



**ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF MANAGEMENT**

**The effect of Business Process Management on Organizational
Performance: In the Case of Ethio Telecom**

By: Lula Fekade

A Thesis Submitted to Addis Ababa University College of Business and Economics in partial fulfillment for the requirement of the Degree of Master in Quality Management.

ADVISOR: Meskerem Mitiku (PhD)

February 2023
Addis Ababa, Ethiopia



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This is to certify that the thesis entitled “The effect of Business Process Management on Organizational Performance: In the Case of Ethio Telecom”, **department** of Management **school** **of** graduate studies, and has been carried out by Lula Fekade, under my/our supervision. Therefore, I/we recommend that the student has fulfilled the requirements and hence hereby can submit the thesis to the department for defence.

Meskerem Mitiku (PhD)



08/6/23

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Signature

Date

Declaration

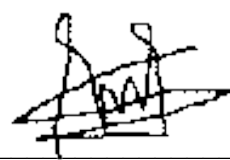
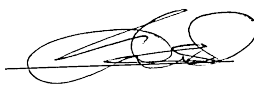
I hereby declare that this MSC Thesis is my original work and has not been presented for a degree in any other university, and all sources of material used for this thesis has been duly acknowledged.

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Abstract

This research paper has mainly focused on assessing the effect of Business Process Management on organizational performance, in the case of Ethio Telecom. An explanatory research design and quantitative research approach was applied on a data collected through questionnaire distributed to randomly selected sample to achieve this overriding objective. As a major method of analysis we have used a correlation and multiple linear regression technique (with the help of SPSS software Version 20) to investigate the effect of BPM practices on organization performance. As per the findings of the study, the effect of strategic alignment and Employee involvement on organizational performance was positive and statistically significant. This positive effect on organizational performance implied as productivity was increased due to staff training and development, which was used in order to reinforce certain behaviors and attitudes. The successful alignment of strategic direction in the organization has positively contributed to improvements in overall performance. On the other hand, change initiatives was used by the management to cultivate the culture of innovation regarding employees' involvement and empowerment, which in turn affected the institution's overall performance. In general, the institute's top management shall take all necessary measures for increased employee involvement, adoption of information technology and alignment of strategic direction with regard to business process management.

Key Words: Organizational Performance

Business Process Management

Multiple regression

Acronyms

BPM: Business Process Management

BPMS: Business Process Management System

BP: Business Process

BSC: Balanced Score Card

ERP : Enterprise Resource Planning

Et: Ethio Telecom

ETA: Ethiopian Telecommunications Authority

ETC: Ethiopian Telecommunications Corporation

IS: Information System

IT: Information Technology

KRA: Kenya Revenue Authority

MIS: Management Information System

OP: Organizational Performance

PMM: Performance Measurement and Management

PMS: Performance Management System

QC: Quality Control

PDP: Performance Development Plan

ROA: Return on Asset

ROE: Return on Equity

SPSS: Statistical Package for Social Sciences

VSAT: Very small aperture terminal

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CHAPTER ONE

1. INTRODUCTION

1.1. BACKGROUND OF THE STUDY

Business process management (BPM) is receiving much attention in academic circles, as well as in business practice. One of the main reasons behind its adoption within organizations is enhancing overall organizational performance (OP) (Robsen, 2004).

Organizations are no longer viewed as a collection of functional areas, but as a combination of highly integrated processes. Additionally, processes are now viewed as assets requiring investment and development as they mature. Thus, business process management (BPM) is becoming increasingly important. In addition, competitiveness increasingly demands that the organizations reinvent themselves in a smart, fast and sustainable manner from performance point of view (Vander and Hoftede, 2003).

Business process management (BPM) considers relatively one of the new topics in management field, and it connects with the knowledge about running current processes or operations, redesign it in a way that reduce the wasted effort and increase the efficiency, and implement changes in the processes to improve the organizational performance, where it incorporate and merge between the information technology and the processes management structure for the sake of improvement, where the effective management of processes are essential to maximize the value of organizations (Trkman, 2010). Singh, (2012) draws attention to the tremendous positive improvements that the BPM practices can generate for businesses in terms of the cost, quality, speed and then service. Thanks to BPM, which is a visual process representation, firms can analyze the business process and identify the unnecessary or repetitive tasks that are not only origin of wasting time but also generate additional costs.

The availability of information is one of the most prominent results of BPM, which develops good understanding of business orientation, fluent decision-making process and eventually leads to reducing it processing time. All of these improvement areas benefit the enhancement of the business financial performance (Nelis, 2006). Business Process Management (BPM) is able to organize and frame a company focusing in the improvement or assurance of performance in order to gain competitive advantage. Although it is believed that BPM improves various aspects

of organizational performance, there has been a lack of empirical evidence about this (Kung, 2007).

Organizational performance is the ability of an organization to reach its goals and optimize results. In today's workforce, organizational performance can be defined as a company's ability to achieve goals in a state of constant change.(<https://www.betterup.com/blog>) For a number of reasons describes by the implication of organizational performance, the issue is still vital. First, it has implications on ability to provide customer value: Providing value to customers is important for organizations. Second, it has lively effect on organizational reputation: Organizations strive to have good reputations due to the advantages of a strong correlation between an organization's financial performance and its reputation. Organizational employees must share what they know and use that knowledge to make changes in work practices, processes, or products to achieve high levels of organizational performance. Hence, the coordination among people, information technology and strategic planning are implanted to secure organizational performance. (Donald Lange, 2011)

For this study, the researcher identified three pillars of business process management that would serve as elements of the independent variable such as employee involvement, information technology, and strategic alignment. Organizational performance on the other hand can be operationalized using the ROA, ROE, profitability, and service quality. According to Rosemann & Brocke's model (2010), the common dimensions in all models are the usage of one or more dimensions of strategic alignment, information technology, process improvement and employee involvement. For this particular study, the researcher has used three of the recommended dimensions due to the fact that it can help achieve the objectives of the study.

Only a few studies have been previously conducted regarding the research question under study. Among these, Trkman, P. (2010); Macharia, Iravo, Ondabu and Ombui (2015); Muasa (2009); Balogun (2016); Kamau (2015); Hernaus, T.P (2012); and Kirubi (2014) were some of the studies reviewed by the researcher. The rationale of this study was that previous researches focused only on the identification and analysis of the idea of business processes management and its components for their expected influence on the different aspects of the organization's performance. Furthermore, previous studies could not be able to assess the effect of BPM on organizational performance in the case of Ethio Telecom. Therefore, the researcher was initiated to conduct this study with the aim to assess the effect of Business Process Management on organizational performance, in the case of Ethio Telecom.

1.2. BACKGROUND OF THE ORGANIZATION

Telecommunications service was introduced in Ethiopia by Emperor Menelik II in 1894 when the construction of the telephone line from Harar to Addis Ababa, was commenced. Then the interurban network was continued to expand satisfactorily in all other directions from the capital. Many important centers in the Empire were interconnected by lines, thus facilitating long distance communication with the assistants or operators at intermediate stations frequently acting as verbal human repeaters between the distant calling parties. In 1981 the telecommunication services had made a major change of technology ranging from Automatic to Digital technology (<https://www.Ethiotelecom.et>, assessed in June 2022).

The telecommunications sector was again restructured and two separate independent entities namely the Ethiopian Telecommunications Authority (ETA) & the Ethiopian Telecommunications Corporation (ETC) were established by Proclamation No. 49/1996 on November 1996. As a continuation Ethiopian Telecommunications Corporation (ETC) reformed in 2005/06-2009/10 five-year strategic plan and after concentrating its efforts on education, health and agriculture, the Ethiopian government has decided to focus on the improvement of telecommunication services, considering them as a key lever in the development of Ethiopia, Ethio telecom (ET) is born, on November 2010, from this ambition of supporting the steady growth of the country (<https://www.Ethiotelecom.et>, assessed in June 2022).

Ethio telecom has got its current status since 29th November 2010 as a part of Ethiopia's 2005/06 – 2009/10 GTP following the federal government's decision to focus on improving telecom services, taking them as key to national development. Consequently, the country's telecom infrastructure and services have been transformed to world-class standards to facilitate the development of the country with a great paradigm shift in the improvement of the sector (<https://www.Ethiotelecom.et>, assessed in June 2022).

Lastly in January 2022 half year report Ethio telecom (ET) total subscribers reached 56.2 Million from this Mobile voice subscriber reached 54.3 Million, Data and Internet users 25 Million, Fixed Services 912K, and Fixed Broadband subscribers reached 374K. Population and geographic coverages are 95% and 85.4% respectively. Telecom density has reached 54.8% (<https://www.Ethiotelecom.et>, accessed in June 2022).

1.3. STATEMENT OF THE PROBLEM

BPM adoption has been identified as one of the means in which organizations can maintain and sustain their competitiveness through a continuous focus on processes. Organizations face cut throat prevalence where BPM is continuously required to boost the performance of industry activities and facilitation of enterprise-wide observation and synchronization (Gillot, J., 2008).

The issue of business processes management has attracted the interest of scholars, experts and managers in their attitudes towards improving the level of the organization's performance, however only limited number of studies existed that identify and analyze the idea of business processes management and its components for their expected influence on the different aspects of the organization's performance. Business Process Management is comprised of different components among which the most widely used are: information technology (IT), employee involvement, strategic alignment, and continuous process improvement (Reijers, H.A., 2006).

Business Process Management is a good support for organizations as it is an effective approach to govern, improve and optimize organization's operations and processes. BPM adoption has been identified as one of the means in which organizations can maintain and sustain their competitiveness through a continuous focus on processes.

Research on BPM practices and the resulting impact on organizational performance have been undertaken in different countries and the findings documented. Munyi and Ogolah (2017) studied on effects of selected factors on process improvement among pharmaceutical firms in Kenya. They concluded that management commitment, organizational culture and staffing had an effect on the BPM. On the other hand, Kibet (2017) sought to determine the effect of business process improvement mechanisms on revenue collection in Nairobi County Government. He concluded that BPM mechanisms played a major part in boosting revenue. The study was applied in the public sector which may differ from the telecom sector.

However, the above variables were not exhaustive in explaining factors that influence business process management. Afanda's study looked at one dimension of BPM practices and it did not address the effects on organizational performance. Ethio telecom is selected for this study in order to check whether gaps in business processes which were identified in the research conducted by Abdulahi A., Aychilum A., Dawit G/M, Ermyas G., and Kidane M. (2013). Some of the limitations of Ethio Telecom Enterprise System identified by the researchers were: lack of

training to use the enterprise system, still there are staff that prefers manual system; lack of immediate support in case of operational difficulty and system failure; inadequate training creates gap among the staff and staffs learn by themselves through trial and error; incompatibility with some products of the company like when to sale VSAT, and Euronet services done manually, highly centralization of the system; frequent system interruption due to network disconnection; and lack of system support and technical staff at regional and branch levels. In addition, the researcher selected Ethio Telecom as a case company due to the fact that it has undertaken repetitive process improvements, adopted various developments, and hence the impact of the change needs to be assessed and examined.

As demonstrated above, none of them focused on the effects of business process management practices on the organizational performance of the telecom sector in a comprehensive way. This study therefore aims to bridge this gap. Furthermore, to the researcher's best knowledge, there are no studies conducted on the assessment of the effect of BPM on organizational performance in Ethiopia, more specifically in the case of Ethio Telecom. Therefore, this study is intended to investigate the effect of Business Process Management on organizational performance, in the case of Ethio Telecom in order to fill the gap seen on previous researches.

1.4. RESEARCH QUESTIONS

To address the stated problem, this study focused on answering the following research questions:

1. What is the effect of information technology (IT) on organizational performance of Ethio Telecom?
2. How does strategic alignment affect organizational performance of Ethio Telecom?
3. What is the effect of employee involvement on organizational performance of Ethio Telecom?

1.5. OBJECTIVES OF THE STUDY

1.5.1 General Objective

The general objective of the study was to assess the effect of Business Process Management on organizational performance, in the case of Ethio Telecom.

1.5.2 Specific Objectives

The specific objectives of the study are described as follows:

1. To examine the effect of information technology on organizational performance in the case of Ethio Telecom.
2. To determine the influence of strategic alignment on organizational performance of Ethio Telecom.
3. To investigate the effect of employee involvement on organizational performance in the case of Ethio Telecom.

1.6. SIGNIFICANCE OF THE STUDY

This research has significance to the senior management of Ethio Telecom to get a better understanding of the BPM concepts and practices along with its impact on the performance of the organization. Concerned government bodies can also use the assessment to make effective BPM analysis, sound decision and corrective measures as required especially with regard to organizational performance.

The study also fills the existing gap in the literature by adding more knowledge to the few available ones. Besides, this study helps to enrich literatures on the subject matter. This is mainly because there is no as such comprehensive study that was made on the BPM effect on organizational performance in the world in general, in Ethiopia in particular.

The researcher is therefore highly convinced that the study serves as a baseline input to researchers, academicians, policy makers and the like by providing inputs, insights and relevant data related to the topic under study.

1.7. SCOPE OF THE STUDY

Organizational performance is affected by various factors; however, the scope of this study was conceptually delimited to assess the impact of BPM on organizational performance in Ethio Telecom. Hence, other factors that may have impact on organizational performance were beyond the scope of the study.

In terms of geographical aspect, the scope of this research was delimited to the Head Quarter of Ethio Telecom in Addis Ababa and hence the study did not consider other district offices and branches of Ethio Telecom.

The study was also delimited methodologically as the data collection instruments for the study are only questionnaire, primary data. Therefore, data was not collected through interview, physical observation or other primary as well as secondary data collection methods.

1.8. LIMITATIONS OF THE STUDY

The knowledge gap on the effect of BPM on organizational performance was one of the limitations to get detailed and conceptualized information from assessment of this research.

The researcher would have been very interested if the assessment on effect of BPM on organizational performance is made in all organizations in Ethiopia. However due to financial and time constraints, it was difficult to incorporate all those organizations and hence, the analysis covers only in the case of Ethio Telecom.

It would also be better if the assessment could cover the factors or variables that affect the performance of the organization. However, due to the aforementioned constraints, it was impossible to do so.

However, considering the researcher's unreserved effort and communication technique, the limitations could not have a negative impact on the findings of the study.

1.9. ORGANIZATION OF THE RESEARCH

The research paper is organized into five chapters. The first chapter introduces the background information, statement of the problem, research questions, general and specific objectives and significance of the study. It also includes the scope and limitations of the research. Chapter two introduces review of relevant literature on the research problems under question. Chapter three discusses the research design adopted for the research and outlines the methodology for carrying out primary data collection. Chapter four presents data findings and discussion of the research. Chapter five covers conclusions and recommendations.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

This chapter deals with brief review of literature in the area of business process management and its effect on organizational performance. The chapter is organized in three sections. The first section presents theoretical review of literature related to BPM and its relation with organizational performance, while the second section reviews the empirical evidence on the study area and related issues. At the end, a summary of the major drawbacks of the existing empirical studies was made and the knowledge gap was identified.

2.2 THEORETICAL LITERATURE REVIEW

2.2.1 OVERVIEW OF BUSINESS PROCESS MANAGEMENT (BPM)

Over the past two decades, definitions of BPM have ranged from IT-focused to BPM as a holistic discipline. BPM refers to a systematic approach to managing processes with the aim of improving the quality of products and services (Smith, R., 2007).

BPM is a structured approach to analyze and continually improve fundamental activities such as marketing, manufacturing, communications and other major elements of organizations' operations. BPM relies on measurement activity to assess the performance of each individual process, set targets and deliver output levels which can meet corporate objectives. BPM is a set of methods, techniques, and tools that can support the design, performance, management, and analysis of business processes (Margherita, A. 2014).

BPM is defined as an integrated management philosophy and set of practices that include incremental or radical change in business processes. It emphasizes continuous improvement and yet customers' satisfaction and employees' involvement. This definition puts us in the picture about the benefits of using BPM within the organization but also pushes us towards other factors contributing to the successful implementation of BPM (Hung, R. et al. 2006).

On the other hand, BPM is a holistic approach that supports the process in its complete lifecycle, from modeling, analysis, monitoring and optimization. Business process modeling is the prominent step of the business process management cycle that allows a deep process analysis and improvement (Fakhouri, H. 2016).

Trkman, P (2010) defined BPM as the efforts that made continuously by the organization to improve the basic activities in it, such as manufacturing, marketing, communications, and the basic elements of organization's processes. According to Chang (2006), BPM is an organizational approach that focuses on the processes, and used in the analysis, design, and development of business processes, to improve the organizational performance and increase the organizational efficiency.

Nadarajah & Kadir (2013) stated that BPM is one of the important links that integrate between the organizational systems and its human resources, where organizations aim to maximize the efficient use of its resources and achieve its strategic objectives and customers' needs.

Franz and Kirchmer (2012) think it is an advanced management system that helps in achieving efficiency and leading excellence, creativity and strategic initiatives achievement in the organization and so it ensures the rational use of the organization assets and its successful business. While Kung, P.A (2007) define it as management method that include methods and supportive tools to design the operational business processes, to analyze, implement and strengthen its value. It is a rule applied by the organizations to maintain the competitive advantage and it is a set of activities supported by tools and systems of business process management which are used by the organization to improve the business processes or to adapt them to the new organization's requirements.

Singh, P. (2012) clarified the contribution of business processes management in achieving the organization's competitive advantage and he stated that the business processes consists of management processes , operational processes and the supportive processes in addition to other processes describe the basis of the business processes which are classified as : client's strategy, customers' relations, employees' development and satisfaction, process development, quality, change management, financial analysis, reports preparation, capital management, management responsibility, product development, product delivery, the service, administrative accounting, and technology management and all of these processes form the basis of achieving the competitive advantage. Some of the successful factors for adopting the business processes management in the organization's performance as Ringim K. et al (2012) were investment in the information technology, size of the financial activities, the management's commitment, the strength of the capital and the efficiency of the incentives' system as these factors have significant relation with the organization's performance as a whole (cost reduction, customers' service management and the processes performance efficiency).

2.2.2 COMPONENTS OF BUSINESS PROCESS MANAGEMENT (BPM)

According to Kohlbacher & Hajo (2010), the essential elements of BPM are processes documentation, management commitment, process ownership, Process performance measurement, corporate culture in line with the process approach, application of continuous process improvement methodologies, and organizational structure in line with the process approach, while Juratory, P., and Christos, B. (2017) sees that BPM components are strategic alignment, IT, processes-centered, optimization and improvement, and employees involvement. Rosemann & Brocke (2010) also introduced a model for BPM components, where the organizations that want to achieve the success in implementing the BPM, need to consider six major factors, each item of those contain other secondary factors, which form substantial capability aspects for this concept and these factors include strategic alignment, governance, methods, information technology, individuals, and culture.

It has been shown that numerous researchers of the previous studies have suggested different BPM components. These different BPM are interrelated. In other words, there are interrelationships that exist among BPM dimensions (Rosemann & Brocke, 2010; Devika et al. 2016; Jeraporn et al., 2017).

Based on the literature, the common dimensions in all models are the usage of one or more dimensions of Rosemann & Brocke's model (2010). Particularly, the widespread dimensions include strategic alignment, information technology, and process improvement and employee involvement. The four main components are presented as follows.

2.2.2.1 Strategic alignment

Strategic alignment is a core BPM constituent. It involves developing specific strategies to maximize the value from process redesign and improvement. (Jiraporn et al., 2017). Organizations must align BPM with the overall strategy of organization, and link between the organizational priorities and organization processes to improve the organizational performance. Hung, R. (2006). Previous researchers have reported that a well-defined strategy is the basis for the optimal alignment with the associated-business processes. Rosemann & Brocke et al. (2010) stated that strategic alignment includes process improvement planning, strategy and process capability linkage, enterprise process architecture, process measure and process customers. According to Neubauer, T. (2009) strategic alignment is one of the major pre-conditions for

implementing sustainable BPM. Therefore, we assume that strategic alignment has statistical impact on the job performance.

2.2.2.2 Information technology (IT)

It refers to software, hardware, and information systems that support operational activity, and includes the organization's capabilities related to processes design, processes implementation, processes control and measurement, and processes improvement and innovation. Harmon, P. (2015). According to Chang, J. (2006) information technology can be developed as part of the design-implementation-analysis and improvement of business processes. Information Technology plays a major role in business process reengineering as it provides office automation; it allows the business to be conducted in different locations, provides flexibility in manufacturing, permits quicker delivery to customers and supports rapid and paperless transactions. In general, it allows an efficient and effective change in the manner in which work is performed.

Neubauer, T. (2009) stated that the selection and implementation of appropriate IT-applications is a major pre-condition for efficiently executing corporate business processes. Thus, it is assumed that information technology has statistical impact on the job performance and organizational performance.

2.2.2.3 Process Improvement

Continuous process improvement refers to sustained incremental improvements of existing processes. It includes key elements such as process documentation, value stream mapping, process ownership and process measurement (Smart, P. et al. 2009).

Devika, N. et al. (2016), on the other hand, mentioned that organizations implement process improvement for addressing the shortcomings identified in their overall performance and to fulfill the need to sustain their competitive advantage.

According to Chong, S. (2007), the critical steps in process improvement are: identification of process customers, understanding of customer requirements, defining output, translation of customer requirements into supplier specifications, defining how the output will be achieved, identification of appropriate measurements, track performance and documenting lessons learnt. Therefore, it is assumed that process improvement has statistical impact on organizational performance.

2.2.2.4 Employee Involvement:

According to Jeraporn et al. (2017), employee involvement means giving employees the ability to do their work: the right information, the right tools, the right training, the right environment, and the authority they need. Employee empowerment play crucial role in a BPM. Executive commitment to employee empowerment allows the latter to participate actively.

Chen & Paularj (2004) mentioned that top management must be communicate to employees effectively, setting organizational values to improve organizational performance. Trkman (2010) stated that when workers are empowered to take decisions independently, it may result in smoother operations with lower throughput times. Thus, it is assumed that employee involvement has statistical impact on the performance of organizations.

2.3 BPM LIMITATIONS AND CRITICAL SUCCESS FACTORS

2.3.1 Limitations about Business Process Management

BPM includes a wide array of practices without many guidelines regarding its optimal implementation and this brings back the criticism of the emergence of business process reengineering. No academic agreement exists on a conceptual framework about what BPM constitutes, accompanied by a lack of publications clarifying the definitions and scope of BPM terminologies. Therefore, BPM remains largely a theoretical and, consequently, the field of research is currently disorganized, without a possibility to classify and/or compare such studies (De Bruin and Rosemann, 2006; Trkman, P. et al. 2010).

Some authors claim that BPM was a repackaging of old ideas to fit a new context, and that this was used to drive growth in the consulting industry or that it has remained in the fad phase and papers describe what BPM actually means (Trkman, P. et al. 2010).

BPM has intangible high-level concepts that have hardly been operationalized and would therefore be difficult to investigate directly (Hernaus et al., 2012). According to Skrinjar, R.B (2008), although BPM to provide a holistic management philosophy with focus on aligning of all aspects of the organization, for practical purposes, BPM implementation is primarily focused on the technical aspect of business process or workflow management.

According to Trkman, P. et al (2010), companies should not mistakenly believe that the adoption of BPM alone would bring any contribution to either their operational or strategic goals because even the best BPM program cannot offer answers to the question of the proper focus of an

organization. BPM can help in the execution of a strategic program by enabling a better match between the organizational strategy and a company's business processes.

The absence of a consolidated body of knowledge and the missed opportunities of a non-systemic approach to process-based management has been caused partial and (often) technology-biased views of process management (Margherita, A. 2014).

2.3.2 Critical Success Factors in Business Process Management

De Bruin and Rosemann, M (2006) says that BPM is a management practice that aims to adopt the guidance process as a way to do business. For this, it is necessary: (1) process management as a strategic focus, (2) define end-to-end processes for the organization, (3) create a focused perspective in the client and added value generation, (4) simplify work, (5) connect with the business chain and consumer, (6) collaborate on process. The BPM is concerned with the main aspects of business operations where there is high leverage and a large proportion of added value that should be governed. The analysis of the literature shows the difficulty of comparing the terms associated with BPM.

According to Škrinjar, R.B et al., (2008) there are nine distinct dimensions might constitute process oriented elements: (1) strategic view; (2) process definition and documentation; (3) process measurement and management; (4) process organizational culture; (5) people management; (6) market orientation; (7) supplier view; (8) process organizational culture; and (9) IT/IS support.

Harmon, P. (2015) says that BPM consists of six main factors: strategic alignment, governance, method, information systems, people and culture. The researcher points 5 critical enablers for a high-performance process to be able to operate on a sustained basis: process design, process metrics, process performers, process infrastructure, process owner. Having not all of these enablers for a process is of little or none value.

On the other hand, Trkman, P. et al. (2010), proposed a novel combination of three underlying theories, namely contingency, dynamic capabilities and task–technology theory and it established a basis for the explanation of (un)successfulness of BPM efforts.

2.4 ORGANIZATIONAL PERFORMANCE

The performance measurement revolution started in the late 1970s with the dissatisfaction of traditional backward looking accounting systems. Since then the literature in this field is emerging with most of the focus on designing performance measurement system (PMS)

(Harrington, J. 2006). A PMS is used in the business sector and have a multi-34 disciplinary character and his field has not formally been defined. Measurement and performance measurement need to be more clearly defined within a PMS, ideally base on measurement theory (Chong, S. et l. 2007).

According to Robson, I. (2004), measuring does not necessarily improve the performance. However, some authors argue that measurement and performance measurement are distinct. Performance measurement which offers more than quantization processes. Further, improvement in performance can be checked: effective and efficient performance goals; an appropriate use of benchmark to set the criteria for measuring performance; and measurement comprehensiveness - usually defined to include the use of resources (efficiency), and the achievement of organizational purposes (effectiveness). Authors in the non-business sectors, especially health care also consider improvement as performance measurement (Chong, S. 2007).

Remain competitive depends on the organization's alignment with the chosen strategy and, therefore, the performance evaluation system must translate the objectives and strategies of the company in operational processes. To evaluate it is necessary to measure. In another way, performance is related to the objectives that the organization intends to achieve. It is not sufficient to define organizational goals. It is necessary to check, to measure if these goals have been achieved (Al-Mudimigh, A. 2007).

2.5 PERFORMANCE MEASUREMENT SYSTEMS AND MODELS

Observing the historical evolution of PMS, from the mid-1990s, the purely financial focus gave way to more comprehensive approaches, in a more focused vision for the individual and looking outside the organization. The amount of PMS approaches in the supply chain has grown, just like the services area, driven by outsourcing models. It is observed that the degree of complexity has been increased significantly in recent years, following the complexity inside the organizations. In this sense, the organizational efforts to measure performance have been seen by researchers and practitioners as a complete system rather than a collection of independent models and tools. Other trends: the influence of the human factor in the performance measurement system, intensification of approaches at the strategic level, the beginning of emerging approaches that establish social and environmental performance indicators (Asmare, E. 2012).

According to Chong, S. et al (2007), the design of a performance measurement system is principally a cognitive exercise, translating views of customer and other stakeholder needs into

business objectives and appropriate performance measures. So, it is necessary to understand the fundamentals of Business Process Management Systems (BPMS). On a constructivist line (involving enterprise collaboration, operations management and BPM/engineering, performance measurement / management and decision support, information and communication management, organizational behavior and knowledge management), there is a lack of understanding what is collaboration and what is its impact on the development of appropriate performance measurement systems. Besides, there are gaps in the fundamentals characteristics of BPMS that influence the use of data (mainly non-financial data), development of measuring methods, measuring attributes and measuring process.

Performance measurement and management (PMM) has received attention from practitioners and researchers. Despite the growing use of PMM systems, companies had had difficulty in implementing such systems, with consequent risk of partial benefits or total goal failure (Robson, I. 2004). The evolution of the literature on measuring models and frameworks is highlighted starting from the development of the last twenty years. However, the field of PMS has not change so much along the past 30 or more years (Chong, S. et al. 2007).

Kyungui, E.M (2014) states that Management Information Systems (MIS) and change management are important enablers of PMS. On the other hand, Saunders, M.L (2007) through the empirical research, showed that five managerial processes and their constituent managerial activities influence performance of organizations as an interconnected managerial system rather than as individual processes and activities. To these authors, a managerial process is “a strategic business processes whose intended outcomes impact the direction and control of the organization’s future performance”. These five processes are: managing performance, managing decision making, managing communications, managing culture and managing change.

Weske, M. (2012) proposed three-stage model as the lifecycle of performance measurement systems. On this way, for those authors, there has been a constant progress in designing performance measurement systems.

2.6 BUSINESS PROCESS MANAGEMENT AND PERFORMANCE

Based on Siha, S. and Saad, G.H (2008), The process management allows you to link the actions of the different internal functions with the competitive factors of the organization, making it easier for the employee understand how their activities are integrated to the business to evaluate you need to measure.

By properly measuring organizational and individual efforts, managers send a clear message about what is expected, which eventually mobilizes the workforce (Hernaus, T.P et al., 2012).

It is important that organization have goal alignment but, researches indicate that there is little knowledge and experience in industry in aligning the process goals and organization's business goals. This could explain the unsuccessful process improvement efforts or perhaps even the skepticism towards process improvement in general (Gonsalves, G. 2002).

Objective and formal analysis of business processes is not easy because, among other things, there is no one-way to represent processes and there are no standards on granularity of activities and the information that needs to be captured. However, process analysis it is necessary and these factors cannot undermine the possibility of do it. Structural metrics must be chosen according to the functional and performance goals of the process. Targets need to be set in terms of these metrics and performance monitored based on them. A balanced set of process metrics considering, for example cost, speed, and quality, must be deployed, so that improvements in one area do not mask problems in another (Smart, P., Maddern H., 2009).

Chong, S et al. (2007) through a systematic review using a meta-analysis dispel the notion that a PMS is a prerequisite to the introduction of an effective BP in organizations because "the PMS as advocated by various authors for over 20 years (since 1990) failed to fulfill the measurement requirements of BPM". This can hinder the association of cause and effect between two or more constructs. On this way, it is important to make a critical systematic review to identify how BPM and organizational performance have been linked by the scientific community.

In your research to identify the fundamentals of a performance measurement system (PMS), in order to ascertain if they satisfy the measurement requirements of BPM, Chong, S. et al. (2007) discovered that a majority of the searches adopt the view of process as a simple, cause and effect workflow or so, despite an acknowledgement by a minority of these authors, and other authors in the management, operations research and IS fields that PMS are systems, suggesting that measurement should be devised for BP rather than on workflow or on business functions. The important aspect is how one measures a production or BP where we can see the transformation that occurs in the process, and determine should we add value to the input and create an output that is more useful and effective to the recipient either upstream or downstream.

2.7 EMPIRICAL REVIEW OF LITERATURE

2.7.1 BPM AND ITS IMPACT ON ORGANIZATIONAL PERFORMANCE

Only a few studies have been conducted both locally and internationally on BPM. Some of them are discussed as follows:

Trkman, P. (2010) undertook a case study on the critical success factors of business process management in Skybank - Slovenia which revealed that the company ought to embrace change in order to boost its edge; though it ought to cautiously tailor its business operations to match the environment and ensure flexibility and continuity. The company ought to identify its key business operations that result to the firm's competitive advantage. It ought to denote the business processes that should be regularized and cases where employees can be flexible. The study further established that BPM aids in the implementation of strategic programs by striking a balance between the firms' master plan and the company's business processes. It revealed that the success of BPM originates in establishing the conditional variables that to a large extent influence both the company's strategy and its key success areas. It should facilitate continuous process improvement while ensuring the alignment between processes and the information systems used.

On their research entitled "the impact of information technology on performance of logistic firms in Nairobi County", Macharia, Iravo, Ondabu and Ombui (2015) revealed that (50%) of logistics firms experience low service delivery owing to the fact that they are not using ICT in their departments. Findings also showed that the use of ICT infrastructure reduces transaction costs by replacing paper work with electronic processes, improves the level of coordination between members of the supply chain, reduces transaction costs as well as eliminates avoidable errors. The study was done at an organizational level despite the fact that IT is used in a wide array of organizations hence it cannot be used to conclusively confirm the correlation between IT and performance in a different sector.

The relationship between information technology conceptualization and bank performance in Kenya was also studied by Muasa (2009). The study established that organizations use ICT to increase their performance. Organizations take up ICT owing to pressure from the industry, organizational financial capabilities and technical features. IT can be taken up as part of the blueprint of the execution – examination and upgrading of business processes (Chang, 2006), used in

an organization as well as involving external IT interfaces (Poirier et al., 2004: Qrunfleh and Tarafdar,2014).

Similarly, Balogun (2016) conducted a study on the effects of information technology on organizational performance in Nigerian Banking industries, and established that it is imperative for managers to plan staff, organize, and control to get the best resources to work capably, well and to encourage the employees to innovate. Regular trainings ought to be availed to the bankers often to ensure they stay atop of the prevailing developments in the use of ICT. This will boost their competence and value of provision of services that will translate to banks profitability. He suggested that a venture in ICT should form a key factor in the general strategy of banking operations to enhance pace, handiness and precise services as well as enable the banks cope with the changes and challenges resulting from ICT controlled globalized economies. However, the study is confined to one region. Studies should be done in other set ups to come up with a generalized conclusion.

ICT and performance of commercial banks in Kenya was also studied by Kamau (2015) and noted that ICT has had a pragmatic effect on the total income of banks specifically with regard to increasing commission fee based income and expanding the income generating ability of the bank hence enhancing the performance of the organizations. He further found out that the effect of bank ICT on customer deposits in the respondents' bank is positive in terms of attracting depositors as well as ease of transacting. He also concluded that the use of ICT has had a positive effect on the ROA of the banks as it has influenced the income margins, payback periods and reduced the operational costs. The scope of the study was limited to ATM's, internet banking, e-banking services without scrutinizing the operating models and the difference in automation in banking structures.

On the other hand, Hernaus, T.P et al. (2012) conducted a study to reveal the significance of picking the most favorable master plan for attaining organizational goals. On analyzing the outcome of the research and observing the path model, it was established that there was a major connection and domination of all outlined concepts, other than the impact of performance measures on financial performance. The outcome also established the effects of business process management, human resources management and management of external stakeholders and non-financial performance. The plan should be firmly incorporated with the firm's operations (Brocke and Rosemann, 2010: Kohlbacher & Gruenwald, 2011). Strategic goals are attained by

operations that build the firm with their responses. The enactment and application of the firm's plan depends on the processes and their exchanges with the organizational elements.

Based on the researchers conducted by Buh, Kovacic and Stemberger (2015), well-articulated plan of the BPM project was vital as it helps the organization recognize the expected benefits. It further revealed that top management support, involvement, and entitlement of employees' resulting from a rise in customer centricism are important. The firm should place their customers' first place and top management should be responsive to process problems and the need for enhancement. The company should also be open to changes, which are critical in BPM adoption. They concluded that managers must identify the organization's critical success factor and thus focus their efforts to overseeing them. The study gives a limited view since the critical success factors tend to be different from one situation to another based on project particulars and organizational traits. The study was based on a single scenario in a different environment which is not a true reflection of the industry outlook hence one cannot make an empirical generalization.

On the other hand, Santos, Alves and Santana (2014) undertook a study on identifying strategies for managing critical success factors of BPM initiatives in Brazilian Public organizations using a focus group. The study established that the awareness and challenges of BPM initiatives and competencies amongst internal clients and BPM team is low and trainings, seminars and informal conversations are key. It also revealed the heightened bureaucracies and lack/poor involvement in the BPM initiatives that calls for communication and emphasis on the benefits and importance of BPM initiatives as well as an awareness initiative and a reward system. It also established that the support of executives is key and that the internal team needs to focus on the goals of the initiatives. The applicability of the suggestions made in this research on managing the BPM initiatives was not scientifically tested in the research. The study also focused on only one scenario and the outcomes cannot be used to generalize the same for all organizations. This study will look at the effects of BPM practices on the financial performance of bank in Kenya

Kasina (2012) studied strategic alignment as a source of competitive advantage at Equity Bank (K) Limited. She found out that organization competitive advantage does not result from the resources that it has but from the proper alignment of procedures and processes that have to be in synchrony so as to capture the opportunities in the market as well as boost the firm's ability to counter threats on its operations that emanate from the market. She also concluded that there is need to match the organization's mission and vision and this should be backed by a flexible

organizational structure, risk taking management and that adequate resources, both financial and human should be availed in order to successfully implement firms' strategies as well as process alignment.

The study was limited to micro finance institutions and it would have been preferable to cover more than one category of financial institutions to get a better representation. The study did not differentiate between the sizes of the micro finance institutions hence cannot be used as a generalization of the banking sector. The current study will look at the extent to which strategic alignment has influenced the financial performance of commercial banks in Kenya.

Muthini (2012) conducted a research on the effects of strategic alignment as source of performance at Kenya Revenue Authority (KRA). He established that KRA has aligned its internal and external strategies and this has resulted in increased total revenue collection. The alignment has seen the firm roll out new systems for data exchanges, computerization of its receipting system that has cut down on corruption and increased efficiency and flexibility. The alignment of external strategies has enabled it to improve on its tax collection as well as improve its strategic planning process. The study was limited to Kenya Revenue Authority (KRA) and should have been replicated to other organizations to check for consistency among other government authorities.

On his research entitled "strategic alignment a source of competitive advantage in the Indonesian Banking industry" Jogiyanto (2007) established that banks will attain a competitive advantage if top management is committed to the strategic use of information systems/technology and appreciate it as a system for building competitive advantage. He also found out that banks are expected to achieve a higher level of performance when two way associations with their strategic allies are supported by electronic relations built upon either information systems/technology tools for architecture networks, and when the work processes intra and inter firms group projects are substantiated by information. The study was carried out in a different environment that may differ if applied in another scenario owing to the culture and practices.

On the other hand, Muthike (2017) undertook a study on the impact of employee involvement on organizational performance in PACT. The study revealed that employees' skills and abilities can only be wholly used by engaging employees in the organization. It established that there is an affirmative link between employee involvement and performance as lack of employee involvement lowers their dedication and proficiency. Similarly, lack of employee involvement impinges on employee understanding of the organization's specified direction.

According to Mokaya and Kipyegon (2014) there was a strong connection between organizational performance management, individual growth and development, remuneration and employee involvement. The study recommended that bank managers should prioritize programs and activities that promote employee involvement as it contributes positively to organizational performance. This should include two-way communication systems, provision of adequate resources to carry out tasks, appropriate training to match knowledge and skills with the right tasks, reward systems to encourage improved performance, attention on top performance to reduce turnover rates and to build a strong unique background that promotes diligence.

A research was conducted by Kirubi (2014) on employee empowerment practices and performance of commercial banks in Kenya and established that all commercial banks in Kenya have empowerment policies. Through employee empowerment, the staffs of commercial banks are informed of their duties, trained on the roles, empowered with management functions such as involvement in policy making and the liberty to make decisions within their jurisdiction. It also established that banks push for efficiency and innovativeness from the employees as well as formulate mechanism that deal with complaints as well as ongoing improvements in service delivery to their customers.

Previously studied researches with an appropriate methodologies and statistical tools assuredly contribute as an input for this study. The credibility of BPM philosophy is no longer an issue and doubtful at all since it has been demonstrated in various countries in the world that competitive advantages and performance benefits can be created and sustained through the adoption of the business process management thinking. There are evidences that successful implementation of BPM benefited organizations through improving organizational performance in many dimensions. These dimensions are service quality, customer satisfaction, financial performance, operational performance, service recovery performance (Samat et al, 2006; Irfan & Kee, 2013; Psomas & Jaca, 2016; Al-Sabi et al., 2017).

Similarly, there exists an empirical evidence concretizing benefit of BPM towards enhancement of organizational performance. Aman G. (2021) has investigated the effect of change management practices on organizational performance in Ethio telecom of south region. In the study it was found out that - all the change management practices (Balances scorecard practices, kaizen philosophy practices and Standard quality circle management practices) were practiced occasionally. Besides, it was revealed that in general, there existed a positive and significant relation between the change management practices and organizational performance. Individually,

Kaizen management philosophy was found to be statistically significant predictor of organization performance. While, Balances scorecard and Standard quality circle management practices were found to be statistically insignificant predictor of organizational performance.

In another study undertaken by the same author, it was found out that BSC, QC, KIZEN philosophy (5S) and PDP was not successfully implemented in the selected telecom shops of Ethio telecom Central West Addis Ababa Region. However, the study has reported that ERP is a user friendly and perfect system of change management tools. It also confirmed that there is in appropriate environment in implementing the change program. Moreover, respondents confirmed that there is ineffective performance appraisal and telecom infrastructure and network system is not supporting the current change effectively in the selling points (Aman G, 2021). Both studies concluded that the practices have contributed to Ethio telecom south region organizational performance to great extent.

Taye, (2021) has undertaken a study to understand and clearly articulate the problem for business process automation & implementation and its effect on the day-to-day operation of the working units. As per the findings of the study, the main effects on organizational business process automation & implementation were lack of system/ tool, awareness, and training. Among the variables, educational level and experience were strong with negative correlation with the dependent variable implicating lower education levels were problems for business process implementation in Ethio telecom. Based on the conclusion points, the article recommended training and enhancing the educational level of existing employees through on-the-job-training and maintain experienced employees. In addition, the study recommended that a more comprehensive study to be undertaken on determining factors for organizational performance and how to enhance it.

In summary, based on the empirical evidence in the local context, those researches which were conducted previously could not effectively assess the effect of BPM on organizational performance in the case of Ethio Telecom, rather they were aimed to assess BPM and its impact on organizational performance in other countries and organizations. Due to these reasons, this research attempted to fill the gap seen on previous researches by using appropriate methodologies, data collection instruments, use better data analysis methods and assessed the real effect of BPM on organizational performance in the case of Ethio Telecom.

2.8 CONCEPTUAL FRAMEWORK

The study was guided by the following conceptual framework which was used to explain the relationship between the dependent variable - organizational performance and independent variable – which are the factors of Business Process Management (BPM) i.e. employee involvement, strategic alignment, and information technology.

After reviewing the theoretical and empirical literature, the researcher developed the following conceptual framework:

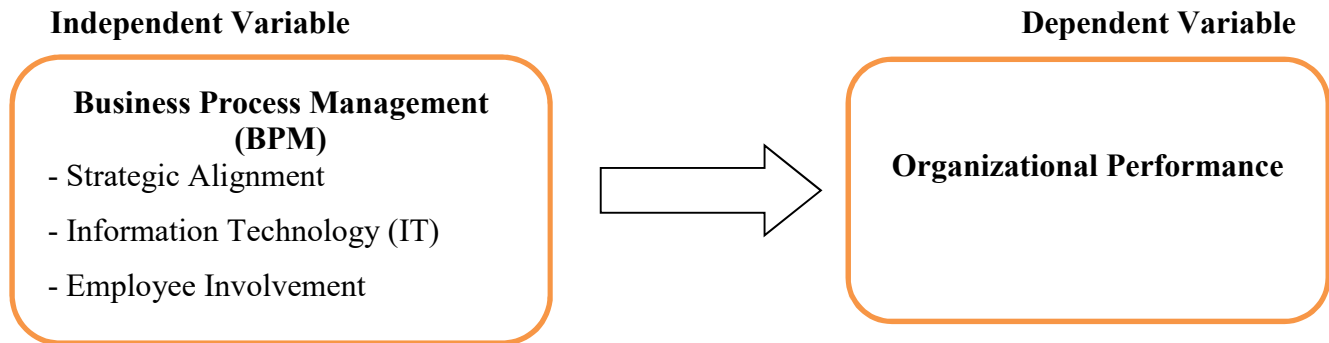


Figure 1 Conceptual Framework, developed by the researcher,

CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

This chapter presents the research methodology to be employed for data collection as well as analysis of research findings. In addition, in this chapter relevant statistical and analytical tool was described in detail. In general, the purpose of this chapter is to provide a clear understanding on research design, the study population, sample size and sampling techniques, data sources, data collection instruments and method of data analysis.

3.1 RESEARCH DESIGN AND APPROACH

As this study aims to assess the effect of BPM on organizational performance in the case of Ethio Telecom, both explanatory and descriptive design is suitable for this study. Explanatory studies establish causal relationships between variables and focuses on studying a situation or a problem in order to explain the relationships between variables (Saunders, Lewis & Thornhill, 2009, p.139). Descriptive researches are those studies for which the purpose is to produce an accurate representation of persons, events or situations (Saunders et al., p.590). The focus of descriptive research studies is to describe the characteristics of a particular individuals or group. Therefore, this study used both descriptive and explanatory method in order to assess the effect of BPM on organizational performance in the case of Ethio Telecom.

3.2 RESEARCH APPROACH

This study was conducted by using quantitative research approach; the approach is best suited for looking at cause and effect, and testing of theories and hypothesis (Muijs, 2010, p.9). The method uses to explain relationships or phenomena by collecting numerical data and analyzing based on mathematical method. The objective of the study is to examine the causal relationship between the BPM on organizational performance in Ethio Telecom; quantitative research approach was utilized to this study since it is an appropriate method to create quantifiable cause and effect relationship between the variables of the study.

3.3 DATA SOURCE AND TYPES

According to Mugenda, O.A (2003), there are two data types and sources: primary and secondary data types/sources. In this study, only primary data was collected through structured

questionnaire. The primary data sources were mainly used to gather facts about the impact of BPM on organizational performance in the case of Ethio Telecom. The research gathered primary data using structured questionnaires.

3.4 METHOD OF DATA COLLECTION

The researcher used primary data gathering instruments which include only structured questionnaire. To collect relevant information from the primary data, the researcher selected sample professional permanent employees as respondents from Ethio Telecom in order to reach at conclusions on the impact of BPM on organizational performance.

The questionnaire contains only structured questions in a Likert scale to establish a relationship between the dependent and independent variables. The five scale Likert questions were distributed in person and through email to sample respondents from the Head Quarter of Ethio Telecom. The researcher followed up the process in order to get the desired data on time. The questionnaires was distributed using the drop and pick later method with a window period of one week. Firstly, the questionnaires were sent to a pilot sample of 15 participants in order to ensure that the questionnaire is clear, and precise.

3.5 TARGET POPULATION AND SAMPLING

3.5.1 Target population

Population is the entire aggregation/total of items from which samples can be drawn. Determining type and method of sampling mainly depends on the types of population that the study covers (Kothari, C.R, 2004).

To determine number of samples from the population, the target population for this study was all the professional employees of Ethio Telecom, particularly those working in the Head Quarter.. Accordingly, the target population for this study was 130 professional permanent employees.

3.5.2 Sampling Design and Sampling Techniques

The researcher used simple random sampling technique to select professional permanent employees for this particular study. This technique was applied due to the fact that all professional employees will have equal chance to be selected in a sample. The rationale behind

for the selection of this sampling technique is its advantages on providing representative samples and data.

3.5.2.1 Sample Size

To determine the sample size for the study, a simple formula for proportions Yamane (1967) was used and the following sample size is obtained.

$$n = \frac{N}{1+N(e)^2}$$
 Where n is the sample size, N is the population size, and e is the level of precision.

$$= \frac{130}{1+130(0.05)^2}$$

$$= 98$$

Hence, for this study 98 randomly selected respondents were involved to fill the questionnaire hoping that it better represents the whole population.

3.6 DATA ANALYSIS METHODS

The collected data through questionnaires was analyzed in the form of descriptive, correlation and multiple regressions. The descriptive statistics was employed to quantitatively describe variables using mean, standard deviations, frequency or mode. The correlation analysis was performed to identify the direction and the strength of the relationship between variables using Spearman's rho correlation analysis. However, as correlation analysis only shows the direction and degree of association between variables, multiple regression analysis was performed to make causal inferences regarding the relationship between variables.

The data was analyzed and presented in the form of diagrams, charts, and tables by using SPSS (Statistical Package for Social Science) software version 20. Various statistical tools such as descriptive arithmetic mean of constructs, correlation, and multiple regressions were used to analyze the effect of the independent variables on the dependent variables. Finally, conclusions were made based on the findings/results of the study and recommendations were forwarded on the basis of the data analyzed.

To examine the effect of business process management on organizational performance the following linear regression model was developed. Variables were carefully selected in review of literature that needs to be specified. Multiple Regression techniques best serve to analyze the

straight-line relationships among two or more variables and estimates the β 's in the equation. Since the number of independent variables is more than one the that model was multiple linear regression model. The degree of fitness of the model to explain the variation in the dependent variable can best be measured by R^2 . As a rule of thumb, the higher R^2 value in multiple regressions implies more likely that the important variables included in the model. Therefore, sample regression model equation for linear relationship among variables is;

$$\text{The Model } Y_j = \beta_0 + \beta_1 X_{1j} + \beta_2 X_{2j} + \dots + \beta_n X_{nj} + \mu$$

Y_j s - represents dependent variable for observation j.

X_j 's - represents the independent variables (IV's) for observation j

β_0 - is the intercept

β 's - is the unknown regression coefficients.

μ - is the error (residual) of observation j.

Based on the above, the model was modified based on the research variables that described in the conceptual framework in chapter two, to examine the effect of BPM on organizational performance of Ethio-telecom.

$$\text{ORGPER} = \beta_0 + \beta_1 \text{EMPINV} + \beta_2 \text{TECADP} + \beta_3 \text{STRALT} + \dots + \mu$$

Where

ORGPER = organizational performance

EMPINV = employee involvement

TECADP = technology adoption

STRALT = strategic alignment

β_0 = it is an intercept showing the value of dependent variable (ORGPER) will assume when the value of the independent variables (EMPINV, TECADP, STRALT) is zero.

$\beta_1\text{EMPINV}$ = partial change in organizational performance due to change in employee involvement while other things remain constant

$\beta_2\text{TECADP}$ = partial change in organizational performance due to change in technology adoption while other things remain constant

$\beta_3\text{STRALT}$ = partial change in organizational performance due to change in strategy alignment while other things remain constant

3.7 ETHICAL CONSIDERATIONS

In this study, privacy, confidentiality, data protection, and voluntary nature of participation was considered the significant ethical issues. Every effort was made to minimize the risk or discomfort to the participants arising from these issues. Prior to distribution of questionnaires, the researcher asked for permission to conduct the research with sample employees of Ethio Telecom.

The study followed thoroughly the research ethics. Accordingly, study purpose was clearly be stated to the respondents and all the collected data was kept confidential. Moreover, all citations were referenced in ethical ways.

3.8 VALIDITY AND RELIABILITY

The validity of data collection instruments was ensured by advisor's comment and pilot test. In order to ensure face validity, in addition to the review made by the advisor, the questionnaire was firstly sent to a pilot sample of 15 employees from Ethio telecom to assess the clarity of the questionnaire. Then, the questionnaire was reviewed by the researcher so that it can be revised based on the advisor's comment and pilot findings.

On the other hand, the reliability was checked by Cronbach's Alpha measures. The reliability of a measure refers to its consistency. One of the types of reliability, internal reliability is very important in connection with multi-scale items that determine whether each scale is measuring a single idea, and hence whether the items that make up the scale are internally consistent. (Bryman & Cramer, 1999, p.65). Coefficient alpha measures internal consistency, this measure expected to be over 0.7 before concluding the test is internally consistent (Muijs, 2010, p.73)

The reliability value of the variables is depicted in the following table

Table 1 Reliability test

Reliability Statistics		
Organizational performance	Cronbach's Alpha	No of Items
Employee involvement	.713	6
Technology adoption	.889	7
Strategy alignment	.890	8
Organizational Performance	.935	5
Reliability statistics of total scale	.840	4

(Source: Researcher's own survey, February 2023)

Based on the test for reliability shown in table 1 above, business process management scale was found to be highly reliable (21 items; $\alpha = .840$), with the reliability Cronbach's Alpha statistics of individual constructs ranging from 0.713 to 0.935. Thus, based on the test of the scales and constructs included, it was revealed that each scale represents a reliable and valid construct.

CHAPTER FOUR

4. DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 INTRODUCTION

The main objective of the study was to assess the effect of Business Process Management practices on organizational performance, in the case of Ethio Telecom. This chapter discusses the response rate, respondents' profile, and individual mean constructs of variables. In addition, it presents data analysis report which was conducted through descriptive and correlation and regression analysis. Multiple regression assumptions were tested to check the validity of data to fit the model. Hypothesis testing was also performed by using the result from multiple regression analysis.

4.1RESPONSE RATE

A total of 98 questionnaires were distributed to 98 respondents selected from the Head Quarter of Ethio Telecom. All questionnaires were filled properly and returned back by the selected respondents. This shows that the response rate was 100% which is deemed sufficient to analyze and interpret the collected data. Accordingly, analysis and presentation of the data was carried out as follows.

4.2 GENERAL PROFILE OF RESPONDENTS

The general profile of respondents was constituted from gender, age, education level and experience. Regarding the sex composition, according to table 2 below, majority of the sampled respondents, 67.3% were male, while the remaining 32.7% were female. The age composition of the respondents the majority of the sampled respondents' age group fall between the ages of 36-45 that accounts 60.2% of the total number of sampled respondents. The percentage of ages below 26-35 and 46-55 is 25% and 14% respectively. This indicates that majority of the respondents were 26 years and above.

As shown in the Table 2 below, 3.1% (3) of the respondents' had less than 2 years of experience; 27.6% (27) of them had work experiences in Ethio telecom between 3 to 5 years, 59.2% (58) of the respondents had 6 to 10 years of experience; and 10.2% (10) of the them had 11 years and above years of work experience. This shows that majority of the respondents had more than 5

years of work experience in Ethio telecom which indicates that respondents have relevant and sufficient work experience to provide appropriate response for the questions regarding the effect of business process management on organizational performance: in the case of Ethio Telecom.

Table 2 Sample characteristics

Description		Frequency	Percent	Valid Percent	Cumulative Percent
Age	26-35	25	25.5	25.5	25.5
	36-45	59	60.2	60.2	85.7
	46-55	14	14.3	14.3	100.0
Gender	Male	66	67.3	67.3	67.3
	Female	32	32.7	32.7	100.0
Educational Background	Diploma	10	10.2	10.2	10.2
	First degree	73	74.5	74.5	84.7
	Master degree	15	15.3	15.3	100
Work Experience	3-5	27	27.6	27.6	27.6
	6-10	58	59.2	59.2	86.7
	Greater than 11	13	13.3	13.3	100.0

(Source: Researcher's own survey, February 2023)

4.3 Descriptive Analysis for Study Variables

This section presents the responses provided by the sampled respondents with regard to questions focused on the impact of business process management on organizational performance: in the case of Ethio Telecom. This is descriptive analysis part such as means and standard deviation (SD). The study makes an agreement on the basis of higher mean value and smaller value of SD.

Descriptive statistics for the variables used in the analysis are presented in the following section.

4.4.1 Employee Involvement

Table 3 Employee Involvement

	N	Mean	Std. Deviation
The organization used staff training and development to reinforce certain behaviors and attitudes that results in increasing productivity.	98	3.9490	.66383
Improvement efforts are directed towards improved communication in the organization.	98	3.8163	.67879

In my own opinion, employee involvement has influenced the financial performance of Ethio Telecom.	98	4.0306	.69541
Employee involvement has enhanced business process management.	98	3.5204	.81519
In order to cultivate the culture of innovation, managers leading in change initiatives take into consideration employees' involvement and empowerment.	98	4.0816	.62050
Employee involvement encourages competition in the organization.	98	3.3163	.79427
Valid N (list wise)	98		

(Source: Researcher's own survey, February 2023)

To see the impact of business process management on organizational performance: in the case of Ethio Telecom, this study administered six questions to evaluate employee involvement. As indicated from the above table 3, the mean responses of all items range between 4.0816 and 3.3163 to the question related to employee involvement. The participants have identified that the employee involvement was good enough in Ethio telecom as the average mean score is above 3.0000.

This means that the organization used staff training and development to reinforce certain behaviors and attitudes that results in increasing productivity and improvement efforts were directed towards improved communication in the organization. On the other hand, employee involvement has influenced the financial performance of Ethio Telecom and enhanced business process management.

Based on the collected data, Ethio telecom has a very good result especially in a way that managers leading in change initiatives took into consideration employees' involvement and empowerment to cultivate the culture of innovation. However, the data showed that employee involvement could not highly encouraged competition in the organization.

This shows that employee involvement in Ethio telecom was good enough as compared with the expected standards and best practices. This finding was similar with the previous finding by Mokaya and Kipyegon (2014), which indicated that there was a strong connection between organizational performance management, individual growth and development, remuneration and employee involvement.

4.3.1 Technology Adoption

As shown in the table 4 below, the researcher administered 8 questions in order to get clear picture of the technology adoption practice in Ethio telecom. Accordingly, the mean response of all these questions was between 4.0510 and 3.0714.

Table 4 Technology Adoption

	N	Mean	Std. Deviation
The organization embraced IT as a means of emphasizing BPM practices.	98	4.0204	.68834
Technology adoption creates an environment of information sharing	98	3.3878	.79473
Technology adoption has facilitated data management	98	3.9490	.70889
Technology adoption has simplified flow of information	98	3.9184	.72756
Technology adoption has simplified transaction processes	98	4.0510	.67918
In my own opinion, technology adoption has influenced the financial performance of Ethio Telecom.	98	3.0714	.87638
Technology adoption been practiced in the organization to achieve business process management.	98	4.0000	.68864
Valid N (list wise)	98		
<i>(Source: Researcher's own survey, February 2023)</i>			

The respondents have indicated that the organization adopted technology to the higher extent as mean score result is greater than 3.0000.

This implies that the organization embraced IT as a means of emphasizing BPM practices and technology adoption has facilitated data management. Similarly, technology adoption has simplified flow of information and simplified transaction processes in Ethio telecom. Moreover, technology adoption had been practiced in the organization to achieve business process management.

Similarly, Jogyato (2007) established that organizations (banks) will attain a competitive advantage if top management is committed to the strategic use of information systems/technology and appreciate it as a system for building competitive advantage.

4.3.2 Strategy Alignment

The table below indicated that the organization's strategy was well formulated and the department's strategic plan defined the organization's strategic goals/objectives. Similarly, the organizational structure matched capabilities and competitive advantages. On the other hand, the organization's strategy has driven a connection between employees and the organization's mission.

Table 5 Strategy Alignment

	N	Mean	Std. Deviation
In my opinion, the organization's strategy is well formulated.	98	3.7551	.74697
The department's strategic plan defines the organization's strategic goals/objectives.	98	3.8980	.80578
Top management review performance data regularly to track progress in achieving strategic goals and objectives.	98	3.0408	.86057
The organizational structure matches capabilities and competitive advantages.	98	3.9694	.80532
The organization's strategy drives a connection between employees and the organization's mission.	98	3.8673	.79480
The organizational strategy eliminates conflicting priorities in the organization.	98	3.9898	.71067
Strategy alignment done in the organization outlines organizational structure and clarity of purpose.	98	4.0306	.71008
In my opinion, strategic alignment influenced the financial performance of Ethio Telecom.	98	3.2857	.87343
Valid N (list wise)	98		

(Source: Researcher's own survey, February 2023)

Furthermore, the organizational strategy had eliminated conflicting priorities in the organization and strategy alignment done in the organization outlines organizational structure and clarity of purpose.

However, strategic alignment could not influence the financial performance of Ethio Telecom to a higher extent. There was also a limitation to review performance data regularly by top management to track progress in achieving strategic goals and objectives.

The result was in agreement with the finding by Muthini (2012) which established that KRA has aligned its internal and external strategies and this has resulted in increased total revenue

collection. According to this study, the alignment has seen the firm roll out new systems for data exchanges, computerization of its receipting system that has cut down on corruption and increased efficiency and flexibility. Moreover, the alignment of external strategies had enabled it to improve on its tax collection as well as improve its strategic planning process.

4.3.3 BPM and Organizational Performance

It can be seen from the below table 6 that the organization's return on asset (ROA) and return on equity (ROE) increased from time to time due to business process management. On the other hand, the organization's ROE had been positively affected by business process management. According to the data, the organization's profitability had also increased from time to time due to business process management and service delivery had been improved as a result of business process management.

Table 6 BPM and Organizational Performance

	N	Mean	Std. Deviation
The organization's return on asset (ROA) has increased from time to time due to business process management.	98	3.9694	.71008
Business process management has a positive impact on the ROA of the organization.	98	3.2347	.82238
Business process management has increased the organization's return on Equity (ROE).	98	4.0306	.68042
The organization's ROE has been positively affected by business process management.	98	4.0102	.72503
Business process management has a positive impact on the profitability of the organization.	98	3.4286	.77326
The organization's profitability has increased from time to time due to business process management.	98	3.9898	.72503
The organization's service delivery has been improved as a result of business process management.	98	4.0612	.72959
Quality of service delivery has been improved from time to time due to improvement in business process management.	98	4.0204	.74584
Valid N (list wise)	98		

(Source: Researcher's own survey, February 2023)

4.4 Aggregate Mean of Constructs

The corresponding mean (total mean of each scale that makes a construct) and standard deviation of the constructs is depicted in table 7. In order to analyze the effect of BPM on organizational

performance, three BPM practices were identified and the score of the responses of the Ethio telecom employees on the practices of these variables has been analyzed on SPSS v20. Organizational performance of the company due to the BPM practices scored by the Ethio telecom employees has been analyzed with SPSS v20.

Based on the table 7 below, the results of SPSS descriptive statistics on the BPM practices every construct of BPM has a score above the mean score three which is above the midpoint. This result implied the majority of Ethio telecom employees were believed that they have been implemented BPM practices in Ethio telecom.

Based on the result, Strategic alignment has the highest mean (3.92) with Standard deviation (SD) of 0.61 implies that employees of Ethio telecom were highly convinced that their company has a good strategic alignment, while employee involvement and technology adoption with lower mean (3.86 and 3.75) with SD of (0.0.36 and 0.44) respectively.

Table 7 Mean of Individual Constructs

Descriptive Statistics					
Description	N	Minimum	Maximum	Mean	Std. Deviation
Employee Involvement	98	2.67	4.83	3.8622	.44324
Technology Adoption	98	3.00	4.71	3.7493	.36698
Strategic Alignment	98	3.00	7.75	3.9171	.61786
Organizational Performance	98	3.00	5.00	3.8916	.46724
Valid N (list wise)	98				

(Source: Researcher's own survey, February 2023)

The Likert scale was converted to scale to interpret mean level of agreement of the respondents on the identified measuring items. The limits of the scale were 1.00 to 1.49 = strongly disagree, 1.50 to 2.49 = disagree, 2.50 to 3.49 = neutral, 3.50 to 4.49 = agree, and 4.50 to 5.00 = strongly agree. Regarding the organizational performance, the construct had a mean and SD of 3.89, and 0.46, respectively which is above the cut point of three. Thus, this indicates employees of Ethio telecom believe that their organizational performance is improved due to BPM practices.

4.5 Correlation and Regression Analysis

4.5.1 Correlation analysis

According to (Saunders, 2009) a correlation analysis was used in order to identify the direction and relationship between the variables. Correlation coefficient enables to quantify the strength of the linear relationship between two variables. Cohen and Holliday (1982), as cited by Bryman and Cramer (1999) proposed the range of correlation coefficient as 0.19 and below = very low; 0.20 to 0.39 = low; 0.40 to 0.69 = modest; 0.70 to 0.89 = high, and 0.90 to 1 = very high. In this study, to categorize the strength of the relationship of the variables the researcher used correlation coefficient range of Cohen and Holliday's (1982).

Table 8 Spearman's rho correlation

Correlations					
		Employee Involvement	Technology Adoption	Strategic Alignment	Organizational Performance
Employee Involvement	Correlation Coefficient	1.000			
	Sig. (2-tailed)	.			
Technology Adoption	Correlation Coefficient	.661**	1.000		
	Sig. (2-tailed)	.000	.		
Strategic Alignment	Correlation Coefficient	.642**	.624**	1.000	
	Sig. (2-tailed)	.000	.000	.	
Organizational Performance	Correlation Coefficient	.694**	.613	.704**	1.000
	Sig. (2-tailed)	.056	.089**	.002	.
Number of Sample (N)		98	98	98	98
**. Correlation is significant at the 0.01 level (2-tailed).					

(Source: Researcher's own survey, February 2023)

As indicated in table 8, based on the correlation coefficient ranges of Cohenn and Holliday, dependent variable; organizational performance and strategic alignment have a strong and positive correlation ($r = .704$, $p < 0.01$), with many of independent BPM practices. The dependent variable organizational performance has also a high correlation with employee involvement ($r=.694$, $P<0.01$) and moderate correlation with technology adoption ($r=.613$, $P<0.01$).

However, correlation analysis shows only the strength and directions of one independent and dependent variables, it does not permit the researcher to make analysis of more than one

independent and dependent variables, and fall short in predicting the beta value of independent variables that explains the dependent variable, and in making inferences regarding the overall relationship between the identified variables. Hence, to analyze the effect of business process management practices on organizational performance of employees, the researcher used multiple linear regression analysis that overcomes the shortcomings of correlation analysis.

4.5.2 Regression Analysis

Diagnostics in Regression

A number of assumptions need to be met before performing regression analysis with confidence. The important assumptions that are to be tested in this section are; independent variables should not be too strongly correlated to one another (Multi-collinearity), the value of residuals to be independent from one another and the residuals should be normally distributed. The following tests performed to check whether the data fits the assumptions of linear regression in order to conclude the analysis results are valid and reliable.

4.5.2.1 Multi-collinearity

If there is a high degree of correlation between independent variables, there is a problem of Multi-collinearity (Kothari, p.142). This is essentially the assumption that the predictors are not too highly correlated with one another.

Table 9 Multi-collinearity Test

Multi-collinearity Test		
Model Description	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Employee Involvement	.456	2.195
Technology Adoption	.493	2.029
Strategic Alignment	.676	1.480
<i>(Source: Researcher's own survey, February 2023)</i>		

When predictor variables are very highly correlated, we have to wonder whether they are not in fact measuring the same thing and would be better combined into one new variable. As indicated in table 9 there is no too high pair-wise correlation between BPM practices (Independent Variables). As a rule of thumb, Bryman and Cramer (1999) stated that the

independent variables that show a relationship at or in excess of 0.80 suspected of exhibiting multi-collinearity. In this study as shown in table under correlation analysis, there is no relationship that equals or exceeds Spearman's rho correlation coefficients of 0.80.

Multi-collinearity assumption can be also tested by looking at the coefficients table. As explained by Muijs (2010, p.181) Tolerance and Variance Inflation Factors (VIF) do exactly the same thing, tolerance is the amount of variance in the individual variable not explained by the other predictor variables. It varies from 0 to 1, a value close to 1 indicates that the other predictors do not explain the variance in that variable. A value close to 0 implies almost all the variance in the variable is explained by the other variables. This permits us to more formally check that our independent variables are not too highly correlated. To meet multiple regression assumptions, we need tolerance score above 0.2 and VIF scores below 10.

4.5.2.2 Autocorrelation

It is an assumption that the value of residuals to be independent from one another (or uncorrelated). To check this assumption, we need to look at the regression output of model summary box. Durbin Watson statistic can be used to test the assumption that our residuals are independent (or uncorrelated). This statistic can vary from 0 to 4. For 'no Autocorrelation' assumption to hold, Durbin-Watson statistic value needs to be close to 2. A value of 2 indicates a perfect no autocorrelation. A value of towards zero indicates positive autocorrelation. A value towards four indicates negative autocorrelation (Saunders et al., 2009).

Table 10 Autocorrelation test

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.868	.754	.743	.23672	1.677
Predictors: (Constant), Employee Involvement, Technology Adoption , Strategic Alignment					
Dependent Variable: Organizational Performance					

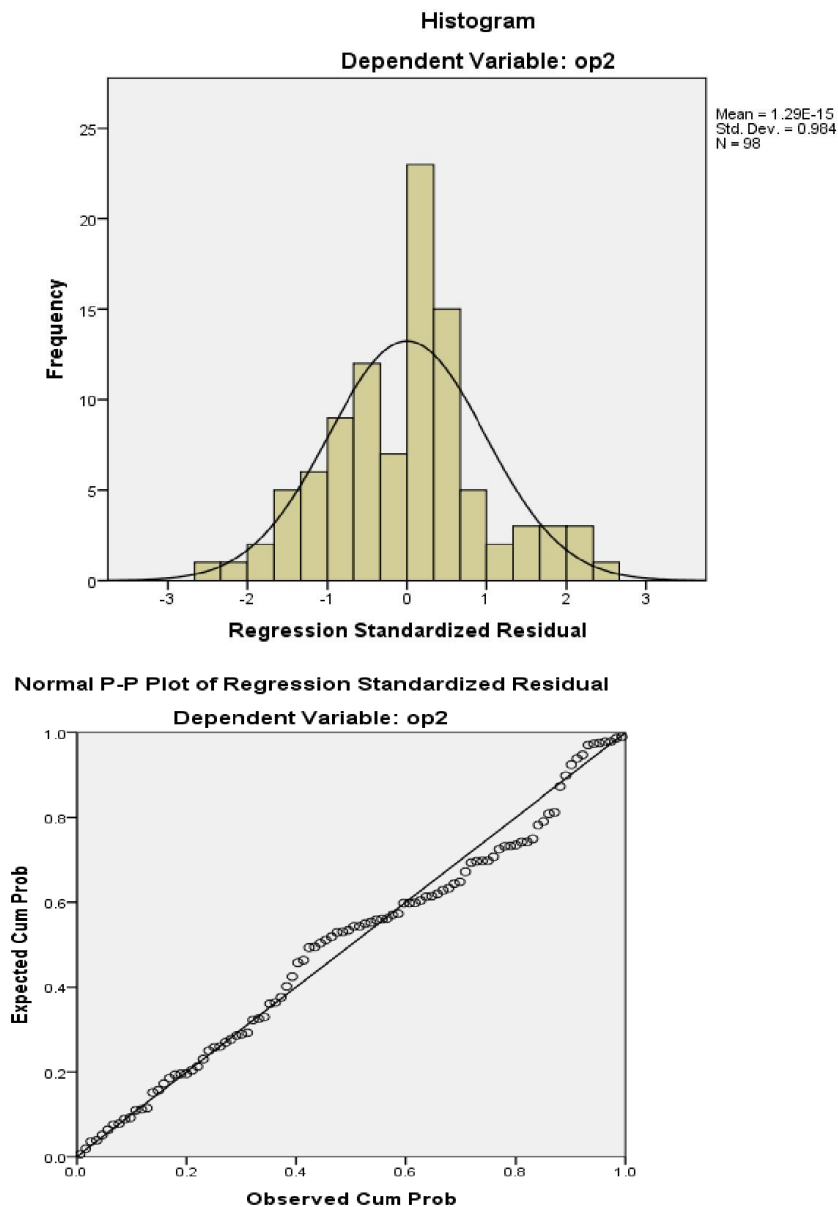
(Source: Researcher's own survey, February 2023)

4.5.2.3 Normality

This assumption is used to determine whether the residuals are normally distributed. This can be tested by looking at the Histogram and P-P plot for the model. To say the Normality assumption of this study is met, the Histogram should be symmetric along the center 0 and the dots at the P-P

Plot should be closer to the diagonal line; Normal P-P plot –points should lie in reasonably straight diagonal line from bottom left to top right.

Figure 2 Normality test



(Source: Researcher's own survey, February 2023)

In this case, referring the above histogram, it can easily be observed for being symmetric (neither kurted nor skewed). According to the diagram below, the P-P plot the dots are drawn closer to the diagonal line, indicating that assumption of normality is met.

4.6 Hypothesis Testing

To test hypothesis of this research, multiple linear regression technique is performed.

4.6.1 Multiple Regression Analysis

Multiple regression analysis is a statistical technique that can be used to analyze and measure a relationship between two or more variables (Saunders et al., 2009, p.461). This technique was implemented to explore the most sophisticated interrelationship among variables. Generally, this method enables the researcher to make stronger causal inferences from observed interrelationships among variables and to predict a dependent variable based on values of a number of independent variables.

Ha1: There is positive and significant relationship between employee involvement and organizational performance

Ha2: There is positive and significant relationship between technology adoption and organizational performance

Ha3: There is positive and significant relationship between strategic alignment and organizational performance

This study assumed that the identified BPM practice measures, namely, employee involvement, Technology adoption and strategic alignment has a positive and significant effect on organizational performance. In correlation analysis we have seen organizational performance has a high and moderate correlation coefficient with BPM practices like employee involvement, technology adoption and strategic alignment (table 11). However, a precise measure of estimating the effect and statistical significance of each of these variables on organizational performance is to undertake a regression analysis. The table below is summary of multiple regression analysis reporting the model summary, ANOVA analysis and coefficient estimates performed using SPSS.

The coefficient R in this model summary indicates the square root of R-Squared and is the correlation between the independent and dependent variable. From the table 11 below, $R = .868$ indicates that there is a very strong positive correlation between the dependent variable (Organizational Performance) and the set of three independent variables (BPM practices) included in the model.

Table 11 the regression model statistics

Model Summary						
Model	R		R Square	Adjusted R Square	Std. Error of the Estimate	
1	.868 ^a		.754	.743	.23672	
a. Predictors: (Constant), Employee Involvement, Technology Adoption and Strategic Alignment						
ANOVA ^a						
Model		Sum of Squares	Degrees of Freedom	Mean Square	F	Sig.
1	Regression	2.213	3	2.213	11.206	.001 ^b
	Residual	18.963	95	.198		
	Total	21.176	98			
a. Dependent Variable: Organizational Performance						
Coefficients Estimation						
Model		Unstandardized Coefficients		Standardized Coefficients	t-statistic	Sig.
		B	Std. Error	Beta		
(Constant)		2.808	.477		5.890	.000
Technology Adoption		.188	.176	.147	1.068	.288
Strategic Alignment		.152	.089	.269	.1707	.0558
Employee Involvement		.409	.151	.388	2.705	.008

As shown in table 11 above, the overall model statistics summary of dependent variable Organizational Performance revealed that the R square value of .754. This result indicate that all independent variables (Employee Involvement, Technology Adoption and Strategic Alignment) included in the model explained 75.4% of variance in the overall Organizational Performance of Ethio-telecom. Hence, the overall model statistic ($R^2 = 0.754$) for organizational performance with significant value of the model which shown on ANOVA table (Sig. = .000) is supported the proposed hypothesis that *Business Process Management has a positive effect on the institution's overall performance*.

To test significance of the model, ANOVA (F- test) was performed. As shown above on multiple regression analysis (table 11), it can be observed from the ANOVA table that the model as a whole is significant ($P = .000$, $F(3, 95) = 11.206$). Thus, it is concluded that the proposed hypothesis which states that *there is positive and significant relationship between business process management dimensions and the overall organizational performance* is accepted.

From table 12 below, the coefficient table of the regression constant shows that when the independent variables are constant at zero, the organizational performance would

be 2.808. Positive and significance relationship was found from independent variables Employee Involvement ($\beta = .388$, $p = .008$) and Strategic Alignment ($\beta = .269$, $p = .0558$) but Technology Adoption ($\beta = .147$, $p = .288$), positive and statically insignificant.

Individual independent variable with higher beta value has stronger effect on dependent variable organizational performance, thus according to table 12 below, among independents variables with positive and significance relationship, Employee Involvement ($\beta = .388$) is the best predictor of organizational performance followed by Strategic alignment ($\beta = .269$). Hence, an improvement on these BPM practices will highly contribute to the improvement of organizational performance. The other variable of BPM practices which has positive effect but found to be statistically insignificance at $p = .05$ level was technology adoption ($\beta = .147$). Therefore, we accept Ha1: *‘There is positive and significant relationship between employee involvement and organizational performance’* and Ha3: *‘There is positive and significant relationship between strategic alignment and organizational performance’*. On the other hand, we reject Ha2: *‘There is positive and significant relationship between technology adoption and organizational performance’*. The summary table is presented as follows.

Table 12 hypothesis summary

Ha1:	There is positive and significant relationship between employee involvement and organizational performance	Accept
Ha2:	There is positive and significant relationship between technology adoption and organizational performance	Reject
Ha3:	There is positive and significant relationship between strategic alignment and organizational performance	Accept

(Source: Hypothesis testing result, February 2023)

4.7 Discussion of major findings

Based on the eventful data finding report from multiple regression analysis performed and the complying hypothesis testing, the major findings of the study are discussed in the forthcoming paragraphs.

With regard to examining the effect of BPM practice, we have accepted our alternative hypothesis dictating a positive and statistically significant relationship between employee involvement and organization performance. According to the responses from the respondents to the questions regarding employee involvement, it was found that employee involvement was

good enough in Ethio telecom as staff training and development was used to reinforce certain behaviors and attitudes that results in increasing productivity. The way that managers leading in change initiatives to cultivate the culture of innovation regarding employees' involvement and empowerment was also good though employee involvement could not highly have encouraged competition in the organization. The effect of employee involvement on organizational performance was found to be positive and statistically significant ($\beta = .388$, $p = .008$). With a unit additional practice of employee involvement, the organizational performance of Ethio-telecom was improving by 0.38 units. Hence, a change in employee involvement will result in a substantial change on the organizational performance of the company.

The data analysis also indicated that Ethio telecom's strategy was well formulated and the department's strategic plan was defined departmental strategic goals/objectives were defined based on the organization's strategic plan. On the other hand, organizational structure was matched with capabilities and competitive advantages. Similarly, the organization's strategy has driven a connection between employees and the organization's mission and had eliminated conflicting priorities in the organization. Moreover, strategy alignment was set in the organization that outlines organizational structure with clearly stated purpose. Regarding the effect of strategic alignment on organizational improvement, as per the results from the multiple regression analysis, a positive and statistically significant relation was found. For aligning the strategy planning and implementation of the institute, the organization's performance was improved by 0.26 units. This implies further practicing strategic alignment will enhance organizational performance.

In summary, the practices of Business Process Management (BPM) like employee involvement, technology adoption and strategic alignment were found to positively affect the organizational performance of Ethio-telecom. Therefore, action plans to increase the involvement of employees, enhance the adoption of new technologies and maintaining strategic alignment can result in improved organizational performance of Ethio-telecom.

CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATIONS

Introduction

The main objective of the study was to assess the effect of Business Process Management on organizational performance, in the case of Ethio Telecom. This chapter presented research conclusions and forwards recommendation points that can help the enhancement in organizational performance of Ethio Telecom.

5.1 Conclusions

Based on the findings of the study, the researcher made the following conclusions in line with the objectives of the study.

- It was identified that the employee involvement was good enough in Ethio telecom organization used staff training and development to reinforce certain behaviors and attitudes that results in increasing productivity and improvement efforts were directed towards improved communication in the organization. With regard to its effect on organizational performance, employee involvement had a positive effect and statistically significant effect. The result was also found to be valid, because productivity was increased due to staff training and development which were provided to reinforce certain behaviors and attitudes.
- In Ethio-telecome the adoption of IT was practiced and regarding its effect on organizational performance, it was found to be positive but not statistically significant. The existence of positive relationship with organizational performance implies increased adoption of technologies will result in enhanced performance of the company.
- It can be concluded that Ethio telecom has a good strategic alignment. Such a good strategic alignment had a positive and statistically significant effect on organizational performance in Ethio telecom as conflicting priorities were eliminated due to strategic alignment. Therefore, with maintaining strategic alignment the company can continuously improve its performance

In general, it can be concluded from the research findings that Ethio telecom's overall performance had increased from time to time due to the practice of business process management components; namely Employee involvement, technology adoption and strategic alignment.

5.2 Recommendations:

Based on the conclusions of the study, the researcher recommended the following points:

- The top management (Board of directors and Executive Management Committee) shall design action plan to enhancing employees' involvement. This can be achieved via staff training and development motivated to reinforce certain behaviors and attitudes that results in increased productivity at work. Furthermore, improve efforts towards ameliorated communication in the organization.
- For the fact that technology adoption helps in simplifying flow of information and transaction processes in the telecom industry; Ethio-telecom shall facilitate the adoption of new technologies. Moreover, technology adoption had been practiced in the organization to enhance performance, hence fostering the same will help overall organizational performance improvements. Therefore, the organization's management and concerned bodies should take the necessary measures to mend the adoption of information technology.
- It was also concluded in the research that strategic alignment had a positive and statistical effect on organizational performance; which implied fostering this strategic alignment will result in enhancement of the overall organizational performance. Hence, it is advisable for Ethio telecom's management and other stakeholders to regularly review the strategic directions of the institute and measure the overall accomplishment of the company.
- In general, taking actions that can positively influence the involvement of employees, adoption of new technologies and alignment of strategic directions will result in improved organization performance of Ethio-telecom.

5.3 Future research

This study was conducted only based on data collected from Ethio telecom head quarter. However, the effect of BPM on organizational performance needs to be expanded to other sectors in Ethiopian context in order to investigate whether the same results and conclusions could be obtained.

With regard to the effect of one of BPM practice i.e. technology adoption was found statistical insignificant in the case of Ethio telecom therefore future research should incorporate to see the effect of technology adoption on organizational performance.

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Annex

Questionnaire

Addis Ababa University, College of Business and Economics

Department of Management

Dear participant,

This questionnaire is designed to assess the **Effect of Business Process Management on Organizational Performance: in the Case of Ethio Telecom**. Completion of the questionnaire is completely voluntary. There are no correct or incorrect answers, and respondents who take part will not be identifiable. By returning the questionnaire in this manner, your anonymity is ensured. Returning this questionnaire was considered as your consent to participate in the survey. The study is to be conducted in partial fulfillment of the requirements of Masters of Quality Management. Please answer all questions. The information obtained through the questionnaire will be treated as confidential and will only be used strictly for academic purposes.

Your participation will be highly appreciated.

Thank you in advance for all your cooperation and kind consideration.

Best regards,

Lula Fekade

Directions: -

- Make only a tick mark (✓) on the space provided to show your answer.
- Please do not write your name in this questionnaire.

Part I - Basic Personal Data

1. Age (in Years)

- A. 18 – 25 [] B. 26 – 35 [] C. 36 – 45 []
 D. 46 – 55 [] E. 56 and above

2. Gender Male [] Female []

2. Educational Background

- A. High School [] B. Diploma [] C. First Degree []
 D. Master's Degree [] E. PhD []

4. Experience in Ethio Telecom in Years

- A. <2 [] B. 3 – 5 [] C. 6 - 10 [] D. >11 []

PART II – Please indicate your response regarding the components of Business Process Management in the Case of Ethio Telecom.

Please indicate your level of agreement on the items listed below.

The scale is underscored as follows:

Strongly agree=5 Agree =4 Neutral =3 Disagree = 2 strongly Disagree =1

S/N.	Questions/Statements	5	4	3	2	1
1. Employee Involvement						
1.1	The organization used staff training and development to reinforce certain behaviors and attitudes that results in increasing productivity.					
1.2	Improvement efforts are directed towards improved communication in the organization.					
1.3	In my own opinion, employee involvement has influenced the financial performance of Ethio Telecom.					
1.4	Employee involvement has enhanced business process management.					
1.5	In order to cultivate the culture of innovation, managers leading in change initiatives take into consideration employees' involvement and empowerment.					
1.6	Employee involvement encourages competition in the organization.					

2. Technology Adoption					
2.1	The organization embraced IT as a means of emphasizing BPM practices.				
2.2	Technology adoption creates an environment of information sharing				
2.3	Technology adoption has facilitated data management				
2.4	Technology adoption has simplified flow of information				
2.5	Technology adoption has simplified transaction processes				
2.6	In my own opinion, technology adoption has influenced the financial performance of Ethio Telecom.				
2.7	Technology adoption been practiced in the organization to achieve business process management.				
3. Strategy Alignment					
3.1	In my opinion, the organization's strategy is well formulated.				
3.2	The department's strategic plan defines the organization's strategic goals/objectives.				
3.3	Top management review performance data regularly to track progress in achieving strategic goals and objectives.				
3.4	The organizational structure matches capabilities and competitive advantages.				
3.5	The organization's strategy drives a connection between employees and the organization's mission.				
3.6	The organizational strategy eliminates conflicting priorities in the organization.				
3.7	Strategy alignment done in the organization outlines organizational structure and clarity of purpose.				
3.8	In my opinion, strategic alignment influenced the financial performance of Ethio Telecom.				

PART III – Please indicate your response regarding the effect of Business Process Management on organizational performance in the Case of Ethio Telecom.

Please indicate your level of agreement on the items listed below.

The scale is underscored as follows:

Strongly agree=5 Agree =4 Neutral =3 Disagree = 2 strongly Disagree =1

S/N.	Questions/Statements	5	4	3	2	1
4. Impact of BPM on Organizational Performance						
4.1. ROA						
	The organization's return on asset (ROA) has increased from time to time due to business process management.					
	Business process management has a positive impact on the ROA of the organization.					
4.2. ROE						
	Business process management has increased the organization's return on Equity (ROE).					
	The organization's ROE has been positively affected by business process management.					
4.3. PROFITABILITY						
	Business process management has a positive impact on the profitability of the organization.					
	The organization's profitability has increased from time to time due to business process management.					
4.4. SERVICE DELIVERY						
	The organization's service delivery has been improved as a result of business process management.					
	Quality of service delivery has been improved from time to time due to improvement in business process management.					