THE EFFECT OF ENTERPRISE RESOURCE PLANNING ON ORGANIZATIONAL PERFORMANCE:

THE CASE IN ETHIOPIAN AIRLINES

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THE EFFECT OF ENTERPRISE RESOURCE PLANNING ON ORGANIZATIONAL PERFORMANCE: THE CASE IN ETHIOPIAN AIRLINES

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STATEMENT OF DECLARATION

I, Adane Siyamregn Mehari, hereby declare that this paper which has a title of "The effect of Enterprise Resource Planning on organizational performance: The case in Ethiopian Airlines" is my original work and has never been submitted to any other university. All materials and sources used for this thesis have been duly acknowledged.

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CERTIFICATE

This is to certify that the thesis entitled "The effect of Enterprise Resource Planning on organizational performance: The case in Ethiopian Airlines" is prepared by Adane Siyamregn Mehari under the supervision of Yohannes Workaferahu (PhD), which is submitted for partial fulfillment of the requirements for the degree of Master of Art in Business Administration with the regulations of the University and meets the accepted standards with respect to originality and quality.

Approved by:

Internal examiner: _____ Signature: _____Date: _____

External examiner: _____ Signature: _____Date: _____

Advisor: Yohannes Workaferahu (PhD) Signature: _____Date: _____

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ACRONYMS

ERP: enterprise resource planning
CRM: customer relationship management
HRM: human resource management
MRO: maintenance repairs and overhaul

ABSTRACT

The purpose of the study was to find out Effect Enterprise resource planning on organizational performance: A Case Study of Ethiopian Airline, Addis Ababa. For the sake of achieving the objectives of the study, the data was gathered through administered questionnaire from a sample of 232 maintenance repairs and overhaul staffs of Ethiopian airline in Addis Ababa and analyzed using statistical analysis such as descriptive and inferential analysis. The sample respondents were selected by using of convenient sampling and Ethiopian Airline in Addis Ababa was by purposive sampling techniques. The study was descriptive and explanatory in nature. As per response of the respondents, the data was analyzed and presented in aggregate by using IBM SPSS statistics 21 version software both in descriptive and inferential statistics. The major findings of the study indicates, the enterprise resource planning elements (organizational information management, enterprise resource planning quality control, customer relationship management and human resource management factors) are the variables that influences the organizational performance in Ethiopian Airline.. The recommendations also forwarded by the researcher after the successful completion of the thesis.

Key Word: *Enterprise resource planning, information management, ERP quality control, CRM, HRM organizational performance*

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Enterprise resource planning (ERP) is the generic term used for management software that include modules such as production, finance, marketing and human resources and that allow companies to plan their goods and services (Velcu, 2010). According to (Somers et al., n.d.). Enterprise resource planning (ERP) systems integrate internal and external management information across an entire organization, embracing finance/accounting, manufacturing, sales and service, customer relationship management, etc. ERP systems automate this activity with an integrated software application.

The purpose of ERP is to facilitate the flow of information between all business functions inside the boundaries of the organization and manage the connections to outside stakeholders. This software, used by many enterprises, particularly by multinational corporations, has a critical role in ensuring increased efficiency. (Pan et al., 2011) suggested that new generation ERP systems should be developed based on the principles of low cost, high quality and efficiency. In the recent years, ERP software have become widely used in almost all sectors such as production, services, finance, transportation and public utilities.

An ERP system can be characterized as an information system made up of different modules, each supporting the business processes. The modules are integrated and all gathered data are stored in a central database (Scapens & Jazayeri, 2003a). Due to this effect business advantages can be expected. Because data become widely available, it is possible to use these data in order to control an organization. Another example for the advantage of this mechanism is the possibility of single storage of data, which can prevent unwished redundancy. Other advantages are the real-time storage of business process data and the business wide availability of data. These assumed advantages are the main reasons for organizations to implement such ERP systems.

In an environment where organizations more and more depend on technology, they want to remain competitive (Somers et al., n.d.). Organizations expect that ERP will create competitive advantages. In assuming that ERP create advantages, it is necessary to know what effects it has on an organizational performance. A lot of research is conducted into implementation issues and success and fail factors of ERP. ERP systems support business processes and can be used as a tool to help to realize other goals. It is interesting to see what the effect of ERP systems is on the organizational performance, or what relations exist between ERP and organizational performance.

1.2 Statement of the Problem

In this competitive and tremendous world, it is important to take care of how the organization can be competitive and be valuable in the market. As it is obvious, all organizations have to look how they can achieve their organization goal with the efficient utilization of resource they have. ERP typically support the different departments and functions in the organization by using a single database that collects and stores data in real time. When ERP systems are fully realized in a business organization, they can yield many benefits: reduce cycle time, enable faster information transactions, facilitate better financial management, lay groundwork for e-commerce, and make tacit knowledge explicit (Gupta & Kohli, 2006).

As managers are doing things right with scarcity of resource in the organization, it is necessary to utilize technological advantage like ERP. A lot of companies have adopted and implemented ERP to get efficiency and improve organizational process by eliminating redundancy. Despite the expected benefit of the ERP implementation for the organizations, not all organizations are lucky to implement it successfully. However, Ethiopian airlines implemented ERP named SAP successfully on 2013 G.C and now it's on stable condition in the organization. So, the organization has been able to reap full benefits of ERP since the time of implementation.

As the data's are stored at the central level, it makes possible to extract data into information and information become available to the organization and to the people within the organization easily. This efficient utilization of resource in the organization must have its own effect on the performance of the organization. This time it is necessary to assess the effect of ERP on organizational performance in Ethiopian airlines.

1.3 Objective of the Study

1.3.1 General Objective

The general objective of the study was to assess the effect of enterprise resource planning on organizational performance in the case of Ethiopian Airlines.

1.3.2 Specific Objectives

Here, the study had four different specific objectives:

- To determine the effects of information management on organizational performance in Ethiopian airline
- To find out the influence of quality control on organizational performance in Ethiopian airline
- To find out the effect of customer relationship management on organizational performance in Ethiopian airline
- To determine the effect of human resource management on organizational performance in Ethiopian airline

3.4 Research Questions

Based on the objective of the study, the following research questions were developed.

1. Does information management have an effect on organizational performance in Ethiopian airline?
2. To what extent do ERP quality control can affect organizational performance in Ethiopian airline?
3. To what extent do CRM factors affect organizational performance in Ethiopian airline?
4. To what extent do HRM factors affect organizational performance in Ethiopian airline?

1.5 Research Hypothesis

Based on the existing theoretical literature review and empirical study, the study aims to fill the gap in the effect of ERP on organizational performance. There were four null and four alternative hypotheses proposed in the study.

Ha_1: The organization, information management has an effect on organizational performance of Ethiopian airline.

Ha_2: ERP quality control has an effect on organizational performance of Ethiopian airline.

Ha_3: CRM has an effect on organizational performance of Ethiopian airline

Ha_4: HRM has an effect on organizational performance of Ethiopian airline

1.6 Significance of the Study

This study will help the Ethiopian Airlines management to examine its current practice of ERP with its performance to the condition of how ERP can affect the performance of the organization. It also helps to know the cause and impacts of the ERP to improve and sustain good performance of the organization. It will help the Ethiopian Airlines management to utilize its organizational resource efficiently and effectively to improve and maintain the best performance of the organization. The study also can give some clue and use as benchmark to others who are willing to do further research on this topic.

1.7 Scope of the Study

To make the study being manageable it is necessary to define the delimitation of the study. The study was conducted in Ethiopian Airlines. The topic under study covered the effect of ERP on organizational performance only, in Ethiopian Airlines. The study also limited to the key elements of ERP (information management, quality control, customer relationship management and human resource management) and organizational performance. The study also limited to maintenance repair and overhaul (MRO) staffs of Ethiopian airline.

1.8 Limitation of the Study

The limitation of this study was that the researcher could not be able to collect data from all maintenance repair and overhaul (MRO) Ethiopian airlines staffs due to time scarcity and workload. The study is also limited to MRO staffs of the organization even if the effect ERP on organizational performance is the factor of all staffs. As the study was focused on the effect of ERP on organizational performance in Ethiopian airline, still the possibility of other factors effect on organizational performance can hinder the study. The study was only limited to the key

elements of ERP and organizational performance in Ethiopian airlines. As the study had been conducted only in Ethiopian airlines, the research result should not be generalized comprehensively to other airlines.

1.9 Organization of the Study

This research paper is organized in to five chapters. chapter one includes all parts of introduction; background of the study, statement of the problem, research questions research objectives, significance of the study, scope of the study, limitation of the study and organization of the study. Chapter two is review of related literature, includes both theoretical and empirical review. And also, chapter three is about all research methodology (research design, population and Sampling design, target population, sample frame techniques (methods) of sample selection, sample size determination, data collection, source of data, data collection tool, data analysis, specification of the model, reliability and validity and description of the variables. Chapter four is all about data presentation, analysis and interpretations. The last chapter, chapter five includes the summary, conclusion, recommendation and suggestion of the study.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This section provides an overview of the ERP systems, their evolution, benefits, reasons for implementing them and its effect on organizational performance. In addition, it provides an overview of existing literature on ERP systems' and organizational performance. The main goal of this section is to review the literature and discuss ERP systems in general for the purpose of identifying research gaps.

2.1 Theoretical Review

2.1.1 ERP History

As (Koech, n.d.) indicated that ERP systems have their roots in Materials Requirement Planning (MRPI) systems, and Manufacturing Resource Planning (MRPII), which emerged during the 1960s. MRPI was mainly used for inventory control and managing production, while MRPII was developed to evaluate the entire production environment and to create or adjust master schedules based on feedback from current production and purchase conditions (Tsai et al., 2009). The development of these manufacturing coordination and integration methods and tools made ERP systems possible. Companies such as SAP, Oracle, and others moved away from legacy MRPII systems and began the process of ERP implementation. An ERP system can be defined as a program that intends to provide solutions to and interface multiple corporate functions, including finance, human resources, manufacturing, materials management, and sales into a unified database system (Scapens & Jazayeri, 2003b).

2.1.2 ERP Benefits

Per (Fiaz et al., 2018) summarization, the benefits that can be gained from the ERP systems, which they classified into five different dimensions:

- ✓ Operational benefits: ERP systems can provide benefits in terms of cost, cycle time, performance, and quality.

- ✓ Managerial benefits: ERP systems can improve decision-making and planning.
- ✓ Strategic benefits: ERP systems can support business growth and innovations.
- ✓ IT infrastructure benefits: ERP systems provide flexibility for current and future changes.
- ✓ Organizational benefits: ERP systems are expected to empower workers and build a common vision. Despite the fact that ERP systems can provide many benefits, researchers have reported that many organizations have been unable to utilize successfully their ERP systems to achieve success (Tajul Urus et al., 2018).

2.1.3 ERP Lifecycle

The success of an ERP system implementation is important to organizations as it improves their existing operations. According to (Velcu, 2010), the ERP system lifecycle consists of three phases, the project, shakedown, and onward and upward phases. (Pan et al., 2011) noted that the ERP system lifecycle consisted of four phases, the chartering phase, project phase, shakedown phase, and onward and upward phase.

1. Project chartering–concerns business decisions regarding the scope of the project, budgeting, and system selection.
2. The project–the main implementation phase with the purpose of getting the system and users "up and running."
3. Shakedown–stabilizing and incorporating IS in everyday operations.
4. Onward and upward–deriving benefits from the ERP system. The post implementation period for ERP systems begins after the implementation phase of an ERP system.

The post implementation phase provides on-going support such as maintenance, training, and upgrades to help organizations sustain and prevent any disruptions to the system. To avoid an IS failure, the system requires continuous support from top management (Scapens & Jazayeri, 2003). There are four common components of ERP are used for this study

1. Information management
2. Customer relationship management
3. Quality control
4. Human resource management

2.1.4 Common Components of ERP

2.1.4.1 Information Management

Information management concerns the control over how information is created, acquired, organized, stored, distributed, and used as a means of promoting, efficient and effective information access, processing, and use by people and organizations (Nasir et al., 2020a). The collection, organize as well as management of the information from one sources to others as well as arrangement of information from one or more people or employer called information management. This also includes people who involved direct and indirectly towards the information management. While, management is involved when the organization have control over structure, processing as well as delivery of information. It's vital to relies on the title is information management to achieve certain goals (Eroshkin et al., 2017)

The elements of information management have been widely used in several of industries such as social, technology, business as well as education. This term can be used to show the participation of information and knowledge that portray the involvement of civilization. Information show the critical issues that existed in the organization where it is indicate on the business operation, productivity as well as performance outcomes. The information is an asset of any organization, and it is a constant risk that may affect the capability of the organization if does not manage it properly. However, the right use and analysis the information result in increasing the productivity and performance of the organization itself. (Schlögl, 2017) state the organization also should know to acquired and utilized information as well as their related resources strategically and they should understand strategic direction of their organization. The information is a valuable aspect that helps the organization in improving its performance.

Generally, management of the process and system that will create, acquire, organize, store, distribute, and use information is related with the definition of the information (Zaman, et al., 2018). (Schlögl, 2017)state information creation, acquisition, storage, analysis and use can supply the intellectual work which assists on development of the intelligent organization. The essential players in information management must be the information users themselves, working in partnership with a cast that includes information specialists and information technologists. Information management must address the social and situational contexts of information

use(Nasir et al., 2020). Information Management might though as a set of process which support and make sure the organization's learning activities is balanced. Six distinct but related information management processes may be distinguished (Scapens & Jazayeri, 2003a).

- Information needs;
- Information acquisition;
- Information organization and storage;
- Information products and services;
- Information distribution; and
- Using information

Organizational performance depends on the availability and practicability of information management in that organization. Many people do not realize that the information management could assist organization to operate competitively and strategically as well as assist the employee to achieve targeted goal in organization (Nasir et al., 2020). A successful organization is an intelligent organization. The intelligent organization is an organization act as a platform that utilized information, material and energy from the external environment, transforms these resources into knowledge, processes, and structures that produce goods or services which are then consumed in the environment. The intelligent organization is, therefore, a learning organization that is skilled at creating, acquiring, organizing, and sharing knowledge, and at applying this information to design its behavior. One of the critical issues about the workplace and organization is how to make sure the productivity can growth and improved (Sul et al., 2015). By becoming an intelligent organization which has systematic information management, it can boost and enhance profit growth.

2.1.4.2 Customer Relationship Management

Organizations realize that they don't just focus on transactions; they turn them towards opportunity to sell products with good service experiences to established long term one to one relationship with each customer. In recent years, organizations had to quick decide the right way to build the long term relation with customer through different tools and techniques. Customer Relationship Management (CRM) was also a tool having different techniques to attract, acquire, retain and build a strong relationship with customers. Customer Relationship Management was a

dual creation process in which information was captured, integrated, accessed then exchanged to create value for future customer from current customer (Alshura, 2018).

Customer relationship management was the key to increase revenue and profit by making a strong and long term relation between company and customer. Customer relationship management also establishes and increase trust between customer and company. This trust was lead the satisfaction, loyalty, cross and up selling, repeat purchasing, lower level of customer complaints, high market share, lower costs and profitability (Rapp et al., 2010). Trust was increase by repeated and convenient interaction with customer. Customer relationship management capabilities were back bone of the organizational performance and if the customer relationship management capabilities were strengthens then automatically business performance is increased. Organizations had realized this fact and they were moving from traditional business to customer oriented.

(Mohammed et al., 2014) states that CRM is a comprehensive strategy and process that enables an organization to identify, acquires, retain and nurture profitable customers. Additionally, CRM is a core organizational process that focuses on establishing, maintaining and enhancing long term associations with customers as advocated by relationship marketing (Covenant University et al., 2014). The comprehensive approach of CRM is to maximize the relationship with all customers. Beside the technological advances, CRM also covers the activities of acquisition management and regain management at the initiation stage, maintenance stage and termination management with the purpose to maximize the value of relationship portfolio (Akroush et al., 2011). Hence, it is clear that CRM is not just a technology, but is a new way of doing business, therefore Reynolds (2002) point out that the comprehensive definition of CRM might be the business strategy, process, culture and technology that enables organization to optimize revenue and increase value through understanding and satisfying the individual customer's needs.

Chen and Popovich (2007) indicate that CRM has evolved from advances in information technology and organizational changes in customer centric process. Thus the attention in managing a successful CRM implementation requires an integrated and balanced approach to technology, process and people (Chen & Popovich, 2003). (Coltman, 2007) also addresses the concept and argues that CRM must be viewed as more than a tool but part of a deeply embedded strategic disposition that enables business to outperform its rivals in competitive advantage.

Furthermore, based on this discussion, this study defines CRM as a core comprehensive firm strategy to provide information through the use of information technology tools to establish long term relationship with customers. It is impossible for organizations to possess all the required sources to stay competitive without having a close relationship with the customers. Therefore it is vital for organizations to deploy CRM practices in order to build strong relationship subsequently improving firm performance.

2.1.4.3 Quality Control

Organizations globally are experiencing changes in the business milieu due to growing consumer awareness of quality, technological advancement and innovation, globalization and intense competition. To respond to these challenges and ensure their survival, many organizations have implemented mixed quality improvement drives as a means to improve their competitiveness and organizational performance. Quality improvement initiatives are being implemented in both manufacturing and service organizations.

Organizations globally are adopting TQM as a means to improve their traditional way of doing business and ensure their survival in the austere competition of contemporary business world. TQM is embraced as a logical quality improvement approach for management of the entire organization with the objective of enhancing performance in terms of profitability, employee performance, customer satisfaction and quality. (Tejay et al., 2005) quality control is a strategic resource that brings about economic value and provides an organization with competitive advantage over its competitors. TQM is hinged on quality and all members of the organization taking part in the affairs of the organization and aims at long term success through customer satisfaction and benefits to members of the organization and the society (ISO 8402, 1994). According to Ombati (2010), implementation of TQM improves quality and productivity in organizations and it works across board in an organization to include all employees and departments and extends backwards and forward to leverage on the suppliers and clients/customers relationships. TQM supplies a frame of reference for implementing effective quality and productivity resourcefulness that can increase the profits and capacity to compete of an organization.

2.1.4.4 Human Resource Management

Human resource management is defined as the process of accomplishing, organizational objectives by acquiring, retaining developing and properly using the human resource in an organization (Beardwell & Claydon, 2007). This function according to (Hendry & Pettigrew, 1990) is critical to the success of any firm and should operate at three levels such as operational, managerial and strategic level.

According to (Beardwell & Claydon, 2007) human resource management co-notates a style of approach whose touchstone is the careful nurturing of and investment in the human stock. (Dyer & Reeves, 1995) says that human resource emphasizes the calculative business-like treatment of labor within the account upon it as a resource like any other to be deployed and disposed of in an economic rational manner.

All above versions share the presumption that decisions about human resource deserve strategic attention because they start from the premise that the way human resource are managed will be of critical to the success of the business plan. Traditionally this function was called personnel management and had relatively limited involvement in the organizations' affairs and goals. Consequently, the personnel managers were concerned with short term operational and day to day human resource needs (Beardwell & Claydon, 2007). With the growing importance of human resource management to the success of the firms, this department is playing many more roles. One of this is increased involvement in long term, strategic direction of the organization (Dyer & Reeves, 1995)

According (Kamoche, 1996) if capabilities represent result from human resource work, human resource professional must clarify which capabilities that matter most. Human resource professional acting as strategic partner plays a major role in creating strategic unity or integrity. As strategic partners they design human resource practices that can and should be used both create and implement strategic clarity (Dyer & Reeves, 1995). For employee should be hired who embodies the values and purposes of the firm. Recruitment systems should be focused on improving the quality of the individuals hired through sophisticated selection procedures designed to screen out all but the very best potential employees. Indeed, research indicates that selectivity in staffing is related to firm performance (Eneh & Awara, 2017).

Organization can improve the quality of current employees by providing comprehensive training and development activities after selection. Considerable evidence suggests that investment in training produces beneficent organizational outcomes (Purell, 1994). Other purposes of training are to increase level of commitment and perception of employees that the organization is a good place to work. Increased commitment can result to less turnover and absenteeism. Training for performance improvement is vital for a firm to adapt and be competitive (Dyer & Reeves, 1995).

Commenting on training (Eneh & Awara, 2017) emphasizes the importance of training need analysis .He says that without determining the need for training there is no guarantee that training will be provided for the right trainee. Another important step in the training program according to him is evaluation of training to determine whether it has achieved its purpose. The effectiveness of skilled employees will be limited however if they are not motivated to perform their jobs. The firm and structure of an organization's human resource systems can affect restriction levels in several ways: First, organization can implement a merit pay °r incentive compensation system that provides rewards to employees for meeting specific goals. A substantial body of evidence has focused on the impact of incentive compensation and performance management systems on firm performance (Eneh & Awara, 2017).

In order to attract and retain the type employees the firm requires, it is necessary to offer flexible benefits. Flexible benefits imply that employees are allowed to choose and change their package at least once a year. Benefits should be reviewed regularly for the purpose of measuring their effectiveness (Beardwell & Claydon, 2007). In addition, protecting employees from arbitrary treatment, though a formal grievance procedure may also motivate them to work harder because they can expect their efforts to be fairly rewarded (Hendry & Pettigrew, 1990).

Finally, the way in which a workplace is structured should affect organization performance to the degree that skilled and motivated employees are directly involved in determining what work is performed and how this work get accomplished. Employee participation systems and internal labor markets that provides an opportunity for employees to advance T within a firm and team based production system are all focus of work organization that have been argued to positively affect firm performance. In addition, it has been argued that the provision of job security encourages employees to work harder (Dyer & Reeves, 1995).

2.1.5 Organizational Performance

Organizations performance is process to enhance both the effectiveness of an organization and the well-being of its member through planned interventions. Key points of the organizational development will which lead to organizational performance are when many of organization development effort to increasing organizational learning, with the intent of then impacting organizational performance (Fernandez & Moldogaziev, 2013)

Organizational performance referring to the actual output or results of an organization as measured against its intended outputs, goals and objective (Jon & Randy, 2009). There are four types of organizational performance measures, first human resource outcomes, second organizational outcomes, third financial accounting outcome, and lastly capital market outcomes. Human resource outcomes related to change in employee behavior which included employee satisfaction, turn over and absenteeism. Organizational outcomes contain labor productivity, customer satisfaction, and quality of product services. Financial accounting outcomes included three measures such as returns on assets, return on equity and profitability. Capital market outcomes reflect how market evaluates an organization which consists of the three indicators which is stock price, growth rate of stock price and market returns (Dyer & Reeves, 1995).

2.2 Empirical Review

2.2.1 Information Management and Organizational Performance

This research adopts an explanation of an information management that supports the basic concepts of what constitutes an ERP system. In the view of (Nasir et al., 2020) an Information System is a collection of subsystems defined by either functional or organizational parameters that support decision making and control the organization. (Eroshkin et al., 2017) highlights the fact that information technology is used to capture, transmit, store, retrieve, manipulate, or display information in one or more businesses. An Information system in an organization provides processes and information useful to its members and clients. It helps it to operate more effectively. The information concerns its customers, suppliers, products, procedures, operations and so on (Scapens & Jazayeri, 2003).

The role of IS in an organization are increasing and encompassing all the various activities and the developments approaches have to take these growing considerations into account. According to Chang and King (2005), the Information Systems can be defined as an integration of hardware, software, human skills and management processes that enhance IS performance to maximize the returns on investment. Furthermore, Information systems combine people, hardware, software, data and networks to perform input, processing, output and control activates (O‟Brien, 2004). The IS implementation and integration is a very complex process and broad systems are employed to their organizational structure for transformation. Others found the IS field is very broad, with a number of different definitions depending on the researchers point of view and an ERP system is considered as that vast information system that integrates all the information that runs through the organization into a uniform system (Basu & Sengupta, 2007).

In addition to this, the material relevant to IS frameworks and methodologies and its consequent outcomes has also been reviewed and the best methodology selected based on the desired outcome of this research study. Technology plays a key role in today's business environment. Many companies greatly rely on computers and software to provide accurate information to effectively manage their business. It is becoming increasingly necessary for all businesses to incorporate information technology solutions to operate successfully. One way that many corporations have adopted information technology on a large scale is by installing Enterprise Resource Planning (ERP) systems to accomplish their business transaction and data processing needs. Enterprise Resource Planning (ERP) systems are software packages that use relational database technology to integrate various units of an organization's information system. ERP systems provide several separate, but integrated modules, which can be installed as a package for any organization (Nasir et al., 2020)

Organizational performance depends on the availability and practicability of information management in that organization. Many people do not realize that the information management could assist organization to operate competitively and strategically as well as assist the employee to achieve targeted goal in organization (Eroshkin et al., 2017).

2.2.2 Quality Control and Organizational Performance

Quality control is one of the most popular components of ERP; it is strategies meant to improve the efficiency and competitiveness of an organization through improving of the quality of products and services. Its practices operate as an interdependent system that combines with other organizational assets to generate competitive advantage. It underscores commitment of the managers and those in positions of leadership, concentrating on the customer, symbiotic supplier relationship, employee empowerment, benchmarking, statistical process control, employee involvement, empowerment and training. Organizational performance reveals how well an organization achieves its objectives in terms of quality of offerings, operations, innovation, employees' satisfaction, customers' satisfaction, sales, profitability and aggregate organization's vision and mission.

Different studies have used varied organizational performance measures. From a review of extant literature organizational performance metrics can be classified into financial and nonfinancial performance indicators. Financial performance indicators include: market share value, return on investment, earning-per-share and profits while non-financial performance indicators include: productivity, quality, efficiency, process improvement, innovation performance, operational performance, attitudinal and behavioral measures such as commitment, customer satisfaction, employee satisfaction and retention Adoption of quality control practices has been shown to enhance an organization's competitive advantage (Papanthymou & Darra, 2017).

Earlier studies gave varied results of the effect of quality control practices and Organizational performances. In some studies there was positive relationship between quality control practices and organizational performance. Other studies reported negative or non-significant relationship between quality control practices and some organizational performance indicators particularly customer focus and financial performance (Mwaniki and Bichanga, 2014); team work and financial performance (Wisna, 2013).

The reasons of the mixed results could be due to: The utilization of different methods, considering varied elements and diverse performance standards in their research models; they were performed in variegated backgrounds such as different countries and different industries

and some did not address the effect of barriers to quality control practices. This study will seek to mitigate this and add onto the ongoing debate about the quality control and its effect on organizational performance.

2.2.3 Customer Relationship Management and Organizational Performance

Customer relationship management plays an important role in enhancing organizational performance and competition advantage (Alshura, 2018). Organization possesses the capabilities of customer interaction management and customer relationship upgrading usually had the superior financial performance (Parvatiyar & Sheth, 1999). So, customer relationship management capabilities and organizational performance had the positive relationship with each other. If customer relationship management capabilities enhanced then business performance automatically increased.

Outstanding customer relationship management leads to customer loyalty and superior competition advantage (Rapp et al., 2010). Customer relationship management capabilities capture customer pertaining needs at accurate time (JIT). Successful implementation of customer relationship management was increase the business profit up to 270 percent (Ryals, 2005). It was also increase the stock price (Fornell, Mithad, & Krwashnan, 2006), customer satisfaction and customer loyalty (Shafique et al., 2015).

Customer relationship management was the chain process to identify, create knowledge, build relationship and shape customer perceptions of the firm and its products solution The Sales Educators (2006). “A comprehensive strategy and process of acquiring, retaining, and partnering with selective customers to create superior value for the company and the customer” was one strategic definition of Customer relationship management offered by (Covenant University et al., 2014).

Customer interaction management, customer relationship upgrading and customer win back capability were the components of customer relationship management capability. Organization possesses the capabilities of customer interaction management and customer relation upgrading capabilities usually had the superior financial performance(Butt, 2021).

2.2.4 Human Resource Management and Organizational Performance

An organization which has a proper HR department has an advantage over their competitors because it helps to enhance the skill and ability of its employees, which results to increase profits, reduce the cost of production, retain employees and enhance the quality of products. Prompt implementation of strategies of the organization will help them to surge ahead of their competitor‘s (Eneh & Awara, 2017). In successful firms, duties are assigned in advance. Human resource planning is to make arrangement on the basis of expected performance from individuals for meeting the goals of the organization. Employee‘s participation in planning procedure is necessary to help them understand and deliver the path towards obtaining organizational objectives.

According to the (Abdullah et al., 2009) model, mission strategy, human resource management and organizational structure operate as interrelated systems. They claim that human resource is a vital part of the effective execution of organizational objectives. Once an organization decides its ideal structure, it must attract and retain individuals that will assist to pursue its overall aim.

The fields of human resources and strategic management have historically ignored each other (Pan et al., 2011). However, their separate paths are converging on a common approach where business strategy and human resource practices become integrated. A unique point to this discussion is that these authors reverse the direction of the fit perspective by stating that employee management processes may in part explain the business strategy and human resource strategy projected by the authors.

A comprehensive research study was undertaken by Chang and Chen (2002) in Taiwan. The sample consisted of about 200 hi-tech organizations. The HR and organizational performance link were evaluated. The finding suggested that the productivity of the employee was directly affected by group work, training, HR planning and appraisal process. It was also established that the turnover of the employee was negatively affected by HR planning.

Additionally, (Beardwell & Claydon, 2007) examined the degree to which organizations use the involvement of employee and complete management of quality principles. In general, these programs were associated with perceived positive organizational results. Although the Lawler et

al. study did not employ the human resource practices used in this study, their research illustrates that various types of personal systems can have an impact on organizational outcomes.

2.3 Conceptual Framework

The conceptual framework of this study is based on the effect of ERP (four variables) on organizational performance as represented diagrammatically in Figure 2.1. The study used a conceptual framework in order to answer the research questions. According to the Study, organizational performance will be conceptualized as being Dependent on ERP (information management, quality control, customer relationship management and human resource management). The conceptual framework diagram is presented below.

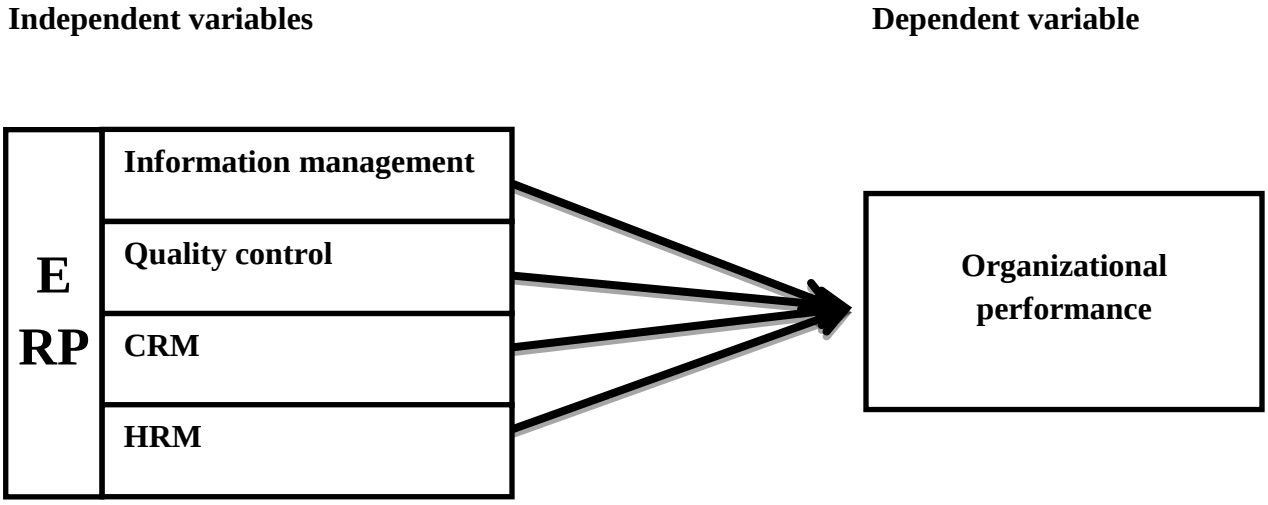


Figure 2. 1: Conceptual Framework of the Study

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

This chapter identifies how the research was done, and its aim is to describe the research techniques and methods applied in this study, to discuss their suitability within the context of various research philosophies, models and methodological approaches. This includes a general overview of the overall research philosophy to be employed in carrying out the research and justification of the chosen approach.

3.1 Description of Study Area

Ethiopian Airlines (Ethiopian), established by Emperor Haile Selassie following the Italian Occupancy, 1935-40. Americans, British and French were enlisted to assist. Ethiopian was formed on December 21, 1945 and began operations on April 8, 1946. Ethiopian made its maiden international flight to Cairo in 1946 flying a Douglas C-47 Skytrain. The American airlines assisted in the development by providing American pilots, maintenance technicians, administrators and managers.

Within 25 years, in 1971, Ethiopian was prepared to operate independently, with Ethiopian personnel. Since its inception, Ethiopian Airlines has grown steadily (Ethiopian Airlines, n.d.). Ethiopian started new flight in 2019 to Istanbul (Turkey), Marsellie (France) Garowe abd Basaso (Somalia). Currently, Ethiopia has 123 international passenger and cargo destinations and 22 domestic destinations.

3.2 Research Design

Research design is an outline of the study which shows that what the researcher will do from the beginning to the very end. It is also a design of arrangement of conditions for data collection and analysis of data in a manner that aim to combine relevance to research purpose with economy in research procedure (C.R. Kothari, 1985). It further constitutes decision regarding what, why, where, when and how concerning an inquiry or a research study (Sekaran, 2003).

The aim of the study was to assess the effect of ERP on organizational performance in the case of Ethiopian Airlines. The objective of the study was to provide better description and explanation of a situation, situation as it exists at present and an association between variables. So, the design of the study is descriptive and explanatory. Descriptive research design is used to describe the data and characteristic about what is being studied, it enables to obtain the current information, it is also used in fact finding of studies and helps to formulate certain principles to give solutions to the problems. The researcher chooses this research design because the data collected from respondents depends on their perception, opinions and experience regarding questions provided for each variable.

According to the response of the participants, the data was analyzed, described and explained both in narrative and statistical way. The researcher also have no control over the variables and will be obliged to report what is happening and attempts to discover causes and effects reflected on variables (C.R. Kothari,1985). So, the study utilized quantitative research approach.

3.3 Population and Sampling Design

3.3.1 Target Population

As target population is defined as the entire group of individuals, events or objects having common observable characteristics to which the researcher wants to generalize the results of the study (Scott W. VanderStoep, Deidre D. Johnson, 2009). The study population was all maintenance repairs and overhaul (MRO) supporting staffs. Since, the number of all maintenance repair and overhaul (MRO) is known, it is easy to provide figure of the population of the study.

3.3.2 Sample Frame

There are 622 maintenance repair and overhaul (MRO) staffs in Ethiopian airline during the data were collected. Out of 622 on sex base, 438 are males and 184 are females.

3.3.3 Sampling Techniques

This section was the very important step for the researcher to determine the sample size of maintenance repair and overhaul (MRO) staffs in Ethiopian airlines to use them as respondents.

Depending on the total population size, using total number of maintenance repair and overhaul (MRO) staffs in Ethiopian airlines for sampling procedures are crucial. Individual maintenance repair and overhaul (MRO) staffs in Ethiopian airline from sampling selected and considered as respondents. Under this study the respondents were selected by using convenient and purposive sampling techniques.

3.3.4 Sample Size Determination

According to (C.R. Kothari, 1985), sample size is the number of items to be selected from the universe to constitute a sample or Sample size is the determined as total number of sampling units needed to be representative of the defined target population; that is the number of elements (people or objects) that have to be included in a drawn sample to ensure appropriate representation of the defined target population. The population (maintenance repair and overhaul (MRO) staffs in Ethiopian airline) is numerous in number and difficult to include all of them in the purpose of gathering information. The sample included those who are directly engaging in ERP system at this time.

To determine sample size (n) in this study, the researcher used formula developed for proportion assuming 95% confidence level, 0.05 for "e" (precision level or acceptable error) and 0.5 p (proportions) for level of variability.

The population definite total sample size is specified by using this ((*Bhattacherjee, A. (2012). Social Science Research Principles, Methods, and Practices. University of South Florida Scholar Commons. Pdf*, n.d.). (Taro Yamane 1967) Formula.

$$\boldsymbol{n = N/(1 + e2 * N)}$$

$$\frac{\mathbf{622}}{\mathbf{(1 + (.05)2 * 622)}}$$

$$\underline{\boldsymbol{n = 244}}$$

Where:

- 'n' implies number of samples to be selected
- 'N' indicates population size
- 'e' stands for acceptable error level.

3.4 Data Collection

3.4.1 Source of Data

According to the need of the research and the reliability of data, both primary and secondary data was collected. Primary data was collected from maintenance repair and overhaul (MRO) staffs in Ethiopian airlines through close ended questionnaire. Secondary data also collected from different journals, publications, books, and company Manuals for assessing the existing findings.

3.4.2 Data Collection Tools

The data was collected through close-ended structured survey questionnaires of (5 point) Likert scale. English version of survey questionnaire was used as suitability to the study. The first section of the questionnaire was designed to an explicit information on demographic aspects of the respondents. Demographics include gender, age, educational, marital status, and experience in Ethiopian airline. The second part includes all questions related to the variables of the topic under study to collect necessary data on factors of ERP that affect organizational performance in Ethiopian airlines through a 5-point Likert's scale from (1) strongly disagree to (5) strongly agree.

3.5 Data Reliability and Validity Test

According to (C.R. Kothari, 1985) Validity test of data collection instrument is a measure to assure an instrument capability to address what it is supposed to measure by including efficiency dimension. Validity had been checked by using face validity; it establishes whether the measuring tool looks like in measuring the correct characteristics. The face validity test of the survey questionnaires was undertaken by showing the instrument of measurement to concerned university scholars.

Pilot study (preliminary test) was carried out by selecting 60 respondents from target population to assess reliability or internal consistency of the main study, from who participated on filling of the main questionnaire. The advantage of doing a pilot study is because it helps to detect potential defects in the measurement procedures, it assists in identifying ambiguous items, and it allows the researcher to become aware of error that may occur due to the wording of question.

Therefore, the researcher ensured the reliability and validity of the questionnaire by undertaking pilot test of instrument. According to, Hill (1998) out of sample size it is optimal to use 20-30 % of participants for conducting pilot test. This reliability can be estimated in terms of Cronbach's alpha (Bhattacherjee, 2012).

Independent Variables (Information, management, ERP quality control, CRM and HRM) **and Dependent Variable** (Organizational performance)	**Cronbach's alpha**	**Number of Items in a Scale**	**Leveled as to George and Mallery**
Information management	.791	6	Good
ERP quality control	.788	8	Good
CRM	.903	5	Very good
HRM	.733	6	Acceptable
Organizational Performance	.781	8	Good

Table 3.1: Reliability Test (**Source: Survey of Questionnaire)**

3.6 Data Processing and Analysis Instruments

The data from the respondents will be processed/encoded for analysis after it is checked and adjusted accordingly to ensure completeness, accuracy and uniformity. All instruments will be assigned a serial number to facilitate identification and data entry into the computer. As for this research, all the important and relevant data will eventually use computer program to analyze the data in depth. The computer analysis will use Statistical Packaging for Social Science (SPSS) version 21. To meet the specified research objectives, descriptive and inferential statistical techniques are adopted to analyze the data.

3.7 Specification of the Model

Organizational performance had been measured by many factors that can improve organizational process and employee's performance to utilize the organizational resource efficiently. One of the factors is ERP which compose information management, quality control, customer relationship management and human resource aspect of the organization. Therefore, these factors are designed as independent variables in the model and the level organizational performance is the dependent variable.

$$Y=\beta 0+ \beta 1\ X1+ \beta 2\ X2+\beta 3\ X3+\beta 4X4+e$$

Whereas,

- Y is dependent variable (Organizational Performance)
- β0 is constant or y intercept is the estimated value of information management, quality control, customer relationship management and human resource are zero
- β1 is the estimated effect of information system on Organizational Performance
- β2 is the estimated effect of quality control on Organizational Performance
- β3 is the estimated effect of customer relationship management on Organizational Performance
- β4 is the estimated effect of human resource on Organizational Performance
- e is error term
- X1 is information management
- X2 is quality control
- X3 is customer relationship management
- X4 is human resource

3.8 Description of the Variables

3.8.1 Independent Variables

3.8.1.1 Information Management

Information management concerns the control over how information is created, acquired, organized, stored, distributed, and used as a means of promoting, efficient and effective information access, processing, and use by people and organizations (Detlor, 2010). The collection, organization as well as management of the information from one sources to others as well as arrangement of information from one or more people or employer called information management.

3.8.1.2 Quality Control

Quality control is a strategic resource that brings about economic value and provides an organization with competitive advantage over its competitors (Powell 1995). Quality control is

hinged on quality and all members of the organization taking part in the affairs of the organization and aims at long term success through customer satisfaction and benefits to members of the organization and the society (ISO 8402, 1994).

3.8.1.3 Customer Relationship Management

Customer relationship management was the key to increase revenue and profit by making a strong and long term relation between company and customer. Customer relationship management also establishes and increase trust between customer and company. This trust was lead the satisfaction, loyalty, cross and up selling, repeat purchasing, lower level of customer complaints, high market share, lower costs and profitability (Rapp, Trainor, & Agnihotri, 2010).

3.8.1.4 Human Resource Management

Human resource management is defined as the process of accomplishing, organizational objectives by acquiring, retaining developing and properly using the human resource in an organization (Dessler, 1997). This function according to Hendry (1990) is critical to the success of any firm and should operate at three levels such as operational, managerial and strategic level.

3.8.2 Dependent Variable (Organizational Performance)

Organizational performance referring to the actual output or results of an organization as measured against its intended outputs, goals and objective (Jon & Randy, 2009). Organizations performance is process to enhance both the effectiveness of an organization and the well-being of its member through planned interventions.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

4.1 Introduction

This chapter deals with the presentation, analysis and interpretation of the data gathered from maintenance repair and overhaul (MRO) support staffs in Ethiopian airlines based on the research questions. The data were obtained through a close-ended type of questionnaire. The main purpose of the study was to assess the effect of ERP on organizational performance. To achieve the objective of the research, 244 sample respondents of maintenance repair and overhaul (MRO) staffs in Ethiopian airline staffs were selected by using (*Taro Yamane (1967*) sample size determination formula. Questionnaires were distributed to all 244 sample respondents and 233 (95.08%) were collected back. The data collected were entered into SPSS version 21, and various statistical steps applied to arrive at the desired output for analysis and presentation. The analysis part was made by using both descriptive and inferential statistics.

4.2 Analysis of Demographic Characteristics

The demographic profiles of respondents are analyzed to show the influence of demographic variables on the organizational performance of Ethiopian airline. It provides data concerning research participant's gender, marital status, age, level of education and experience in Ethiopian airline.

4.2.1 Gender of Respondents

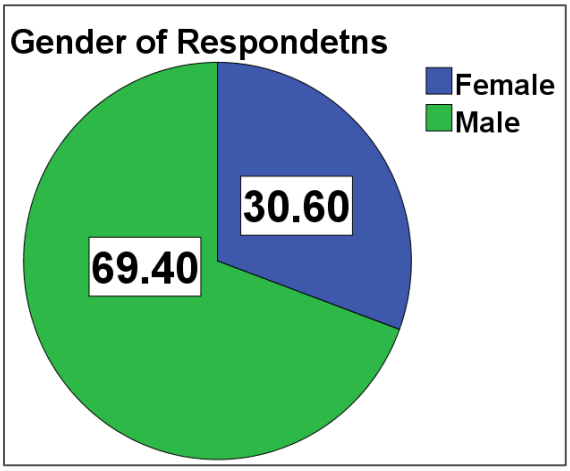


Figure 4. 1: Gender of respondents (Source: Survey of Questionnaire, 2021)

In figure 4.1 above, gender distributions was presented. From 232 respondents of maintenance repair and overhaul (MRO) staffs in Ethiopian airline staffs, 69.40% are male and 30.60% are female employees. This figure shows that the domination the male employees over the women employees for this research and this may have the results can be more depend on the male respondents.

4.2.2 Age of Respondents

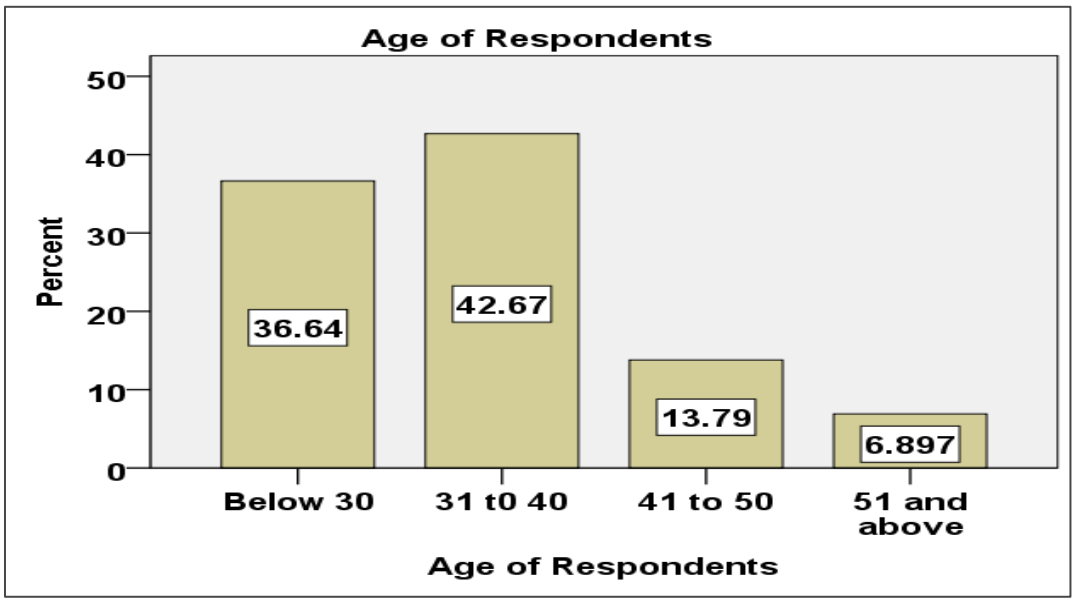
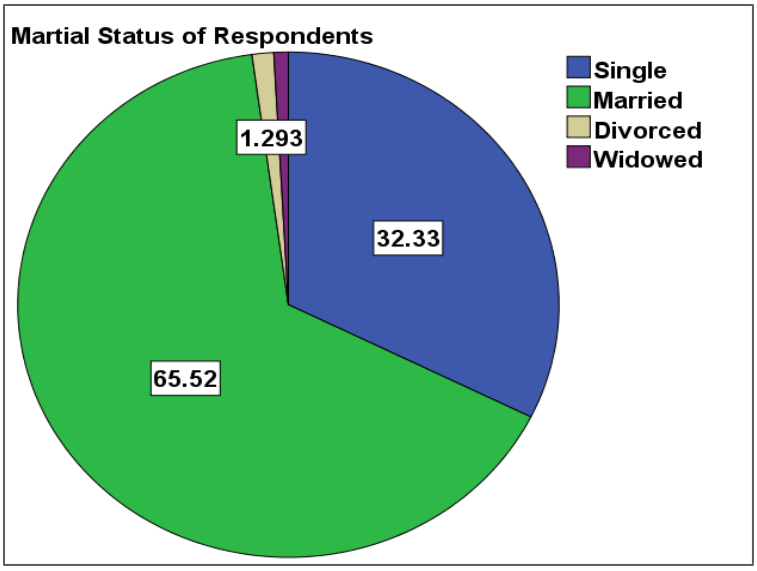


Figure 4. 2: Age of Respondents (Source: Survey of Questionnaire, 2021)

Figure 4.2 show us the age category of the respondents. For the total participant of this research, the age was categorized into for groups which are below 30, 31 – 40, 41 – 50 and 51 and above. As the figure shows, the second age category which is (from 31 – 40) has possessed the majorities of the respondents within 42.67%. The employees with less than 30 years old are the second highly numbered with 36.64%, while with the age of 41 – 50 years old are 13.79% and 6.897 are 51 and above years old. This show the employees of the company's dominated by young (energetic) employees and this can help the company to successfully improve organizational performance as they can adapt to new environments than old age employees.

4.2.3 Marital Status of Respondents

Figure 4. 3: Marital Status of Respondents

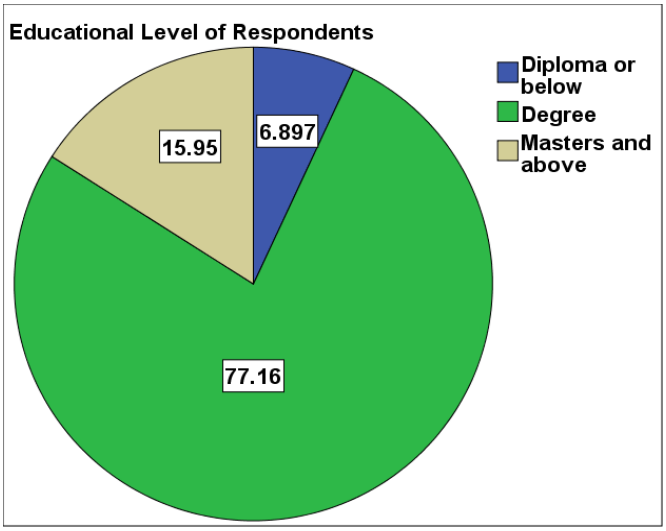


Source: Survey of Questionnaire

As we can see from figure 4.3, the marital statuses of the respondents are presented. From the total respondents, 32.33% are single, 65.52% are married, 1.293 are divorced and the rest are widowed. This may be able to help the company as the majorities of the employees are married and married employees are stabled and more loyal to their job than others.

4.2.4 Educational Level of Respondents

Figure 4. 4: Educational Level of Respondents

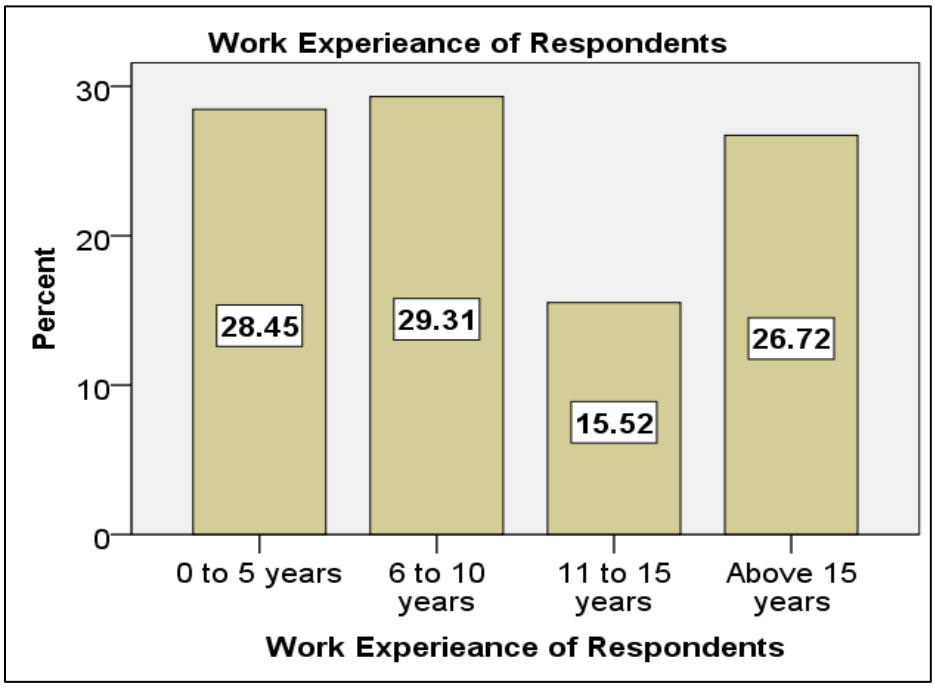


Source: Survey of Questionnaire

The figure 4.4 above also presents the respondents level of education. For this research the employee's educational level was categorized into three groups, which are diploma, and below, first degree and masters and above. From the total research participants, 77..16% of the respondents are covers by first degree holders, 15.95% are master's degree and above and 5.897% are diploma and certificates and holders . This show the company's dominated by degree holders and it can help the company to achieve its objective as they are well educated.

4.2.5 Work Experience of Respondents

Figure 4. 5: Work Experience of Respondents



Source: Survey of Questionnaire

From figure 4.5 we can see the employee's experience of the research participants. The experience was categorized to four groups based on the year of service in the company. As we can see, employees with 0 – 5 years' experience constitute 0f 28.45%, with 6 – 10 are 29.31%, with 11 – 15 are 15.52% and 26.72% are above 15 years of experience. The employees are well experienced and it may help the company to have good performance.

4.3 Descriptive Statistics of the Variables

4.3.1 Descriptive Statistics of Independent Variables

The importance of using this statistical description is to interpret the importance average responses of the respondents to each statement of the variables. The researcher considers, for his measure, an inherent assumption, which states that - with the usage of any Likert scale that, although the scale is truly ordinal in nature, it is assumed to be on an interval scale with

which statistical properties such as the mean can be justifiably used. It is an assumption made quite frequently in empirical studies (Dawson, 2009).

Accordingly, the study applies mean and standard deviation as the best measures for analysis based on the mean range developed by (*C.R. Kothari - Research Methodology_ Methods and Techniques (1985, New Age Publications (Academic)). Pdf*, n.d.) (Al-Sayaad, J., Rabea, A., Samrah, A., 2006) as the following table:

Table 4. 1: Five-Scaled Likert's Criterion

No	**Mean range option**	**Response option**
1	1.00 -1.80	Strongly disagree
2	1.80 -2.60	Disagree
3	2.60 -3.40	Neutral
4	3.40 – 4.20	Agree
5	4.20 – 500	Strongly agree

Source: (Al-Sayaad, J., Rabea, A., Samrah, A., 2006)

Standard deviation is a widely used measurement of variability or diversity used in statistics and probability theory. It shows how much variation or "dispersion" there is from the average (mean or expected value). The minimum and maximum values are also considered to show that exact answers of the respondents of the questionnaire. The sample mean is to show the majority of respondents as best predictors of the population.

4.3.1.1 Descriptive Statistics of Information Management

Table 4. 2: Information Management

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
In my firm ERP helps information decentralized	232	1	5	3.23	1.046
ERP helps me to access information on my desk	232	1	5	3.39	.952
ERP helps management to freely share information	232	1	5	3.45	1.056
ERP helps me to report to my supervisor on my desk	232	1	5	3.77	.973
ERP helps me to coordinate the work with my team	232	1	5	3.78	.882
ERP helps me to get the right information on time	232	1	5	3.69	.980
Valid N (listwise)	232				

Source: Survey of Questionnaire

As shown in the above table 4.2, the respondents were asked on information management of the organization. Accordingly, the results of survey for item 1 and 2 which are "In my firm ERP helps information decentralized" and "ERP helps me to access information on my desk" the tables shows their mean value of 3.23 and 3.39 respectively. These shows, the majorities of the respondents are indifferent on the statements used to address the information management of the organization.

The same table also shows the result of item 3 and 4 such as "ERP helps management to freely share information" and "ERP helps me to report to my supervisor on my desk" and the table expresses the mean values of the items as 3.45 and 3.77 respectively. The result shows the majorities of the respondents are agreed on the statements used to the information management of the organization.

This table also describes item 5 and 6, which are "ERP helps me to coordinate the work with my team" and "ERP helps me to get the right information on time", the table also shows the mean for the items are 3.78 and 3.69 respectively. This means the majorities of the respondents are agreed on the statements used to address the information management of the organization.

Generally, the response from maintenance repair and overhaul (MRO) staffs in Ethiopian airline on the information management of the organization has cumulative mean result of 3.55. This result implies that the respondents are agreed on the above statements used to express what the information management of the organization look like in Ethiopian airline. Their response was positive to the information management of the organization. This variable also has 0.98 values of cumulative standard deviation which shows the variation of employees perception to items used. Therefore, ERP support the organization performance as it helps to manage information within the organization in Ethiopian airline since it is one of the variables which can affect the performance of the organization.

4.3.1.2 Descriptive Statistics of ERP Quality Control

Table 4. 3: ERP Quality Control

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
In my firm ERP has accurate data	232	1	5	4.13	.795
In my firm ERP help flexibility	232	2	5	4.24	.734
In my firm ERP is easy to learn	232	1	5	4.17	.787
In my firm ERP is easy to use	232	1	5	3.77	1.031
In my firm ERP is reliable	232	1	5	3.91	.928
In my firm ERP allows data integration	232	1	5	3.24	.780
In my firm ERP allows for customization	232	1	5	3.25	.835
In my firm ERP is efficient	232	1	5	3.26	.812
Valid N (listwise)	232				

Source: Survey of Questionnaire

This table 4.3 shows as the descriptive statistics of quality control of ERP effect on organizational performance. So, the result of the survey for the eight items is shown in the table. For statement 1, 2 and 3 which are “In my firm ERP has accurate data”, “In my firm ERP help flexibility” and “In my firm ERP is easy to learn” the mean results are 4.13, 4.24 and 4.17 respectively. This implies, the respondents are agreed, strongly agreed and agreed to the statements respectively.

This table also describes item 4 and 5 which are “In my firm ERP is easy to use”, and “In my firm ERP is reliable”, the table also shows the mean for the items are 3.77 and 3.91 respectively. This means the majorities of the respondents are agreed on the statements used to address quality control of ERP effect on organizational performance

Again, the table also shows the result of item 6, 7 and 8 “In my firm ERP allows data integration”, “In my firm ERP allows for customization” and “In my firm ERP is efficient”. These items got the mean result of 3.24, 3.25 and 3.26 respectively, which means the respondents are neutral to the statements used to address quality control of ERP effect on organizational performance.

Generally, the result of the survey from maintenance repair and overhaul (MRO) staffs in Ethiopian airline for the variable of quality control of ERP effect on organizational performance has a cumulative mean of 3.75 which is between 3.4 and 4.2. This result shows that the employees of the company maintenance repair and overhaul (MRO) staffs in Ethiopian airline are agreed on the statement used to measure the quality control of ERP effect on organizational performance. The variable also has the cumulative standard deviation of 0.83 which shows the variation of the responses from the research participants. Therefore, ERP helps organizational performance as it helps the organization to have quality process since it is one of the independent variable to affect organizational performance.

4.3.1.3 Descriptive Statistics of CRM

Table 4. 4 Customer Relationship Management

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Using of ERP helps my firm to satisfy the customers	232	1	5	3.68	.807
Using of ERP helps my firm to acquiring new customers	232	1	5	3.62	.786
Using of ERP helps my firm to build strong relationship with customers	232	1	5	3.50	.827
Using of ERP help my firm to increase the market share	232	1	5	3.59	.812
Using of ERP help my firm to gain competitive advantage	232	1	5	3.62	.823
Valid N (listwise)	232				

Source: Survey of Questionnaire

Table 4.4 is showing the descriptive statics result of customer relationship management. Accordingly, the results of survey for item 1, 2, 3, 4 and 5 which are "Using of ERP helps my firm to satisfy the customers", "Using of ERP helps my firm to acquiring new customers", "Using of ERP helps my firm to build strong relationship with customers", "Using of ERP help my firm to increase the market share" and "Using of ERP help my firm to gain competitive advantage" the tables shows their mean value of 3.68, 3.62, 3.50, 3.59 and 3.62 respectively. These shows, the majorities of the respondents are agreed on the statements used to address the effect of CRM on organizational performance.

Generally, the response from maintenance repair and overhaul (MRO) staffs in Ethiopian airline on the effect of CRM on organizational performance has cumulative mean result of 3.6. This result implies that the respondents are agreed on the above statements used to express effect of CRM on organizational performance look like in Ethiopian airline. This variable also has 0.81

values of cumulative standard deviation which shows the variation of employees perception to items used. Therefore, ERP support the organization performance as it helps to CRM within the organization in Ethiopian airline since it is one of the variables which can affect the performance of the organization.

4.3.1.4 Descriptive Statistics of HRM

Table 4. 5: Human Resource Management

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
ERP facilitate trainings in my organization	232	1	5	3.49	.784
ERP helps to track with performance appraisal	232	1	5	3.23	1.046
ERP helps in promotion decision	232	1	5	3.39	.952
ERP helps to improve my performance	232	1	5	3.45	1.056
ERP helps in suggesting and commenting on HRM issues	232	1	5	3.77	.973
ERP can be used for fair rewarding system	232	1	5	3.78	.882
Valid N (listwise)	232				

Source: Survey of Questionnaire

This table 4.5 shows as the descriptive statistics of human resource management effect on organizational performance. So, the result of the survey for the six items is shown in the table. For statement 1, 2 and 3 which are “ERP facilitate trainings in my organization”, “ERP helps to track with performance appraisal” and “ERP helps in promotion decision” the mean results are 3.49, 3.23 and 3.39 respectively. This implies, the respondents are agreed for the first statement and neutral to the other statements respectively.

This table also describes item 4, 5 and 6 which are “ERP helps to improve my performance”, “ERP helps in suggesting and commenting on HRM issues” and “ERP can be used for fair rewarding system”, the table also shows the mean for the items are 3.45, 3.77 and 3.78 respectively. This means the majorities of the respondents are agreed on the statements used to address the effect HRM on organizational performance

Generally, the result of the survey from maintenance repair and overhaul (MRO) staffs in Ethiopian airline for the variable of the effect HRM on organizational performance has a cumulative mean of 3.52 which is between 3.4 and 4.2. This result shows that the employees of the company maintenance repair and overhaul (MRO) staffs in Ethiopian airline are agreed on the statement used to measure the effect of ERP effect on organizational performance. The variable also has the cumulative standard deviation of 0.95 which shows the variation of the responses from the research participants. Therefore, ERP helps organizational performance as it helps the organization utilize human resource management since it is one of the independent variable to affect organizational performance.

4.3.2 Descriptive Statistics of Dependent Variable/Organizational Performance

Table 4. 6: Organizational Performance

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
ERP helps my firm to has stronger growth in sales revenue	232	1	5	3.69	.980
ERP helps my firm able to acquire new customers.	232	1	5	4.13	.795
ERP helps my firm to acquire a greater market share.	232	2	5	4.24	.734
ERP helps my firm to increase sales to existing customers	232	1	5	4.17	.787
ERP helps my firm to facilitates profit maximization	232	1	5	3.77	1.031
ERP helps my firm to improved business performance	232	1	5	3.91	.928
ERP helps my firm to improves its competitive advantage	232	1	5	3.24	.780
ERP helps my firm to and lowers transaction costs	232	1	5	3.25	.835
Valid N (listwise)	232				

Source: Survey of Questionnaire

As shown in the above table 4.6, the respondents were asked on organizational performance of the organization. Accordingly, the results of survey for item 1 and 2 which are "ERP helps my firm to has stronger growth in sales revenue" and "ERP helps my firm able to acquire new customers." the tables shows their mean value of 3.26 and 4.13 respectively. These shows, the majorities of the respondents are agreed on the statements used to address the organizational performance. The same table also shows the result of item 3 "ERP helps my firm to acquire a greater market share". The result shows the majorities of the respondents are strongly agreed on the statements used to address organizational performance.

This table also describes item 4, 5 and 6, which are "ERP helps my firm to increase sales to existing customers", "ERP helps my firm to facilitate profit maximization", and "ERP helps my firm to improved business performance". The table also shows the mean for the items are 4.17, 3.77 and 3.91 respectively. This means the majorities of the respondents are agreed on the statements used to address the organizational performance. The employees are also answered indifferently to the rest of two statements which has 3.24 and 3.25 respectively.

Generally, the result of the survey from maintenance repair and overhaul (MRO) staffs in Ethiopian airline for the variable of the organizational performance has 3.8 cumulative mean which means the majorities of the respondents are agreed to the statements used to measure the organizational performance of Ethiopian airline. Therefore, there is a possibility of organizational performance improvement because of ERP implementation in Ethiopian airline.

4.3.3 Summary of Descriptive Analysis of the Variables

Under this section the summary of the variables will be presented. The variables are described here according to their cumulative mean values.

Table 4. 7: Summary of Descriptive Analysis of the Variables

No	Variables	C. mean	Scale used	Scale level
Independent variables				
1	Information management	3.55	Ordinal	**Agree**
2	ERP quality control	3.75	Ordinal	**Agree**
3	Customer relationship management	3.6	Ordinal	**Agree**
4	Human resource management	3.52	Ordinal	**Agree**
Dependent variable				
5	Organizational performance	3.8	Ordinal	**Agree**

Source: Survey of Questionnaire, 2021

To summarize the above table, all the independent variables and the dependent variable of the study are got the positive response of the measurements. These variables got the scale level of agree. To generalize the exact relationships of the variables and the research model the inferential analysis was undertaken in the next portion.

4.4 Analysis of Inferential Statistics

In this section, the results of inferential statistics are presented. The dependent variable, which is the organizational performance, is used for inferential analysis against the independent variables. For the purpose of achieving of the objective of the study, both Karl Pearson's Correlation Coefficient and regression analyses were performed.

4.4.1 Pearson Correlation Analysis

The researcher uses Karl Pearson's coefficient of correlation (or simple correlation), because it is the most widely used method of measuring the degree of relationship between two variables (C.R. Kothari, 1985).

4.4.1.1 Organizational Performance and Information Management Correlation

Table 4. 8: Organizational Performance and Information Management Correlation

Correlations			
		Organizational performance	Information management
Organizational performance	Pearson Correlation	1	.731*
	Sig. (2-tailed)		.000
	N	232	232
Information management	Pearson Correlation	.731*	1
	Sig. (2-tailed)	.000	
	N	232	232
*. Correlation is significant at the 0.05 level (2-tailed).			

Source: Survey of Questionnaire

Table 4.8 shows the perfect positive correlation between organizational performance and organizational information management, which is significant at 0.05 levels. Therefore the relationship between organizational performance and information management has a strong correlation which is perfectly related.

4.4.1.2 Organizational Performance and ERP Quality Control Correlation

Table 4. 9: Organizational Performance and ERP Quality Control Correlation

Correlations			
		Organizational performance	ERP quality control
Organizational performance	Pearson Correlation	1	.241**
	Sig. (2-tailed)		.000
	N	232	232
ERP quality control	Pearson Correlation	.241**	1
	Sig. (2-tailed)	.000	
	N	232	232
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Survey of Questionnaire

Table 4.9 shows the perfect positive correlation between organizational performance and the quality control of ERP, which is significant at 0.01 levels. Therefore, the relationships between the organizational performance and the quality control of ERP have weak correlation which is positively related.

4.4.1.3 Organizational Performance and CRM Correlation

Table 4. 10: Organizational Performance and CRM Correlation

Correlations			
		Organizational performance	CRM
Organizational performance	Pearson Correlation	1	.813*
	Sig. (2-tailed)		.000
	N	232	232
CRM	Pearson Correlation	.813*	1
	Sig. (2-tailed)	.000	
	N	232	232
*. Correlation is significant at the 0.05 level (2-tailed).			

Source: Survey of Questionnaire

Table 4.10 shows the perfect positive correlation between organizational performance and organizational CRM, which is significant at 0.05 levels. Therefore the relationship between organizational performance and CRM has a strong correlation which is perfectly related.

4.4.1.4 Organizational Performance and HRM Correlation

Table 4. 11: Organizational Performance and HRM Correlation

Correlations			
		Organizational performance	HRM
Organizational performance	Pearson Correlation	1	.538**
	Sig. (2-tailed)		.000
	N	232	232
HRM	Pearson Correlation	.538**	1
	Sig. (2-tailed)	.000	
	N	232	232
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Survey of Questionnaire

Table 4.11 shows the perfect positive correlation between organizational performance and the HRM, which is significant at 0.01 levels. Therefore, the relationships between the organizational performance and the quality control of ERP have moderate correlation which is positively related.

4.4.2 Regression Analysis

Multiple regression analysis was applied in the study to examine the variables explanatory nature. Multiple regressions are usually used in the research where there are two or more independent variables that are hypothesized to influence one or more dependent variables (*Paul Baker, 2006*). Regression analysis can determine how much of the variation in the dependent variable can be explained by the independent variables.

4.4.2.1 Multi Collinearity Test

The Variance Inflation Factor (VIF) is a measure of multi Collinearity among the independent variables. For the multi collinearity to be good or less, the tolerance values should be greater than 0.1 and the VIF values should not exceed 10.0 ((*Julie Pallant, 2001*).

Table 4. 12: Multi Collinearity Test

Coefficients[a]							
Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**Collinearity Statistics**	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.414	.247		.147	.000		
Information management	.651	.712	.582	.502	.000	.496	2.016
ERP quality control	.199	.086	.196	.318	.000	.424	2.358
CRM	.383	.477	.348	.488	.000	.319	3.130
HRM	.256	.050	.224	.384	.000	.913	1.095
a. Dependent Variable: Organizational performance							

Source: Survey of Questionnaire

Table 4.12 shows the multi collinearity of among independent variables. As the table depicts the result of the variance inflation factor (VIF) is greater than 0.1 and less than 10, the variables are free from collinearity problem.

4.4.2.2 Regression Analysis of Independent Variables and Dependent Variable

This section presents finding obtained from the data gathered through questionnaire by using multiple linear regression analysis. Multiple regressions analysis was conducted to determine whether a relationship exists between the independent variables and the dependent variable and their level of significance.

Table 4. 13: Model Summary

Model Summary[b]				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.848[a]	.72	.7091	.624
a. Predictors: (Constant), information management, ERP quality control, CRM, HRM				
b. Dependent Variable: Organizational performance				

Source: Survey of Questionnaire

From table 4.13 above, "R" has a score of .848. It is a multiple correlation coefficient between dependent and independent variables of the study. "R" represents the value of the multiple correlation coefficients between the predictors and the outcome (Field, A., 2005).

From this table, also we can see the value of R^2 which is $\mathbf{R^2}$= .72. This implies that 72% of the total variation in the dependent variable is explained or caused by the influence of these independent variables.

4.4.2.3. Model Linearity test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.135	4	5.284	25.531	.000[b]
	Residual	46.979	227	.207		
	Total	68.114	231			

a. Dependent Variable: OP

b. Predictors: (Constant), HRM, CRM, IM, QC

Table 4. 144: Model Linearity test

The table shows the overall significance /acceptability of the model from statistical perspectives. As the significance value of F statistics shows a value (.000), which is less than P<0.05, the model is significant.

4.4.2.4. Heteroskedasticity test

Decisions on the scatterplot graphic heteroskedasticity test show that there is no clear pattern and it is a spreading dot, then the indication is “no heteroskedasticity problem”.

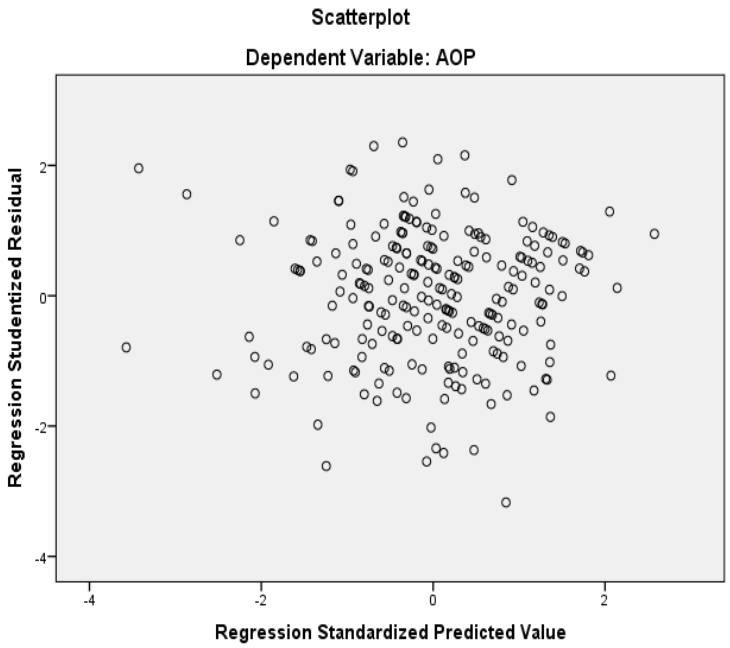


Figure 4. 6: Heteroskedasticity test

4.4.2.5. Test for normality

It is used for determining whether the data is well modeled by normal distribution or not. This test of normal distribution could be checked by graphical method of tests. The normality assumption assumes a critical role when a study is dealing with a small sample size, data less than 100 observation. Even though the normality assumption is not a treat since the observation or sample size of the study is large enough, more than 100 observations, and the researcher tested it using plot.

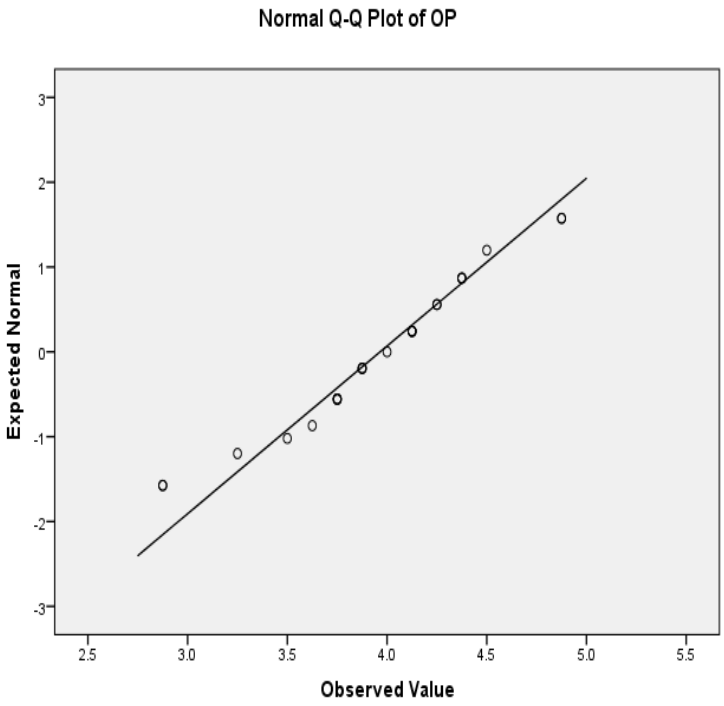


Figure 4.7: Normality test

The above figure shows that the residuals of the model are normally distributed, and the model is free from normality problem.

4.5. Hypothesis Testing

The goal of hypothesis testing is to determine the likelihood that a population parameter is likely to be true. The researcher tests whether the value stated in the null hypothesis is likely to be true. An alternative hypothesis (Ha) is a statement that directly contradicts the null hypothesis.

The significance (sig.) value expresses a value to accept or reject the (null) hypotheses. The p-value is the probability that the correlation is one just by chance. Therefore, the smaller the p-value, the better will be. The general rule is: reject H0 if $p < .05$ and accept H0 if $p \geq .05$ (Julie Pallant, 2001).

This part of the study, proof of the null hypothesis is made based on table below, which is the table calculated for multi collinearity test.

Table 4. 15: Independent Variables with their Coefficients and P-Value

Model	B	Beta (β)	P-value (sig.)
(constant)	**.414**		**.00**
Information management		.651	**.00**
ERP quality control		.199	**.00**
CRM		.383	**.00**
HRM		.256	**.00**

Source: Survey of Questionnaire, 2021

There were four null and four alternative hypotheses proposed in the study. Here testing results are discussed.

Hypothesis 1

Ho_1: The organization, information management has no effect on organizational performance of Ethiopian airline.

Ha_1: The organization, information management has an effect on organizational performance of Ethiopian airline.

Hypothesis two

Ho_2: ERP quality control has no effect on organizational performance of Ethiopian airline.

Ha_2: ERP quality control has an effect on organizational performance of Ethiopian airline.

Hypothesis 3

Ho_3: CRM has no effect on organizational performance of Ethiopian airline

Ha_3: CRM has an effect on organizational performance of Ethiopian airline

Hypothesis 4

Ho_4: HRM has no effect on organizational performance of Ethiopian airline

Ha_4: HRM has an effect on organizational performance of Ethiopian airline

For the all hypothesis, Table 4.15 shows the p-value of the variable is less than .05. Therefore, we can reject the entire null hypothesis (**Ho**) and accept the alternative one (**Ha**). This implies all the independent variables of the study have an effect on the organizational performance.

Table 4. 16: Summary of Hypothesis Testing

No.	Hypothesis	Tool	Result
Ha_1	The organization, information management has an effect on organizational performance of Ethiopian airline.	Inferential Regression	**Accepted**
Ha_2	ERP quality control has an effect on organizational performance of Ethiopian airline.	Inferential Regression	**Accepted**
Ha_3	CRM has an effect on organizational performance of Ethiopian airline	Descriptive analysis	**Accepted**
Ha_4	HRM has an effect on organizational performance of Ethiopian airline	Inferential Regression	**Accepted**

Source: Survey of Questionnaire

In addition to this, by using the results of the above table which is the multi collinearity test coefficients, the following regression equation was formulated for this study and tries to show the effects of independent variables and the dependent variable.

Depending on the equation formula proposed by researcher, in chapter three:

$$\mathbf{Y = \beta 0 + \ \beta 1\ X1 + \ \beta 2\ X2 + \beta 3\ X3 + \beta 4 X + e}$$

And, by taking a result from table 4.12.

$$\boldsymbol{Y = .414 + (.651)X1 + (.199)X2 + (.383)X3 + (.256)X4 + e}$$

Whereas,

- ✓ **Y is** the dependent variable (organizational performance)
- ✓ **β0 is a** constant or y intercept when the estimated value of independent variables is zero
- ✓ **β1** is the estimated effect of organizational information management
- ✓ **β2** is the estimated effect of ERP quality control
- ✓ **β3** is the estimated effect of CRM
- ✓ **β4** is the estimated effect of HRM
- ✓ **e** is error term
- ✓ **X1** is information management
- ✓ **X2** is ERP quality control
- ✓ **X3** is CRM
- ✓ **X4** is HRM

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Major Findings

The main objective of the study was to assess the effect of ERP on organizational performance of Ethiopian airline Addis Ababa, Ethiopia. There was a total of 232 questionnaires collected from respondents are used for the study. Based on the analysis, discussion and related issues of the research, the following summaries are made; accordingly.

- ✓ Regarding demographic analysis, all the attributes used shows majority of the respondents are male, young, married first degree holders and well experienced.
- ✓ For the descriptive analysis of independent variables of the study, as it is clearly observed from the mean value and its analyses, the independent variables possess average mean values of 3.55 for organizational information management, 3.75 for ERP quality control, 3.6 for customer relationship management and 3.52 for human resource management which shows positive response to the variables. The descriptive analysis of dependent variables of the study, organizational performance in Ethiopian airlines has a cumulative mean of 3.8 and which shows positive response to the variable.
- ✓ The result of inferential analysis of the study verifies strong and perfectly positive relationships of dependent variables for information management and CRM. ERP quality control and human resource management have weak and moderate relationship respectively, with the dependent variable in the Ethiopian airlines while they are perfectly positive.
- ✓ According to regression model summary, the coefficient of determination is (R^2) = 72%. This shows about 72% of the total variance in the in the dependent variable is caused by this independent variable used under this research.
- ✓ The influences of independent variables over the dependent variable, from highest influence to lowest are IM, CRM, HRM and ERP quality control, respectively.

5.2 Conclusions

This research was conducted on Ethiopian airlines to assess the effect of ERP on organizational performance. Based on the objectives and findings of the study, the following conclusions are worth drawn by alleviating the factors of ERP effect on organizational performance.

There is a possibility of ERP contribution in the good performance of Ethiopian airline as the variable got strong correlation with the dependent variable. Also, majority of the respondents are agreed on the item provided to address the ERP quality control in the organization. But it has weak correlation with the effect it has on organizational performance. This is the potential chance for the company, if it can change the ERP quality control usage to improve organizational performance of the company.

And, there is a possibility of ERP contribution in the good performance of Ethiopian airlines as the variable got strong correlation with the CRM effect. Again, majority of the respondents are positively agreed on the item provided to address the HRM effect on the organizational performance. But it has moderate correlation with the effect it has on organizational performance. This also have a potential chance for the company, if it can change the ERP usage on HRM to improve organizational performance of the company.

Generally, the proposed variables such as ERP quality control and human resource management shows weak and moderate effect on organizational performance of Ethiopian airline. Therefore, the company's organizational performance can be successfully improved because of ERP if the company utilize these two components of ERP to its advantage.

Regarding the dependent Variable, Majority of the respondents are positively agreed on the item provided to address the organizational performance of Ethiopian airline. Therefore, the organization performance can be improved more if the company can utilize the feature of ERP more efficiently.

5.3 Recommendation

As suggestions for the effect of ERP on organizational performance of Ethiopian airlines is required, based on the findings and conclusions of the study, the following recommendations are forwarded.

- ✓ The company should give a great consideration how can efficiently and effectively utilize the features of ERP and other new systems that can boost the performance of the company.
- ✓ The company should give an attention how to make the ERP quality control of the organization and HRM practice can strongly and positively affect the organizational performance of the company.
- ✓ The company should find a way it that can sustain the good effect of information management and CRM on the performance of the company.
- ✓ The company should have to motivate employee's that can help them to relay on the technological advancement to the sake of the organizational performance.
- ✓ Finally, should follow-up the progress of ERP effect on its performance and give the right feedback and corrections timely when it is needed.

5.4 Suggestion for Future Study

This study assesses the effects of ERP on organizational performance on Ethiopian airlines by the variables of organizational information management, ERP quality control, CRM and HRM. But it's obvious that it needs more to conduct such research with regard to resource utilization effect on organizational performance.

For further and future research, the following areas are suggested:

- ✓ This paper has focused only on four common components ERP as independent variables. So, it is possible to extend the scope of this research to other components of the ERP system like organizational legacy, supply chain management and other features of the system.
- ✓ This paper has focused only on Ethiopian airline. So, it is possible to extend the scope of this research at country level for other organizations that implement ERP to know the effect of the system on the performance of the business at national level.
- ✓ Finally, ERP is not the only factor that can affect organizational performance of Ethiopian airline. So, it needs further studies on the organizational performance issues and other related points too.

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APPENDIX:

RESEARCH QUESTIONAIRE

Addis Ababa University

College of Business and Economics

Department of Business Administration

Master of Business Administration (MBA)

Dear respondent, my name is Adane Siyamregn Mehari and I am a post graduate student of Master of Business Administration at Addis Ababa University. Currently, I am undertaking a master's thesis entitled "***The effect of Enterprise Resource Planning (ERP) on organizational performance: a case in Ethiopian Airlines***". You are one of the respondents selected to participate on this study. Please assist me in giving correct and complete information so as to present a representative finding on the current effect of ERP on organizational performance in your organization. Your participation is entirely voluntary and the questionnaire is completely anonymous.

Finally, I confirm you that the information that you share with me will be kept confidential and only used for the academic purpose. No individual's responses will be identified as such and the identity of persons responding will not be published or released to anyone. All information will be used for academic purposes only. Thank you in advance for your kind cooperation and dedicating your time.

Sincerely,

Adane Siyamregn Mehari

Please use the following addresses to return the questionnaire

Email: adanes@ethiopianairlines.com and 8109adanes@gmail.com

Phone number: +251 912460703 (Telegram only)

General Instruction:

- There is No need to write your name
- Please tick/put "**X**" in the provided box

Part I: Demographic Profile

1. Gender:

☐ Male ☐ Female

2. Age:

☐ Less than 25 ☐ 31 – 35 year ☐ 41 and above

☐ 25– 30 year ☐ 36 - 40 year

3. Marital status:

☐ Single ☐ Married ☐ Divorced

4. Educational status:

☐ Certificate or Diploma ☐ First Degree

☐ Master Degree and Above

5. Year of experience in Ethiopian Airlines:

☐ Less than 5 years ☐ Above 10 years

☐ 5 -10 years

Part II: How valuable is information management with ERP in your organization?

This section of the survey deals with your opinions about information management at your work. Please show the extent to which you think your work environment reflects the stated statements. You should rank the statements as follows:

1	2	3	4	5
Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

No	Statements	Your Response				
		1	2	3	4	5
1	In my firm ERP helps information decentralized					
2	ERP helps me to access information on my desk					
3	ERP helps management to freely share information					
4	ERP helps me to report to my supervisor on my desk					
5	ERP helps me to coordinate the work with my team					
6	ERP helps me to get the right information on time					

Part III: how is the quality control ERP in your organization?

This section of the survey deals with your opinions about the qualities of ERP system in your organization. Please show the extent to which you think that the stated statements are the reality of the system and you should rank the statements as follows:

1	2	3	4	5
Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

No	Statements	Your Response				
		1	2	3	4	5
1	In my firm ERP has accurate data					
2	In my firm ERP help flexibility					
3	In my firm ERP is easy to learn					
4	In my firm ERP is easy to use					
5	In my firm ERP is reliable					
6	In my firm ERP allows data integration					
7	In my firm ERP allows for customization					
8	In my firm ERP is efficient					

Part IV: how is CRM with ERP in your organization?

This section of the survey deals with your opinions about the CRM in your organization. Please show the extent to which you think that the stated statements are the reality of your organization and you should rank the statements as follows:

1	2	3	4	5
Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

No	Statements	Your Response				
		1	2	3	4	5
1	Using of ERP helps my firm to satisfy the customers					
2	Using of ERP helps my firm to acquiring new customers					
3	Using of ERP helps my firm to build strong relationship with customers					
4	Using of ERP help my firm to increase the market share					
5	Using of ERP help my firm to gain competitive advantage					

Part V: how is HRM with ERP in your organization?

This section of the survey deals with your opinions about the HRM in your organization. Please show the extent to which you think that the stated statements are the reality of your organization and you should rank the statements as follows:

No	Statements	Your Response				
		1	2	3	4	5
1	ERP facilitate trainings in my organization					
2	ERP helps to track with performance appraisal					
3	ERP helps in promotion decision					
4	ERP helps to improve my performance					
5	ERP helps in suggesting and commenting on HRM issues					
6	ERP can be used for fair rewarding system					

Part VI: Effect of ERP on Organizational Performance

This section of the survey deals with your organizational performance. Please show the extent to which you think that the stated statements are the reality of the performance in the organization and you should rank the statements as follows:

1	2	3	4	5
Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

No	Statements	Your Response				
		1	2	3	4	5
1	ERP help my firm to has stronger growth in sales revenue					
2	ERP help my firm able to acquire new customers.					
3	ERP help my firm to acquire a greater market share.					
4	ERP help my firm to increase sales to existing customers					
5	ERP help my firm to facilitates profit maximization					
6	ERP help my firm to improved business performance					
7	ERP help my firm to improves its competitive advantage					
8	ERP help my firm to and lowers transaction costs					

Thank you!!