

ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES DEPARTMENT OF PROJECT MANAGEMENT

THE EFFECTIVENESS OF PROJECT MANAGEMENT PROCESS ON THE PERFORMANCE OF JAMBO CONSTRUCTION PLC.

BY: SARON GELANA

A RESERCH PROJECT SUBMITTED TO ST. MARY'S UNIVERSITY, IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR AWARDS OF MASTERS OF ART IN PROJECT MANAGEMENT

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DECLARATION

I hereby declare that the work entitled: "The Effectiveness of project management process on the performance of Jambo construction "is the outcome of my own effort and study and that all source of materials used for the study have been duly acknowledged. I have produced it independently except of the guidance and Suggestion of my Research Advisor.

This study has not been submitted for any degree in this University or any other university. It

Is offered for the Partial Fulfillment of Requirements for Award of Masters of Art in Project

Management.

Declared by: Saron Gelana Eticha

CERTIFICATION

This is to certify that Saron Gelana Eticha has carried out this research project on the topic Entitled "The Effectiveness of project management process on the performance of Jambo construction" under my supervision. This work is original in nature and it is sufficient for submission for the partial fulfillment for the award of Degree of Masters of Art in Project and Management.

MuluadamAlemu (PHD)

Signature

Date 31/05/22

Addis Ababa, Ethiopia

ACKNOWLEDGMENT

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ACRONYMS AND ABBREVIATIONS

SPSS - Statistical Package for Social Science

PMBOK - Project Management Body of Knowledge

WBS -Work Breakdown Structure

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ABSTRACT

Project management is an administration process for the planning and control of services or the implementation of a project. Project management is a method of managing change by designing activities that meet specific objectives while involving stakeholders and teamwork to achieve successful implementation. Literature shows that applying project management practices offers organizations the means to be completed within the time frame, budgeted cost and required quality. However, unfortunately many projects take longer time to complete, cost more than necessary. The general objective of this study is to assess the effectiveness of project management process on the performance of Jambo construction. Mixed research approach has been adopted to carry out the study. A total of 70 questionnaires were distributed .The collected data was analyzed with the help of SPSS version 20.0. Then the data presented quantitatively using descriptive statistics with the help of table, frequency and percentage. The research result revealed that stakeholder management, communication management, Human resource management and integration management processes were applied effectively in Jambo construction. But On the other hand factors that challenges the construction project in this study includes scope management, quality management, risk management, time management, cost management and procurement management. Based on these research findings the researcher concluded that planning process from the process group and Quality, Time, Cost, Communication, scope, risk, procurement and integration management processes from the subject group are effective in realizing success of a project. Emphasis should be given to have well prepared procurement planning with much detail, quality management plan, risk management plan, scope management plan, time management plan and Cost management plan in order to deliver successful projects.

Keywords: Project management, Construction project, project management Effectiveness, Project management knowledge area, Jambo Construction.

CHAPTER ONE

INTRODUCTION

This document provides a comprehensive and comprehensive source of information and advice on the effectiveness of the project management process for the performance of jambo construction projects. If the project cannot be completed within the cost and time budget and the performance planned based on the original plan cannot be achieved, the project can fail.

One of the goals of this article is to understand effective project management processes for project success. Therefore, in order to evaluate the effectiveness of the implemented project management processes, this article analyzes the current project management situations in the construction of Jambo according to international standards called Guidelines for Project Management.

This document provides step-by-step identification of effective project management techniques for project success by providing lessons from a Jambo Construction project case study and the steps necessary to implement a proper management process increase.

This chapter provides background of the study, statement of the problem, objectives of the study, research questions, scope of the study, significance of the study, limitation of the study and presents the organization of the report.

1.1 Background of the study

The construction industry is a multi-billion dollar industry with increasing scale and technological sophistication. The construction industry is the backbone of economic development. Due to the harsh field conditions and heavy materials used, the construction process is labor intensive and requires good management style.(Habtemariam, 2019)Although it cannot be denied that project management practices have improved significantly over the last 30 years (Diana White, 2002).

The level of success in carrying out construction project development activities will depend Heavily on the quality of the managerial, financial, technical and organizational performance of The respective parties, while taking into consideration the associated risk management, the Business environment and economic and political stability.(Takin, 2004)

On-time completion within budget, required quality standards and performance measured by customer satisfaction are all critical factors in the long-term success of a construction project. (Omran, 2012).This means that budgets and schedules are increasingly central to project management methodologies, while other aspects of performance are becoming more relevant.

Failure to meet project deadlines, budget costs, and quality requirements can have many unforeseen negative consequences.

While project management practices have undoubtedly improved dramatically over the last three decades (Diana White, 2002).problems remain with the underlying assumptions and project management practices of certain countries.(Abd El-Razek, 2008)

According to Lewis (Lewis, 1998). Project is considered as successful if it meets technical performance standards and achieves a high level of satisfaction among key stakeholders. Also note that perception is an important aspect of success. The reasons for success and delay are primarily in the various interests of stakeholders and stakeholder groups. According to a study by (Tatiana Rina Puspasri, 2005), project stakeholders, project processes, human aspects, and the environment can affect project performance. Large-scale construction projects are underway in the construction industry. Procedurally applied project management techniques are used to achieve the goals of large construction projects.

In most cases, project success can be defined as completing the project on time, within budget and according to the project specifications by (Tesfaye Hailu Zewdie, 2016).

According to (Wubishet, 2006), the main problems facing Ethiopia's construction project are traditional approaches to project planning, planning without the necessary expert approval, and applicable project management guidelines.

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It is a violation of. Intervention by the owner or stakeholder. Due to these and other factors, 79.06% of Ethiopian projects failed to meet their goals (Lemma, 2014). In addition, 72% of projects funded by the Ethiopian Development Bank in 2013 failed. Delayed implementation, overestimation of project profits, and inadequate project staffing has emerged as statistically significant causes of project goal failure (Getachew, 2015).

Meanwhile, in the survey, (Eyob Birhanu, 2020), identified five of the ten areas of knowledge of project management that challenged road construction projects. Scope management, quality control challenge, stakeholder management, communication management, risk management challenge.

As I have tried to explain in the above, project management process is an administration process for the planning and control of services or the implementation of a project. Jambo Real Estate is an industry where large scale projects are undertaken so the issue will be beneficial for practitioners in identifying which project management processes are effective for the success of a project. Implementation delays, overestimation of project return, and poor project manpower quality have been identified as statistically significant causes of project failures to meet their objectives. Unfortunately; adequate researches had not been done in evaluating effectiveness of project management processes on performance of projects in Jambo Construction.

Researchers are currently focusing their efforts on factors that influence project effectiveness. However, little research has been conducted to date on how projects are effectively managed in organizations. Without effective project management, a construction company, in particular, will be unable to achieve its objectives and goals. They must, however, be managed properly.

Previous literature on the effectiveness of project management processes for project performance does not cover all aspects of project management challenges and practices in a single study. Most of them focus on a single aspect of project management, including stack holder management, risk management, planning, monitoring, and assessment. However, challenging factors in one area have a significant impact on all other related areas.

Little is known about the relationship between project management process performance and project success or failure in order to identify and understand which project management processes are most effective. As such, the problem is considered one of the basic elements of an effective project management process. To provide a better recommendation, and because the topic has not been well researched and the literature is scarce, this should provide a lesson for other projects. Consistent with the study aimed at filling this research gap, the effect of the project management approach on the performance of Jambo Construction PLC will be critically evaluated in this study.

1.2 Background of the Company

Jambo Construction PLC began operations in September 1998 with a paid-up capital of birr 500,000 (fifty thousand Birr) and has since grown to a paid-up capital of birr 95,520,000. (Ninety-Five Million Five Hundred Twenty Thousand).

Jambo Real Estate is a young and solid company founded under the Jumbo Group (Consortium) and serves a model role in the real estate sector. Jambo Real Estate has entered the real estate development business based on its long and reliable experience, strong professional ethics and reliable financial capabilities accumulated over many years as Jumbo Construction Plc. With a sister company of the consortium.

Jambo Construction & Trading LTD is a subsidiary of Jambo Construction PLC. With the expansion of business scope, Jambo Construction PLC established a subsidiary in South Sudan on July 21, 2010 under the Companies Act of 2003 of the Government of South Sudan (GOSS). The purpose of establishing Jambo Construction & Trading LTD is to provide all professional and ethical construction and trading services and to be part of the development of South Sudan.

Jambo Construction & Trading LTD is one of the priority companies in providing construction services in South Sudan. Jambo Construction & Trading LTD has provided several construction

services to UN agencies (UNOPS, UNDP, UNMISS, UNICEF, etc.) and South Sudanese government ministries during its 10-year effort.

The company has also established a subsidiary in Uganda called Jambo Construction & Trading LTD Uganda.

Since its inception, the company has been involved in a variety of engineering and related activities in Ethiopia. His contributions include the Mafi City Mall in Bole, 6 different G + 9 residential units around the Global Hotel, 2 apartments around Torhailoch, 1 apartment each around Flamingo, Abuware and Ayate, and around Olympia. It will be completed soon. And it has a wealth of experience in the interdisciplinary field of construction.

1.3 Statement of the Problem

The project should be completed within the time frame, budget cost, and required quality. A project is considered to have failed if the project does not meet the expectations of stakeholders and the failure of the project is related to cost, quality, and time considerations ((B. Prakash Rao, 2016). Inadequate project management due to cost and time overruns can lead to unachieved product successes such as profitability and market share (baccarini, 2004).

According to research done by (Akewushola, 2012), found that if these project management methods are well managed, there is a very high probability that there is a viable project that guarantees success. This includes scope of work, time, resources, costs, quality, communication, and risk and contract deliverable.

Organizations rely heavily on an effective project management process. It is also necessary to research the project management process in order to better understand and manage projects in Jambo Real Estate. Jambo Real Estate is currently a large construction company that works on a variety of projects. Unfortunately, no adequate research had been conducted to assess the effectiveness of project management processes on project performance in the organization.

Previous literature regarding the effectiveness of project management process on project performance does not cover all aspects of challenge and practice of project management in one study. Most of them focus on single aspects project management issues such as stake holder management, risk management, planning and monitoring and evaluation. But a challenging factor in one area will have a significant ripple effect in all other related areas.

Little is known about the relationship between the implementation level of a project management process and the success and failure of a project. Identifying and understanding the effective project management process is very effective. Therefore, this issue is considered to be one of the fundamental factors in an efficient project management process. It will be a lesson for other projects, in order to give better recommendations, and because this subject is not well studied and lacks literature. Consistent with the study designed to fill the gap in this study, this study critically assesses the effectiveness of project management methodologies for the performance of the Jambo Construction PLC.

1.4 Objectives of the study

1.4.1 General Objective

The study's overarching goal is to assess and analyze the effectiveness of project management processes on the performance of Jambo Construction PLC.

1.4.2 Specific Objectives

Specifically, this study will attempt:

a) To assess the extent of project management processes applied in Jambo construction projects.

b) To test the effectiveness of project management processes used in Jambo construction.

C) To come up with a better recommendation on the effectiveness of project management process in order to improve the performance of building construction projects in Jambo construction.

1.5 Research Questions

The following fundamental research questions will be very important for the study to clearly determine the effectiveness of project management process on the performance of Jambo construction and propose solutions.

1) What are the most effective project management processes applied in Jambo construction projects?

2) To what extent project management process is being practiced at Jambo construction?

3) How effective are project management processes in Jambo construction project?

1.6 Scope and limitations of the Study

The project management process has a very broad scope. The primary focus of this research is on the effectiveness of project management processes on the performance of the Jambo construction. In terms of unit of analysis, the scope of this research is limited to Project managers working in the company, Engineers, supervisors, managers, and all staff members found in the company.

The major constraints faced by the researcher whilst conducting this study were lack of prior research studies on the topic and time constraints. The other limitation of the study is that the research relied merely on the opinions of the employees. This is due to the non-availability of adequately published and documented data about effective project management processes by the organizations which would have been useful if found.

1.7 Significance of the study

The research findings of this study will be useful to the following stakeholders including:

Academics/Researchers

The findings of this study will aid academicians in gaining a better knowledge of the essential aspects that influence the performance of construction businesses' project management processes.

Jambo construction and other construction companies

The outcomes of this study will also aid Jambo Construction and others in delving further into the benefits of using numerous components investigated in the research to anticipate the aspects that affect their performance.

Considering the importance of project management in the construction companies, specifically in building construction, and the booming of construction activities in Ethiopia, it is assumed that these research output contributes in identifying which project management processes has effect on performance of building construction projects. And it will contribute in adding some concepts to the existing body of knowledge with a particular emphasis on construction practices being currently implemented.

Governmental Policy Makers

The findings of this study can be used by the government to aid in the formulation of policy and the development of frameworks for critical finance, marketing, work premises, and other factors that affect the performance of construction projects. Furthermore, the findings of this study will inform policymakers about the types of policies that should be developed.

1.8 Organization of the thesis

The project work is organized into five chapters. Chapter one which is the introductory part

Presents background of the study, statement of the problem, objectives of the study, research questions, scope, limitation and significance of the study. Chapter two comprises of literature review and quotes the various related works done in this area of study, take place about project process groups, project management success and all the important frame works and concepts. Chapter three which is the research methodology part covers research design, target population; sampling techniques, sample size and data collection tools. And chapter four which is data analysis and findings part reveals findings and analysis from both qualitative and quantitative data collected from the instruments are analyzed and described exhaustively. The last chapter, chapter five that is the summery of findings, conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter presents the theoretical foundations of project management as well as project management practices. Furthermore, it introduce both theoretically and empirically focused literature defining the difference between "project successes" and "project management success," so that the emphasis on project success and its inherent dimensions is more easily understood. This is followed by a systematic review of the use of Project Management Practices in construction projects in Jambo construction and beyond to identify gaps in knowledge about the use of Project Management practices.

2.1 Conceptual Definition

project is defined as a temporary endeavor undertaken to create a unique product, service, or result (Luis emilio alvarez-dionisi, 2013). According to (Muszynska, 2016), a project can be considered to be any series of activities and tasks that: have a specific objective, with a focus on the creation of business value, to be completed within certain specifications, have defined start and end dates, have funding limits (if applicable), consume human and non-human resources (i.e., money, people, equipment), are multifunctional (i.e., cut across several functional lines)

(Kerzner, 2006), defined PM as "Project management is the planning, organizing, directing, and controlling of company resources for a relatively short-term objective that has been established to complete specific goals and objectives.

There are many definitions to project management, but the ,(PWG.Morris, 2006)defined PM as "the application of knowledge, skills, tools and techniques to project activities in order to meet or exceed stakeholder's needs and expectations from a project"

Construction project management does not differ much from project management in general; Walker defined it as "The planning, Co-ordination and control of a project from conception to completion on behalf of a client requiring the identification of the client's objectives in terms of utility, function, quality, time and cost, and the establishment of relationships between resources, integrating, monitoring and controlling the contributors to the project and their output, and evaluating and selecting alternatives in pursuit of the client's satisfaction with the project outcome".(Douglas c.bower, 2007)

(Daniel w.m.chan, 2002), remarked that project performance measurement include time, budget, safety, quality and overall client satisfaction. (kuprenas, 2003), stated that project performance measure an improvement of cost, schedule and quality for design and construction. Project

Performance is traditionally evaluated using schedule, cost and quality performance, also known as the "iron triangle" (Anton Zandhuis R. s., 2013).

2.11 Operational Definition of Terms

Project: A temporary endeavor undertaken to create a unique product or service. It is often organized under the direction of Project Manager, who will ensure that the project achieves its objectives. (PWG.Morris, 2006).

Project Management: - the application of knowledge, skills, tools and techniques to project activities in order to meet or exceed stakeholder's needs and expectations from a project" (PWG.Morris, 2006)

Project Management Effectiveness: - A measure of the quality of attainment in meeting objectives. It is the extent to which the goals of a project are attained or the degree to which a system can be expected to achieve a set of specific requirements (Wideman, 2002)

Critical success factors (CSFs): - are characteristics, conditions, or variables that can have a significant impact on the success of the project when properly sustained, maintained, or managed,(Zarina alias, 2014).

2.2 Theoretical Frame work

Projects are needed to be completed within the time frame, budgeted cost and required Quality. A project is considered as a failure one if a project fails to meet the expectation in line with the stakeholders and the failure incident of project is associated with consideration of cost, quality and time (B. Prakash Rao, 2016).

Poor project management in terms of cost or time overruns may result in the non-attainment of product success such as profitability or market share (baccarini, 2004).

(atkinson, 1999), reported that project management has cost quality, and time as its critical factor. According to the study conducted by (Akewushola, 2012), finds out that if these project management practices are well managed, there is a very high possibility of having a viable project that will guarantee a sound business success. Which include work scope, time, resources, costs, quality, communication, risk, and contracts procurement(k.wysocki, 2003), finds out that there are five constraints operate on every project; these are scope, quality, time, cost and resource.

According to the research and literature review conducted by (Tesfaye Hailu Zewdie, 2016), showed that significant numbers of projects in Ethiopia are under failed category. Hence, this research author recommends that effective project management processes like Planning, Time, Quality, Cost and Communication processes have to be given great attention during execution of a project since they are the main driving force for success of a project.

According to (Luis emilio alvarez-dionisi, 2013), project management is divided into ten areas; integration, scope, time, cost, quality, human resources, communication, risk, procurement and stakeholder management.

Project management process groups include.

- 1. Initiating
- 2. Planning
- 3. Executing
- 4. Monitoring
- 5. Closing

2.21. Initiating

All projects start with an idea for a product, service or another desirable outcome. The initiating process group then determines the nature and scope of the project. Not performing this stage well means it's unlikely the project will be successful in meeting the business' needs.

In this stage, the team has important activities to do and prepare such as:

• Interviews with the client, funder or stakeholders, to identify the needs and the goals.

• Preparation of all relevant documents such as feasibility documents, project concept and project charts.

• Gathering and carefully studying all the standards, regulations and rules needed to complete the project (Wideman M. , 2004).

•Preparation of high level of project schedule and scope of work.

2.22 Planning

After initiating, the project is planned to an appropriate level of detail. This stage comprises:

- Determination of details of the project, such as cost, schedule and starting and finishing dates of the various activities.
- Identifying work breakdown structure (Kerzner, 2006).
- Identification of procurement plan, risk plan, communication plan and overall project plan.

2.23. Executing

Executing consists of the processes used to complete the work defined in the project management plan. It's about accomplishing the project's objectives. The executing process involves co-coordinating people and resources, as well as integrating and performing the project activities. The deliverables are produced as outputs from the processes performed, as defined in the project management plan. In this phase we need to use many processes such as:-

2.231 Project Scope Management

According to (Anton Zandhuis R. s., 2013), project scope management focuses on all process related to activities that required to complete the project successfully.(Mirza, 2013), a major contribution to unsuccessful projects is the lack of understanding or defining project and product scope at the start of the project.

(Mirza, 2013), noted that a project scope deals with the required work to create the project deliverables. It is essential for each project to clearly define and document its scope so that the project can move forward in a coordinated manner and requirements can be written.

2.232 Project quality Management

Project quality management consists of all processes and activities related to performing organizational-related quality policies, aims and objectives as well as responsibilities (Harold kerzner, 2017).Project quality management includes the processes and activities of the performing organization that determine quality policies, objectives, and responsibilities so that the project will satisfy the needs for which it was undertaken (Harold kerzner, 2017).

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2.233 Project stakeholder Management

Project stakeholder management comprises of several processes required to identify stakeholders (people related to the project), organization's and groups who may affect the project or may be affected by the project (Boonstra, 2006).Project stakeholder management includes the processes required to identify the people, groups, or organizations that could impact or be impacted by the project, to analyze stakeholder expectations and their impact on the project, and to develop appropriate management strategies for effectively engaging stakeholders in project decisions and

Execution (Harold kerzner, 2017).

2.234 Project communication Management

Project communications management includes the processes that are required to ensure timely and appropriate planning, collection, creation, distribution, storage, retrieval, management, control, monitoring, and the ultimate disposition of project information (Harold kerzner, 2017).Communication is the most important element to project success and yet it remains a challenge throughout the engagement (Jogannagari Malla Reddy, 2017).

Communication management focuses on time spent by PMs' communication with team members and stakeholders (internal and external (Davis, 2014)

Communications issues are a part of known challenges in project management. One of the ten Knowledge areas of the Project Management Body of Knowledge (Blaize horner reich, 2006)) guide is project communications management. Communication planning, communication management, and communication control are the primary processes for communication management (Luis emilio alvarez-dionisi, 2013)

2.235 Project Risk Management

According to (Harold kerzner, 2017), project risk management includes the processes of conducting risk management planning, identification, analysis, response planning, and controlling risk on a project.

According to (Zantis, 2003), risk management is "a systematic way of looking at areas of risk and consciously determining how each should be treated.(tamosalitiene, 2010), share a similar view that risk management is a process of defining sources of uncertainty (risk identification), estimating the consequences of uncertain events/conditions (risk analysis), and generating response strategies in the light of expected outcomes.

Project risk management is the highest ranked factor for project failure (Whittaker, 1999) the systematic procedure of classifying, evaluating and responding to risks as project-related events or conditions that are not definitely known and that have the potential for adverse effects on an objective project (Luis emilio alvarez-dionisi, 2013). Thus, care must be taken to properly manage risk management.

2.236 Project Time Management

Project time management includes the processes required to manage the timely completion of the project (Harold kerzner, 2017). Time management also will help by comparing the time planned for such activity and the time actually spent implementing it (Kerzner, 2006).

(Dubem I. Ikediashi, 2014), in their study stated that Schedule delays, otherwise known as time overruns, is the highest challenge factor and are considered critical to the failure of projects. Further holds that Inadequate planning by contractors and project managers, improper site management by contractors, inadequate experience handling projects, and delays in payments to contractors by clients are factors that result in schedule delays (Dubem I. Ikediashi, 2014).

A key message in project time management is the importance of ensuring work proceeds effectively within individual tasks, along with the interaction of related tasks (Pasian, 2011).Project success, based on effective control of time management processes, instruments and practices, is the ultimate measure. The project manager is primarily responsible for developing and managing a realistic project schedule and project plan to complete the project on time.

2.237 Project Human Resource Management

Project human resource management includes the processes that organize, manage, and lead the project team (Harold kerzner, 2017).Most time it is difficult to get the right employees on the project and this staffing problem may therefore have several implications on the success of the project (Chen wang, 2016).According to (Alnasseri, 2013), project managers who follow traditional ways of managing and executing projects often give little attention or even disregard the allocation of human related factors within their management agendas.

Project humans are as one wing of human resource management. The management of resources involves the organization, administration and leadership of the project team. The project team consists of individuals with assigned roles and responsibilities for the project's implementation. It is an important responsibility of the project management team to staff the project with the right skills, at the right place, and at the right time.

2.238 Project Cost Management

According to (Harold kerzner, 2017), Project cost management includes three major functions called cost estimating, budgeting and cost control. Project management practice depends a lot on forecasting in planning for the projects and the organization and a lot of project Failures known in literature are mostly due to wrong estimate or costing problem (chen wang, 2016).

2.239 Project Procurement Management

Project procurement management includes the processes necessary to purchase or acquire products, services, or results needed from outside the project team (Harold kerzner, 2017).(Solomon olusola babatunde, 2012), identified critical success factors related to procurement management through survey questionnaires; these are competitive procurement process, thorough and realistic assessment of the cost and benefits, and transparency in the procurement process.

This involves with outside procurement, which is part of many projects such as hiring small contractors. If not implemented properly, it will clearly affect the budget and schedule. Planning is important for procurement management in identifying the additional needs of the project and the way that those contractors will participate. Next, hire the contractors to make those purchases, it is important to choose a job description, reference terms, feedback questions and seller. Individual processes need to be managed and supervised, and then the work is completed and everyone is satisfied.

2.240 Project Integration Management

According (Anton Zandhuis R. s., 2013), Project integration management involves the processes and activities within the project management process groups to identify, define, combine, unify, And coordinate the different processes and project management activities.

In all areas of a project, Project Integration Management is all about maintaining stability, such as time, scope, cost, quality, human resources, communication, risk, procurement, stakeholders, and others.

2.24. Monitoring

The monitoring process group involves managing and tracking the project. Potential problems can be identified quickly for the team to take corrective action. The project management plan is used for this purpose.

Monitoring includes the following:

- Measuring ongoing project activities (where are we against where we should be?)
- Monitoring the project variables (cost, schedule, scope) against the project management plan and the project baseline (where should we be?)
- Identifying corrective actions to address risks and issues (how can we get back on track?)
- Managing changes using the change control process (what is the impact of this change?)

2.25. Closing

At this point, it's important to know how well the project has performed. This task is done using the project closure report. The report communicates how well the project has performed against its original business case, quality measures, cost and duration. This process needs many procedures such as:

- Delivering all the necessary documents to the customer, with complete information needed by the client.
- Procurement audits and contracts close out will be formally undertaken for all procurements made

• Identifying lessons learned from the project, by documenting all the levels of success, failure and achievements, so as to make use of it in future projects (John w.creswell, 2003).

2.3 Empirical Literature

Different researchers assessed the effectiveness of project management process on different projects locally internationally and in the Ethiopian context.

(Akewushola, 2012), discovered that for a project to be successful there must first be an improved appreciation of the role of project management within projects, and this role must be placed within the context of a wider project alongside other outside criteria and long term expectations.

According to the study conducted by (Akewushola, 2012), finds out that if these project management practices are well managed, there is a very high possibility of having a viable project that will guarantee a sound business success. Which include work scope, time, resources, costs, quality, communication, risk, and contracts procurement (k.wysocki, 2003), finds out that there are five constraints operate on every project; these are scope, quality, time, cost and resource.

A survey and literature review conducted by (Tesfaye Hailu Zewdie, 2016)show that a significant number of projects in Ethiopia fall into the failed category. Therefore, the author of this study pays close attention during the execution of the project, as effective project management processes such as planning, time, quality, cost and communication process are the main driving forces behind the success of the project.

As (Wubishet, 2006), added, the main problems of Ethiopia's construction projects are intervention of owners or stakeholders with traditional approach to project design, planning without the consent of required professional and not using applicable guidelines of project management.

On the other hand (Eyob Birhanu, 2020), Identifies factors that challenges the road construction project in the study out of ten knowledge area of project management is significantly identified five areas those are; scope management challenge, quality management challenge, stakeholders management challenge, communication management challenge and risk management challenges.

Chan and (Daniel w.m.chan, 2002), remarked that project performance measurement includes time, budget, safety, quality and overall client satisfaction. (kuprenas, 2003), stated that project performance measurement means an improvement of cost, schedule, and quality in design and construction stages.

2.4 Knowledge gap

Previous literature on the effectiveness of project management processes for project performance does not cover all aspects of project management challenges and practices in a single study. Most of them focus on a single aspect of project management, including stack holder management, risk management, planning, monitoring, and assessment. However, challenging factors in one area have a significant impact on all other related areas. Therefore in this study in line with project management process scope management, quality, stakeholder, communication, risk, time, human resource, cost, procurement and integration management processes are assessed.

Very little is known about the relationship between the extent of project management process implementation with project success or failure in order to identify and understand which project management processes are highly effective. Thus the issue is believed to be among the basic factor in determining the efficient project management process. In order to come up with a better recommendation, and because this topic is understudied and literatures are scarce, it will provide a lesson for other projects. In line with, the study intended to fill this research gap, the effectiveness of the project management method on the performance of Jambo Construction PLC will be critically evaluated in this study.

In project management, you need to pay more attention to the implementation phase and the issues involved. There is little research on the effectiveness of project management on project performance. Recently, the number of projects has increased. However, research in this area is still inadequate. Further research is needed to assess the value of the management concept. This study examines the theoretical framework for the effectiveness of the project management process on project performance, based on previous studies. Analyze empirical results against a theoretical framework. This study explores the relationship between the key factors behind project management success and failure and the background variables of these organizations.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter covers research methods, research designs, sample size and population, study variables and instruments, processes, and activities carried out. The study region, sampling technique, questionnaire formulation, data collecting, data processing, and analysis are all detailed in this chapter.

3.1Research Approach

The survey questionnaires were used to collect data that is used to assess and identify which project management processes are most beneficial in terms of project performance. The data were quantitatively examined, and therefore both qualitative and quantitative approach was conducted and the conclusions are drawn from the data that which is collected. These mixed method approach can help to gain a more complete picture than a standard quantitative or qualitative study, as it integrates benefits of both methods (Gay, 2009).

Qualitative research is an approach for exploring and understanding the meaning of Individuals or groups ascribe to a social or human problem. The process of research involves Emerging questions and procedures, data typically collected in the participant's setting, data Analysis inductively building from particulars to general themes, and the researcher makes Interpretations of the meaning of the data.

Quantitative research is an approach for testing objective theories by examining the Relationship among variables. These variables, in turn, can be measured, typically on Instruments, so that numbered data can be analyzed using statistical procedures (John w.creswell, 2003). Mixed methods research is an approach to inquiry involving collecting both Quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks.
Mixed approach is useful to capture the best of both quantitative and qualitative Approaches. Thus, in order to achieve the objective of this study and answer the research Questions, mixed research approach were used. The first stage involved the use of descriptive statistics. The interrespondent matrix was used to calculate the frequency (i.e., prevalence rate) of each theme. The conducted frequency analyses are displayed.

3.2 Design of Research

Research design is the plan and structure of investigation so conceived as to obtain answers to research questions (Boris F.Blumberg, 2014). In this study explanatory mixed method design was used to explore and identify project management practices by assessing the extent of project management practices in Jambo construction.

3.3 Sampling Design, Population of the study, Sample size and Sampling Techniques

Jambo construction PLC is the name of the organization that was surveyed. The target populations of the study are employees of Jambo construction particularly involved in Planning, implementation and control of projects undertaken by the company.

Sampling is used as a basis for statistical estimation from items, about the features of that population (M.Saunders, 2009).The target groups in this study were Jambo construction management staff and professional engineers at head office and project. According to human resource of the enterprise there are 70 management staff and engineers at head office and projects. Therefore 70 questionnaires were distributed.

A target population of the sampling contains different team (Human resource team, procurement, Finance team, and other knowledge area of project management) with varying information on the research topic with their nature of job, it would be better to select groups who practical experience on the subject matter. Therefore, in order to minimize representation that might occur, the researcher obliged to use purposive sampling technique.

3.4 Data Collection Tools and Procedures

3.4.1 Questionnaire

The layout of the questionnaire was kept as simple as possible in order to encourage respondents to participate meaningfully. The questions was kept as brief as possible, and great care was taken in their wording and phrasing. Because Employees may not understand English as well as Amharic, the questionnaire was written in the local language. Greater emphasis was also be placed on the appearance and layout of the questionnaire because they play a larger role and are critical in any data collection process in which the questionnaire is to be completed by the respondent. It was free from Ambiguity and counter biasing statement.

The literature in the study will be used as a guideline for the development of the questions in the questionnaire. The questions that will be used in the questionnaire are five-point likert scale type questions. The type of scales which is used to measure the items on the instrument is continuous scales (strongly agree to strongly disagree).Different categorical variables are considered of which, Nominal, ordinal variable, interval and ratio. The respondents were approached by face to face while distributing as well as collecting the questionnaire and the purpose of the questionnaire was clearly defined to the respondents.

3.4.2 Interviews

Face-to-face interview were conducted with the Jambo construction workers and the relevant owner, managers who heads the company in the sectors. It gives the interviewer (researcher) and interviewee (respondent) the opportunity to interact and get details on the questions and answers. Through interviews, clarification of issues is easily achievable leading to accuracy of data from the respondents.

3.4.3 Secondary Sources

Secondary data from files, pamphlets, office manuals, circulars, and policy papers were used to supplement information as needed. In addition, a wide range of books, published and unpublished government documents, websites, reports, and newsletters examined in order to make the study more fruitful.

3.5 Data Analysis Methods

Following the collection of pertinent data, it was analyzed and interpreted in the form of qualitative and quantitative analysis. Interview questions and responses was typically tape-recorded and then transcribed verbatim before analysis is begun. Quantitative data was statistically analyzed using computer software programs such as the Statistical Package for Social Sciences (SPSS) version 20. The inter respondents matrix (strongly disagree, disagree, neutral, agree and strongly agree) entered in to the SPSS database. Specifically, descriptive statistics (mean and standard deviation) were taken from this tool. Descriptive analysis was used to reduce the data in to a summary format by tabulation (the data arranged in a table format) and measure of central tendency (mean and standard deviation).

3.6 Instrument Reliability

In this study, each statement was rated on a 5-point likert scale, with the options being strongly agree, agree undecided, disagree, and strongly disagree. Based on this, an internal consistency reliability test was performed in the organization, as well as the (Joseph A. Gliem, 2003) for the instrument. The instrument was in line with the study's objectives.

Cronbach's alpha is a measure used to assess the reliability, or internal consistency, of a set of scale or test items. According to (U Sekeran, 2003), reliability measures stability and consistency across time and the various items in the instrument. It indicates the extent to which the instrument is free from error or bias. The closer the Cronbach's alpha to 1 is the higher the reliability of the instrument. Thus a scale is said to have a good reliability. As shown in the table below the Cronbach's alpha for each item is presented.

Reliability Statistics

Cronbach's	Ν	of
Alpha	Items	
.803	60	

By using Cronbaches alpha analysis (using IBM SPSS 20 software) the data collected from Jambo construction project obtained α value of 0.803, which is acceptable in internal consistency by a commonly accepted rule of using Cronbach's alpha. Therefore, the data obtained from using survey questionnaires seemed reliable.

3.7 Ethical Consideration

All research participants who take part in this study were properly informed about the purpose of the study, and their willingness and consent was obtained before the distribution of questionnaires and interview questions begins.

Regarding the respondents' right to privacy, the study was undoubtedly maintaining the confidentiality of each participant's identity. Names were kept confidential in all cases, so collective names such as' respondents' was used.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

Introduction

This chapter explains and discusses the results of findings based on the analysis done on the data Collected. The data was collected through questionnaire, interview and document analysis regarding the effectiveness of projects management process at Jambo construction. A total of 35 questionnaires were distributed to all the project team members and managers and 35 were returned which accounts 100% response rate.

The questionnaire contains variables which include project initiation, planning, monitoring and closing phase practices as well as effective project management skills such as scope management, quality management, stakeholder management, communication management, risk management, time management, human resource management, cost management, procurement management and integration management. All items in the questionnaire are arranged in a form of likert items to capture the feelings of respondents in scale ranging from 1 to 5.All the data has been analyzed in SPSS so that the accuracy of the information is maintained.

In addition to this a self-administered close ended questionnaire is included to support the researcher to discuss the results more clearly and an interview is conducted among management members. The content of the interviews were manipulated in a way that it would prove or disprove the feeling expressed by the participants who responded the questionnaire .All the interview question were structured so that it match the contents of the items enlisted in the questionnaire .

4.1 General Information about Respondents

The study sought information on aspects of respondents' background, particularly, gender

Distribution, age distribution, educational back ground, experience and job title of the population filling the questionnaire.

Table 4.1 shows general information about gender, age, educational qualification, and work experience and job title of the respondents. According to result drawn (table 4.1 below), Most (77%) of respondents are male and 22.9% of the respondents are female, age distribution (65.7% - age 18-30, 22.9% - age 31-40 and 11.4% 41-50),educational level (82.9% BA/BSc holders, and remaining 17.1% MA/MSc holders), and regarding work experience, the result shows more percentage of respondents have work experience (42.9% 1 -5, 31.4% 6 - 10, 11.4% 11- 15 and 14.3% above 15 years).Respondents job title also shows 22.9% of the respondents were on project manager position, 37.1% of the respondents are site engineer, 20% office engineer and the remaining 20% are on administrator position which is 80% office engineering team leader, 2.9% operation manager, 2.9% construction manager, 2.9% real estate manager, 2.9% human resource manager, 2.9% finance head, 2.9% procurement and supply head.

Table 4.1:	Respondents	Demographic	Characteristics
			0110100001000000

Description		Frequency	Percent
Gender	Female	8	22.9
	Male	27	77.1
	Total	35	100
Age	18-30 years	23	65.7
	31-40 years	8	22.9
	41-50 years	4	11.4
	Total	35	100.0
Educational back ground	BA/BSC	29	82.9
	MA/MSC	6	17.1
	Total	35	100.0
Work Experience	1-5 years	15	42.9
	6-10 years	11	31.4
	11-15 years	4	11.4
	above 15 years	5	14.3
	Total	35	100.0
Job title	Project Manager	8	22.9
	Site Engineer	13	37.1
	Office Engineer	7	20.0
	Other	7	20.0
	Total	35	100.0
Other job title	Office Engineering team leader	28	80.0
	Operation Manager	1	2.9
	construction manager	1	2.9
	Real Estate manager	1	2.9
	Human resource manager	1	2.9

Finance head	1	2.9
procurement and supply head	1	2.9
Total	1	2.9
	35	100.0

4.2 The Effectiveness of Project Management Process

The participants of the research were asked to give their opinion on the effectiveness of project management process on the performance of construction project undertaken by Jambo construction. The respondents were given options on a rate of 5-point Likert's scale with 1= Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5= strongly Agree.

The collected study data was analyzed using descriptive statics such as Frequency, mean and Percentage and standard deviation as shown below in the table.

Where: Frequency (f) = Number of respondents who agreed on the corresponding rating.

Mean = Average rating given by respondents.

Percentage (%) = Percentage of respondents to be agreed from total respondents

Standard deviation= tell how measurements for a group are spread out from the mean

4.2.1 Project initiation phase practices filled by respondents

Table 4.2 High level project schedule milestones wereproperly identified

-		Frequency	Percent	Mean	S.D
	Neutral	1	2.9		
.,	Agree	14	40.0	4.54	0.561
valid	Strongly Agree	20	57.1		
	Total	35	100.0		

Source: Survey data (2022)

According to the data collected 40 % of the respondents agreed, 57.1 % of the respondents S.A, 2.9% of the respondents Neutral in project initiation phase on the statement 'High level project schedule milestones were properly identified. The mean value and the standard deviation were generated by SPSS, 4.54 and 0.561 respectively. The mean value is greater than Likerts mean value of 3.Therefore most of the respondents believe that high level project schedule milestones were properly identified.

Table 4.3 : Scope of work was identified at high level to avoid misunderstanding between the stakeholders

_		Frequency	Percent	Mean	S.D
	strongly disagree	1	2.9		
	Disagree	7	20.0		
Valid	Neutral	1	2.9	3.91	1.245
	Agree	11	31.4		
	Strongly Agree	15	42.9		
	Total	35	100.0		

Source: Survey

data (2022)

The mean value for the statement, Scope of work was identified at high level to avoid misunderstanding between the stakeholders are 3.91 and the standard deviation 1.245. This was calculated using SPSS; having 2.9% strongly disagree, 20% disagree, 2.9% neutral, 31.4% agree, 42.9% strongly agree with the given statement. The mean value is greater than Likert's mean value of 3.Therefore it is concluded that most of the respondents believe there exists in High-level project resources like budget and people were identified.

		Frequenc	Percent	Mean	S.D
		у			
	Disagree	5	14.3		
	Agree	12	34.3	4.23	1.031
Valid	Strongly Agree	18	51.4		
	Total	35	100.0		

 Table 4.4: High level project resources like budget and people were identified

The aggregated mean for the High level project resources like budget and people were identified is 4.23. This value compared with the Likert scale mean value is greater than 3. Therefore, the practice of High level project resources like budget and people were identified that undertaken by jambo construction.

Table 4.5: High level planning was prepared that serve as a roadmap for detail plan at the planning phase

		Frequenc	Percent	Mean	S.D
		у			
	Neutral	5	14.3		
	Agree	19	54.3	4.17	0.664
Valid	Strongly Agree	11	31.4		
	Total	35	100.0		

The mean value for the statement 'High level planning was prepared that serve as a road map for detail plan at the planning phase is 4.17 and the standard deviation is 0.664. These are calculated from the number of respondents who agree 54.3%, neutral 14.3%, strongly agree 31.4%. From the mean value, it is concluded that high level planning was prepared that serve as a road map for detail plan at the planning phase in jambo construction.

4.2.2 The practice of project planning phase practices filled by respondents

			<u> </u>		
		Frequenc	Percent	Mean	S.D
		у			
	Disagree	4	11.4		
	Neutral	1	2.9		
Valid	Agree	18	51.4	4.09	0.919
v and	Strongly Agree	12	34.3		
	Total	35	100.0		

 Table 4.6: Scope statement of the project was prepared in detail

Source: Survey data (2022)

The mean value for the statement in which the organization Scope statement of the project was prepared in detail of the project is calculated 4.09 and the standard deviation is 0.919.For this statement 51.4 % agreed, 34.3% strongly agreed, 2.9% selected neutral and 11.4% Disagreed. This indicates most of the respondents agreed that the organization Scope statement of the

project was prepared in detail on the project. Therefore, it is concluded that the organization has a practice of preparing scope statement in detail during project planning phase.

-		Frequenc	Percent	Mean	S.D
		У			
	Disagree	1	2.9		
	Neutral	3	8.6		
Valid A	Agree	18	51.4	4.23	0.731
v allu	Strongly Agree	13	37.1		
	Total	35	100.0		

 Table 4.7: Project teams were recruited and assembled in a way that

 enables them to perform all activities as required in cohesive manner

Source: Survey data (2022)

The aggregated mean for the Project teams were recruited and assembled in a way that enables them to perform all activities as required in cohesive manner is 4.23. This value compared with the Likert scale mean value is greater than 3. Therefore, Project teams were recruited and assembled in a way that enables them to perform all activities as required in cohesive manner.

Table 4.8: Work breakdown structure (WBS) was developed and
helps to properly estimate the required material, human and financial
resources

		Frequenc	Percent	Mean	S.D
		у			
	Disagree	8	22.9		
	Neutral	2	5.7		
Valid	Agree	11	31.4	3.89	1.183
	Strongly Agree	14	40.0		
	Total	35	100.0		

Source: Survey data (2022)

For the statement 'the project Work breakdown structure (WBS) was developed and helps to Properly estimate the required material, human and financial resources' 31.4% of respondents Agreed, 40% of respondents choose strongly agree, 5.7 % neutral while 22.9% disagreed With the statement. The mean value of this is 3.89 and the standard deviation value is 1.183. The result shows that most percentages of the respondents is agreed .This entails that, the practice of developing the project Work breakdown structure (WBS) is involved in project planning phase of jambo construction.

		Frequenc	Percent	Mean	S.D
		У			
	Disagree	5	14.3		
	Neutral	1	2.9		
Valid	Agree	19	54.3	3.97	0.954
v and	Strongly Agree	10	28.6		
	Total	35	100.0		

 Table 4.9: Network diagram that shows activity dependency and sequences was developed

Source: Survey data (2022)

The aggregated mean for the Network diagram that shows activity dependency and sequences was developed is 3.97. This value compared with the Likert scale mean value is greater than 3. Therefore, Network diagram that shows activity dependency and sequences was developed.

		Frequenc	Percent	Mean	S.D
		У			
	Neutral	1	2.9		
	Agree	12	34.3	4.6	0.553
Valid	Strongly Agree	22	62.9		
	Total	35	100.0		

Table 4.10 : Proper activity cost and time estimation was made

The mean value for the statement Proper activity cost and time estimation was made, are 4.6 and the standard deviation 0.553. This was calculated using SPSS; having 62.9% strongly agree, 34.3% agree, 2.9% neutral with the given statement. The mean value is greater than Likert's mean value of 3.Therefore it is concluded that Proper activity cost and time estimation was made

 Table 4.11: Overall budget and schedule of the project was

 determined

-		Frequenc	Percent	Mean	S.D
		у			
	Disagree	5	14.3		
	Neutral	1	2.9		
Valid	Agree	11	31.4	4.2	1.052
v and	Strongly Agree	18	51.4		
	Total	35	100.0		

Source: Survey data (2022)

The aggregated mean for the Overall budget and schedule of the project was determined is 4.2. This value compared with the Likert scale mean value is greater than 3. Therefore, Overall budget and schedule of the project was determined.

		Frequenc	Percent	Mean	S.D
	strongly disagree	1	2.9		
	Disagree	10	28.6		
Valid	Neutral	4	11.4		
	Agree	9	25.7	3.54	1.291
	Strongly Agree	11	31.4		
	Total	35	100.0		

 Table 4.12: Procurement plans of the project were established

Source: Survey data (2022)

The mean value for the statement, Procurement plans of the project were established are 3.54 and the standard deviation 1.291. This was calculated using SPSS; having 31.4% strongly agree, 25.7% agree11.4% neutral, 28.6% disagree, 2.9% strongly disagree with the given statement. The mean value is greater than Likert's mean value of 3.Therefore it is concluded that Procurement plans of the project were established.

-		Frequenc	Percent	Mean	S.D
		у			
	strongly disagree	9	25.7		
	Disagree	18	51.4		
Valid	Neutral	3	8.6	2.23	1.215
	Agree	1	2.9		
	Strongly Agree	4	11.4		
	Total	35	100.0		

 Table 4.13: Possible risks were identified and quantified

According to the data collected 51.4 % of the respondents Disagree, 25.7 % of the respondents Strongly disagree, 8.6% of the respondents Neutral, 2.9% agree and 11.4% strongly agree in project initiation phase on the statement 'Possible risks were identified and quantified. The mean value and the standard deviation were generated by SPSS, 2.23 and 1.215 respectively. The mean value is smaller than Likert's mean value of 3.Therefore most of the respondents believe that possible risks were not identified and quantified.

		Frequenc	Percent	Mean	S.D
		У			
	Disagree	19	54.3		
	Neutral	4	11.4	2.86	1.033
Valid	Agree	10	28.6		
v and	Strongly Agree	2	5.7		
	Total	35	100.0		

Table 4.14: Change control plan, communication plan, management plans were developed

Source: Survey data (2022)

The mean value for the statement Change control plan, communication plan, management plans were developed, are 2.86 and the standard deviation 1.033. This was calculated using SPSS; having 54.3% disagree, 28.6% agree 11.4% neutral, 5.7% strongly disagree with the given statement. The mean value is less than Likert's mean value of 3.Therefore it is concluded that Change control plan, communication plan, management plans were not developed.

		Frequenc	Percent	Mean	S.D
		у			
	Disagree	5	14.3		
	Neutral	1	2.9		
Valid	Agree	14	40.0	4.11	1.022
vanu	Strongly Agree	15	42.9		
	Total	35	100.0		

The mean value for the statement Overall project plan was approved by concerned body is4.11 and the standard deviation 1.022. This was calculated using SPSS; having 42.9% strongly agree, 40% agree 2.9% neutral, 14.3% disagree with the given statement. The mean value is greater than Likert's mean value of 3. Therefore it is concluded that Overall project plan was approved by concerned body.

4.2.3 Project execution phase practice in Jambo construction

			-		
		Frequenc	Percent	Mean	S.D
		у			
	Disagree	3	8.6		
	Neutral	1	2.9		
Valid	Agree	13	37.1	4.31	0.9
v anu	Strongly Agree	18	51.4		
	Total	35	100.0		

 Table 4.16: Team meetings are effective and held with a stated agenda

Source: Survey data (2022)

The aggregated mean for the Team meetings are effective and held with a stated agenda was determined is 4.31. This value compared with the Likert scale mean value is greater than 3. Therefore, Team meetings are effective and held with a stated agenda.

Table 4.17: The project schedule is updated regularly, incorporating							
unplanned work as needed							
	English	Demoent	Maan	C D			

		Frequenc	Percent	Mean	S.D
	_	У			
	Disagree	2	5.7		
	Neutral	2	5.7		
Valid	Agree	29	82.9	3.89	0.583
v and	Strongly Agree	2	5.7		
	Total	35	100.0		

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. . . .

The aggregated mean for the project schedule is updated regularly, incorporating unplanned work as needed was determined as 3.89. This value compared with the Likert scale mean value is greater than 3. Therefore, the project schedule is updated regularly, incorporating unplanned work as needed.

 Table 4.18: Project risks are reviewed regularly with new risks

 identified and updated as needed

		Frequenc	Percent	Mean	S.D
		у			
	strongly disagree	13	37.1		
	Disagree	11	31.4		
Valid	Neutral	4	11.4		
	Agree	4	11.4	2.23	1.308
	Strongly Agree	3	8.6		
	Total	35	100.0		

Source: Survey data (2022)

The mean value for the statement Project risks are reviewed regularly with new risks identified and updated as needed are 2.23 and the standard deviation 1.308. This was calculated using SPSS; having 37.1% strongly disagree, 31.4% disagree 11.4% neutral, 11.4% agree & 8.6% strongly agree with the given statement. The mean value is less than Likert's mean value of 3.Therefore it is concluded that Project risks are reviewed regularly with new risks identified and updated as needed.

	-	Frequenc	Percent	Mean	S.D
		у			
	Disagree	1	2.9		
	Neutral	3	8.6		
Valid	Agree	12	34.3	4.4	0.775
vand	Strongly Agree	19	54.3		
	Total	35	100.0		

 Table 4.19: Project status updates are provided to key stakeholders

 regularly

Source: Survey data (2022)

The aggregated mean for the Project status updates are provided to key stakeholders regularly was determined as 4.4. This value compared with the Likert scale mean value is greater than 3. Therefore Project status updates are provided to key stakeholders regularly.

		Frequenc	Percent	Mean	S.D
		У			
	strongly disagree	17	48.6		
	Disagree	8	22.9		
Valid	Neutral	4	11.4		
	Agree	4	11.4	2.03	1.272
	Strongly Agree	2	5.7		
	Total	35	100.0		

 Table 4.20: Quality assurance and scope verifications were properly

 made

The mean value for the statement Quality assurance and scope verifications were properly made are 2.03 and the standard deviation 1.272. This was calculated using SPSS; having 48.6% strongly disagree, 22.9% disagree 11.4% neutral, 11.4% agree & 5.7% strongly agree with the given statement. The mean value is less than Likert's mean value of 3.Therefore it is concluded that Quality assurance and scope verifications were not properly made.

4.2.4: Project Monitoring and control phase practices in jambo construction

Table 4.21	:Performance	report	was	made	for	every	activity	as	per	the
schedule										

		Frequenc	Percent	Mean	S.D
		у			
	strongly	1	2.0		
	disagree	1	2.7		
V - 1: -1	Neutral	1	2.9		
v alid	Agree	12	34.3	4.49	0.818
	Strongly Agree	21	60.0		
	Total	35	100.0		

Source: Survey data (2022)

The mean value for the statement the project team Performance report was made for every activity as per the schedule for a given projects is 4.49 and the standard deviation is 0.818. These are calculated from the number of respondents who strongly agreed with the statement, which is 60 % and agree with the statement and 34.3 % respectively, neutral 2.9%, strongly disagree 2.9%. From the mean value, it is concluded that the performance reports for every activity is involved in the project during Monitoring and Control of the given project.

		Frequenc	Percent	Mean	S.D
		У			
	strongly disagree	1	2.9		
	Disagree	2	5.7	4.14	1.089
Valid	Neutral	6	17.1		
	Agree	8	22.9		
	Strongly Agree	18	51.4		
	Total	35	100.0		

 Table 4.22: Project scope control was made against the planned one for

 every scope statement

According to the data, 51.4 % of the respondents strongly agreed, 22.9% agreed in the statement of Project scope control was made against the planned one for every scope statement of the But the remaining 5.7 % disagreed and 2.9 % strongly disagree, 17.1% neutral with that. Then mean value and the standard deviation were generated by SPSS, 4.14 and 1.089 respectively. This mean value shows there is a practice of involving in the statement 'Project scope control was made against the planned one for every scope statement' during monitoring and control of the project.

		Frequenc	Percent	Mean	S.D
		у			
	strongly disagree	11	31.4		
	Disagree	16	45.7		
Valid	Neutral	2	5.7		
	Agree	4	11.4	2.14	1.167
	Strongly Agree	2	5.7		
	Total	35	100.0		

 Table 4.23: Project quality control was made against the plan as per the client request in the plan

The aggregated mean for the Project status updates are provided to key stakeholders regularly was determined as 2.14 and S.D 1.167. This value compared with the Likert scale mean value is greater than 3. Therefore Project quality control was made against the plan as per the client request in the plan.

		Frequenc	Percent	Mean	S.D
		У			
	strongly disagree	9	25.7		
	Disagree	12	34.3		
Valid	Neutral	4	11.4		
	Agree	9	25.7	2.46	1.221
	Strongly Agree	1	2.9		
	Total	35	100.0		

 Table 4.24: Risk response control was made to confirm whether the

 risk response actions are going as planned

According to the data, 25.7 % of the respondents strongly disagreed, 34.3% disagreed in the statement of Risk response control was made to confirm whether the risk response actions are going as planned. But the remaining 25.7 % agreed and 2.9 % strongly agree, 11.4% neutral with that. Then mean value and the standard deviation were generated by SPSS, 2.46 and 1.221 respectively. This mean value shows there is not a practice of involving in the statement of Risk response control was made to confirm whether the risk response actions are going as planned during monitoring and control of the project.

		Frequency	Percent	Mean	S.D
	strongly disagree	1	2.9		
	Disagree	3	8.6		
Valid	Neutral	3	8.6	4.03	1.043
v anu	Agree	15	42.9		
	Strongly Agree	13	37.1		
	Total	35	100.0		

 Table 4.25: Schedule and cost control were made against the planned
 one to check if cost over runs and schedule delays are properly managed

The aggregated mean for the Project status updates are provided to key stakeholders regularly was determined as 4.03 and S.D 1.043. This value compared with the Likert scale mean value is greater than 3. Therefore Schedule and cost control were made against the planned one to check if cost over runs and schedule delays are properly managed.

4.2.5: Closing phase practices filled by respondents

Table 4.26: Procurement audits and contract close out was formally undertaken for all procurements made

Frequenc	Percent	Mean	S.D
У			

	Disagree	25	71.4		
Walid	Neutral	4	11.4	2.46	0.78
Valid	Agree	6	17.1		
	Total	35	100.0		

Source: Survey data (2022) the aggregated mean for the Procurement audits and contract close out was formally undertaken for all procurements made was determined as 2.46 and S.D 0.78. This value compared with the Likert scale mean value is greater than 3. Therefore Procurement audits and contract close out was not formally undertaken for all procurements made.

 Table 4.27: Lessons learned from the project were identified and

 properly documented for future use

-		Frequenc	Percent	Mean	S.D
		У			
	strongly	3	86		
	disagree	5	0.0		
	Disagree	23	65.7		
Valid	Neutral	3	8.6	2.49	1.173
	Agree	1	2.9		
	Strongly Agree	5	14.3		
	Total	35	100.0		

Source: Survey data (2022)

The aggregated mean for the Lessons learned from the project were identified and properly documented for future use was determined as 2.49 and S.D 1.173. Therefore Lessons learned from the project were not identified and properly documented for future use.

		Frequenc	Percent	Mean	S.D
		У			
	strongly	1	11 /		
	disagree	+	11.4		
Valid	Disagree	18	51.4		
v allu	Neutral	4	11.4	2.51	1.011
	Agree	9	25.7		
	Total	35	100.0		

 Table 4.28: All project records were updated as per the changes made
 on any record

The aggregated mean for all project records were updated as per the changes made on any record was determined as 2.51 and S.D 1.011. Therefore all project records were updated as per the changes made on any record.

4. 2.6. Effective project management skills in jambo construction filled by respondents. Table **4.29:** Project scope management

	N	Moon	Std
	19	Wiean	Stu.
			Deviation
Changing			
requirements late in			
the project and	70	3.91	0.919
continuing change			
requests			
Design discrepancies			
	70	4.20	1.079
Project requirements			
inadequately	70	4.20	1.079
documented			
Aggregate Mean and		4.1	1.025
St. Deviation			

Source: Survey data (2022)

Table 4.26: shows that the average mean score of Project Scope Management challenge

Factors is (4.1) with a Std. Deviation of (1.025) which indicates that there is lack of Project Scope Management. As can be seen in the table among the factors in scope management challenges "Design discrepancies and the Project requirements inadequately documented" is rated as a major challenge.

Table 4.30: Project Quality Management

	Ν	Mean	Std.
			Deviation
Lack of strict quality			
control measures	70	3.8	1.183
Use of poor initial			
testing techniques	70	3.8	
			1.132
Quality checks not		3.91	1.401
performed at	70		
satisfactory level			
Aggregate Mean and		3.83	1.23
St. Deviation			

Source: Survey data (2022)

Table 4.30: shows that the Average mean score of Project Quality Management challenges is (3.83) with a Std. Deviation of (1.23) which indicates that effective Project Quality Management Is not practiced in jambo construction.

Table 4.31	: Project	stakeholder	management
		Stancholaci	management

	Ν	Mean	Std.
			Deviation
Late identification of			
stakeholders in the	70	2.4	1.439
project			
Low commitment of			
stakeholders towards	70	2.57	1.119
planned projects			
Not obtaining		2.43	0.979
stakeholders approval	70		
Aggregate Mean and		2.46	1.179
St. Deviation			

Table 4.31: shows that the Average means score of Project Stakeholder Management

Challenges is (2.46) with a Std. Deviation of (1.179) which indicates that there is effective Project Stakeholder Management.

Table 4.32: Project communication management

	Ν	Mean	Std.
			Deviation
Lack of professional			
communication	70	3.74	1.172
support			
Understand your roles			
and responsibilities	70	3.69	1.183
well			
Have adequate access			
to the people with the	70		
information necessary		4.09	0.562
for you to perform			
your job			
Get accurate	70	4.06	0.639
information			
Aggregate Mean and		3.89	0.889
St. Deviation			

Source: Survey data (2022)

Table 4.32: shows that the Average means score of Project Communication Management Challenges is (3.89) with a Std. Deviation of (0.889) which indicates that effective Project Communication Management are considered.

Table 4.33: Project Risk Management

	N	Mean	Std.
			Deviation
Poor risk management			
	70	4.14	1.287
Failure to manage expectations	70	3.66	1.083
Unexpected events with no effective response possible	70	3.54	1.094
Aggregate Mean and St. Deviation		3.78	1.15

Source: Survey data (2022)

Table. 4.33: shows that the Average means score Project Risk Management Challenge Factors

Is (3.78) with a Std. Deviation of (1.15) which indicates that Project Risk Management is not practiced well.

Table 4.34: Project Time management

	N	Mean	Std.
			Deviation
Project schedule	70	4.43	1.170
delays			
Too tight project			
schedule and	70	2.57	1.037
unrealistic deadlines			
Inaccurate time		2.51	1.147
estimations	70		
Aggregate Mean and		3.17	1.118
St. Deviation			

Source: Survey data (2022)

Table 4.34: shows that the Average mean score of Project Quality Management challenges is

(3.17) with a Std. Deviation of (1.118) which indicates that on project time management, there is project schedule delays but Too tight project schedule and unrealistic deadlines, Inaccurate time estimations are not a problem.

Table 4.35: Human resource management

	N	Mean	Std.
			Deviation
Wrong selection of project team	70	3.80	1.279
Lack of skilled personnel with adequate capacity	70	2.34	0.938
Lacking clear roles and responsibilities among team members	70	2.46	0.919
Being unable to resolve conflicts	70	1.80	0.677
Aggregate Mean and St. Deviation		2.6	0.95

Source: Survey data (2022)

Table 4.35: shows that the average means score of Project Human Resource Management Challenges is (2.6) with a Std. Deviation of (0.95) which indicates that Project Human Resource Management is effectively practiced except wrong selection of project team.
Table 4.36: Cost Management

Table 4.3.8: Cost	N	Mean	Std.
Management			Deviation
Inaccurate cost		3.91	1.442
estimation	70		
Lack of cost control		3.80	1.530
	70		
	10		
Inadequate		3.60	1.241
funding/capital or	70		
poor use of			
funding/capital			
Aggregate Mean and		3.77	1.4
St. Deviation			

Source: Survey data (2022)

Table 4.36: shows that the averages mean score of Project Human Resource Management

Challenges is (3.77) with a Std. Deviation of (1.4) which indicates that the cost management system of the company is poor.

Table 4.37: Project procurement management

	Ν	Mean	Std.
			Deviation
Lack of well-prepared		3.17	1.445
procurement planning	70		
Lack of competitive		3.89	1.278
procurement process	70		
Lack of transparency		3.80	1.232
and integrity in the	70		
procurement process			
Lack of well-prepared		3.89	1.157
contracts with much	70		
detail and clear			
documentation			
Aggregate Mean and		3.68	1.27
St. Deviation			

Source: Survey data (2022)

Table 4.37: shows that the Average mean score of Project Procurement Management Challenges is (3.68) with a Std. Deviation of (1.27) which indicates that Project Procurement Management is not appropriately practiced in the company.

Table	4.38:	Integration	Management

	Ν	Mean	Std.
			Deviation
Failure to assign and			
identify project	70	1.80	0.719
manager early in the			
project			
Lack of efficient			
change management	70	2.17	1.014
Lack of clear vision			
and goals of the	70	1.74	0.657
project			
Aggregate Mean and		1.9	0.79
St. Deviation			

Source: Survey data (2022)

Table 4.38: shows that the Average means score of Project Integration Management is (1.9) with a Std. Deviation of (0.79) which indicates that Project integration Management is effectively practiced in the company.

4.2.7 Result of Data Analysis on the Effectiveness of Project Management Process on

Project Performance

The average mean for the project management processes in initiation, planning, executing, monitoring and control and closing phase is about 4.21, 3.77, 3.37, 3.45 and 2.48 respectively. This value indicated that there are some issues which are not effectively practiced during planning, execution, monitoring and closing phases. The mean values are based on the agree and disagree response of the respondents.

Table 4.39 Result of Data Analysis

	Ν	Mean	Std.
			Deviation
Initiation phase	70	4.21	0.56
practice			
Planning phase	70	3.77	0.95
Execution phase	70	3.37	1.3
Monitoring phase	70	3.45	1.16
Closing phase	70	2.48	0.78

This value indicated that there are some issues which are not effectively practiced during planning, execution, monitoring and closing phases.

Table 4.40 Result of Data Analysis

	Ν	Mean	Std.
			Deviation
Scope management	70	4.1	1.21
Quality management	70	3.83	2.1
Risk management	70	3.78	1.3
Time management	70	3.17	1.2
Cost management	70	3.77	1.8
Procurement	70	3.68	2.9
management			

According to the data analyzed on the effectiveness of project management process, scope management, quality management, risk management, time management, cost management and procurement management were not effectively practiced with the average mean value of 4.1, 3.83, 3.78, 3.17, 3.77, and 3.68 respectively.

4.3 Discussion of the results

Findings of the research analyzed the effectiveness of project management process on the performance of Jambo construction projects from beginning of projects up to close out. The average mean for the project management practice in initiation, planning, executing, monitoring and control and closing phase is about 4.21, 3.77, 3.37, 3.45 and 2.48respectively. This value indicated that there are some issues which are not effectively practiced during planning, execution, monitoring and closing phases.

During planning phases possible risks were not identified and quantified as well as change control plan, communication plan, management plans were not developed. Again on project execution phases, project risks are not reviewed regularly with new risks identified and updated as needed and quality assurance and scope verifications were not properly made. During project monitoring and control phase, project quality control was not made against the plan as per the client request in the plan and also risk response control was not made to confirm whether the risk response actions are going as planned. Lastly on project closing phase, procurement audits and contracts close out was not formally undertaken for all procurements made, lessons learned from the project were not identified and properly documented for future use as well as all project records were not updated as per the changes made on any record.

According to the data analyzed on the effectiveness of project management process, scope management, quality management, risk management, time management, cost management and procurement management were not effectively practiced with the average mean value of 4.1, 3.83, 3.78, 3.17, 3.77, and 3.68 respectively.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS & RECOMMENDATIONS

Introduction

This chapter has three sections. The first section presents the summary of major findings, the Second section presents conclusion of the research derived from findings and the third section Deals with recommendation that were made on basis of the findings.

5.1 Summary of Major Findings

The aim of this research was to assess and analyze the effectiveness of project management process in Jambo construction projects, to determine the current status of project management processes. Based on the results of the study carried out enterprise has a good project initiation practices with high level of identifying project schedule milestone, scope of work, planning and project resources like budget and people. During planning phases, preparation of detail scope statement, project team assimilation, development of work breakdown structure, cost and time estimation was prepared but possible risks were not identified and quantified as well as change control plan, communication plan, management plans were not developed. Again on project execution phases, effective team meetings are held, project schedule was updated regularly but project risks are not reviewed regularly with new risks identified and updated as needed and quality assurance and scope verifications were not properly made. During project monitoring and control phase, performance report was effectively made with scope control but project quality control was not made against the plan as per the client request in the plan and also risk response control was not made to confirm whether the risk response actions are going as planned.

Lastly on project closing phase, procurement audits and contracts close out was not formally undertaken for all procurements made, lessons learned from the project were not identified and properly documented for future use as well as all project records were not updated as per the changes made on any record. This implies that the closing practice was poor.

The most effective project management process applied in Jambo construction projects are stakeholder management, communication management, human resource management, integration management. But On the other hand factors that challenges the construction project in this study includes scope management, quality management, risk management, time management, cost management and procurement management.

5.2 Conclusions

In line with the objective of the study the data collected was analyzed and interpreted. The aim of this research was to assess and analyze the effectiveness of project management process in Jambo construction projects, to determine the current status of project management processes.

Generally as the result obtained from the study and based on its specific objectives the following conclusions were drawn:

- The enterprise has a good project initiation phase practices which includes identification of high level project schedule, scope of work, project resources like budget and people and high level of planning which serve as a road map for detail plan.
- On the project planning phase practice work breakdown structure was developed and network diagram which shows activity dependency but on the other hand possible risks were not identified and quantified, change control plan, communication plan and management plans were not developed.

- On project execution phase, effective team meetings was held, the project schedule was updated regularly but project risks were not reviewed regularly as well as quality assurance and scope verification were not properly made.
- Performance report was made for every activity as per the schedule on project monitoring and control phase practices but project quality control was not made against the plan and project risk response control was not made to confirm whether the risk response actions are going as planned.
- The enterprise closing phase practice is poor which is procurement audits and contracts close out was not formally undertaken for all procurements made, lessons learned from the project were not identified and properly documented.
- The company has good project management skills of stakeholder management, communication management, human resource management and integration management.
- The major factors that challenge the organization include scope management which includes changing requirements late in the project, design discrepancies and inadequately documented project requirements.
- The study revealed that quality management is also one challenge which is lack of strict quality control measures, use poor initial testing techniques.
- The enterprise has poor risk management which is failure to manage expectations, unexpected events with no effective response possible.
- > The enterprise is poor at Time management which causes project schedule delays
- Cost management is also one challenge of the organization which includes inaccurate cost estimation, lack of cost control and inadequate capital.
- The other major challenge of the enterprise is poor procurement management which is lack of well-prepared procurement planning, lack of transparency and integrity in the procurement process, lack of well-prepared contracts with much detail and clear documentation.

5.3 Recommendation

Based on the result of the study and conclusion reached together with lesson drawn from literature on experience of the effectiveness of project management process, the following important remarks are recommended.

 \checkmark The findings of this research indicate that practice of project scope management,

Were less practiced in Jambo construction projects. In order to deliver successful projects

Project scope management should be considered.

- ✓ Jambo construction requires attention in quality management which includes quality control measures, quality checking at satisfactory level.
- \checkmark Jambo construction should be seen risk management as a basic management tool
- ✓ Effective time management mush give attention in order to avoid project schedule delays
- ✓ Cost management which includes accurate cost estimation; develop cost control, adequate capital should be seriously considered.
- Emphasis should be given to have well prepared procurement planning with much detail in order to improve procurement management challenge.

Bibliography

- Abd El-Razek, H. M. (2008). causes of delay in building construction projects in egypt. *Journal of* construction engineering and management.
- Akewushola, o. h. (2012). Effect of project management on project success. *Australian Journal of Business and Management Research*.
- Alnasseri, e. a. (2013). Assessing the challenges of project management practices in building construction: in the case of the commercial bank of ethiopia head office project.
- Anton Zandhuis, P. R. (n.d.).
- Anton Zandhuis, R. s. (2013). *ISO 21500: Guidance on Project Management-A pocket Guide.* Van Haren publishing, Zaltbommel, www.vanharen.net.
- atkinson, R. (1999). Project management: cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria. *International journal of project management*.
- B. Prakash Rao, S. C. (2016). Delay Analysis of Construction Projects.

baccarini, A. c. (2004). Project success. Journal of construction research.

Blaize horner reich, s. y. (2006). project management body of knowledge. Project management journal.

Boonstra, A. (2006). Interpreting an ERP-implementation project from a stakeholder perspective. International journal of project management.

Boris F.Blumberg, D. R. (2014). Business research method. Mcgraw-hill education.

- chen wang, l. c.-r. (2016). When traditional information technology project managers encounter the cloud: Opportunities and dilemmas in the transition to cloud services. *International journal of project management*.
- Chen wang, I. c.-r. (2016). When traditional information technology project managers encounter the cloud: Opportunities and dilemmas in the transition to cloud services. International journal of project management.
- Daniel w.m.chan, m. m. (2002). Compressing construction durations: lessons learned from Hong Kong building projects. *International journal of project management*.
- Davis, K. (2014). Different stakeholder groups and their perceptions of project success. *International journal of project management*.
- Diana White, J. F. (2002). Current practice in project management- an emperical study. *International journal of project management*.
- Douglas c.bower, d. h. (2007). Planning Knowledge for Phased Rollout Projects. *International journal of project management*.

- Dubem I. Ikediashi, S. O. (2014). Analysis of Project Failure Factors for Infrastructure Projects in SaudiArabia: A Multivariate Approach. *Journal of Construction in Developing Countries*.
- Eyob Birhanu. (2020). The practice and challenges of project management.
- Gay, M. &. (2009). Using Meta-Analysis as a Research Tool in Making Educational and Organizational Decisions. Ernest W. Brewer (University of Tennessee, USA).
- Getachew. (2015). Causes of failure of projects financed by development bank of Ethiopia: The case of corporate credit process'.
- Habtemariam, M. (2019). Factors affecting construction projects performance: the case of save the children.
- Harold kerzner. (2017). Project management case studies. John wiley and sons, inc, hoboken new jersey.
- Jogannagari Malla Reddy, S. P. (2017). Significance of Software Layered Technology on Size of Projects. Journal of Science and Technology (JST).
- John w.creswell, v. l. (2003). Advanced mixed method research design.
- Joseph A. Gliem, R. R. (2003). Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales.
- K Phaniraj, K. S. (2014). Practical Factors Affecting Delay in High Rise Construction–A Case Study in a Construction Organization. *International journal of engineering research*.
- k.wysocki, R. (2003). Effective software project management. Wiley publishing, inc, indianapolis, indiana.
- Kerzner, H. (2006). *Kerzner's Project Management Logic Puzzles*. IEEE Transactions on Engineering Management.
- kuprenas, J. A. (2003). Implementation and performance of a matrix organization structure. International journal of project management.
- Lemma. (2014). The role of project planning on project performance in Ethiopia'.
- Lewis, J. P. (1998). Mastering project management : applying advanced concepts of systems thinking, control and evaluation, resource allocation.
- Luis emilio alvarez-dionisi, r. t. (2013). Global project management trends. *International journal of information technology project management*.
- M.Saunders, p. A. (2009). Research methods for business students.
- Mirza, P. a. (2013). Challenges of project management practice in ethiopian airports infrastructure development projects.

Muszynska, K. (2016). Communication management in project teams practices and patterns.

Omran. (2012). Project performance in sudan construction industry.

- Pasian, B. L. (2011). Project management maturitya critical analysis of existing and emergent contributing factors.
- PWG.Morris, c. D. (2006). Exploring the role of formal bodies of knowledge in defining a profession The case of project management. *International journal of project management*.
- Solomon olusola babatunde, A. o. (2012). Critical success factors in public-private partnership (PPP) on infrastructure delivery in nigeriya. *Journal of facilities management*.

Takin, R. a. (2004). Performance indicators for successful construction project performance.

tamosalitiene, O. k. (2010). Risk assessment of construction projects.

Tatiana Rina Puspasri. (2005). Factors causing the poor performance of construction.

Tesfaye Hailu Zewdie. (2016). The Effectiveness of Project Management Processes on.

U Sekeran, N. J. (2003). Research methods for business. River Street.

Whittaker, B. (1999). What went wrong? unsuccessful information technology projects.

Wideman. (2002). Wideman comparative glossary of project management.

Wubishet. (2006). Procurement and Contract Management.

- Zantis, T. E. (2003). Programming and Scheduling Techniques. *International journal of project management*.
- Zarina alias, e. y. (2014). Determining Critical Success Factors of Project Management Practice: A Conceptual Framework. *procedia social behavioral sciences*.

APPENDIX

Appendix I

SECTION I: Survey Questionnaire

ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES

Masters of Art in Project Management

Dear respondent: My name is Saron Gelana, pursuing a Master of Arts Degree in project

Management at St. Mary's University. The research is entitled as **"THE EFFECTIVENESS OF PROJECT MANAGEMENT PROCESS ON THE PERFORMANCE OF JAMBO CONSTRUCTION PLC"** for the partial fulfillment of academic requirement.

This questionnaire is designed to collect primary data for this study only and your genuine

Responses to the questionnaires are highly demanded on which the success is depending on.

I kindly request you to spend a few minutes of your valuable time to answer the questions as

Per the instruction below:

- You do not need to write your name
- > All of the questions are responded by yourselves
- You are required to encircle only one out of the given alternative numbers which is your best choice to say.

For some of the questions that need your explanations, please try to honestly describe as per the questions on the space provided. All the information you provide will kept in strict confidentiality and it will be used only for academic research. Please answer each question carefully. If you need any explanations or description concerning the study and the questions provided, don't hesitate to reach me through the mobile phone number: +251 910458884 or email: gelanasaron92@gmail.com.

Thank you in advance for your participation in the study!

Part I. Back ground information about the respondents. Please use ($\sqrt{}$) in the relevant box for

Your response

A. Gender: Female Male	
B. Age	
1.18-30 years	
2. 31-40 years	
3. 41-50 years	
4. 51-60 years	
5. Over 60 years	

C. Educational back ground

1. College / Diploma	
2. BA/BSC	
3. MA/MSC	
4. PHD	
D. Relevant Work Experience	
1. 1-5 years	
2. 6-10 years	
3. 11-15 years	
4. above 15 years	

E. Your current Job title in your company

1. General Manager	
2. Project Manager	
3. Site Engineer	
4. Office Engineer	
5. Forman	
6. Other	

Part II:

General Direction: In a scale of 1 to 5, please indicate the extent to which you agree with Each of the following statements in relation to how well the project management practices Were applied and face challenges to Access project. Mark with a tick against the most Applicable response. Where; 1= strongly disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree

No.	Project initiation phase practices	5	4	3	2	1
1	High-level project schedule milestones were properly					
2	Identified.					
	Misunderstanding between the stellaholders					
3	High-level project resources like budget and people					
5	were identified					
4	High-level planning was prepared that serve as a road					
	map for detail plan at the planning phase					
	Project Planning phase practices					
5	Scope statement of the project was prepared in detail.					
6	Project teams were recruited and assembled in a way					
	that enables them to perform all activities as required in					
	cohesive manner					
7	Work breakdown structure (WBS) was developed and					
	helps to properly estimate the required material, human					
	and financial resources.					
8	Network diagram that shows activity dependency and					
	sequence was developed					
9	Proper activity cost and time estimation was made					
10	Overall budget and schedule of the project was					
	determined					
11	Procurement plans of the project were established					
12	Possible risks were identified and quantified					
13	change control plan, communications plan,					
	management plans were developed					
14	Overall project plan was approved by concerned body					
	Project Execution phase practices					
15	Team meetings are effective and held with a stated					
	agenda					
16	The project schedule is updated regularly,					
	incorporating unplanned work as needed					
17	Project risks are reviewed regularly with new risks					
	identified and updated as needed.					
18	Project status updates are provided to key stakeholders					
	regularly					

19	Quality assurance and scope verifications were			
	properly made			
	Project Monitoring and Control phase practices			
20	Performance report was made for every activity as per			
	the schedule			
21	Project scope control was made against the planned one			
	for every scope statement			
22	Project quality control was made against the plan as per			
	the client request in the plan			
23	Risk response control was made to confirm whether the			
	risk response actions are going as planned			
24	Schedule and cost controls were made against the			
	planned one to check if cost over runs and schedule			
	delays are properly managed			
	Closing phase practices			
25	Procurement audits and contract(s) close out was			
	formally undertaken for all procurements made			
26	Lessons learned from the project were identified and			
	properly documented for future use			
27	All project records were updated as per the changes			
	made on any record			
	Effective project Management skills			
	Scope management			
28	Changing requirements late in the project and			
	continuing change requests			
29	Design discrepancies			
30	Project requirements inadequately documented			
	Quality management			
31	Lack of strict quality control measures			
32	Use of poor initial testing techniques.			
33	Quality checks not performed at satisfactory level			
	Stakeholder management			
34	Late identification of stakeholders in the project			
35	Low commitment of Stakeholders towards planned			
	projects			

36 Not obtaining stakeholder approval

	Communication management			
37	Lack of professional communication support			
38	Understand your roles & responsibilities well			
39	Have adequate access to the people with the			
	information necessary for you to perform your job			
40	Get accurate information			
	Risk management			
41	Poor risk management			
42	Failure to manage expectations			
43	Unexpected events with no effective response possible			
	Time management			
44	Project schedule delays			
45	Too tight project schedule and unrealistic deadlines			
46	Inaccurate time estimations			
	Human resource management			
47	Wrong selection of project team			
48	Lack of skilled personnel with adequate capacity			
49	Lacking clear roles and responsibilities among team			
	Members.			
50	Being unable to resolve conflicts.			
	Cost management			
51	Inaccurate cost estimation			
52	Lack of Cost Control			
53	Inadequate funding/capital or poor use of			
	funding/capital			
	Procurement Management			
54	Lack of well-prepared procurement planning			
55	Lack of competitive procurement process			
56	Lack of transparency and integrity in the procurement			
	process			
57	Lack of well-prepared contracts with much detail and			
	clear documentation			
	Integration management			
58	Failure to assign and identify Project Manager early in			
	the project			
59	Lack of efficient change management			

	60	Lack of Clear vision and goals of the project						
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Appendix II:

SECTION II:

What is the major challenge/s related to project management practice in construction projects that you have been involved?

 What is the impact/s of the mentioned challenges in the project you have been involved
With?

3. How does the organization deal with those challenges?

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