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THE ROLE OF CONTRACT ADMINISTRATION ON PROJECT PERFORMANCE: THE CASE OF PRIVATE CONSTRACTION CAMPANY IN ADDIS ABABA

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THE ROLE OF CONTRACT ADMINISTRATION ON PROJECT PERFORMANCE; THE CASE OF SOME SELECTED PRIVATE CONSTRUCTION COMPANY IN ADDIS ABABA.

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DECLARATION

I, **Samson Tadege**, hereby declare that the thesis work entitled **"The role of contract administration: The Case of Some Selected private construction Companies in Addis Ababa"** submitted by me for the award of the Master of Art Degree in Project Management at ST. Mary's University is original work and it has not been presented for the award of any other Degree, Diploma, Fellowship or other similar titles of any other university or institution.

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List of Acronyms

CAC – Contract Administration and Construction

CM – Contract Management

IACCM - International Association for Contract and Commercial

IACCM - International Association for Contract and Commercial

ICC - International Chamber of Commerce

JIT – Just in Time

PMBOK- Project management body of knowledge

PMI – Project Management Institute

SPSS - Statistical Package for Social Sciences

Abstract

The purpose of this study is to examine the role of contract administration practice on project performance at private construction company in Addis Ababa. Source of data used was a close ended Likert Scale based Questionnaire and gathered from a sample of 88 employees that were selected using simple random sampling method. The data obtained from the survey were then analyzed with the use of SPSS. Data was collected through a questionnaire using statistical tools such as mean, standard deviation, correlation, and multiple regression analysis. Results of this study indicate that contract administration practices dimensions such as (contract administration planning, timely monitoring, and inspection practice) have positive and significant relationship with project performance. This research concluded that contract administration practice had major influence on the performance of the project in private construction companies. Forwarded recommendations in general strong effort should be given on contract administration practice by improved communication and collaboration among project teams, regularly review and update contract documents, monitoring and inspection tool advancement, and effectively linked with technology, taking proactive corrective actions will improve the project effectively. Researcher also suggests further studies on contract administration practices specifically on private company and Ethiopia cases where we lack information that is practical to us.

***Key words**: contract administration, project Performance, contract administration planning, timely monitoring and inspection practice*

CHAPTER ONE:

INTRODUCTION

1.1.Background of the study

The construction industry is regarded as one of the major production sectors of a country (Sertyesilisik 2007). It increases the need for allied sectors including building technology, paint, steel, cement, ceramics, and building chemicals. This means that the sector is labor-intensive and is growing at a rapid rate for skilled, semiskilled, and unskilled workers. For this reason, the building sector is a major indicator of a nation's economic health and success. Given that it involves a wide range of players, activities, and economic sectors, the construction industry is thought to be among the most complex, risky, and difficult (Tatarestaghi et al. 2011).

Construction projects in general are difficult to manage and challenging due to the nature of the industry and the project; such as complex and unique nature, mobile workforce, ingrained culture, working conditions, and project-based setup, diverse sub-contractors and suppliers; in addition to regulatory bodies and changes in government policies during the production process (Arditi and Balci, 2009). These factors significantly affect the efficient performance of construction site management team (Fapohunda and Stephenson, 2010) and in most cases lead to project failure (Kar, 2009).

Enhancing project performance is critical for addressing nation's political, social, and economic issues. Effective project management is essential for achieving higher standards of quality, reducing costs, and saving time. A poorly designed and executed project, on the other hand, will be costly, time-consuming, and produce substandard outcome, all of which will impede nation's ability to progress Dandane, (2018). The management of contracts has significant impact on how well projects are delivered. Plan for contract management that are not up to part of result in overspending, missed deadlines, subpar performance, unsatisfactory outcomes, and eventually project failure or termination. These problems are also a result of insufficient supervision or follow-up on contract implementation.

Many variables affect project's likelihood of success. Effective contract administration is one of the key components. Making choices and ensuring that information is shared promptly are all part of contract administration, which include reviewing and monitoring the construction project in addition to completing the project as specified by the contract agreements (Surahyo,

2018). Effective communication between all parties involved is essential to the success of contract administration. Establishing the parties' connections, outlining roles, and choosing the best administrative practices are all part of this (Uher and Davenport, 2009).

Globally, achieving efficient contract management may be hampered by a variety of obstacles, impediments, or circumstances. According to the International Association for Contract & Commercial Management (IACCM 2003), contract management is regarded as the primary source of operational weakness in more than 70% of international corporations, and improving contract management would improve risk management and lower costs. As a result, 60% of worldwide organizations have begun to address the issue of contract management.

Developing countries require a wide range of developed facilities to meet their socioeconomic development goals. Many writers on the development of emerging countries' construction industries remarked that the sector is not adequately developed to meet the needs that these countries require. Construction projects in these countries are frequently subject to long delays and increased cost kasiem, (2008). Furthermore, local construction industries are underdeveloped; indigenous contractors undertake the smallest projects and lack the necessary technical and managerial expertise, despite the fact that they may be good entrepreneurs.

In Ethiopia, construction sector is playing an important role in national economy. Nevertheless, the construction industry in Ethiopia is challenged by several problems which tend to confront the sector and thus making efforts at developing the construction industry is very difficult and complex. According to Asteway, (2008), the underlying problems of the construction sector in Ethiopia can be classified into two main categories. The first is related to the consequences of the fact that the sector is not viewed and planned in an integrated manner, but rather, operates with fragmented, unrelated and often conflicting components (Wubishet, 2004). The second problem is related to deficiencies and market price fluctuation of the inputs required for the construction which result in cost overrun of project (Gebre-Michael, 2002).

According to Abdissa (2003), one of the major issues in the Ethiopian construction industry is a lack of qualified engineering experts with adequate training in construction management, international contract administration, and claims handling. Furthermore, he stated that delays and disruption in building activity, as well as excessive variation requests, are some of the leading causes of claims in the business. Understanding the contract terms, administering the construction based on the delivery method chosen, and completing the proper duties and what

is anticipated from each of the participants are critical for successfully supporting the collaborative effort on a project.

In this regard, contract administration is crucial to project performance at all stages of the project life cycle. Taking this into mind, this study will evaluate the influence of contract administration on project performance in the context of a specific private construction company in Addis Ababa.

1.2.Statement of the problem

Studying past experience, specialists have become aware that ineffective contract administration process management can generate reworks, project delays, impede progress, sour relations between key project players, and raise overall project costs. Despite being clearly stated in the conventional forms of contracts, the fundamental rules governing contract administration and activities are occasionally misinterpreted, misapplied, undervalued, or overlooked. Consequently, disagreements arise, which has an impact on the project's overall success, Hesham (2020).

Moreover, construction projects in general are difficult to manage and challenging due to the nature of the industry and the project; such as complex and unique nature, mobile workforce, ingrained culture, working conditions, and project-based setup, diverse sub-contractors and suppliers; in addition to regulatory bodies and changes in government policies during the production process (Arditi and Balci, 2009). These factors significantly affect the efficient performance of construction site management team (Fapohunda and Stephenson, 2010) and in most cases lead to project failure (Kar, 2009). The reasons for such failure are highly complicated, and it is not advised to pinpoint specific causes in order ensure project success. However, it is felt that the primary reasons for project failure in developing countries are lack of advance planning, a holistic approach, a thorough engineering and management strategy, and inconsistency in monitoring and follow-up, coordination and communication lapses and above all, absence of a methodical approach (Kar, 2009). Besides technical issues, posit that professionals in the construction industry also need to handle managerial issues (Agundu, et, al., 2003).

Building Construction industry in Ethiopia suffers from many problems and complex issues in performance. Performance is related to many topics and factors such as time, cost, quality, client satisfaction, productivity and safety. In Addis Ababa there are many construction

projects such as roads, buildings and water supply projects which are executed by small and medium scale local contractors. These construction projects have problems in their performance. As a result of many factors which affect the successful completion of the project, especially time, cost and quality of the projects

According to Abraham (2021), In Addis Ababa, there are many building contractors who have failed to deliver Buildings on time which created a skeleton jungle in some areas. Many building construction projects have been completed with poor performance in the past due to a variety of contractor reasons, including client obstacles, material shortages, road closures, design and drawing amendments, additional work, waiting for a decision, handing over, variation orders, Bill of Quantity amendments, and delays in receiving drawings. Other indications of performance include project managers, coordination among participants, monitoring and feedback, and leadership abilities.

However, projects must be completed within the timeline, budgeted cost, and required quality. Unfortunately, many initiatives take longer to execute, cost more than appropriate capital, and frequently result in low quality outputs Dandane, (2018). This critical issue involving time, capital, and quality is especially acute in Ethiopia. The current issue with project performance will have an impact on the country's socioeconomic and political economy. Despite significant academic advancements, the influence of contract administration on project performance in Ethiopia in general, and notably in Addis Ababa building projects, has not been adequately documented and reported Dandane, (2018).

Many studies focus on the contract management and general principles of contract administration but do not delve deeply into how construction contract administration practice impacts project performance. It indicates that there is a gap in understanding of the role of contract administration and their effect on construction project outcome. The purpose of this study is to examine the role of contract administration in the performance of construction projects in some selected private construction companies in Addis Ababa currently undertaking various construction projects. Those are: Sunshine construction, Etete construction, Rama construction and Bamacon construction, by taking three key variables into account: contract administration planning, performance monitoring, and deliverable inspection, and to make recommendations to improve project performance through effective contract administration.

1.3.General objective

The study's overall objective is to examine the role of contract administration on project performance, in the case of selected private construction company in Addis Ababa.

1.4. Specific objectives

1. To examine contract administration planning strategy role on project performance.

2. To examine the contribution of timely monitoring of contract implementation for project performance/success.

3. To examine the inspection practice and its contribution to obtaining the intended deliverables.

1.5. Significance of the study

The purpose of this study was to determine the impact of contract administration on the performance of construction enterprises. Although similar studies have been completed on contract administration and contract management practice in governmental organizations, I believe there has been no comparable research done on private construction enterprises in Ethiopia. As a result, this study will be useful to other researchers as a beginning point, as well as practitioners such as contractors, investors, construction consultants and other construction professionals in making judgments. Besides, this study is important towards the growth of an economy in the country due to the construction sector is the contributor of country income in Ethiopia

1.6. Research hypothesis

H1:1. There is a relationship between contract administration planning strategy and project performance.

H01:1. There is no relationship between contract administration planning strategy and project performance.

H1:2. There is a relationship between timely monitoring and project performance.

H0:2. There is no relationship between timely monitoring and project performance.

H1:3. There is a relationship between inspection practice and project performance.

H0:3. There is no relationship between inspection practice and project performance.

1.7. Scope of the Study

The study was delimited to three major areas (conceptual, geographical and methodology).

Conceptual Scope: The conceptual scope of the study aims to explore, describe and explain the existing contract administration practices and all factors that may obstruct the achievements of construction projects in Addis Ababa. The study examines the role of contract administration in project performance.

Geographical Scope: the study will focus only on the selected construction companies located in Addis Ababa. Those companies outside the Addis Ababa will be omitted in this study as finances and distances are the limiting factors that inhibit collecting the data from all the employees across the country

Methodological Scope: it has used mixed research design in which quantitative data was collected from the questionnaire.

1.8. Definition of terms

Contract; A contract is a legally binding agreement between two or more parties that outlines the terms and conditions for a specific transaction or relationship. In essence, a contract is a formal promise that is enforceable by law. It is a fundamental concept in business, law, and everyday life, Hutchison et al. (2009)

Contract administration refers to the process of managing and overseeing the execution of a contract between two or more parties. This involves ensuring that all parties involved in the contract fulfill their respective obligations and adhere to the agreed-upon terms and conditions. “Contract administration” is a term used to describe the functions that are performed after the parties have signed the contract (Sherman, 1996).

Project; a project is a temporary endeavor with a specific goal or objective, typically involving the creation of a product, service, or result. Projects are unique and have a defined beginning and end, as opposed to ongoing, routine operations. They are often undertaken to bring about change, introduce a new product or service, or achieve a specific outcome, Projects differ from types of work. PMI (2004) defines a project as a temporary endeavor undertaken to produce a unique product, service or result.

Project Contracts: are legally binding agreements that define the terms and conditions under which a project will be executed, (PMI,2004). These contracts outline the responsibilities,

rights, and obligations of the parties involved in the project, such as the project owner (client) and the contractor. The contract serves as a foundation for managing the project and provides a framework for addressing issues, resolving disputes, and ensuring that the project is completed successfully

Project performance: refers to the degree to which a project is accomplishing its objectives and delivering the intended outcomes. It is a comprehensive assessment that involves evaluating various aspects of a project, including its scope, schedule, budget, quality, and stakeholder satisfaction. Effective project performance management is crucial for ensuring successful project delivery. According to the business dictionary, Performance is the accomplishment of a given task measured against present known standards of accuracy, completeness, cost, and speed.

Deliverables -A deliverable is any unique and verifiable product, result or capability to perform a service that is required to be produced to complete a process, phase, or project. Deliverables are typically tangible components completed to meet the project objectives and can include elements of the project management plan (PMI, 2013).

Constraints- A limiting factor that affects the execution of a project or process, (PMI, 2013) Inspection; is a systematic examination or assessment of something to ensure that it meets certain standards, specifications, or requirements. Inspections are conducted in various fields, including manufacturing, construction, services, and quality control, to verify that products, processes, or services comply with established criteria.

Project success; is a multifaceted concept that goes beyond merely completing a project on time and within budget. It involves achieving the project's intended goals and delivering value to stakeholders. Success can be measured in various ways, and different stakeholders may have different perspectives on what constitutes a successful project. Since projects are temporary in nature, the success of the project should be measured in terms of completing the project within the constraints of scope, time, cost, quality, resources, and risk as approved between the project managers and senior management (PMI, 2013).

1.9. Organization of the Research Report

This study is organized into five chapters. Chapter one has presented the introduction and background to the study which covers background information, statement of the research

problems, research questions, research objectives, significance of the study, limitations and delimitations of the study as well as organization of the report. Chapter two is the presentation of review of literatures both theoretical and empirical. This chapter also presents a conceptual framework to help researchers clarify the research objectives. Chapter three presents the research methodology including the study area, research design, and population under the study, sample size and sampling techniques, data collection methods, data processing and data analysis. Chapter four is where the findings from questionnaires and interviews are analyzed and discussed. These chapters also comprehensively interpret the findings. Finally, chapter five gives conclusions and recommendations from the results of findings.

CHAPTER TWO

RELATED LITERATURE REVIEW

Introduction

The chapter aims to discuss the role of contract administration in the performance of the project and related issues. To these ends, the chapter reviews different related theories, concepts and empirical literature. These theories, concepts and empirical literature help the researcher both to understand and properly answer the stated objectives of the research.

2.1. Theoretical Review

This study draws on several conceptual frameworks. Each of them with their own shortcomings can help understand and interpret the role of contract administration on the management of the project and its performance. They are discussed as follows:

2.1.1. Construction industry

The construction industry assumes a key part in deciding the advancement and prosperity of a country, and fundamentally adds to upgrading the stability and security of a nation (Ismail, et al., 2013). This could be attributed to the fact that the industry encompasses almost all aspects within the country, be those related to irrigation, concrete structures, communication networks and all related civil engineering projects and initiatives. It therefore has wide applicability in such diverse sectors as health, education, agriculture, housing, commercial, utilities etc., all of which are related to infrastructural development and associated progress. It can therefore be concluded that the construction sector is an amalgamation of diverse organizations, impacting the construction process in varied ways.

In layman's terms, a construction is the process of building anything by humans for one or more purposes. It could be a road, bridge, dam, residential dwelling, airport, or commercial building, among other things. According to Tecle and Mehelet (2009), construction is the process of building or assembling infrastructure. Construction is the recruitment and use of capital, specialized personnel, materials, and equipment on a specific site in accordance with plans, specifications, and contract papers prepared to satisfy the client's needs. According to (Moavenzdadeh.1976), building contributes to the economic growth of any country by achieving some of the basic objectives of development, including output generation, employment creation, and income generation and redistribution; it also plays a vital part in

satisfying basic physical and social needs, including the production of shelter, infrastructure and consumer goods.

PMI, 2008 defines building construction as the process of adding structures with walls to real property or construction of buildings. Its further discusses that if those buildings are not designed and constructed by professionals, they might lead to undesirable results such as structural collapse, cost overrun and disputes.

Construction industry is necessary in every country to provide physical developments which help in improving social and economic needs of country (Abedi, Mohamad, & Fathi, 2011). Likewise, other countries, in Ethiopia construction industry trend in the past 10 years shows a yearly growth rate of 12.43 and this shows a share of 5.3% of the country's GDP (ECIDP, 2014).

Hence, the construction industry has been growing rapidly worldwide. General construction focuses on residential and non-residential constructions and also general civil engineering works, like metal works, electrical works, plumbing, sewerage and sanitary works, refrigeration and air-conditioning work, painting work, carpentry, tiling and flooring work, and glass work.

2.1.2. Project definition

The term project is extremely broad and is defined variously by different researchers. Even if they define it according to their own perspective, it symbolizes the same concept. There is no commonly accepted definition of project. However, all of the scholars' definitions showed similarities. according to Wysocki (2014), "a project is an endeavor in which human, financial and material resources are organized in a novel way to undertake a unique scope of work, of provided specification, within constraints of cost and time, so as to achieve beneficial change defined by quantitative and qualitative objectives." The definition provides three important project objectives, mainly time, cost, and quality, which should be prioritized when carrying out the project. It also emphasizes the importance of efficient organization of available resources in order to achieve a good final result. Müller and Turner (2007), emphasize the importance of considering the broader context, stakeholders, and power dynamics in project management in this way: "a project is a whole of actions limited in time and space, inserted in, and in interaction with a politico-socio-economic environment, aimed at and tended towards a goal progressively redefined by the dialectic between the thought (the project plan) and the reality."

As defined by (PMI, 2013), a project is “a temporary endeavor undertaken to create a unique product or service.” Temporary means that every project has a definite beginning and a definite end. The end is reached when the project's objectives have been achieved, or when it becomes clear that the project objectives will not or cannot be met, or the need for the project no longer exists and the project is terminated. Unique means that the product or service is different in some distinguishing way from all other projects or services. Though the desired end results may have been achieved elsewhere, they are at least unique to the organization. Moreover, every project has some elements that are unique (Manalebih, 2018).

2.1.3. Construction contract

A construction contract is a contract specifically negotiated for the construction of an asset or a combination of assets that are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use. Construction contracts are formulated in a number of ways for rendering services from consultants or contractors.

Since most of the time the owner cannot perform the actual construction of his project, he hires a contractor that will undertake the task. A contractual agreement is signed between the owner and the contractor stating all the responsibilities of both parties. According to (JCT, 2011), risk allocation in construction contracts is crucial for defining the responsibilities and liabilities of all parties involved, thereby ensuring a fair distribution of risks. All parties involved in the project need to understand the risks they are accepting and how the contract is dealing with them. In addition to stating the rights and obligations of the different parties, the parties are also agreeing how the risks are to be allocated among them when they enter into any kind of contract.

2.1.4. Contract Administration

The term "Contract administration" refers to the process of managing and overseeing the execution of a contract between two or more parties. This process involves ensuring that all parties involved fulfill their contractual obligations and that the terms and conditions of the contract are met. Wang et al. (2018), Contract administration is a crucial aspect of business and project management, helping to minimize risks, resolve disputes, and ensure that both parties receive the benefits outlined in the contract.

Jackson (2010) defines contract administration as red tape and paperwork associated with the construction of a project and deals with relationships and managing all the business affairs related to the contract parties and their obligations. Similarly, Kerzner (2013) defines contract

administration as a process dedicated to ensuring that each party is performing as required by the requirements of the contract. According to Rendon (2011), contract administration is a process of monitoring the performance of the contractor in accordance with the terms and conditions described in the contract and continue from signing the contract until the contract closed-out or terminated. According to Ofori (2014), contract administration is a subset of contract management that deals with the contract execution phase, which begins when the contract is signed and continues until the contract is closed out. According to PMI (2016), construction administration is an administrative duty that all entities should carry out in relation to the scope of work. The industry defines construction contract administration as actions carried out by a third party appointed by the employer to administer the contract during construction (CSI 2005). The third-party has different titles such as "Engineer," "Architect," or "Certifier" under the different standard forms.

According to (Niraula et al. 2008), Contract administration is the process in charge of dealing with day-to-day contractual issues. Construction contract administration deals with major critical areas such as risk identification, roles, and responsibility, execution process, payment certification, change management, schedule control, cost management and quality control/assurance, dispute, claim, and settlement. From the employer side, the functions carry out by contract administration are the main tool for effective project management.

2.1.4.1. Contract administration planning

Contract administration planning is the process of outlining the steps and strategies for effectively managing and overseeing a contract throughout its lifecycle. This includes defining roles and responsibilities, setting up communication channels, establishing performance metrics, and ensuring compliance with the terms and conditions of the contract. By carefully planning the administration of a contract, organizations can minimize risks, optimize performance, and achieve successful outcomes, Considering that contracts are the leading cause of legal disputes, having a contract administration plan in place is a smart way to avoid costly disputes and hold both parties accountable, Lack of proper planning increases waste of time, results in unrealistic goals and objectives, and leads to project delays and over budget (Kotwoni, 2019)

Effective contract administration planning is essential for ensuring that construction contracts are executed efficiently and effectively. By following best practices and addressing common challenges, contract administration will prevent disputes, reduce costs, and improve project outcomes.

2.1.4.2. performance monitoring

Contract monitoring is an important part of outcome-oriented administration (Rist, Boily & Martin, 2011). Outcome-oriented administration includes knowingly collecting factual data to establish to what intensity the predetermined outcomes are being done to change the design and outcome of actions to improve and be accountable for achievement of the predetermined result (Mayne, 2017). Moreover, Timely monitoring is the process of tracking and reviewing the progress of a construction project against the contract schedule, milestones, and deadlines. The goal of timely monitoring is to ensure that the project is completed on time, within budget, and to the required quality standards.

2.1.4.3. Contract inspection

Contract inspection is a process where a third-party inspector, typically hired by the contractor or owner, verifies that the work completed by the contractor meets the specifications outlined in the construction contract. The purpose of contract inspection is to ensure that the work meets the required standards, quality, and safety requirements. Inspection; is a systematic examination or assessment of something to ensure that it meets certain standards, specifications, or requirements. Inspections are conducted in various fields, including manufacturing, construction, services, and quality control, to verify that products, processes, or services comply with established criteria.

2.1.5. General contract administration processes

According to the CMH (Jan 2017), General contract administration process comprises eights steps. These processes and steps are enumerated as follows.

I. **Planning**

Pre-contract activities should be carefully planned and executed to ensure that all necessary information is gathered and that the contract is properly prepared, Zhang et al. (2019).

Contract administration planning should take place concurrently with the writing of the solicitation's description of work. The solicitation should include information on contract administration procedures. At the same time, the Institution should designate, organize, and schedule resources for the contract administration team to help the contract manager carry out contract administration operations. Pre-contract activities should be carefully planned and executed to ensure that all necessary information is gathered and that the contract is properly prepared, Zhang et al. (2019). To adequately plan for contract administration, program personnel must fully comprehend all aspects of the request and contract.

(II) Performance Monitoring

Effective contract administration involves monitoring the contractor/supplier's performance to ensure compliance with the contract terms and identify and address any emerging issues. Contract monitoring can be considered as a preventive role, an opportunity to assess the contractor's need for technical help, and a valuable source of information about the effectiveness and quality of goods/services offered. Performance monitoring instruments should be stated in the RFP and incorporated into the contract.

Reporting and testing are examples of contract monitoring tools. Institutions may not be able to enforce reporting or testing requirements that are not adequately documented in the contract.

(III) Contract Reporting Obligations

Contract reporting obligations include (1) contractor reports to the Institution contract administrator, (2) Institution contract administrator reports to executive management, and (3) Institution reports to other state agencies. There are generally three report types: Status Reports, Activity Reports, and Vendor Performance Reports. All serve useful functions.

(IV) Invoices and Payments

Invoices: - submitted by contractor/supplier must comply with the contract rate schedule. Invoices should be reviewed to ensure that the contractor's invoices correspond with the contractor's progress on the work. A contractor's progress should be measurable because costs incurred or invoices submitted, in and of themselves, are insufficient indicators of the contractor's progress.

Prior to payment, invoices must be approved by program staff familiar with the work and the current status of the work. If the contract manager believes that the invoice exceeds the contractor's progress, the contract manager should request and receive contractor's explanation prior to approval of the invoice for payment. Payment should be withheld pending the Institution's approval of the contractor's progress.

Payments: - Payments must be made in accordance with Applicable Laws,

(V) Change Management Process

The contract may need to be amended during its term. Modifications to notice addresses, price, or delivery schedules are all possible. There are two types of amendments. A bilateral amendment requires all parties to agree to change the contract. A unilateral amendment

requires only one party's agreement to modify the contract. The original contract's terms and conditions may stipulate when a bilateral (all-party agreement) or unilateral (one-party agreement) update is required. The institution should put in place an efficient change management system. Failure to manage and control contract changes can result in inadvertent SOW modification, timetable extension, increased contract cost, circumvention of management controls, or decreased contractor accountability.

(VI). **Dispute Resolution Process**

Effective dispute settlement is a crucial contract management skill. It is critical to identify issues early, communicate effectively with the contractor, and provide the contractor with written notice of the Institution's concerns (either a formal request to cure or a less formal written approach), Li et al. (2019), Disputes should be resolved amicably through negotiation or mediation and encouraged to raise issues promptly rather than allowing them to escalate into major disputes.

The goal of the dispute resolution process is to resolve contract issues through direct negotiation between Institution and contractor representatives, before the issues need third party resolution. To avoid contract escalation and to guarantee that the Institution does not alienate contractor representatives, Institution officials must react to all contractor inquiries immediately. The initial measures to be taken are: 1. Determine the issue. Providing information or clarification to a contractor can often remedy what appears to be an issue before it becomes a problem. 2. Research facts. When reviewing contract difficulties, the Institution should collect as much factual information as possible from a variety of sources, including the project manager and contractor. 3. Evaluation. Reviewing all factual facts and contract requirements. After consulting with all decision makers, the client should choose the best course of action.

(VII) Termination

Contract termination should be the last resort and should be rare. Contract termination reflects a failure by all parties to the contract. When the contract terms permit termination, the parties are no longer obligated to continue the performance of their duties and obligations under the contract. Depending on the specific contract terms, parties may terminate without cause (Termination for Convenience), with cause (Termination for Default) or for force majeure.

(VIII) Contract Closeout

A contract is considered complete when all goods/services have been received and accepted, all reports have been delivered and accepted, all administrative processes have been completed, all Institution-provided equipment and materials have been returned and final payment has been paid to the contractor, Singh et al. (2019).

The contract close-out procedure is usually a straightforward but confusing administrative procedure. The close-out process performs two purposes: (1) confirming that all contract parties have fulfilled their contractual duties and obligations and that there are no remaining unperformed duties or obligations; and (2) evaluating the contract's success and lessons learned for future contracting.

2.1.6. Essential features of valid contract

At the low level, according to Humphries Associates (2004) for a contract to be valid it must have the following features among others at its low level;

The Offer: The offer must be communicated and can be canceled at any time before acceptance. It is important to note that the offer is different from an invitation to treat which is where a party communicates that it is prepared to enter negotiations with a view to forming a contract.

Acceptance: The acceptance must be communicated. This must be of the offer made otherwise it could be a counteroffer. There is a rule that if the acceptance is mailed, it occurs on the date posted else if acceptance is by phone, fax, or email, it occurs when received.

Capacity to Contract: This refers to the power of a natural person to enter into a contract. In it imperative to note that the following parties do not have the capacity to enter a contract;

(a) Minors- people under 18 years of age except for necessary requirements like food

(b) Persons under illegal drugs such as heroine or alcohol

(c) Persons of unsound mind.

Consideration: A contract is not valid without consideration; that is, “quid pro quo” or something given for something received. In this case, the project contract must clearly state what is being exchanged between the parties as consideration. Consideration must be ‘valuable’. Something must be supplied in return for the promise made by the offer or, for

example, money. Consideration must not be unlawful or gratuitous. It must also not be something already done or suffered (past consideration).

Intention: The parties must intend to be bound by the contract. Therefore, it is important to make sure that accurately and clearly terms and conditions express the intention of all parties. It is essential to remember that there should be a "meeting of the minds."

Legality: Legality of a contract refers to an implied warranty that an act, agreement, or contract strictly abides to the statutes of a particular jurisdiction. Since contracts require parties to agree to standard terms and conditions it is vital to make sure all parties read the fine print so that they understand what they are signing up to.

Enforceability: Despite having all of the essential elements, a contract might still not be enforceable because of some other issue(s), these include among others, lack of capacity of one of the parties (for example if one of the parties is a minor), where a mistake is made about the nature of the contract, where there has been misrepresentation of a particular fact(s) inducing a person to enter into the contract, where a contract is illegal or is effected by pressure or undue influence of one party over another.

2.1.7. Terms and Conditions of Contract

2.1.7.1. Condition of contract

The conditions of a contract are rules by which the execution of the contract is to be governed. They set out the responsibilities, rights, and liabilities of the two parties. They also set out the actions to be taken by the parties if and when certain eventualities should arise. The general conditions of the contract have two components. The first is a standard form of general conditions of contract and special condition of contract, Public Procurement Agency, (PPA, 2006).

Conditions of contract in construction refer to the terms and stipulations that define the rights, responsibilities, and obligations of the parties involved in a construction project, Kumar et al. (2019). These conditions are typically outlined in a formal contract document and serve as the legal framework governing the construction project, Zhang et al. (2019). The conditions of the contract cover a wide range of aspects related to the project, and they vary depending on the type of contract used.

2.1.7.2. Terms of contract

In construction contracts, the term of the contract refers to the duration for which the contract is valid and in force. The specific length of the contract term is typically outlined in the contract document itself. Construction projects can vary significantly in size and complexity, so the contract term may range from a few weeks for smaller projects to several years for large, complex construction endeavors. A project owner should consider offering a contractor better contract terms in exchange for a price reduction. The contractor must consider various factors, such as the scope of the work, contract terms, quality of work, and project duration, the contract terms are among the most critical factors, so contractors pay a great deal of attention to them when pricing a project (Jarkas, 2013; Smirnov and Fedoseev, 2013; Yosr, et al., (2019).

2.1.8. Remedies for Breach of Contract

When a breach of contract occurs, remedies are the legal means available to the non-breaching party to address the violation of the contractual agreement. Li et al. (2019), specific performance is often more effective in achieving contractual compliance than other remedies. The type of remedy sought often depends on the nature and severity of the breach. Some common remedies for breach of contract listed below;

Compensatory Damages: The most common remedy, compensatory damages, aims to place the non-breaching party in the position they would have been in if the contract had been carried out. This may include direct damage such as financial losses.

Consequential Damages: Also known as special or indirect damages, these are losses that were not directly caused by the breach but were a foreseeable consequence of the breach.

Liquidated Damages: In some contracts, the parties may agree in advance on the number of damages to be paid in case of a breach. This is known as liquidated damage, and it should be a reasonable estimate of the actual damage.

Specific Performance: This remedy involves a court order requiring the breaching party to fulfill its contractual obligations as specified in the agreement. Specific performance is often sought when monetary damages are inadequate or impractical.

Rescission: Rescission allows the non-breaching party to cancel the contract and return both parties to their pre-contract positions. This is typically an option when the breach is fundamental, or the contract was based on a mistake.

Reformation: Reformation is a remedy that involves the court modifying the contract to reflect the parties' true intentions when there was a mistake or misrepresentation in the contract.

Cancellation and Restitution: This involves canceling the contract and requiring the breaching party to return any benefits or payments received from the non-breaching party.

Injunction: An injunction is a court order preventing the breaching party from taking certain actions or requiring them to perform specific actions. It is typically used in cases where damage is not an adequate remedy.

2.1.8. Contract as a project management tools

A well-drafted and carefully negotiated contract serves as a crucial tool in project risk management within the field of construction and project management, Li et al. (2019). Ineffective control and management of supply contracts costs business a lump of US dollars per year (Prosidian Consulting, 2011). As a cornerstone to any business transaction, when effectively used, contracts can be of great importance in managing project risks. Before driving to risk management, it is important to understand the project contract risks and why their risks arise. Very often, the following are the contract related project risks:

Risk Allocation:
Contracts allocate risks among the parties involved in a project. By clearly defining each party's responsibilities, liabilities, and obligations, a contract helps distribute risks to the party best equipped to manage or mitigate them. This includes risks related to design changes, delays, unforeseen conditions, and performance issues.

Scope of Work and Specifications:
Clearly outlining the scope of work, specifications, and quality standards in the contract helps manage the risk of misunderstandings or disputes regarding project requirements. A well-defined scope minimizes the potential for changes and variations that could lead to additional costs and delays.

Performance Standards and Penalties:
Contracts often include performance standards and penalties for non-compliance. Establishing these criteria helps manage the risk of subpar work or delays by providing a mechanism to hold the party responsible accountable.

Time and Schedule Management:

Contract terms often include a schedule and deadlines for project completion. These provisions help manage the risk of delays by providing a framework for monitoring progress and addressing issues related to project timelines.

Payment Terms and Financial Risk:

Clearly defined payment terms and conditions help manage financial risks associated with the project. This includes milestones for payments, payment schedules, and provisions for addressing payment disputes.

Insurance and Indemnification:

Contracts typically require parties to maintain appropriate insurance coverage. This helps manage the risk of unforeseen events by ensuring that parties have the financial means to address liabilities and damages. Indemnification clauses may also specify how certain risks and losses will be allocated among the parties.

Force Majeure and Unforeseen Events:

Contracts often include force majeure clauses that address unforeseen events such as natural disasters or political unrest. These clauses help manage the risk of events beyond the parties' control by specifying how delays and additional costs resulting from such events will be handled.

Dispute Resolution Mechanisms:

Contracts typically include provisions for resolving disputes. This helps manage the risk of conflicts by establishing a structured process for addressing disagreements, whether through negotiation, mediation, arbitration, or litigation.

Termination Provisions:

Contracts may include conditions under which either party can terminate the agreement. These provisions help manage the risk of non-performance or other serious breaches by providing a mechanism for ending the contractual relationship.

Compliance with Regulations:

Contracts often include provisions ensuring compliance with applicable laws and regulations. This helps manage legal and regulatory risks by establishing expectations for adherence to relevant standards.

2.1.9. Project contract performance management

Performance management aims to measure the ability to meet specific objectives. Performance measurement at the project level is to evaluate the performance (and success) of the project lifecycle, communicate results to practitioners, and identify areas of improvement in order to remain successful. On the other side, some organizations measure insufficiently in order to start the improvement program and spread lessons learned from other projects (Deng et al. 2012). Key performance indicators are the measurement tools for the success criteria, and it is suggested to evaluate the project performance from start to completion. Success criteria are projected outcomes or organization achievements that are required to consider. To date, the continuous development of performance measures indicates that there is no agreement on how to measure project performance and what are the key performance indicators or success criteria

Early in the 1960s, the project performance was measured on finishing, and an operational basis, and then the earlier studies in the 1980s introduced the concept of the triple constraints in terms of time, cost, and scope/ quality. Korde et al. (2005), carry out the extensive review on 122 papers addressing construction performances, development of construction predictive models and factors influencing the performance measures between 1985 to 2005. Korde et al. (2005) categorized the performance criteria into time, cost, productivity, and overall performance dimensions. Based on firm project management practices, Ling et al. (2008) evaluated the project performance of international firms in China and concluded the performance measures like cost, time, quality, profit margin, and owner satisfaction. PMI (2013) extends the iron triangle by adding the degree of customer satisfaction, constraints of scope, resources, and risk to the project performance indicators. Currently, safety, site disputes, and environmental performance are also added to the performance measures.

2.1.10. The project management triangle

The Project Management Triangle, also known as the “Triple Constraint or Iron Triangle”, is a fundamental concept in project management that illustrates the dynamic relationship between three key elements: time, cost, and scope. The triangle represents the idea that changes to one of these elements will inevitably impact the others. “The Scope or Iron Triangle” is the triangle showing five constraints that operate in every project irrespective of project environments, namely; scope, quality, cost, time, and resources (Wysocki, 2009). These constraints are very important for the success or failure of projects and thus form a mutually dependent set; that is,

a change in one constraint can require a change in another constraint in order to restore the equilibrium of the project.

Time (Schedule):

The project timeline is critical in contract management, as it affects the payment schedule, milestone dates, and overall project delivery. Contract managers must ensure that the project timeline is aligned with the contractual requirements and that any changes to the timeline are properly communicated and documented.

In construction projects, time is often of the essence. Delays in completing construction projects can result in increased costs, contractual penalties and potential damage to the reputation of the project team. Project managers must develop realistic schedules, manage dependencies, and monitor progress to ensure timely completion.

Cost (Budget):

The project budget is another critical element in contract management, as it determines the financial resources available for the project. Contract managers must ensure that the project budget is realistic and aligned with the contractual requirements and that any changes to the budget are properly approved and documented.

Cost is a significant factor in construction projects, encompassing expenses related to labor, materials, equipment, permits, and overhead. Staying within budget is critical to project success. Cost overruns can strain financial resources and impact the overall viability of the project. Effective cost management involves accurate budgeting, cost tracking, and addressing any deviations promptly.

Scope (Project Deliverables):

The project scope is essential in contract management, as it defines what is included in the project and what is not. Contract managers must ensure that the project scope is clearly defined and aligned with the contractual requirements and that any changes to the scope are properly approved and documented.

The scope of a construction project outlines the work to be completed, including specific deliverables, features, and requirements. Changes to the project scope can affect both time and cost. For example, increasing the scope might extend the timeline and require additional

resources. Managing scope involves thorough planning, clear documentation, and effective change control processes.

In the context of a construction project, there are additional considerations:

Quality (Optional Fourth Constraint):

Quality is often considered a fourth element within the Project Management Triangle. High-quality construction is essential for ensuring the longevity and safety of structures. While quality is influenced by the balance of time, cost, and scope, it's a critical factor that project managers must prioritize. Cutting corners to save time or costs can lead to defects and long-term issues.

Safety and Regulatory Compliance:

Construction projects must adhere to safety regulations and building codes. Failure to meet safety standards can lead to legal issues, delays, and additional costs. Project managers need to integrate safety considerations into the project plan and monitor compliance throughout the construction process.

Risk Management:

Construction projects inherently involve risks such as weather-related delays, unforeseen site conditions, and changes in regulations. Effective risk management is crucial for identifying potential issues early, developing mitigation strategies, and minimizing the impact of risks on time, cost, and scope.

Stakeholder Communication:

Communication is vital in construction projects to manage expectations and keep stakeholders informed about progress, changes, and potential challenges. Project managers need to maintain open lines of communication with contractors, subcontractors, clients, and regulatory authorities.

Successfully navigating the Project Management Triangle in construction projects requires a strategic and adaptable approach. Project managers must continuously assess the interplay between time, cost, and scope while considering quality, safety, and risk management factors to deliver a successful construction project

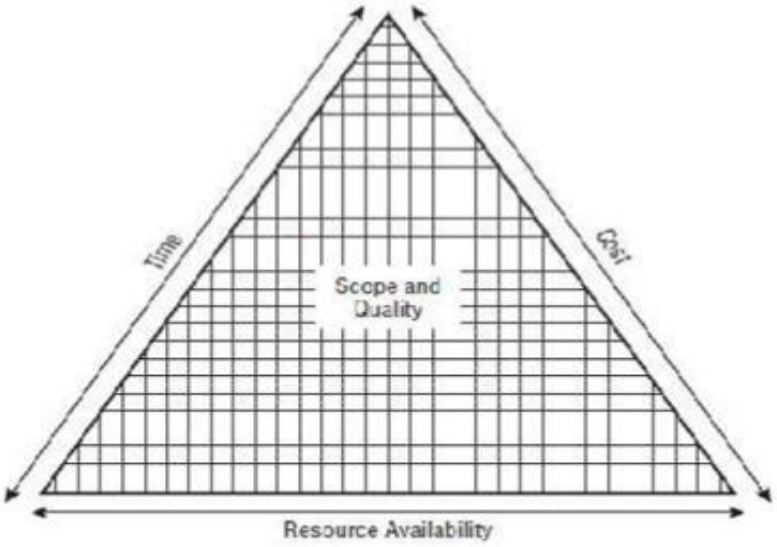

Figure 1; project management iron triangle

Source: Wysocki (2009)

2.1.11. Project contract lifecycle

Every project, not just those in the construction industry, goes through a series of identifiable phases, wherein it is 'born', it matures, it carries through to old age and it 'expires'. In the construction project life cycle, we identify different phases each with different purposes and characteristics. It usually takes a long period of time from the contract formation till the construction end since it usually involves many processes. According to Hillson D., (2009), contract management must be carried out throughout the entire project life in different stages to achieve the intended project objectives.

Hillson D. 2009, argues that there is no universally accepted definition of a project lifecycle, and different books and standards use different terminologies to divide the life of a project into different phases. The author used three simple stages to structure the way in which risk management is used across the project lifecycle; these are before the project starts, when the project starts and after the project has started. The first stage includes conception, viability and initiation of the project. The second stage is the elapsed time between the decisions to initiate the project to the actual launch of the project. The final stage is the project execution phase which is the application area of the project.

According to Cristian P. et al, 2009, the construction contract goes through two main phases which are the establishment of the contract and the implementation of the contract. The contract establishment phase involves bidding and contract negotiation, whereas the

implementation phase lasts from the contract's signature to its termination. The bid period, which is the first stage of the construction contract, runs from the drafting of the bid document to the bid opening. Contract negotiations begin when the tender is submitted and end when the contract is signed. During this stage, the owner and contractor discuss the contract's future and how they want to accomplish it before signing the contract after carefully considering all of its provisions. During the contract implementation phase, contractors complete the construction work according to the contract agreement.

Contract Establishment

(i) The Tendering Period: The tendering or bidding time begins from the drafting of tender documents to the tender opening. This is the first offer and acceptance between the owner and the provider.

(ii) Contract Negotiations: This process begins with the submission of a tender and concludes with both parties signing the project contract. This second stage of contract establishment is further separated into two stages: first tender review and discussion of the contract's future.

(a) Conducting an initial examination of the various tenders, including dismissing unqualified tenders, followed by a comparative study among suppliers who offer competitive rates and have the technical expertise to build the project, and finally selecting the best supplier.

(b) Discussion between the project owner and the supplier about the future of the contract as well as about project completion and finally the signing of the contract by both parties.

Contract Implementation

This is the period from signing the contract to the end of the contract. In this lapse, all procurement and engineering works such as installation and commissioning need to be completed. Suppliers must complete the engineering works and take responsibility for the warranty with reference to quality, quantity, schedule and technical specifications written in the contract or functional requirement specifications, or bill of quantity.

2.1.12. Challenges impacting contract administration

Various challenges, barriers, or factors may hinder the achievement of effective contract administration. According to Ting and Whyte (2009), contract administration is affected by various elements relating to the form of contract, such as issues covered, clarity, completeness and comprehensiveness, international efficiencies difficulties, and the stakeholders' mentality. Pooworakulchai et al. (2017), study internal and external factors affecting the contract administration in both governmental and private projects in order to improve the management of contracts in private projects. The authors divide the pre-contract factors affecting contract administration during the construction period into three main groups, namely quality, time, and cost.

2.1.13. Poor Contract Administration

The traditional contracting system has several problems associated with poor contract administration (Ogwueleka 2015). The inability to run into project performance will result in "out of business case;" spending money and effort on arbitration litigation and alternative dispute resolutions. Park and Kim (2017), highlights deficient performances of contract and claim management in several phases of the procurement life cycle as a result of a shortage of contract management experts.

Poor contract administration and inefficient contract management are working against the industry's sustainability; heavy fines for non-compliance; significant loss of savings; incur resource waste; time delay; productive loss; the presence of several non-value-added activities (Saxena 2008); poor control of operations; low rate of satisfying customers; unwanted costs; and more risks (Awwad et al. 2016). Poor contract administration wastes money and strains contractor-owner relationships (Al Jurf and Beheiry 2010; Al Jurf and Beheiry 2012).

According to Khekale and Futane (2013), unresponsive contract administration may lead to contractor's claims. Sometimes poor contract administration is caused by corrupt practices (Kasiem 2008). Excessive use of variations; and can be tracked in today's running and completed projects (Okere 2012). The consequences of poor contract administration/management have a direct impact on the contractor's and work performance and consequently, the project delivery.

2.2. Theoretical Perspectives

Before driving in to the empirical discussions, it is important to situate the argument within a theoretical context for they guide the study and it is from these theories that the researcher will

be able to address the role of contract administration in the performance of project. While theories provide the foundation for the study by giving the reader what he/she needs to know in order to interpret and understand the results and how those results are arrived at, concepts serve as justifying choices, which give theoretical background of the choices made during the course of this work. The followings are theories related to the issue at hand.

2.2.1. Contract Compliance Theory

Contract compliance theory is the act of conforming to contract agreements between buyers and sellers. Generally, the purchasing function is held responsible for all reasons of non-compliance. According Aberdeen Group (2006) compliance may be internal or external. Internal compliance can be interpreted as either conforming to the rules in the agreement by purchasing organization such as payment terms and minimum order requirements or in purchasing from agreement only, that is, purchasing by using framework agreements for the entire company (Telgen, 2004).

According to Aberdeen Group (2006) the use of framework agreements for the entire company can assist maintaining high contract compliance and reduction in purchasing costs. This can in turn increase the probability of project success. As far as the projects as concerned, external contract compliance can take up several forms including unavailability of products, services or qualified personnel, charging prices different from the contracted prices, or late delivery or delivering products that do not meet the contracted specifications.

2.2.2. Contract Management Theory

Contract management theory can be interpreted as category management, contract administration and contracting processes (Knoester, 2005). While category management is about managing the contracting processes initiation, contract management is addressed by Knoester (2005) who speaks of contract management as the management of the engagement administration of all term agreements by which means a contract is closed. He stressed that this is the contract management process for ensuring that the right information is in the right place at the right time, to support the whole of the contracting process. In project disciplines, this can be achieved by distributing contract information to all primary project stakeholders to determine an optimal supply base.

The contracting process is the third interpretation of contract management and is where contract realization is managed. This process is connected to both the category management process

and the contract administration process. Contracting processes are initiated by category management and are from there supported by the contract administration process. This administration process is necessary during the whole contracting process in order to assure quality, efficiency and effectiveness (Angelov, 2005).

2.2.3. The Will Theory

The basis of contract is the meeting of the minds of the parties (that is the will of the parties). Hutchison et al., (2009) narrated that if one party is in fault as regard to one of the important elements of the agreement there is no real agreement. The result is neither party is bound nor each party may reclaim whatever it has performed. This theory maintains that commitments in project contracts are enforceable because the promisor has "willed" or chosen to be bound by his or her commitment(s). Classical theories of contract protect the will of the parties, because the will is something naturally worthy of respect; the use of force against a defaulting promisor in project contracts is ethically justified.

2.3. Empirical Literature Review

In this section of the study, different reviewed literature relevant to the study will be discussed. The literature reviewed shows that there has been research done to assess various organizations' contract management practice in Ethiopia. However, there are gaps in literature concerning contract administration practice in general and construction contract administration in particular.

2.3.1. Literature Specific to Ethiopia

A number of researchers of contract management have addressed the role of contract management. Although shortage of written sources is apparent at the country level in general and Addis Ababa city in particular, attempts are made to review some related empirical evidence. In the discussion below, the researcher briefly reviews the literature, depicts their shortcomings and finally develops a conceptual framework that guides the current research.

The first case study an empirical framework was conducted by Addis Mesfin (2014) on Ethiopian Building Construction Projects under the title "The Study of Construction Contract Risk Management Practices in Ethiopian Building Construction Projects." A questionnaire survey was conducted on various randomly selected building construction enterprises in Ethiopia to assess their risk awareness and risk management in their projects. According to

the research findings, poor contract management was discovered to be one of the key drivers of risk, with a high chance of occurrence and a high level of influence on project objectives. It was also discovered that most building structures in Ethiopia are not completed in accordance with their original design, i.e. they usually experience damage.

Another study (Hailu, 2016) was conducted to determine whether project management procedures are effective for project success by reviewing case studies of successful and failed projects. The study focused on two large building construction projects. The survey questionnaire was utilized as a research instrument in the two projects' studies. According to the research, if 88% of the effective knowledge area processes such as quality, cost, schedule, and communication processes are used, project success is guaranteed. The study's findings indicate that the triple constraints of cost, quality, and time, as well as topic group communication protocols are the most effective project management techniques for project success. Furthermore, planning processes from process groups are beneficial to project success. The survey also revealed that a large percentage of initiatives in Ethiopia have failed. As a result, it proposes that project management procedures such as planning, time, and quality, cost, and communication processes be given special attention during project execution.

Ayalew (2016) performed a study titled "Assessment on Performance and Challenges of Ethiopian Construction Industry" to determine the level of project management practice in the construction industry. A literature review was conducted as part of the study, and a structured questionnaire was employed as a research instrument. The study included 69 professionals from major players in the construction sector. The study determined that the degree of construction project management practices in terms of adopting general project management procedures, functions, tools, and techniques is poor based on the responses of professionals and the examined literature. Furthermore, the study discovered that the amount of practice for variables like cost, safety, risk, and time management is lacking when compared to their predefined or planned values.

Befkadu (2017) conducted studies titled "The practice of project management in the Ethiopian real estate industry and its contribution to project success: The case of a selected company in Addis Abeba." The primary goal of this study was to investigate the applicability of project management practice based on diverse difficulties. To do this, the study employed a descriptive research design that included both qualitative and quantitative methods. Data were gathered through questionnaires and interviews with real estate companies, owners, and consultants.

IBM SPSS Statistics 20 was used to analyze the data based on the responses. The key finding is that project integration, scope, time, HR, procurement, and claim management are successfully managed in the industry, as are project initiation process groups and project ending process groups. However, project cost management, project quality management, project communication management, project stakeholder management, and project risk management are poorly handled in Ethiopia's real estate industry. As a result, the researcher advised improving project management practices in the Ethiopian business (Befkadu, 2017).

Tigist Belachew (2016) carried out a case study on the Addis Ababa Light Railway titled "Assessment on the Practices of Project Contract Administration." The methodology included interviews, focus group discussions, and descriptive analysis. According to the research findings, project contract management has an impact on project success. The study recommended that having a well-established contract is like having a good fence that leads to a smooth relationship with the stakeholders, i.e. having a clear contract demarcation (specifications of instructions) first, which leads to success with proper follow up and monitoring.

2.3.2. A research gap

Despite attracting much attention from practitioners, academics, and researchers, the impact of contract management on the success of project management, particularly in private construction company, has not been addressed. Furthermore, the findings and best practices in contract management are often easily applicable to industrialized countries with high-tech infrastructure and minimal bureaucracy, making it feasible to implement Total Quality Management (TQM) and Just-In-Time (JIT) philosophies to achieve high-quality inputs and zero lead times. However, this may not be the case for developing countries or those with more complex regulatory environments, where the challenges and complexities of contract management are more pronounced. This research aimed to examine the role of contract administration on project performance in Addis Ababa construction firms in order to optimize existing projects while adding value to forthcoming projects.

2.3.3. Conceptual frame work

A conceptual model shows how the researcher theorizes the relationships among several factors identified as being important to the research questions. In contract administration process, the main variables that conceptual model has been developed based on the reviews of previous

knowledge to discuss the interrelationships among the variables deemed integral parts are discussed below in Figure 2.

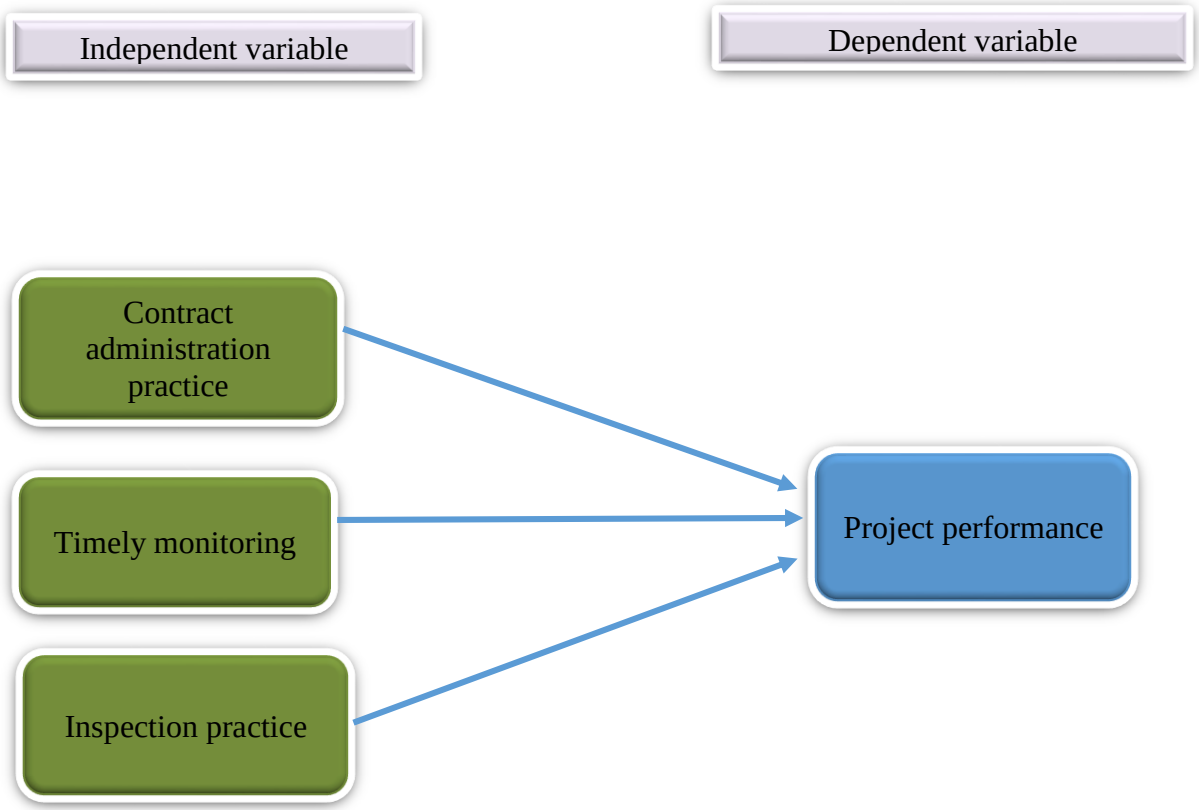

Figure 2:conceptual frame work

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Introduction

In this chapter, the researcher describes the procedures to ensure a methodical and well-informed investigation, focusing on sampling procedure, data collection and analysis methods. Data collection instruments and procedures are discussed as well as the target population and sampling procedures.

3.1. Research design

The study employed both descriptive and explanatory research design methods. Explanatory method is where researcher gets an idea or observed something and tries to study furthermore about it. Furthermore, the concept of causality is grounded in the logic of hypothesis testing, which, in turn, produces inductive conclusions though such conclusions are probabilistic and thus can never be demonstrated with certainty (Cooper, R. D. & Schindler, S. P. 2014). Kaliyadan and Kulkarni (2019) argue that descriptive statistics give a summary about the sample being studied without drawing any inferences based on probability theory. The inferential questions or hypotheses relate variables or compare groups in terms of variables so that inferences can be drawn from the sample to a population plus it provides a rationale for the choice of statistical test and mention the assumptions associated with the statistic (Creswell, 2014).

3.2. Research Approach

There are three types of research approaches: quantitative, qualitative and mixed. Therefore, this study utilized quantitative research approach. Since it is used with predetermined and highly structured data collection techniques under this study. Thus, the study used explanatory methods approach as a design in methods in which the researcher collects quantitative data analyzes the results, and then uses the results to find conclusion and recommendation.

The study used in quantitative where survey research is followed since it provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population that includes a cross-sectional study using survey questionnaires for data collection with the intent of generalizing from a sample to a population, (Fowler, 2008).

3.3. Data source and Type

For this study primary sources of data were used. Kothari (2004) describes primary data as those which are collected fresh and for the first time and thus happen to be original in character.

The study utilized questionnaires as major instrument for collecting primary data. Schwab (2005) defined questionnaires as measuring instruments that ask individuals to answer a set of questions or respond to a set of statements. A questionnaire is a research instrument that is used in data collection when dealing with a large sample (Kombo, et a1.2002). A questionnaire is preferred because of its convenience and ease of administration. Kothari (2004) stated that questionnaires have various advantages, like; it is free from the bias of the interviewer; it is low cost even when the universe is large and is widely spread geographically; respondents have adequate time to give well thought out answers; respondents who are not easily approachable can also be reached conveniently; large samples can be made use of and thus the results can be made more dependable and reliable. In view of the advantages and the need to gather more information, questionnaires were administered to CEO, engineer, senior project managers and concerning contract administrator to solicit their views concerning their practice of construction contract administration.

The study used a closed-ended questionnaire for primary data collection. This is due to the fact that closed-ended questions are often good for surveys, because one can get higher response rates. Besides, answers to closed-ended questions can easily be coded and analyzed, which makes them particularly useful when trying to prove the statistical significance of a survey's results. Closed ended questions are also advantageous in that response choices can clarify the context of the question for the respondent as well as improve consistency of responses. The questionnaire was carefully designed, and each item is cautiously created so as to collect the target information, address research objectives and tie it into the overall research problem. The study made a total of 88 respondent's present relevant practitioners.

3.4. Sampling Techniques and Sample Size

3.4.1. Sampling Technique

Creswell (2003), asserted individual researchers have freedom of choice. They are "free" to choose the methods, techniques, and procedures of research that best meet their needs and purpose. Since the aim of this study is to get actual information about the role of contract administration on project performance in four private construction company, this study used probability sampling techniques in order to give equal opportunity for the target population.

Sampling is the process or technique of selecting a suitable sample for the purpose of determining parameters or characteristics of the whole population. To carry out a study, one might bear in mind what size the sample should be, and whether the size is statistically justified and lastly, what method of sampling is to be used (Adams, 2007). Since the purpose of this study is to examine the role of contract administration on project performance in private construction companies, the target population of this study is 105 head office and site employees which exist in Addis Ababa. After having the representative sample size, simple random sampling technique was used for identification of respondents to the quantitative questionnaire. Since, simple random sampling is the most practical way of sampling to give every population equal chance to be representative sample for this study.

West (2016) stated that simple random sampling is where each and every member of a population has the same chance of being included in the sample and where all possible samples of a given size have the same chance of selection. In this study simple random sampling was applied suitably to select target population of four private construction company in Addis Ababa, it mainly includes the CEO, project manager, office engineer, contract administrator and concerned officers. From the total of 105 in Addis Ababa, sample specimen was taken from 88 employees that were selected by lottery method using the sample determination formula discussed below to give equal opportunity to the employees. "So that it's major concern is to get relevant data for the study and to give equal opportunity for the representatives of the population" (Kothari, 2004).

3.4.2. Sample size

Sample size determination is a scientific task that should be performed with proper care, (Zikmund 2010). The following formula is used by the researcher to determine the sample size for a given population. A representative sample size with known confidence level which is 95% is selected, based on the formula of (Yamane 1967). Therefore, considering the above given points the sample size for this study is calculated as follows:

$$n = \frac{\mathbf{N}}{\mathbf{1+N(e)^2}}$$

Where: **n** = the sample size/ required sample size

N = Population Size

1 = designates the probability of the event occurring.

e = the level of precision (Sampling error that can be tolerated which is 5%).

Assumptions: A 95% confidence level, and e = ±5%

Therefore:

$$\mathbf{n = \frac{105}{1+105(0.05)^2}}$$

$$\mathbf{n = 88}$$

So, a total of 88 respondents was selected to gather relevant data to complete the research work.

3.5. Methods of data analysis

First, descriptive statistics of the variable were generated in accordance with (Malhotra 2007), who stated that utilizing descriptive statistics method aids the researcher in visualizing the current situation and provides useful information. The study's descriptive analysis included percentages, means, and standard deviations. Frequency tables were used to summarize the respondents' profiles in terms of frequency and percentages, while descriptive statistics such as mean and standard deviations of respondents' responses to construction contract administration practices and project performance scales were calculated to determine employee perceptions of contract administration practices and project performance. According to Aamir (2014:103), "inferential statistics involves making an inference for the general population based on the results of a study sample." to analyze our data further.

Pearson Product Moment Correlation

According to (Stigler 1989), the Pearson Product Moment Correlation is a measure of the linear correlation between two variables, x and y, with values ranging from +1 to -1 inclusive, where 1 represents total positive correlation, 0 represents no correlation, and -1 represents total negative correlation. The sign of the coefficient indicates whether the relationship is positive

or negative, while the numerical part of the coefficient represents the magnitude of the correlation. The closer the correlation coefficient to 1 or -1, the stronger the relationship between the variables.

The Pearson Product Moment Correlation Coefficient was used. Pearson Product Moment Correlation is used to determine the following relationships for the sample respondents.

• The relationship between contract administration planning and project performance.

• The relationship between timely monitoring and project performance

• The relationship between inspection practice and organizational performance

Multiple Regression Analysis

The purpose of multiple regressions is to learn more about the relationship between several independent variables and dependent variables. Multiple regressions analysis takes into account the inter-correlations among all variables involved. In multiple regressions analysis more than one predictor is jointly regressed against the dependent variable, (Cohen & Swerdlik, 2002). This method is used to investigate the role of contract administration and project performance.

Regression Model Specification

The model of multiple regressions on this study was built around the dependent variable which is organizational performance and the dimensions of the independent variables (contract administration planning, timely monitoring and inspection practice). Therefore, the general formula used for the model is:

$$\mathbf{Yi = \alpha + \beta.xi + e}$$

The left hand variable Yi denote the dependent variable project performance, α is the intercept term which gives the mean or average effect on Y of all the variables excluded from the equation, although its interpretation is the average value of Y when the stated independent variables are set equal to zero; β is the coefficient of x variables(independent variables) which measures the change in the mean value of Y; per unit change in their respective independent variables, xi is the different independent variables which are contract administration planning strategy, timely monitoring and inspection practice and e is the error term. Finally, the above

general least square model is converted to incorporate all the variables to test the hypothesis of the study as follows:

Project Performance = f (contract administration planning, timely monitoring and inspection practice)

$$PP = \alpha + \beta 1.CAP + TM.\ \beta 2 + IP.\ \beta 3 + e$$

Were

PP= Project Performance

CAP = contract administration planning

TM = timely monitoring

IP= inspection practice

e = Error Term

3.6. Validity and Reliability

It is critical to ensure that the instrument we develop to measure a specific idea accurately measures the variable and that we are actually measuring the concept that we set out to measure. As a result, the content validity of this study was addressed by a review of the literature and adaptation of the instrument employed in prior research (Hair 2007). Although the instruments in this study tested as reliable, reliability tests were conducted to confirm the dependability of each instrument and ensure that the data reflected internal consistency. According to Nunnaly (1978), dependability refers to the consistency of a test, survey, observation, or other measuring device. To verify the instruments' reliability. Cronbach Alpha was used to determine the reliability of the measurement scales.

Table 1: Rule of thumb Cronbach alpha

Cronbach's Alpha	Internal Consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable

$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Source: Cortina (1993).

Reliability Analysis

The reliability of scale shows how free the data is from random errors. Therefore, it is always advisable to select that scale that is reliable. One of the most commonly used scales of reliability is internal consistency. Internal consistency refers to "the degree to which the items that make up the scales are all measuring the same underlying attributes (i.e. the extent to which the items "hang together"), (Christopher 2015). A reliability coefficient (alpha) of 0.70 is considered acceptable, reliable and recommended for the new questionnaire. The reliability of the questionnaire was tested using the Cronbach's alpha correlation coefficient with the aid of Statistical Package for Social Sciences (SPSS) software and all the items were with recommended ranges of Alpha value.

3.6. Ethical Consideration

The researcher did his best to address ethical consideration of confidentiality, privacy, and informed consent. Before data collection, all study participants were made aware of the study's objective and their voluntary agreement was obtained. Participants were also informed that they had the complete right to discontinue or refuse to participate in the study.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSION

Introduction

The fourth chapter deals with the analysis, discussion and findings of the research study work that deals with the role of contract administration on project performance; the case of private construction company in Addis Ababa. The chapter included the response rate, demographic data, the result or findings, the interpretation and discussion, data presentation tools statically symbols, summery of the chapter and the link between chapter four & five based on the research study report section. The quantitative data that was gathered and organized and coded would be analyzed. Accordingly, the result of the coded data was translated to a tabular data using frequency and percentages in accordance with the value given for the coded categories above and below the median. As high & low and then the analysis of the tabular data was explained under it.

4.1. Response Rate

This chapter examines the elements of the role of contract administration in project performance; the case of private construction company in Addis Ababa. The survey had a sample size of 88 respondents, returning questionnaires, yielding a response rate of 100% percent. It is a reliable response rate for data analysis as Babbie (2002) posited that any response of 50 % and above is adequate for analysis. Moreover, it is possible to generalize that as the response rate indicates all of the respondents were happy with the study and its findings.

4.2. General Information of the Respondents

This section profiles the respondents in respect to gender, age, level of education, year of experience of the respondents in the role of contract administration on project performance. The items in the research instruments used in the study informed profiling of the respondents.

4.2.1. Gender of respondents

Table 2: genders of the respondent

Genders of the respondent			
	Frequency	**Percent**	**Valid Percent**

Valid	Male	50	56.8	56.8
	Female	38	43.2	43.2
	Total	88	100.0	100.0

Source: - SPSS output survey data 2024

The data sought on whether respondents were males or females. It is important to analyze gender distribution of the respondent so as to compare the role of contract administration on project performance; in private construction company in Addis Ababa. The study did not consider any gender in the selection of respondents. Respondents asked to indicate their gender. The data shows that males made the majority of the respondents at 50 (56.8 %) and the females at 38(43.2 %) as shown the above table. This indicates the majority of the respondents are males who involved in the questioners of the role of contract administration on project performance; the case of private construction company in Addis Ababa

4.2.2. Age of the respondent

Table 3:Age of the respondent

Age	Frequency	Percent	Valid percent
Below 25 year	18	20.5	20.5
26 -35 year	30	34.5	34.5
36 -45 year	24	27.3	27.3
46 – 55 year	12	13.6	13.6
Above 56 year	4	4.5	4.5
Total	88	100	100

Source: - own survey data (2024)

From the table given above Respondents were asked to indicate their age group in years. This was done to understand the age distribution of the respondents since an individual's age was not a consideration in the selection of respondents in this study. Age groups are classified into four categories: as we see the below 25 years; 26-35 years, 36-45 years and above 46 years. Regarding respondent Age category in year majority 30 (34.1%) of respondents participated in the survey are at age of 26-35 years old, similarly the second highest number 24 (27.3%) of

respondents are at age of 36-45 years. on other hand the list participated respondents are below 25-year-olds are 18(20.5) and on the other hand 46-55 years olds are 12(13.6%). Finally, 56 and above 56 years old are 4 (4.5 %). This confirms that 140 (44 %) of respondents were youths between the age of 26-35 years. About the age, distribution of the respondent majority of them found at young and youth age and well known the role of contract administration on project performance; the case of private construction company in Addis Ababa.

4.2.3. Education level of respondents

Table 4:Education level of respondents

		Frequency	Percent	Valid percent
	Above MA/MSc	4	4.5	4.5
Valid	MA/MSc	20	22,5	22,5
	BA/BSC	32	36.4	36.4
	Diploma	18	20.5	20.5
	Certificate	14	15.9	15.9
	Total	88	100.0	100.0

Source: - own survey data (2024)

From the table above the respondents were asked to indicate their highest level of education. Respondent's level of education is considered important in this study in respect to responding to the research instruments as well understanding the role of contract administration on project performance.

The study sought to establish the educational level of respondents, the results indicate that about 14 (15.9%) respondents had a certificate or less, followed by diploma holders 18 (20.5%), but first degrees were the majority of respondents with 32 (36.4%) and master's level of education with 20 (22.5%), as shown in the table above. Finally, four (4.5%) of the respondents hold above master's degrees. From this the majority of the respondents are educated and have knowledge of the role of contract administration on project performance which were first degree having 32 (36.4%).

4.2.4. Martial statues of respondents

Table 5: Marital status of the respondent

Marital statues				
		Frequency	Percent	Valid Percent
Valid	Single	15	17.0	17.0
	Married	63	71.6	71.6
	Divorce	10	11.4	11.4
	Total	88	100.0	100.0

Source: - own survey data (2024)

As indicated in table 5, respondents are asked to indicate their martial states and the majority of the respondents of 63(71.6%) are married whereas 15(17%) of the respondents are single. In addition to this the remaining 10(11.4%) of the respondents are divorcé. The result indicates that the majority of the respondents are married and have basic knowledge about the role of contract administration in project performance; in the case of private construction companies in Addis Ababa.

4.2.5. Work Experience of respondents

Table 6:Work Experience of respondents

Level of experience	Frequency	Percent	Valid percent
Below 1 year	8	9.1	9.1
1 -5 year	16	18.2	18.2
6 – 10 year	28	31.8	31.8
10 -15 year	22	25	25
Above 15 year	14	14.3	14.3
Total	88	100.0	100.0

Source: - own survey data 2024

From the given table above the study sought to establish the work experience of respondents. From the total respondents 8 respondents (9.1% of respondents) have worked below 1 year, 16

respondents (18.2% of respondents) have worked between 0 to 5 years, 28 respondents (31.8 % of respondents) have worked between 6 to 10 years, 22 respondents (25 % of respondents) have worked between 10 to 15 years, while 14 respondents (14.3 % of respondents) had worked for more than 15 years respectively. This shows that data was collected from experienced people with enough information in relation to contract administration in this study.

4.3. Descriptive Statistics

This section contains descriptive statistics of the research variables namely contract administration planning strategy, timely monitoring of contract implementation and inspection practice.

4.3.1. Descriptive Statistics contract administration planning strategy

This section presents the analysis of contract administration planning strategy obtained from the results. Interpretation of the data and findings in the following discussion produced the mean score and standard deviation of the responses of respondents on the role of contract administration on project performance; the case of private construction company in Addis Ababa. The questions were scaled by using a five-point Likert scale in which 1= strongly disagree, 2= Disagree, 3 = Neutral, 4 = Agree, 5 = strongly Agree to rate the exhibited contract administration planning strategy. The analysis of the contract administration planning strategy was investigated by using means and standard deviations from the results. The results of the means were interpreted based on 1-1.49 = Very Low; 1.5-2.49 = Low; 2.5-3.49 = Moderate; 3.5-4.49 = High; 4.5-5.0 = Very high.

Table 7: Descriptive Statistics of contract administration planning strategy

Descriptive Statistics			
	N	Mean	Std. Deviation
The contract administration planning strategy resulted in cost savings or efficiency improvements	88	4.0341	1.02216
I feel confident in the ability of the project team to execute the contract administration planning strategy.	88	3.7386	.97667

The contract administration planning strategy effectively aligned with the project goals and objectives.	88	3.6932	.84904
The contract Administration planning strategy was clearly communicated to all relevant stakeholders	88	4.1250	.98041
The objectives outlined in the contract administration planning strategy are achievable	88	4.1477	.98890
I believe the contract administration planning strategy will lead to efficient resource utilization.	88	3.6705	1.21032
The timelines set forth in the contract administration planning strategy are realistic and achievable.	88	4.2841	1.02776
The contract Administration planning strategy was clearly communicated to all relevant stakeholders.	88	4.1023	1.08320
Valid N (leastwise)	88		
Aggregate mean and STD		3.977025	1.019372

Source: - own survey data 2024

The results presented in Table 7 indicate that the sample mean for individual response ranged between 3.6705 and 4.2841. These values of sample mean generally tend to 3.977025 on the Likert scale used in this study and thus translate to agreement amongst respondent in respect to the activities implied by the statements. Similarly, the sample standard deviation for the different responses ranged between .84904 and 1.21032 demonstrating that the responses were fairly close together around the sample mean as the variability was narrow. Furthermore, the aggregate scores for sample mean and sample standard deviation for contract administration planning strategy were 3.977025 and 1.019372 respectively.

The result presented in table 7, shows that the respondents stated that The timelines set forth in the contract administration planning strategy are realistic and achievable having a highest means of 4.2841 and STD of 1.02776, The objectives outlined in the contract administration planning strategy are achievable having a highest means of 4.1477 and STD of .98890, The

contract Administration planning strategy was clearly communicated to all relevant stakeholders having a highest means of 4.1250 and STD of .98041, The contract Administration planning strategy was clearly communicated to all relevant stakeholders having a highest means of 4.1023 and STD of 1.08320, The contract administration planning strategy resulted in cost savings or efficiency improvements having a means of 4.0341 and STD of 1.02216, respondents feel confident in the ability of the project team to execute the contract administration planning strategy having a means of 3.7386 and STD of .97667, The contract administration planning strategy effectively aligned with the project goals and objectives having highest means of 3.6932 and STD of .84904 and respondents believe the contract administration planning strategy will lead to efficient resource utilization having a means of 3.6705 and STD of 1.21032 respectively.

From the overall table 7, we can see that with the highest mean 3.9770 the respondents agree on most contract administration planning questions and have Std, D 1.01937 slightly wide range of variance on answer from the mean value.

In general contract administration planning strategy of the respondents were used to the role of contract administration on project performance the case of private construction company in Addis Ababa having aggregate scores for sample mean and sample standard deviation for contract administration planning strategy were 3.977025 and 1.019372 respectively

4.3.2. Descriptive Statistics of timely monitoring of contract implementation

This section presents the analysis of timely monitoring of contract implementation obtained from the results. Interpretation of the data and findings in the following discussion produced the mean score and standard deviation of the responses of respondents on the role of contract administration on project performance; the case of private construction company in Addis Ababa. The questions were scaled by using a five-point Likert scale in which 1= strongly disagree, 2= Disagree, 3 = Neutral, 4 = Agree, 5 = strongly Agree to rate the exhibited timely monitoring of contract implementation. The analysis of the timely monitoring of contract implementation was investigated by using means and standard deviations from the results. The results of the means were interpreted based on: 1-1.49 = Very Low; 1.5-2.49 = Low; 2.5-3.49 = Moderate; 3.5-4.49 = High; 4.5-5.0 = Very high.

Table 8: Descriptive Statistics of timely monitoring of contract implementation

Descriptive Statistics			
	N	Mean	Std. Deviation
I am satisfied with the frequency of updates provided on the progress of contract implementation	88	3.8636	.80490
The monitoring process effectively identifies any delays or issues in contract implementation	88	3.7727	1.15198
The information provided during monitoring sessions is clear and actionable	88	3.8636	1.18595
The estimated time for projects implementation is not realistic compared to the volume of required work.	88	4.20455	.899030
The contractors do not have required machinery and equipment to execute works on time	88	4.0000	1.01710
There are unpredicted events and situations which are not considered during the time estimation.	88	3.0455	1.10286
Clients are under pressure and tend to give shorter time to contractors for feeder roads projects implementation.	88	3.8409	1.24924
Valid N (list wise)	88		
Aggregate mean and STD		3.7987	1.098725

Source: - SPSS output survey data 2024

The results presented in Table 8 indicate that the sample mean for individual response ranged between 3.0455 and 4.20455. These values of sample mean generally tends to 3.7987 on the Likert scale used in this study and thus translates to agreement amongst respondent in respect to the activities implied by the statements. Similarly, the sample standard deviation for the

different responses ranged between .80490 and 1.24924 demonstrating that the responses were fairly close together around the sample mean as the variability was narrow.

According to the given table the respondents stated that The estimated time for projects implementation is not realistic compared to the volume of required works having a highest means of 4.20455 and STD of .899030, The contractors do not have required machinery and equipment to execute works on time having a highest means of 4.000 and STD of 1.01710, The information provided during monitoring sessions is clear and actionable having a highest means of 3.8636 and STD of 1.18595, Satisfied with the frequency of updates provided on the progress of contract implementation having a highest means of 3.8636 and STD of .80490, The Clients are under pressure and tend to give shorter time to contractors for feeder roads projects implementation having a means of 3.8409 and STD of 1.24924 The monitoring process effectively identifies any delays or issues in contract implementation having a means of 3.7727 and STD of 1.15198 and There are unpredicted events and situations which are not considered during the time estimation. Having a moderate means of 3.0455 and STD of 1.10286respectively.

It implies that the response of respondents agrees on most project performance questions with mean of 3.5698 and Std, D 1.206791 have slight wide range of variance on answer from the mean value, on other hand, the respondent's response on the item there are unpredicted events and situations which are not considered during the time estimation are answered with neutral scale. Also, slight wide range variances were seen on their responses.

In general, timely monitoring of contract implementation of the respondents was used to the role of contract administration on project performance the case of private construction company in Addis Ababa having aggregate scores for sample mean and sample standard deviation for timely monitoring of contract implementation were 3.7987 and 1.098725 respectively

4.3.3. Descriptive Statistics of inspection practice

This section presents the analysis of inspection practice obtained from the results. Interpretation of the data and findings in the following discussion produced the mean score and standard deviation of the responses of respondents on the role of contract administration on project performance; the case of private construction company in Addis Ababa. The questions were scaled by using a five-point Likert scale in which 1= strongly disagree, 2= Disagree, 3 = Neutral, 4 = Agree, 5 = strongly Agree to rate the exhibited inspection practice. The analysis

of the inspection practice was investigated by using means and standard deviations from the results. The results of the means were interpreted based on: 1-1.49 = Very Low; 1.5-2.49 = Low; 2.5-3.49 = Moderate; 3.5-4.49 = High; 4.5-5.0 = Very high.

Table 9: Descriptive Statistics of inspection practice

Descriptive Statistics			
	N	Mean	Std. Deviation
The inspection practices in place are thorough and effective	88	3.5000	.98261
The inspection reports provide clear and actionable feedback	88	3.7159	1.11364
The inspection practices help in identifying and addressing issues in a timely manner	88	3.9773	1.18397
The inspection process is transparent and well-documented	88	3.8977	1.12485
The inspections help in ensuring compliance with relevant regulations and standards	88	3.7841	1.06619
The inspection practices contribute to overall project quality	88	3.5455	1.28572
The inspections of projects were conducted regularly	88	3.8182	1.10947
Valid N (list wise)	88		
Aggregate mean and STD		3.74838	1.164672

Source: - SPSS output survey data 2024

The results presented in Table 9 indicate that the sample mean for individual responses ranged between 3.5000 and 3.9773. These values of sample mean generally tends to 3.74838 on the Likert scale used in this study and thus translates to agreement amongst respondent in respect to the activities implied by the statements. Similarly, the sample standard deviation for the

different responses ranged between .98261 and 1.28572 demonstrating that the responses were fairly close together around the sample mean as the variability was narrow.

According to the given table 9, the respondents stated that The inspection practices help in identifying and addressing issues in a timely manner having a highest means of 3.9773 and STD of 1.18397, The inspection process is transparent and well-documented having a highest means of 3.8977 and STD of 1.12485, The inspections of projects were conducted regularly having a highest means of 3.8182 and STD of 1.10947, The inspections help in ensuring compliance with relevant regulations and standards having a highest means of 3.7841 and STD of 1.06619, The inspection reports provide clear and actionable feedback having a means of 3.7159 and STD of 1.11364, the inspection practices contribute to overall project quality having a means of 3.5455 and STD of 1.28572 and The inspection practices in place are thorough and effective having a means of 3.000 and STD of .98261 respectively.

From the overall Table it can be concluded that the respondents agreed with constant response to the items on inspection practice mean of 3.74838 and Std, D 1.164672 have slightly wide range of variance on answer from the mean value.

In general inspection practice of the respondents were used to the role of contract administration on project performance the case of private construction company in Addis Ababa having aggregate scores for sample mean and sample standard deviation for inspection practice were 3.74838 and 1.164672 respectively.

4.3.4. Descriptive Statistics of project performance

This section presents the analysis of project performance obtained from the results. Interpretation of the data and findings in the following discussion produced the mean score and standard deviation of the responses of respondents on the role of contract administration on project performance; the case of private construction company in Addis Ababa. The questions were scaled by using a five-point Likert scale in which 1= strongly disagree, 2= Disagree, 3 = Neutral, 4 = Agree, 5 = strongly Agree to rate the exhibited project performance. The analysis of the project performance was investigated by using means and standard deviations from the results. The results of the means were interpreted based on 1-1.49 = Very Low; 1.5-2.49 = Low; 2.5-3.49 = Moderate; 3.5-4.49 = High; 4.5-5.0 = Very high.

Table 10: Descriptive Statistics of contract administration on project performance

Descriptive Statistics			
	N	Mean	Std. Deviation
Projects that have been delivered to meet end user expectations	88	3.8750	1.10185
Projects have registered tremendous reduction in wastages	88	3.6250	1.18722
Projects have been completed within set cost estimates	88	3.3409	1.28552
Projects that have been delivered to meet the desired quality standard	88	3.5000	1.24106
Projects have always been efficient and effective	88	3.5795	1.17171
Projects are always completed with the set budget	88	3.1818	1.26442
Projects that have been delivered to meet end user expectations	88	3.8864	1.06600
Valid N (leastwise)	88		
Aggregate mean and STD		3.5698	1.206791

Source: - SPSS output survey data 2024

The results presented in Table 10, indicate that the sample mean for individual respondent ranged between 3.1818 and 3.8864. These values of sample mean generally tends to 3.5698 on the Likert scale used in this study and thus translates to agreement amongst respondent in respect to the activities implied by the statements. Similarly, the sample standard deviation for the different responses ranged between 1.06600 and 1.28552 demonstrating that the responses were fairly close together around the sample mean as the variability was narrow.

According to the given table the respondents stated that projects that have been delivered to meet end user expectations having a highest means of 3.8864 and STD of 1.06600, projects that have been delivered to meet end user expectations having a highest means of 3.8750 and STD of 1.10185, projects have registered tremendous reduction in wastages having a highest

means of 3.6250 and STD of 1.18722 and projects have always been efficient and effective having a highest means of 3.5795 and STD of 1.17171, Projects that have been delivered to meet the desired quality standard having a means of 3.500 and STD of 1.24106, Projects have been completed within set cost estimates having a means of 3.3409 and STD of 1.28552 and projects are always completed with the set budget having a means of 3.1818 STD of 1.26442 respectively.

From the overall table 10, we can see that with mean 3.5698 the respondents agree on most project performance questions and Std, D 1.206791 have slight wide range of variance on answer from the mean value. On another hand, it is clearly viewed that Projects have been completed within set cost estimates, Projects that have been delivered to meet the desired quality standard and Projects are always completed with the set budget are answered with neutral scale. Also, slight wide range variances were seen on their responses.

In general project performance of the respondents were used to the role of contract administration on project performance the case of private construction company in Addis Ababa having aggregate scores for sample mean and sample standard deviation for project performance were 3.5698 and 1.206791 respectively.

4.4. Correlation Analysis

In order to decide the relationship between independent variables of the study with the role of contract administration on project performance the case of private construction company in Addis Ababa and to evaluate strength of this relationship, the product moment correlation coefficient was used. The product moment correlation coefficient is the most widely used method of measuring the degree of relationship between two variables (Kothari, 2004). This coefficient assumes that there is a linear relationship between the two variables. Positive values of "r" indicate positive correlation between the two variables (i.e., changes in both variables take place in the statement direction), whereas negative values of 'r' indicate negative correlation i.e., changes in the two variables taking place in the opposite directions. A zero value of 'r' indicates that there is no association between the two variables. According to Bartz (2009) a correlation coefficient enables quantifying the strength of the linear relationship between variables. This coefficient is usually denoted by 'r' and can take only the value from -1 to +1. If r = +1 there is perfect positive relationship between variables.

Table 11: Correlations analysis result

Correlations					
		Contract planning strategy	Timely monitoring	Inspection practice	Project performance
Contract planning strategy	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	88			
Timely monitoring	Pearson Correlation	.880**	1		
	Sig. (2-tailed)	.000			
	N	88	88		
Inspection practice	Pearson Correlation	.813**	.842**	1	
	Sig. (2-tailed)	.000	.000		
	N	88	88	88	
Project performance	Pearson Correlation	.855**	.844**	.869**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	88	88	88	88

**. Correlation is significant at the 0.01 level (2-tailed).

Source: - SPSS output survey data 2024

As indicated in Table 11 the relationship among all the variables was found by using Pearson's correlation coefficient. The correlation value r = .855** shows that there is a strong relationship between Contract planning strategy and Project performance on with the role of contract

administration on project performance the case of private construction company in Addis Ababa, and the p-value showed that the relationship is significant. Regarding to Project performance on with the role of contract administration on project performance the case of private construction company in Addis Ababa and Timely monitoring, r=.844**, which shows a strong relationship between the two variables, and the p-value indicates that the relationship is significant. When Coming to the relationship of Project performance on the role of contract administration on project performance the case of private construction company in Addis Ababa with Inspection practice, the r=.869** showed a strong relationship between the two variables, also p-value shows that the relationship is significant.

4.5. Regression Analysis

Multiple regression analysis studies the relationship between a dependent (response) variable and independent variable (predictors, repressors', IV's). In this study multiple regression analysis was used. Regression analysis is a statistical method that relates one dependent variable to a linear combination of one or more independent variables. Regression identifies how much each independent variable has an effect on dependent variable. Multiple regression analysis calculates multiple correlation coefficients and R-square (Kerlinger and Lee, 2000).

4.5.1. Testing assumptions of multiple regression model

Before conducting multiple regression analysis, the study assessed whether the collected data satisfied multiple regression model assumptions or not. According to Dhakal, (2018) any fit of a multiple regression model is valid, if and only if it should satisfy assumptions of linear relationship between, data must not show multi-collinearity, Homoscedasticity, and the residuals (errors) are approximately normally distributed. The tested assumptions are shown as follows:

Assumption 1: Linearity Test

Linearity means the relationship between dependent and independent variables is to be linear. This relationship characterized by a straight line. Linearity allowed the researcher to predict the dependent variable based on one or more of several independent variables. The assumption was checked through a scatter plot by looking at whether the two variables approximately form a straight line. As presented in figure 3 there was linear relationship between dependent and each of independent variables in the study area.

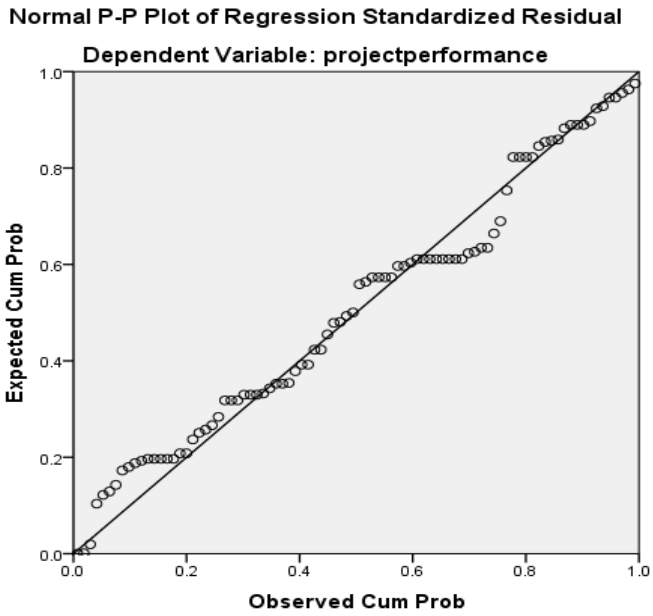

Figure 3.Linearity test

Source: Own survey, 2024

Assumption 2: Multi-collinearity Test

Multi-collinearity is an undesirable situation when one independent variable is a linear function of other independent variables or high correlations between the independent variables (Gelman, 2006). Andy (2006) suggests that a tolerance value less than 0.1 almost certainly indicates a serious collinearity problem. According to Liu, (2010) a VIF value greater than 10 is because for concern. In this study the researcher checked this assumption with tolerance and VIF statistics. As it can be observed from Table 12. taking into account the Variance Inflation Factor not to exceed the allowable value (10) and Tolerance value greater than (0.1) for all independent variables. Therefore, multi-collinearity problem does not exist.

Model formula for tolerance $1–R^2$ AND Model formula for VIF $\frac{1}{1-r^2}$

Table 12: Multi-collinearity test

Variables	Tolerance	VIF
Contract administration planning strategy	.269	3.717
Timely monitoring	.288	3.471
Inspection practice	.245	4.081

Source: Own survey, 2024

Assumption 3: Normality Test

Most statistical analysis works on the assumption and requirement of normality (Kline, 2016). Pallant (2011) explained normal distribution as it describes a symmetrical bell-shaped curve that portrays the greatest frequency of scores in the middle, with smaller frequencies towards the extremes.

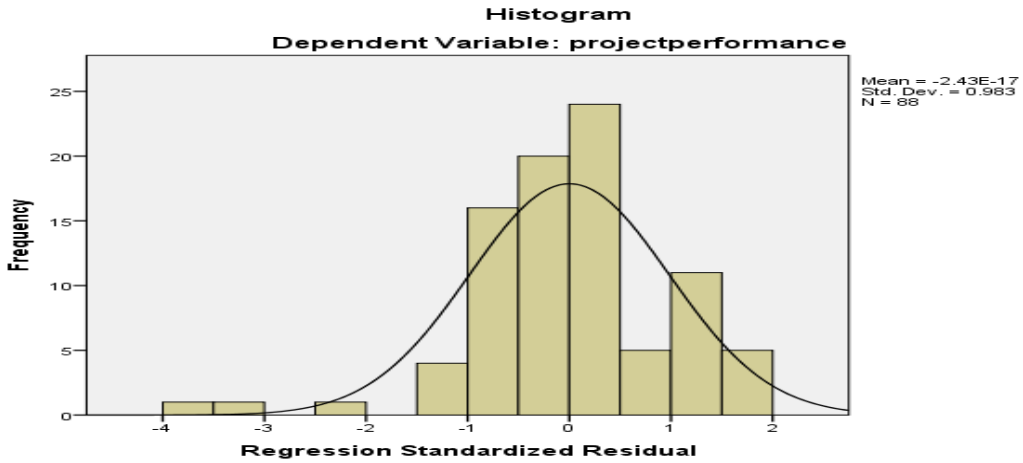

Figure 4. Normality test

Source: Own survey, 2024

Assumption 4:5 Homoscedasticity Test

This is the assumption that the variation in the residuals (or amount of error in the model) is similar at each point across the model. In other words, the spread of the residuals should be fairly constant at each point of the predictor variables (or across the linear model). It can be getting an idea of this by looking at our original scatter plot but to properly test this, we need to ask SPSS to produce a special scatter plot for us that includes the whole model (and not just the individual predictors). To test this assumption, we need to plot the standardized values our model would predict, against the standardized residuals obtained. As shown in figure 5 the spread of the residuals was fairly constant at each point of the predictor variables or our plot of standardized residuals vs standardized predicted values showed no obvious signs of funneling, suggesting the assumption of homoscedasticity has been met.

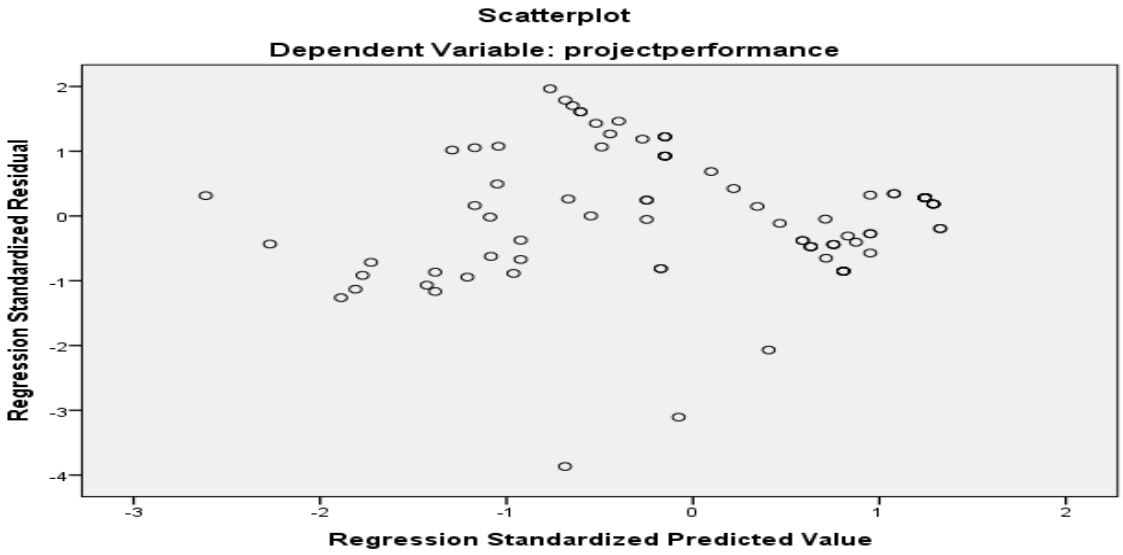

Figure 5. Homoscedasticity Test

Source: Own survey, 2024

4.5.2. Result of Regression Analysis

Multiple regression analysis calculates multiple correlation coefficients and R-square. The contribution of independent variables towards dependent variables is measured by Beta value and can be explained on the bases of p or t values. From the study finding each point were presented below:

Table 13: Model Summaries

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.911[a]	.830	.824	.47967

a. Predictors: (Constant), inspection practice, contract planning strategy, timely monitoring

b. Dependent Variable: project performance

Source: Own survey, 2024

In Table 13, R value represents the correlation strength between dependent variable and independent variables of the study. The value 0.911 shows strong correlation between variables tested (dependent and independent variables), R-square is the coefficient of determination and measures the proportion of variance in dependent variable (project performance) that is explained by independent variables (inspection practice, contract

planning strategy, timely monitoring), The table is analyzed, it is seen that the value of R-square shows 83 % change taking place in project performance due to inspection practice, contract planning strategy, timely monitoring.

Table 14: ANOVA

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	94.244	3	31.415	136.534	.000
	Residual	19.327	84	.230		
	Total	113.571	87			

a. Dependent Variable: project performance

b. Predictors: (Constant), inspection practice, contract planning strategy, timely monitoring

Source: Own survey, 2024

Table 14 shows whether the test carried out was statistically significant for the regression model used in the study using ANOVA and degree of variability, If the F ratio is large and probability is less than 0.05 then it is termed statistically significant, (Sau 2012).

The ANOVA summery table for the regression analysis is observed that the significance level is less than 0.05 ($p<0.05$) that illustrate we have significant linear regression, i.e. the independent variables, (inspection practice, contract planning strategy, timely monitoring) statistically significant to predict the dependent variable (project performance) at private construction company in Addis Ababa and The F calculatedat 5% level of significance is 136.534 this shows that the overall model is significant.

Table 15: Regression Coefficient

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.660	.293		-5.660	.000

	Contract planning strategy	.159	.268	.903	3.949	.000
	Timely monitoring	.598	.277	.534	2.159	.004
	Inspection practice	.879	.127	.584	6.947	.000

a. Dependent Variable: project performance

Source: Own survey, 2024

According to Kabir (2016) one of the approaches used to test a research hypothesis is the p-value approach. In this approach, researchers compute the p-value on the basis of a test statistic and then compare it with the significance level (test size). If the p-value is smaller than the significance level, research rejects the null hypothesis. A p-value is considered as amount of risk that researchers have to take when rejecting the null hypothesis. This study used the test size of $\alpha = .05$ which is at 95% confidence level or 5% level significance. Pallent (2016) states the general rule to reject Ho if $p < 0.05$ and accept Ho if $p \geq 0.05$.

Table 15 above presents regression coefficient result. According to Dhakal (2018) unstandardized coefficients indicate how much the dependent variable varies with an independent variable when all other independent variables are held constant. The regression coefficient provides the expected change in the dependent variable for a one-unit increase in the independent variable. In order to measure the contribution of each independent variable on the dependent variable the study considers the following model specification by using unstandardized coefficient values.

Statistical equation as per Model: **$(Y= \beta 0+ \beta 1X1+ \beta 2X2+\beta 3X3+E\ldots.)$**

$$(Y=- 1.660 +.159X_1+.598X_2+.879X_3+E....)$$

Where: x1, x2 and x3 are independent variables of the study (i.e., inspection practice, contract planning strategy, timely monitoring) respectively. From the above regression equation, the researcher understands that keeping all other variables constant: For every one-unit increment on inspection practice, the percentage of project performance by 87.9% in the study area. For every one-unit increment on contract planning strategy, the percentage of project performance increases by 15.9%. For every one-unit increment on timely monitoring, the percentage of project performance increases by 59.8%. As it can be seen from the regression result, out of three independent variables, the effect of inspection practice is the most significant, followed

by timely monitoring and then contract planning strategy.

4.6. Summary of Hypothesis Testing

Hypothesis 1

H1:1. Contract administration planning has a positive and significant relationship with project performance.

H01:1 Contract administration planning has no positive and significant relationship with project performance.

The results of multiple regressions, as presented in table 15 above, revealed that contract administration planning has a positive and significant effect on project performance with a beta value (beta =.159), at 95% confidence level ($p < 0.05$). This implies that, if contract administration planning increases by 1-unit change, project performance will increase by 15.9%. Therefore, the null hypothesis is rejected, and it is accepted that contract administration planning has a positive and significant effect on project performance.

Hypothesis 2

H1:2. Timely monitoring has a positive and significant relationship with project performance.

H0:2. Timely monitoring has no positive and significant relationship with project performance.

The results of table 15 showed that the unstandardized coefficient beta and p-value of timely monitoring has positive and insignificant effect with (beta =.598, $p < 0.05$). This implies that, if timely monitoring increases by 1-unit change, project performance will increase by 59.8%. Therefore, the null hypothesis is rejected, and it is accepted that timely monitoring has a positive and insignificant effect on project performance.

Hypothesis 3

H1:3. Inspection practice has a positive and significant relationship with project performance.

H0:3. Inspection practice has no a positive and significant relationship with project performance.

The result of table 15 showed that the unstandardized coefficient of beta and p-value of inspection practice has positive and significant effect at (beta = .879, $p < 0.05$). This implies that, if inspection practice increases by 1-unit change, project performance will increase by

87.9%. Therefore, the null hypothesis is rejected, and it is accepted that inspection practice has a positive and significant effect on project performance.

Table 16: Hypothesis testing results

Hypothesis	**Method**	**Test**
Contract administration planning has statistically positive and significant effect on project performance.	Regression	Accepted
Timely monitoring has statistically positive and significant effect on project performance	Regression	Accepted
Inspection practice has statistically positive and significant effect on project performance	Regression	Accepted

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Introduction

The chapter presents a summary of the findings, conclusions and recommendations as per the research objective.

5.1. Summary of Findings

This chapter examines the elements of the role of contract administration on project performance; the case of private construction company in Addis Ababa. The survey had a sample size of 88 respondents, returning questionnaires, yielding a response rate of 100% percent. The summary of the findings is presented as follows:

- The result of the aggregate mean of all contract administration planning strategy related items was 3.977025 with standard deviation 1.019372, which lies between the range of [3.5 - 4.49] and it felt high mean range section and contract administration planning strategy were used to the role of contract administration on project performance the case of private construction company in Addis Ababa
- The result of the aggregate mean of all timely monitoring of contract implementation related items was 3.7987 with standard deviation 1.098725, which lies between the range of [3.5 - 4.49] and it felt high mean range section and timely monitoring of contract implementation were used to the role of contract administration on project performance the case of private construction company in Addis Ababa
- The result of the aggregate mean of all inspection practice related items was 3.74838 with standard deviation 1.164672, which lies between the range of [3.5 - 4.49] and it felt high mean range section and inspection practice were used to the role of contract administration on project performance the case of private construction company in Addis Ababa
- The result of the aggregate mean of all project performance related items was 3.5698 with standard deviation 1.206791, which lies between the range of [3.5 - 4.49] and it felt high mean range section and project performance were used to the role of contract administration on project performance the case of private construction company in Addis Ababa

- The correlation value r = .855** shows that there is a strong relationship between Contract planning strategy and Project performance on with the role of contract administration on project performance the case of private construction company in Addis Ababa, and the p-value showed that the relationship is significant.
- Regarding to Project performance on with the role of contract administration on project performance the case of private construction company in Addis Ababa and Timely monitoring, r=.844**, which shows a strong relationship between the two variables, and the p-value indicates that the relationship is significant. When Coming to the relationship of Project performance on the role of contract administration on project performance the case of private construction company in Addis Ababa with Inspection practice, the r=.869** showed a strong relationship between the two variables, also p-value shows that the relationship is significant.
- From the above regression equation, the researcher understands that keeping all other variables constant: For every one-unit increment on inspection practice, the percentage of project performance by 87.9% in the study area. For every one-unit increment on contract planning strategy, the percentage of project performance increases by 15.9%. For every one-unit increment on timely monitoring, the percentage of project performance increases by 59.8%. As it can be seen from the regression result, out of three independent variables, the effect of inspection practice is the most significant, followed by timely monitoring and then contract planning strategy.

5.2. Conclusion

The overall purpose of this is to assess the impact of contract administration on project performance, in the case of some selected private construction companies in Addis Ababa. Specifically, this study used to assess contract administration planning practices and their role in contract administration, to assess the contribution of timely monitoring of contract implementation for project performance/success and to assess the inspection practice and its contribution to obtaining the intended deliverables. Contract administration strategy is essential for effectively managing contract implementation in any project. Timely monitoring plays a crucial role in improving time, cost, and quality by enabling project managers to identify deviations early and take corrective actions. Inspection of deliverables adds to the specified quality of deliverables by ensuring that they meet the standards outlined in the contract, ultimately preventing rework and meeting client expectations.

In the case of a private construction company in Addis Ababa, effective contract administration can help the company deliver projects successfully, maintain a good reputation in the industry, and ensure project success. By implementing a well-planned and executed contract administration strategy, the company can manage contract implementation efficiently, improve project performance, and achieve the desired outcomes within the stipulated time, budget, and quality parameters. Contract administration plays a critical role in project performance, and its effective implementation is key to achieving project success and client satisfaction. By prioritizing timely monitoring, inspection of deliverables, and a comprehensive contract administration strategy, private construction companies in Addis Ababa can enhance their project management practices and deliver successful projects that meet or exceed client expectations

Contract administration strategy plays a crucial role in managing contract implementation and influencing project performance for a private construction company in Addis Ababa, Ethiopia. This strategy involves clear communication among all project stakeholders, compliance monitoring to ensure adherence to contract terms, risk management to address potential challenges, documentation and record-keeping for tracking progress and resolving disputes, performance tracking to monitor key indicators, dispute resolution mechanisms to prevent conflicts, and a focus on continuous improvement through regular reviews and adjustments. By implementing an effective contract administration strategy tailored to the company's needs, project performance can be enhanced, leading to successful project completion within budget and to the satisfaction of all stakeholders involved.

Timely monitoring is a critical strategy employed in contract administration to enhance project performance in a private construction company in Addis Ababa, Ethiopia. By closely monitoring the progress of the project in terms of time, cost, and quality, the company can proactively identify any deviations from the planned schedule, budget, or quality standards. This allows for timely interventions to address issues before they escalate, ensuring that the project stays on track and meets its objectives. Through effective monitoring, the company can optimize resource allocation, identify potential risks and challenges early on, and make informed decisions to improve efficiency and quality. Ultimately, timely monitoring as part of a robust contract administration strategy contributes to the successful completion of projects within budget and to the satisfaction of all stakeholders involved

Inspection of deliverables plays a crucial role in ensuring the specified quality of deliverables in construction projects managed by private companies in Addis Ababa, such as Sunshine Construction, Etete Construction, Rama Construction, and Bamacon Construction. Contract administration teams are responsible for overseeing the quality control process, which involves monitoring and inspecting construction activities to verify compliance with contract specifications, industry standards, and safety regulations. By conducting thorough inspections of deliverables, contract administrators can identify any deviations from the agreed-upon requirements early on and take corrective actions promptly. This proactive approach helps prevent potential quality issues, rework, and delays, ultimately contributing to the overall quality of the project deliverables. Additionally, regular inspections help ensure that subcontractors and suppliers adhere to the terms of the contract, maintain quality standards, and meet project milestones.

The role of contract administration in overseeing inspection processes is essential for maintaining project performance and client satisfaction. By establishing clear inspection protocols, timelines, and quality control measures, private construction companies in Addis Ababa can enhance project outcomes, minimize risks, and uphold their reputation for delivering high-quality construction projects. Inspection of deliverables adds value to the specified quality of deliverables by providing assurance that the project meets the required standards and specifications outlined in the contract, ultimately contributing to the success and reputation of private construction companies in Addis Ababa.

5.3. Recommendation

The following recommendations to the management of private construction companies in Addis Ababa and suggestion for other researchers, the main theme of the recommendation focuses on the proper enhancement of three determinants of the role of contract administration on project performance

- Implement a standardized contract administration strategy across all projects within Sunshine Construction, Etete Construction, Rama Construction, and Bamacon Construction to ensure consistency and efficiency in managing contracts and develop a contract administration manual that outlines the roles and responsibilities of each team member involved in contract administration, including project managers, contract administrators, and site inspectors.

- private construction companies in Addis Ababa should Establish clear timelines and milestones for contract administration tasks, such as reviewing contract documents, issuing change orders, and processing payments, to ensure timely completion of project deliverables. Conduct regular monitoring and inspection of construction sites to verify compliance with contract specifications, quality standards, and safety regulations.
- Sunshine Construction, Etete Construction, Rama Construction, and Bamacon Construction Should Utilize technology tools, such as construction management software or mobile apps, to streamline monitoring and inspection processes and facilitate real-time communication between project teams and implement a proactive approach to identifying potential issues or deviations from the contract early on and take corrective actions promptly to prevent delays or cost overruns.
- private construction companies in Addis Ababa should Provide training and professional development opportunities for contract administrators and site inspectors to enhance their skills and knowledge in contract administration best practices and Foster strong communication and collaboration among project teams, subcontractors, and clients to ensure alignment on project goals, expectations, and deliverables.
- Sunshine Construction, Etete Construction, Rama Construction, and Bamacon Construction Should Establish key performance indicators (KPIs) related to contract administration processes, such as contract compliance, change order processing time, and dispute resolution, to measure and improve project performance and Regularly review and update contract documents to reflect any changes or amendments, ensuring all parties are informed and aligned with the latest contractual agreements.
- Collaborate with legal experts to ensure contracts are legally sound, enforceable, and protect the interests of Sunshine Construction, Etete Construction, Rama Construction, and Bamacon Construction in Addis Ababa. Implement a risk management framework to identify, assess, and mitigate potential risks associated with contract administration, such as delays in approvals or disputes with subcontractors.
- Sunshine Construction, Etete Construction, Rama Construction, and Bamacon Construction should conduct post-project reviews to evaluate the effectiveness of the contract administration process, identify lessons learned, and implement improvements for future projects and foster a culture of accountability, transparency, and integrity within the

organization to promote adherence to contractual agreements and ethical standards in all contract administration activities.

- private construction companies in Addis Ababa should Continuously monitor industry trends, regulatory changes, and best practices in contract administration to adapt and improve processes within Sunshine Construction, Etete Construction, Rama Construction, and Bamacon Construction in Addis Ababa.

5.4. Recommendations for Further Works

This study has covered only four private construction companies in the capital city of Addis Ababa, the results might not be transferred to other parts of the country. Therefore, this study only gives a little glimpse of the current situation on the role of contract administration on project performance, In the future a better in depth study needs to be undertaken on this topic by expanding the area coverage beyond Addis Ababa. Besides this, to capture the whole picture in the industry other companies should be included in the study. Future research shall also be conducted by exploring other variables which might have a higher potential in explaining the variation in project performance.

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Appendix 1

S.T Mary's university

SURVEY QUESTIONNAIRE DESIGNED FOR RESPONDENTS

Questionnaire Prepared for respondents

Dear respondents

These survey questionnaires designed for master thesis accomplishment needed for partial fulfillment of Master of Art degree in project management by student at St. Mary University. So, the objective of this questionnaire is to collect information for the study conducted on the role of contract administration in project performance; the case of private construction company in Addis Ababa. The information you provide below was essential for accomplishment of this study. Therefore, your genuine, honest, and prompt response is a valuable input for the quality and successful completion of the research. The information you give is used only for academic purposes and has been kept confidential.

Thank you in advance!!

Directions for filling the questionnaires

 Do not write your name

 Put "√ or ×" mark in the box provided for choice questions

 Your response was being utilized only for the purpose of this survey

Part I: General Information

1. Sex: Female ☐ Male ☐

2. Educational level:

Diploma ☐ Degree ☐ Masters☐ PhD☐ Other(Specify

3. In which age group are you?

25 and below☐ 26-35☐ 36-45 ☐ 46-55 ☐56 & above ☐

4. How long have you been working with private Construction Company?

Below 1 years ☐ 1-5 ☐ 6-10 ☐ 11-15 ☐ Above 15 ☐

5. Marital status: Single ☐ Married ☐ divorce ☐

Part II: Independent Variables

Please indicate the extent to which you agreed or disagreed on the following question by using 5 points Likert scale: Strongly Disagree = 1, Disagree = 2, Neutral = 3, Agree = 4 and Strongly Agree = 5 Please circle one number to indicate the extent to which you agree or disagree with the following question

Section: A contract administration planning strategy

Kindly indicate your views on the contract administration planning strategy by ticking in the Likert scale whereby; 5-Strongly Agree, 4-Agree, 3-Indifferent, 2-Disagree, 1- Strongly Disagree.

No	Questions Items	SD	D	N	A	SA
		1	2	3	4	5
1	The contract administration planning strategy resulted in cost savings or efficiency improvements					
2	I feel confident in the ability of the project team to execute the contract administration planning strategy.					
3	The contract administration planning strategy effectively aligned with the project goals and objectives.					
4	The contract Administration planning strategy was clearly communicated to all relevant stakeholders					
5	The objectives outlined in the contract administration planning strategy is achievable					
6	I believe the contract administration planning strategy will lead to efficient resource utilization.					
7	The timelines set forth in the contract administration planning strategy is realistic and achievable.					

8	The contract Administration planning strategy was clearly communicated with all relevant stakeholders.					

Section B: timely monitoring of contract implementation

Kindly indicate your views on timely monitoring of contract implementation by ticking in the Likert scale whereby; 5-Strongly Agree, 4-Agree, 3-Indifferent, 2-Disagree, 1- Strongly Disagree.

No	Questions Items	SD	D	N	A	SA
		1	2	3	4	5
1	I am satisfied with the frequency of updates provided on the progress of contract implementation					
2	The monitoring process effectively identifies any delays or issues in contract implementation					
3	The information provided during monitoring sessions is clear and actionable					
4	The estimated time for projects implementation is not realistic compared to the volume of required work.					
5	The contractors do not have required machinery and equipment to execute works on time.					
6	There are unpredicted events and situations which are not considered during the time estimation.					
7	Clients are under pressure and tend to give shorter time to contractors for feeder roads projects implementation.					

Section C: inspection practice

Kindly indicate your views on inspection practice by ticking where appropriate; 5-StronglyAgree, 4-Agree, 3-Indifferent, 2-Disagree, 1-Strongly Disagree.

No	Questions Items	SD	D	N	A	SA
		1	2	3	4	5
1	The inspection practices in place are thorough and effective					
2	The inspection reports provide clear and actionable feedback					
3	The inspection practices help in identifying and addressing issues in a timely manner					
4	The inspection process is transparent and well-documented					
5	The inspections help in ensuring compliance with relevant regulations and standards					
6	The inspection practices contribute to overall project quality					
7	The inspections of projects were conducted regularly					

Section D: project performance

Kindly indicate your views on project performance by ticking where appropriate; 5-Strongly Agree, 4-Agree, 3-Indifferent, 2-Disagree, 1-Strongly Disagree.

No	Questions Items	SD	D	N	A	SA
		1	2	3	4	5
1	projects that have been delivered to meet end user expectations					
2	projects have registered tremendous reduction in wastages					
3	projects have been completed within set cost estimates					
4	projects that have been delivered to meet the desired quality standard					
5	projects have always been efficient and effective					
6	projects are always completed with the set budget					