.3	100
The Organization has Clear norms	N	8	43	38	18	6	113
and Value	%	7.1	38.1	33.6	15.9	5.3	100
Dose the Organization policies and		28	40	23	14	8	113
Procedures compatible with the new	Ν						
ERP system	%	24.8	35.4	20.4	12.4	7.1	100

4.6	Items	about	external	environment	factors	that	affected	ERP
imp	lementa	ation						

Source: Own Survey, 2019

Concerning the question which was raised customization of the system in line with the company policy and procedure, 6.2% respondent respond that the customization of the system is not in line with the company policy and procedure. On the other hand, 86.8% respondent respond that the customization of the system in line with the companies polices and procedure. The remaining 7.1% respondent they didn't give any response they are neutral. From this fact we can infer the majority of the respondent believe that customization of the system is in line with the company policy and procedure.

For the question asked about the consultant fully understands about the company culture, 42.5% of the employees answered that the consultant is fully understand about the company culture whereas, 16.76% of employees, replied that the team are not fully understand the company culture other 40.7% of the respondents declared that they neither agreed nor disagree about they are neutral. From this fact, we can deduce that majority of the respondents believe that the project team fully understand about the company culture instead of this high number of respondents also don't know about the consultant know or not now about the company culture because they response is neutral. This implies that if the consultant fully understands about the company culture it will help to understand the company process, back ground and also nature of the employees.

Regarding whether ERP implementation the company has clear norms and values, 45.2% of respondents have strongly disagreed and dis agree that EPSE don't have a clear norm and value. Likewise, 21.1% of employees have also taken that the company have clear norm and value that in line with ERP implementation. On the other side, 33.6% representatives have neutral. From the above response we can infer the company doesn't have clear norms and values.

Concerning the question which was raised the company policy and procedure is compatible with ERP system, 60.2% respondent respond that the company policy and procedure is not in line with the ERP system. On the other hand, 19.5% respondent responds that the company policy and procedure is in line with the ERP system. The remaining 20.4% respondents they didn't give any response they are neutral. From this fact we can infer the majority of the respondent believes that company policy and procedure is not in line with the ERP system.

# 4.6 Items about internal environment factors that affected ERP implementation

Item		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Management is willing to use ERP system in the		18	39	21	21	14	113
Organization.	%	15.93	34.5	18.6	18.6	12.4	100
Management is aware of the benefits that can be	N	9	18	39	38	9	113
achieved with the use of ERP system							

	%	7.96	15.9	34.5	33.6	8.0	100
Management always supports and encourages the use of ERP for job-related work	N	6	38	44	19	6	113
	%	5.3	33.6	38.9	16.8	5.3	100
The training given on the ERP system was adequate	N	2	6	16	76	13	113
and userul to you.	%	1.8	5.3	14.2	67.3	11.5	
Further enhancement training is required on the ERP	N	0	3	16	59	35	113
system use	%	0	2.7	14.2	52.2	31.0	100
The trainers were knowledgeable and helped me in my	N	4	3	19	51	36	113
understanding of the EACI system	%	3.5	2.7	16.8	45.1	31.9	100

Source: Own Survey, 2019

The results in Table indicate that, 50.43 %, of the respondents argued that Management are not committed to use ERP system in the Organization, 18.6% preferred middle of the-road. The rest, 31.0% of respondent believed that Management is willing to use ERP system in the organization. From the finding the majority of respondent implicit that management are not committed to use the system.

Regarding Management Support and encouragement, 22.1 % of respondent believed that management support and encourages the use of SAP. Then again, 38.9% of respondents were disagreed. The rest, 38.9% of respondent preferred to stay neutral on the matter. Considering these all facts, it is possible to say that largest proportion of the employees believed that management are not support and encourage the use ERP system. By this reflection, the research concludes that lack Management Support and encouragement is also another factor that affects successful ERP implementation.

In addition to what has been raised just before, the respondents were asked if the training given to group of users was adequate and useful. The result revealed that 7.1 per cent of the respondents responded that the training given on the system wasn't adequate and useful to the functional module. On the other hand, majority result revealed that 78.8 per cent of the respondents responded that the training given on the system was adequate and useful to the functional module.

By this, it could be said that the respondents believe on that on the top of the already imparting training program, additional enhancement training program is not required.

In addition to the adequacy and usefulness of training, employees requested if further enhancement training is required on the system, and 83.2% of the respondents believed that additional training is highly required to cop up with the detail feature of ERP system and this will benefit the organization as well as the employees. The rest, 14.2% and 2.7% of the respondents were neutral and disagree respectively. It can be concluded that the majority of the respondents believed that additional training is highly required to enable employees efficient in the system.

Concerning the trainer Knowledge, 77% of the respondents declared that the trainers was experienced and helped them on the understanding of the ERP system. Then again, 5.9% of them are disagreed. The rest, 16.8% of them are neutral. From the above fact the trainers were capable and helpful on the given training.

# 4.7 Items about major benefits and limitation of implementing and using ERP systems

Despite the fact that to summarize the narrative out comes, the researcher used criterionreferenced definitions for rating scales to describe the collected data in major benefit and limitation of implementing and using ERP system.

ltem		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Paduction of cost	Ν	1	5	1	73	33	113
Reduction of cost	%	.9	4.4	.9	64.6	29.2	100.0
Cycle time reduction	Ν	1	1	1	74	36	113
-,	%	.9	.9	.9	65.5	31.9	100.0
Productivity improvement	Ν	0	4	8	75	26	113
	%	0	3.5	7.1	66.4	23.0	100.0
Quality improvement	Ν	0	0	8	65	40	113
	%	0	0	7.1	57.5	35.4	100.0
Performance improvement	N	0	1	4	72	36	113
	%	0	.9	3.5	63.7	31.9	100.0
Better resource management	N	0	0	5	64 56.6	44	113
	%	0	0	4.4	0.00	30.9	100.0
Support business growth	N	0	0	62	63.7	30 1	100.0
	% N	0	0	3	71	39	113
Decreased financial close cycle	1N %	0	0	2.7	62.8	34.5	100.0
Increased IT infrastructure	N	0	0	7	70	36	113
capability	%	0	0	6.2	61.9	31.9	100.0
	Ν	0	0	1	71	41	113
Improved decision making	%	0	0	.9	62.8	36.3	100.0
Support organizational changes	Ν	0	1	3	67	42	113
Support organizational changes	%	0	.9	2.7	59.3	37.2	100.0
Build common visions	Ν	0	2	13	63	35	113
	%	0	1.8	11.5	55.8	31.0	100.0
Quickened information response	N	0	0	2	63	48	113
time	%	0	0	1.8	55.8	42.5	100.0
Improved interaction with	N	0	2	10	62	39	113
customers	%	0	1.8	8.8	54.9	34.5	100.0
	Ν	0	0	3	54	56	113
improved cash management	%	0	0	2.7	47.8	49.6	100.0
More efficient business processes	Ν	0	0	1	55	57	113
	%	0	0	.9	48.7	50.4	100.0
Better coordination and cooperation between functions and different company departments	Ν	0	0	9	52	52	113
· · · · · · · · · · · · · · · · · · ·	%	0	0	8.0	46.0	46.0	100.0
Better management and controlling	Ν	0	2	3	58	50	113
Tunctions	%	0	1.8	2.7	51.3	44.2	100.0
Financial flows control	N	0	1	1	55	56	113
	%	0	.9	.9	48.7	49.6	100.0
Information flows control	Ν	0	1	4	57	51	113
	%	0	.9	3.5	50.4	45.1	100.0
Control of flow of goods	Ν	0	1	4	53	55	113
	%	0	.9	3.5 3	46.9 57	48.7 53	100.0 113
Faster more accurate transactions	N %	0	0	2.7	50.4	46.9	100.0

# 4.7.1 Items about major benefits of implementing and using ERP systems

Source: Own Survey, 2019

Table 4.7.1 Descriptive statistics summary of benefits

A list of 22 potential benefits has been selected from previous study to identify the actual benefits realized in Ethiopia post office respondents indicated the level of observation of those 22 different possible benefits in post implementation stage of ERP project on a 5 point Likert type.

In the above table respondents were asked various questions issues related to ERP implementation benefit. As shown on the above table, respondents were asked as to Reduction of cost, Cycle time reduction, Productivity improvement, Quality improvement, Better resource management, Support business growth are the benefits of ERP implementation. In response to this items the majority of the respondents comprising 93.8%,97.4%,89.4%,92.9%,95.5%,93.8% are agreed and strongly agree to the statement respectively. Because of the response rate we can say that the above items are highly beneficiary for the company by implementing ERP system.

In addition to other items are Decreased financial close cycle, Increased IT infrastructure capability, improved decision making, Quickened information response time. In response to this items respondent's response rate is 97.3%, 93.8%, 99.1%, 98.3% are agreed and strongly agree to the statement respectively. Because of the response rate implementing ERP system gives those benefits to the company.

Regarding Improved cash management 47.8% and 49.6% from the respond that agree and strongly agree of ERP implementation and the rest 2.7% are neutral. On the item Better coordination and cooperation between functions and different company departments the respondent response is 92% are agree and strongly agree.

Better management and controlling functions, faster more accurate transactions are the other items that the respondent asked in this response 95.5% and 97.3% of respondents are agreed and strongly agreed about the benefits of those items.

The above table and descriptive analysis shows that by having better information can make realistic estimations and forecasting anticipating future scenarios. And ERP suppresses information barriers between departments by integrating and improving internal communication.

For the all benefit in the above listed it can achieve increased profitability and benefits. In other word, the increase in performance achieved with the implementation of enterprise resource planning compensated in the long run the initial investment.

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### 4.7.2 Items about major limitation of implementing and using ERP systems

A list of 16 potential limitations has been selected from previous study to identify the actual limitation faced in Ethiopia post service enterprise, respondents indicated level of experience of those 16 different possible limitations were in ERP project on a 5-point Likert type.

ltem		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Difficulties in changing to new from old	N	0	3	5	62	43	113
systems	%	0	2.7	4.4	54.9	38.1	100.0
Uppypilability of skilled project people	N	6	14	26	46	21	113
	%	5.3	12.4	23.0	40.7	18.6	100.0
T	N	2	21	16	50	24	113
Turnover of key project people	%	1.8	18.6	14.2	44.2	21.2	100.0
Web rests of implementation	N	2	17	22	45	27	113
High costs of implementation	%	1.8	15.0	19.5	39.8	23.9	100.0
Difficulties in estimating project	N	0	7	12	55	39	113
requirements	%	0	6.2	10.6	48.7	34.5	100.0
	N	1	6	18	48	40	113
Significant resistance from star	%	.9	5.3	15.9	42.5	35.4	100.0
	N	1	24	15	48	25	113
In house resource constraints	%	.9	21.2	13.3	42.5	22.1	100.0
Unclear strategic direction and vision	N	0	9	14	56	34	113
for the use of ERP	%	0	8.0	12.4	49.6	30.1	100.0
Lack of commitment from top	N	1	10	6	40	56	113
leadersnip	%	.9	8.8	5.3	35.4	49.6	100.0
Incompotent consultants	N	16	44	40	8	5	113
	%	14.2	38.9	35.4	7.1	4.4	100.0
Lack of change management	N	0	12	26	47	28	113
	%	0	10.6	23.0	41.6	24.8	100.0
Inadequate Training	N	11	48	28	18	8	113
	%	9.7	42.5	24.8	15.9	7.1	100.0
Poor Reporting Procedures	N	3	8	10	69	23	113
	%	2.7	7.1	8.8	61.1	20.4	100.0
Underperformed Project Team	N	3	4	18	59	29	113
	%	2.7	3.5	15.9	52.2	25.7	100.0
Lack of discipline	N	4	6	18	58	27	113
	%	3.5	5.3	15.9	51.3	23.9	100.0
Lack of Process Engineering	N	1	62	12	60.2	25	113
	%	.9	0.2	10.0	00.2	22.1	100.0

Source: Own Survey, 2019

Table 4.7.2 Descriptive statistics summary of limitation

In the above table respondents were asked various questions issues related to ERP implementation limitation. As shown on the above table, respondents were asked as to Difficulties in changing to new from old systems. In response to this item the majorities of the respondents comprising 93% are agreed and strongly agree to the statement. Because of the response rate we can say that the above items are highly limitation for the company to implementing ERP system. On the other hand, 59.3 % shows that Unavailability of skilled project people is one of the limitations the respondent response.

In addition to Unclear strategic direction and vision for the use of ERP in the company is one of the major limitation, the response rate is 79.7% of respondents agreed up on it. Also Lack of commitment from top leadership item response is 79.7% of respondent agree this show that it is one of the limitation in the company.

Regarding Incompetent consultants, the respondents 53.1% response shows that disagree and 35.4% of respondents are neutral the rest 11.5% of respondents are agree about the consultant incompetence is one of the limitation. But in general the highest percent of the respondent response rate shows that the consultant incompetency is not major limitation to implement ERP in the company.

In relation to other items Lack of change management, Underperformed Project Team, Lack of Process Engineering is the other statement that asked to the respondent and the respondent response that 66.4% agree in lack of change management is one of limitation in the company and 77.9%,82.3% respondent agree in limitation of Underperformed Project Team, Lack of Process Engineering respectively.

When we see the above table and descriptive analysis we infer that implementing ERP is vast, thorny and expensive and also the requires an enormous time commitment from the professionals in the company. Employee training at both managerial and technical levels, new work flow and complete changeover in basic working policies often makes the implementation of ERP a slow and painful process.

Figure 2.0 scale of the ERP project implementation



# 4.8 Respondent rating of ERP project implementation in EPSE

Source: Own Survey, 2019

In the above table respondents were asked to rate the scale of ERP implementation process. As shown on the above chart respondents' response to this the majority of the respondents comprising 69.0% are too below and below their expectation to the statement. And 7.1% respondents are ERP project implementations exceed their expectation and the rest of 23.9 % are neutral.

This descriptive imply that the majority of the respondents are not satisfied by the implementation processed in the company.

### **CHAPTER FIVE**

### FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

# 5.1 Summary of findings

The study is conducted in the Ethiopia post service enterprise head office in Addis Ababa. It focused mainly success factors of ERP implementing in the company. For the purpose, primary data were gathered through structured questionnaire.

- ✓ As per the results of the study major factors to ERP implementation were identified. Accordingly, lack of top management support, inadequacy of tanning, Luck of effective project management methodology Conflicts between user department, Unclear strategic direction and vision for the use of ERP, misunderstanding of (resistance to) change requirement were found, user friendly of the system are major factors affecting in ERP implementation in Ethiopia post office.
- ✓ With regard to the support of top management in assisting successful implementation of ERP in Ethiopia post office an observable gap is evident implying that proper support is urgent. Again, the study indicates that Ethiopia post office didn't deploy a proper project team and lack of effective project management methodology and also proper continues tanning in order to equip those employees who are expected to work on the system as main tool. From this the study concludes that lack of project team and lack of effective project management methodology are as one common factor affecting for ERP implementation in Ethiopia post office.
- ✓ More than half of respondents believe that the project team clearly understands the change in its organizational structure, strategies and process for ERP implementation.
- Regarding customization of the system even though the company has its own problem to give the right information on customization process majority of the respondent respond that the customization done according to company policy and procedure.
- ✓ From the management commitment point of view majority of respondent respond that implementation of ERP system supported by the management in line with the organizational mission and vision is not good.

- ✓ More than half of respondents believe that the project team clearly understands the change in its organizational structure, strategies and process for ERP implementation.
- ✓ More than 90% of respondents understand the use and benefits of ERP but the resistance to change from the oldest system and processes is high.
- ✓ High numbers of respondents understand turnover of key project people is the limitation of ERP that face in the implementation processes in the organization.
- ✓ More than half respondent's response that their expectation about the ERP system implementation in the organization is below their expectation.

# **5.2 Conclusion**

Business organizations consider ERP system as an essential information system solution to serve and cope up with technological business environment. EPSE is one of business organizations driven by this force to implement ERP into its company in order to facilitate decision making, real time process integration, improve internal communications etc. However, when implementing an integrated and ERP packages, success factors of ERP implementing process and sharing experience is very important. Because ERP systems are complex, need huge budget investment, company re-arrangements and the implementation success depends on different internal and external organizational factors, people and technological factors of the companies.

Based on the findings of the research, the following conclusions can be drawn

- ✓ EPSE employee is well known about the Company policies and procedures establish the rules of conduct within an organization, outlining the responsibilities of both employees and employers. Company policies and procedures are in place to protect the rights of workers as well as the business interests of employers. But the company policies and procedures are not compatible with ERP system.
- ✓ EPSE don't have a clear norms and values to meet in future with regarding of technological aspect.
- ✓ Based on the result the major constraints are the inadequacy of effective project management methodology and proper communication when there is a change on the business requirement to capacitate employees on the system. Even though the organization is aware of the importance of project management methodology valuable effort has not been applied. From this implication, I conclude that there is lack of Leadership commitment and support regarding to arrange effective project management methodology is not focused by the organization. Also the reporting formats are difficult to understand by decision makers as well as internal users, and also the conflict between departments and the organization mission and vision are not aligned with implementation of ERP.
- ✓ Even though as the ERP system are new to the enterprise users, super users and technical support as the finding indicate that majority of the respondent replied that there is no enough training to equip users of ERP. Due to this poor knowledge transfer users were not

given a clear idea of the system hence the decency of the company on integrators is still high this leads to the company incurred additional cost.

- ✓ ERP project implementation team members should come from disciplines across the company. ERP is enterprise-wide and you do not want this seen as an IT or accounting project only. Most of the implementation team members will become super users and will help train people within their departments. In addition to specific roles in the ERP project, these are also representatives of all the users who are important customers of the ERP system.
- ✓ Based on the finding as majority of respondent replayed that the commitment and support of management for smooth implementation of ERP system is not enough. As mentioned, an ERP implementation is an enormous endeavor and means a big change for each employee. Resistance to this change is a common reaction. Strong leadership, creating consensus and engaging employees in the choice of a new ERP system can be very beneficial for the quality of the implementation. The more people are involved in the decision making process the more they want the implementation to go well and are willing to make an effort
- ✓ The respondents realized the benefit of the ERP implementing in the company but they resist changing the old system to the new system. In any new technology implementation, one of the issues that need to be addressed is the resistance to change. Many implementations have failed due to strong resistance from the end users.
- ✓ Implementation of ERP in the processes of an organization can prove to be highly beneficial to optimize successful business operations to boost growth and improve efficiency by understanding this EPSE management need to willing to use ERP system.

### **5.3 Recommendations**

Based on the results and findings of the study to improve ERP system implementation, some recommendations are suggested to be addressed by the Ethiopia post office. Those variables which are most important success factors of ERP implementing as per the analysis result are misunderstanding of change requirements, ineffective communications with user department, lack of management support, lack of effective project management methodology, insufficient training of end users, conflict between user departments, failure to re-designing business process, composition of project team members with ERP module were found major factors that affect ERP implementation in Ethiopian post office.

- ✓ The project management team needs to have teeth to be able to manage scope. Scope has a direct tie to budget, project timeline and risk. If increase scope and budget, project timeline and risk increase. Often stakeholders will increase scope without increasing budget or timeline which means the increase their risk of failure exponentially. If the project management team doesn't have the teeth and ability to manage scope and change then you will end up with a project that never ends and an ERP that is over customized irrespective of the solution you choose.
- ✓ Proper management (both project and organization) should be considered. Because it enables to know managerial style, staff skill identifying and filling, effective communication, continues tanning etc. are considered as factors that could lead to implementation success.
- ✓ Change management as factor to bring positive outcome, resistance from staff should be monitored through training and the ERP system explained for them well that reduce resistance to it. The company's culture should also be accepting this change and it should assist the staff to persuade this change rather than resist it.
- ✓ Top management is expected to provide support in the areas of committing to the ERP project, sufficient financial and human resource, there might be also several occasions when the top management need to take strong and quick decision for smooth implementation of ERP system. So EPSE management has to exert all its effort for implementation of ERP system within the organization.

- ✓ Clear communication method should be set. Without clear and regular communication employees can become disengaged. That's why a cohesive internal communications strategy is often at the heart of a successful business. It is less about creating a big fanfare about company announcements, but more about establishing an agile, ongoing dialogue between all employees, departments and stakeholders.
- ✓ The organizational so needs to work on the existing culture and use the knowledge to successfully map the steps needed to accomplish a successful change. Adaptations in the culture of an institution take a long time and require special attention from top management who has to accommodate it as part of strategic management. Cultural change commences with diagnosing the prevailing culture of the organization and adapting this culture to current or proposed strategy. As there is a close relationship between culture and strategy of an organization.
- ✓ To overcome this resistance problem, the management has to embark on a structured program to educate the users about the potential benefits of the new system. This may in many ways reduce the probable resistance that could arise and enhance the likelihood of a successful implementation.
- ✓ EPSE need to sate a clear norms and values with regarding of technological and other types of aspect to lead the organization for the future. Values and norms as unwritten rules are for behavior very important in the organization. Sometimes the term shared values is used to describe those values that are accepted and respected by most workers. Values and standards are identified with an organizational culture.
- $\checkmark$  Ethiopia postal service enterprise can also use this study as project lesson assessment.
- ✓ Other companies in this country those have planned to implement ERP can consider these factors that affect for their ERP implementation.

# 5.4. Limitation of the Study

These research findings will be able to contribute to the existing literature on factors affecting ERP implementation in EPSE.

Questionnaires were not returned on time because some of the employees were out of their principal work place. As a result, the response rate is to some extent negatively affected. Some of the employees were not volunteers to fill the questionnaire because they are busy of their daily routine. Moreover, some of them seem bored of feeling lots of questionnaire from different researchers every year. Secondly, the time required to complete the research was very small and this had an influence on the researchers' decision so the short time did not allow an in-depth search for more information.

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# Appendix

### QUESTIONNAIRE

### **ST.MARY'S UNIVERSITY**

### MBA IN GENERAL MANAGEMENT

### **Dear Respondents**

The main purpose of this questionnaire is to gather information about factors that affect ERP implementation in Ethiopian post office. This information is being sought solely for academic purpose and will be treated with confident. Thus your cooperation in responding to this questionnaire is important for the researcher. Therefore, your genuine response to questions is vital for the quality and successful completion of the study.

**Contact Address:** 

**Tewodros berihun** 

Tele- +251 0911 70 48 68

### E-mail: <u>berihuntewodros@gmail.com</u>

Part I: Background Information - Please put 'X' in the box

1. What	is your gender?			
Male		Female		
2. Age (	Group:			
≤25		26 – 35	36 – 40	41 and above
3. Educa	ational Status:			
Seco	ondary education		Diploma	Collage

BA/BSC				Master	rs & Abo	ve	
Other please specify							
4. Your service year: $\leq 5$	6-10		11 – 15			16 –	20
21 and above							
5. Which division are	you working in?	2					
Finance	Sourcing &	z Facilities			Human F	Resources	
6. The position you he	old in the organiz	zation					
Staff	Supervisor		Manager		]	Officer	
Chef Officer		Other					
Part II: Issues Relate	ed with the stud	ly area					
Use a scale of 1-5 Wh	nere:						
1 = Strongly Disagree	e						
2 = Disagree							
3 = Neutral							
4 = Agree							
5 = Strongly Agree							

1. Issues related with ERP implementation process in your organization

Please read each statement carefully and show the extent of your agreement on the statements by circling the numbers in the column using the following rating scale (Likert Scale).

Ser. No.	STATEMENT			Scale		
1.1	Functional and technical support of	1	2	3	4	5
	integrators are success full in relation to					
	knowledge transfer					
1.2	The project team fully understands the	1	2	3	4	5
	customization Process with the company					
	policy and procedure					
1.3	Ethiopia post office super users are	1	2	3	4	5
	trainedina way can full replace the					
	integrators support					
1.4	Training was given exhaustively for all	1	2	3	4	5
	users					
1.5	The training given on the system	1	2	3	4	5
	wasadequate and useful to your					
	functional module					
1.6	Users interface of the system is easily	1	2	3	4	5
	understandable					

Where: 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

# 2.it's about Major constraints that Ethiopian post office faces while implementation of ERP.

Please read each statement carefully and show the extent of your agreement on the statements by circling the numbers in the column using the following rating scale (Likert Scale).

Ser. No.	STATEMENT	Scale				
2.1	Adoption and implementation of ERP system	1	2	3	4	5
	supported by the management in line with					
	the Organization mission and vision					
2.2	Luck of effective project management	1	2	3	4	5
	methodology					

Where: 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

2.3	Misunderstanding of (resistance to)	1	2	3	4	5
	change requirement					
2.4	Conflicts between user department	1	2	3	4	5
2.5	The management consider ERP	1	2	3	4	5
	implementation is part ofour					
	Organization long term strategy					
2.6	Work Culture that favors collaboration is	1	2	3	4	5
	Important to ERP implementation.					

3.Factor related to the external environment factors that affected the implementation of ERP?

Please read each statement carefully and show the extent of your agreement on the statements by circling the numbers in the column using the following rating scale (Likert Scale).

Where: $1 = St$	trongly Disagree 2	= Disagree 3 $=$ Neut	ral $4 = \text{Agree } 5 =$	Strongly Agree
		0		

Ser. No.	STATEMENT			Scale		
3.1	Country's policies and Procedures are considered during integration	1	2	3	4	5
3.2	Dose the consultant full aware about the organization culture	1	2	3	4	5
3.3	The Organization has Clear norms and Value	1	2	3	4	5
3.4	Dose the Organization policies and Procedures compatible with the new ERP system	1	2	3	4	5

4.Factor related to the internal environment factors that affected the implementation of ERP?

Please read each statement carefully and show the extent of your agreement on the statements by circling the numbers in the column using the following rating scale (Likert Scale).

Ser. No.	STATEMENT			Scale		
4.1	Management is willing to use ERP system in the Organization	1	2	3	4	5
4.2	Management is aware of the benefits that can be achieved with the use of ERP system	1	2	3	4	5
4.3	Management always supports and encourages the use of ERP for job-related work	1	2	3	4	5
4.4	The training given on the ERP system was adequate and useful to you.	1	2	3	4	5
4.5	Further enhancement training is required on the ERP system use.	1	2	3	4	5
4.6	The trainers were knowledgeable and helped me in my understanding of the ERP system	1	2	3	4	5

Where: 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

5.Based on your experience in the company, and using this scale from 1 to 5 circle in the table below, your opinion regarding the following list of limitation and benefits encountered in ERP project.

Please read each statement carefully and show the extent of your agreement on the statements by circling the numbers in the column using the following rating scale (Likert Scale). Where:1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

Ser. No.	List of limitation	Scale				
5.1	Difficulties in changing to new from old	1	2	3	4	5
	systems					

5.2	Unavailability of skilled project people	1	2	3	4	5
5.3	Turnover of key project people	1	2	3	4	5
5.4	High costs of implementation	1	2	3	4	5
5.5	Difficulties in estimating	1	2	3	4	5
	project requirements					
5.6	Significant resistance from staff	1	2	3	4	5
5.7	In house resource constraints	1	2	3	4	5
5.8	Unclear strategic direction and vision for	1	2	3	4	5
	the use of ERP					
5.9	Lack of commitment from top leadership	1	2	3	4	5
5.10	Incompetent consultants	1	2	3	4	5
5.11	Lack of change management	1	2	3	4	5
5.12	Inadequate Training	1	2	3	4	5
5.13	Poor Reporting Procedures	1	2	3	4	5
5.14	Underperformed Project Team	1	2	3	4	5
5.15	Lack of discipline	1	2	3	4	5
5.16	Lack of Process Engineering	1	2	3	4	5
	List of benefits			-1		1
5.17	Reduction of cost	1	2	3	4	5
5.18	Cycle time reduction	1	2	3	4	5
5.29	Productivity improvement	1	2	3	4	5
5.20	Quality improvement	1	2	3	4	5
5.21	Performance improvement	1	2	3	4	5
5.22	Better resource management	1	2	3	4	5
5.23	Support business growth	1	2	3	4	5
5.24	Decreased financial close cycle	1	2	3	4	5
5.25	Increased IT infrastructure	1	2	3	4	5
	capability					
5.26	Improved decision making	1	2	3	4	5
5.27	Support organizational changes	1	2	3	4	5
5.28	Build common visions	1	2	3	4	5
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5.29	Quickened information response time	1	2	3	4	5
5.30	Improved interaction with customers	1	2	3	4	5
5.31	Improved cash management	1	2	3	4	5
5.32	More efficient business processes	1	2	3	4	5
5.33	Better coordination and cooperation	1	2	3	4	5
	denortments					
	departments					
5.34	Better management and controlling	1	2	3	4	5
	functions					
5.35	Financial flows control	1	2	3	4	5
5.36	Information flows control	1	2	3	4	5
5.37	Control of flow of goods	1	2	3	4	5
5.38	Faster, more accurate transactions	1	2	3	4	5

6. Based on your perception, circle the below number using the following rating scale of the ERP Project implemented in your company?

## **1** = ERP project is too below of my expectations,

## **2** = **ERP** project is below my expectation,

- 3= Neutral,
- 4= ERP project met my expectation and

## **5= ERP project exceed my expectation.**

If there is any other issue/ problem that you observed in relation to ERP implementation and its Utilization, please write down here.

Thank You!!!