
# Factors Affecting Procurement Performance in Selected Government Hospital Renovation: a case study of Family Planning by Choice Project

**A Project Work submitted to Addis Ababa University School of Commerce for the Partial Fulfillment of Master of Arts Degree in Project Management**

**Submitted by:** Bethelehem Muluneh (Id no. GSD/7970/09)

**Advisor: -** Birhanu Denu (PhD)

June 2021

Addis Ababa, Ethiopia

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# DECLARATION

I, Bethelehem Muluneh, hereby declare that this study entitled "Factors Affecting Procurement Performance in Selected Government Hospital Renovation: a case study of Family Planning by Choice Project" is my original work conducted in partial fulfillment of the requirements for the Masters of Art in project Management (MAPM) degree at Addis Ababa University School of Commerce.

Full acknowledgements have been made for all references of other people's work that have been cited and ideas adopted. I further declare that, No part of this project work has either been presented whole or in part to any other institutions for any award.

_____

Bethelehem Muluneh

# Statement of Certification

This is to certify that **Miss. Bethelehem Muluneh** has carried out his research work on the topic entitled **— "Factors Affecting Procurement Performance in Selected Government Hospital Renovation: a case study of Family Planning by Choice Project"** and it is her original work and is suitable for submission for the award of Master's Degree in Project Management.

**Certified by:**

| | | |
|---|---|---|
| Birhanu Denu(PHD) | _____ | _____ |
| Advisor's Name | Signature | Date |

# Factors Affecting Procurement Performance in Selected Government Hospital Renovation: a case study of Family Planning by Choice Project

By: Bethelehem Muluneh

## PROJECT MANAGEMENT POST GRADUATE PROGRAM

### Approved by Board of Examiner

| | | |
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| **Birhanu Denu(PHD)** | _____ | _____ |
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| External Examiner | Signature | date |

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# ABSTRACT

*The objective of this research is to assess the factors affecting procurement performance in selected government hospitals renovation in the case of family planning by choice project. The study adopts explanatory research design. The research used is quantitative approach and primary data is collected randomly from 109 respondents through questionnaire. The questionnaire data is analyzed through SPSS 20.0 statistical packages. This the result of the study indicated the characteristics of the project; project procurement procedure; project owner related factor; contractor related factor and client related factors has a significant role in procurement performance in selected government hospitals renovation project. But the significance of renovation size and contractors progress payment has found to have less impact on procurement performance. The paper recommended that family planning by choice project should work in collaboration with project practitioners involved in procurement related activities and policy makers to take proactive measures to improve construction procurement performance in local governments in terms of cost, quality and timeliness, which will improve service delivery to all project beneficiaries.*



**Key Words: Procurement performance, Hospital renovation**

# Table of Contents

# List of Tables



# List of Figures

## List of Abbreviations

**PMBOOK** – Project management body of knowledge

**SPSS -** Statistical package for social science

# Chapter One
# 1. Introduction

## 1.1. Background of the study

Project success in the construction industry is mainly dependent on management and project procurement. Project management requirements can briefly have defined as, usage of tools and techniques or having specific knowledge and skills about project to meet project specifications (PMBOK, 2000). Project procurement methods and project delivery systems are important for project success (Rashid, R.A et.al, 2006).

The process of construction procurement is extensive and covers every aspect of the project delivery system (Hughes, 2012; Hashim (1999), Rasid et al. (2006), Eriksson and Westerberg (2009) suggest different procurement related factors that can affect project performance.

According to Hashim (1999) pre-construction time, control of project design and cost and client's control of construction projects are procurement related factors whose influences were found on procurement methods of Traditional, Design, Build, and Management Contracting in construction industry.

In almost all construction projects contracts are the contractual clauses allowing parties involved in the contract to freely initiate variation orders (Ndihokubwayo and Haupt, 2009). Variation order has been seen by many studies as involving additions, omissions, alterations and substitution in terms of quality, quantity and schedule of works (Al-Jishi and Al-Marzoug, 2008; Ndih okubwayo, 2008; 2009; Rodriguez, 2012)

## 1.2. Statement of the problem

Procurement is vital to organizations and its strategies have become part of a business success. It boosts efficiency and competitiveness and to realize these, it is vital to give emphasis about the strategic factors that affect the performance of the procurement function.

Internal and external forces are influencing the ability to recognize the procurement goal. Relations among different elements like professionalism, staffing levels and budget resources, organizational structure whether centralized or decentralized, procurement regulations, rules, guidelines, and internal control policies, all have affecting on the performance of the procurement function and needs consideration (Kim et.al, 2013).

Activities of procurement usually suffer from neglect, poor co-ordination, lack of open competition and transparency. Corruption may also occur in the various processes of procurement. It is common to observe lack of trained and qualified procurement specialists who are competent to conduct and manage procurements in various private companies. Inflexible and bureaucratic systems of procurement contribute to contract delays, increased costs and lack of fair competition, all of which affect the procurement process and performance negatively.

According to Dale (2010), procurement is still realized as supplement rather than essential to business operations in most organization. The influence of certain factors on procurement performance has been in focus for years, together with their impact on the overall organizational efficiency. Poor Procurement performance is usually due to incompetent staff, traditional procurement procedures and poor coordination of procurement activities and lack of proper regulations.

As a result, this affects the process of tendering, bidding and evaluate variation work of procurement function. Therefore, this study is focus on identifying Factors Affecting Procurement Performance in selected government hospital renovation the case of family planning by choice project

## 1.3. Research Questions

Based on the above research problem, for this study the following basic research questions are designed and assessed accordingly

What are the factors that affect the performance of procurement in construction projects specifically at government hospitals renovation project?

- What are the factors that impact-tendering methods used in government hospitals renovation?
- What is the effect of using lowest bidder bid awarding system in government hospitals renovation project?
- What is impact of variation order in government hospitals renovation project?

## 1.4. Objective of the study

### 1.4.1 General objective of the study

To identify the factors that affect procurement performance of government hospitals renovation in family planning by choice renovation project.

### 1.4.2 Specific objective of the study

1 To investigate the effect of tendering method on the procurement performance of government hospitals renovation in family planning by choice renovation project.
2 To investigate the effect of lowest bidder bid awarding system on procurement performance of government hospitals renovation in family planning by choice renovation project.
3 To investigate the effect of variation order on procurement performance of government hospitals renovation in family planning by choice renovation project.

The overall objective of the study is to assess and examine factors affecting procurement performance at government hospital renovation in family planning by choice project.

## 1.5. Significance of the study

Performance of construction contracts in local governments especially procurement related issues have not been widely researched in Ethiopia. Despite the continued outcry of poor performance of construction contracts in terms of completion, payment and quality of works, there is limited information about the causes of the poor performance and more so in relation to procurement processes.

This study, therefore, will add extensive information to the existing limited knowledge on the effect of procurement process on performance of construction contracts in local governments.

The findings of this study will compel project practitioners involved in procurement related activities and policy makers to take proactive measures to improve construction contract performance in local governments in terms of cost, quality and timeliness, which will improve service delivery to all project beneficiaries.

## 1.6. Scope of the study

Due to the diversity of factors affecting procurement establishment, this study focuses on assessment of procurement management on project. It is limited to selected government hospitals

renovation project. Thus, to meet the objective, the researcher gives emphasis to the performance of this project procurement management.

## 1.7. Limitations of the study

A study conducted by Cheung et al.,(2004) found that there are seven main key performance indicators, namely time, cost, quality, client satisfaction, client changes, business performance, and health and safety. This study will focused on factors affecting the prompt delivery of renovation projects. The study is further limited to investigating the extent to which factors influencing the performance of contractors due to time limitation, this study is concerned with major procurement methods for construction works only, and will not take into account the other procurement methods.

## 1.8. Definition of Terms

**Procurement management**: is one such form of management, where goods & services are acquired from a different organization. Procurement management is known to help an organization to save much of the money spent where purchasing goods & service from outside.

**Project Performance:** projects are initiated to achieve business objectives. Project objectives are a means to that end. When measuring project is ongoing, it is necessary to focus on the project objectives & performance against schedule & budget estimates.

## 1.9. Organization of the Research Report

**Chapter-1: -Introduction**

This chapter is containing background of the study, statement of the problem, basic research questions, objectives of the study, definition of terms, significance of the study, and delimitation/scope of the study.

**Chapter-2: -Literature review**

This chapter is discussing literatures relevant to the study. It will have theoretical review, empirical review and the conceptual framework of the study.

**Chapter-3: - Research Methodology**

Under this chapter, the type and design of the research; the subjects/participant of the study; the sources of data; the data collection tools/instruments employed; the procedures of data collection; and the methods of data analysis used are described.

**Chaper-4: -Results and discussion/Data presentation, analysis & interpretation**

This chapter is summarizing the findings of the study, and interpret and discuss the findings.

**Chapter-5: -Summary, Conclusion, recommendation**

This chapter have four sections, which include summary of findings, conclusions, limitations of the study and recommendations.

# Chapter Two
# 2. Review of Literature

## 2.1 Introduction

This chapter provides information from there view of literature on factors affecting procurement performance in construction project in government hospitals renovation project. Theoretical framework that is guided the study has also been identified.

## 2.2 Theoretical Review

**Procurement:** is refer to as acquisition of goods, services, capabilities and knowledge required by businesses, from the right source, the right quality, in the right quantity, at the right price and at the right time to maintain and manage a company's primary and support activities (Giunipero, et al. 2006; Hines, 2006; Porter, 1998; Triantafillou, 2007, Van, 2000). According to Mangan, et.al 2008, procurement is a process of identifying and obtaining goods and services. It includes sourcing, purchasing and covers all activities from identifying potential suppliers to delivery to the beneficiary.

**Procurement performance** is a measure of identifying the extent to which the procurement function was able to reach the objectives and goals with minimum costs. There are two main aspects of the procurement performance: effectiveness and efficiency. Procurement effectiveness is the extent to which the previously stated goals and objectives are being meet. It refers to the relationship between actual and planned performance of any human activity. While, efficiency is the relationship between planned and actual resources required to realize the established goals and objectives and their related activities, referring to the planned and actual costs (Van Weele, 2002).

Procurement practices refer to the strategies of procuring or acquiring Products and services (Mc-Falls, 2016). It can also be that Procurement practices are those managerial actions undertaken to enhance performance of the integrated supply chain.

## 2.3 Factors Affecting Procurement performance

The factors that have ability to affect and influence the procurement performance in negative manner.

### 2.3.1. Procurement systems

Procurement system is a contemporary term, which is known to many practitioners and researchers of the construction industry by different terms; these include terms such as project approach, procurement methods, procurement delivery methods or project delivery systems, etc. The following definitions best define a procurement system:

1. It is an organizational structure adopted by the client for the implementation and at times eventual operation of a project (Masterman, 2002).

2. It is a key means through which the clients create the pre-conditions for the successful achievement of project-specific objectives (Rameezdeen and Ratnasabapathy, 2002, 2006). Procurement systems govern the delivery processes of a construction project in many ways and are the key in determining the success or failure of any particular project.

Procurement systems are basically classified into traditional and non-traditional systems.

**Traditional procurement systems:** this method is called 'traditional' because it has been in existence for a long time and has been the only choice available for most clients of the construction industry for many years. Using this method, the client enters into an agreement with the design consultant (an architect or engineer) to actually carry out the design work and prepare contract documents. Following the completion of this phase, the contractor is then appointed based upon the owner's criteria and the owner enters into a contract with the successful contractor for the assembly of the project elements. In essence, the client is under two contractual obligations: the design professional and the contractor. In order for the client to obtain a constructed facility, tenders from this type of procurement systems are invited in one of the three following methods:

**Open tendering**

This is a procedure that allows practically any contractor to submit a tender for the work. This procedure involves either the client or consultant (on behalf of the client) placing a public advertisement giving a brief description of the work. Normally the client will require a cash deposit when contract documents are requested (Pilcher, 1992).

**Selective tendering**

This consists of the client drawing up a shortlist of contractors that are known to have the appropriate qualifications to carry out the work satisfactorily. Those contractors who seek to be listed are then asked for further details concerning their technical competence, financial standing, resources at their disposal and relevant experience. Pre-qualifying contractors who were on the list are invited to tender (Pilcher, 1992)

**Negotiated tendering**

This method is applied in several or different contexts, but the essence is that tenders are obtained by the client inviting a single contractor of his/her choice to submit a tender for a particular project

**Non-traditional procurement systems**

Non-traditional is a generic term which is used to refer to all emerging or contemporary procurement systems of the construction industry other than the traditional procurement system. Over the past number of years, the construction industry has undergone changes in a manner never seen before. The increased size and complexity of the construction projects, financial challenges, political and social consideration, and information technology are just some of the changes that have been taking place. These changes had led to the development of alternative procurement systems other than the famous traditional one. Although the development of non-traditional procurement systems seemed to be the favorite to most clients of the construction industry, It must, however, be emphasized that there is not yet a specific method used to select the most appropriate procurement system. Masterman (2002) defines a non-traditional procurement system as a diversified contemporary procurement system(s) that not only considers design and construction, but also considers financing, operating and facility management. The three different types of non-traditional procurement systems are as follows:

**Integrated procurement system**

This is a system where one organization, usually but not exclusively the contractor, takes responsibility for the design and construction of the project, in theory at least. The client deals only with one organization.

**Management-oriented procurement system**

Under a management-oriented procurement system, the management of the project is carried out by an organization working with the designer and other consultants to produce the designs and manage the physical operations, which are carried out by contractors. When using systems within this category, the client will need to have a greater involvement with the project than when employing any of the other methods described in the previous two categories.

**Collaborative/discretionary procurement system**

Under a collaborative system, the client lays down a framework for the overall administration of the project within which he/she has the discretion to use the most appropriate of all the procurement systems contained within the other three categories. In a collaborative procurement system, quantity surveyors play an integral role by providing a wide range of services, which include contractual issues; it also offers quantity surveyors an opportunity to act as independent advisors within the system (Cartlidge, 2002).

### 2.3.2. Lowest bidding bid awarding system

This is the most commonly used procedure to obtain and select contractors'/construction firms for execution of construction projects. In broad-spectrum, the aim of competitive bidding (price-based) is to obtain the least possible price for a particular project, service or facility. Competitive bidding method tries to ensure that everyone gets an equal chance to bid, minimizes collusion, and saves the public money. It focuses on honest competition to obtain the finest work and supplies at the lowest possible cost. It also necessitates protecting against nepotism, favoritism, extravagance, corruption and fraud (Sweet, 1989).

In the competitive lowest-bidding method, the prequalified and responsive bidder who submits the least bid, meeting the specifications must be winner of the contract.

### 2.3.3. Variation order

Variation order is the eccentricity practiced in some scheme from base agreement or task scope equally agreed at contracting duration. It is written contract among the construction parties that symbolize extra work, omission, or reconsideration to the agreement documents, identifies the alteration in price and time and describes the nature of the task involved. Change orders increases for altered sources of which certain reasons are predictable and the left one are not predicted.

Variations in construction projects are very common and likely to occur from different sources, by various causes, at any stage of a project, and may have considerable negative impacts on items such as costs and schedule delays. A critical variation may cause consecutive delays in project schedule, re-estimation of work statement, and extra demands of equipment, materials, labor, and overtime.

Five main causes led to the introduction of changes in the construction projects in the state. The causes are as follows:

- Changes in the scope of the work by the client.
- Exchange of construction materials by the client.
- Specification changes by the client.
- Changes in building design by the consultant.
- Differences between the contract forms and drawings.

The main effects identified and investigated in joining with variation order are as follows:

- Increase project time
- The increase in the project cost.
- Delay logistics
- Impact on the quality of the project
- Destruction and reconstruction

## 2.4 Empirical Review

Enshassi (2009), in his thesis on factors affecting the procurement performance of construction projects in the Gaza Strip is found out that the most important factors agreed by the owners, consultants and contractors were average delay. Because of closure and materials shortage, availability of resources as planned through project duration, Leadership skills for project manager, escalation of material prices, availability of personals with high experience and qualification and quality of equipment and raw materials in project.

Bui (2010) in their study carried out in Vietnam on factors affecting construction project outcomes discovered that major enablers that lead to project success are foreign experts' involvement in the project, government officials inspecting the project and very close supervision when new construction techniques are employed. Amusan and Adebile, (2011)

studied factors affecting construction procurement performance in Nigerian construction sites. He discovered from the analysis that factors such as contractor's inexperience, inadequate planning, inflation, incessant variation order, and change in project design were critical to causing cost overrun, while project complexity, shortening of project period and fraudulent practices are also responsible.

Iyagba, Odusami and Omirin, (2003) did a research on the relationship between project leadership, team composition and construction project procurement performance in Nigeria. The tests of the hypotheses led to the conclusion that there was significant relationship between the project leader's professional qualification, his leadership style, team composition and overall project procurement performance. No significant relationship was found between the project leader's profession and overall project procurement performance.

Iyer and Jha (2005) did a research on factors affecting procurement performance evidence from Indian construction projects and found out that the project manager's competence and top management support are found to contribute significantly in enhancing the quality performance of a construction project. Nyangilo, (2012) did an assessment of the organization structure and leadership effects on construction projects procurement t performance in Kenya, he found out that lack of appropriate project organization structures, poor management systems and leadership are the major causes of poor project performance.

Chan and Kumaraswamy (2002) remarked that project performance measurement includes time, budget, safety, quality and overall client satisfaction. Kuprenas (2003) stated that project performance measurement means an improvement of cost, schedule, and quality in design and construction stages. Navon (2005) defined performance measurement as a comparison between the desired and the actual performances.

## 2.5 Conceptual Framework of the study

The study will attempt to establish factors that influence procurement performance in selected government hospitals renovation project at family planning by choice project. Tendering methods, competitive bidding and variation order are the independent variables while procurement performance in terms of cost, time and quality is the dependent variable. The summarized conceptual framework shown below on in figure 2.1

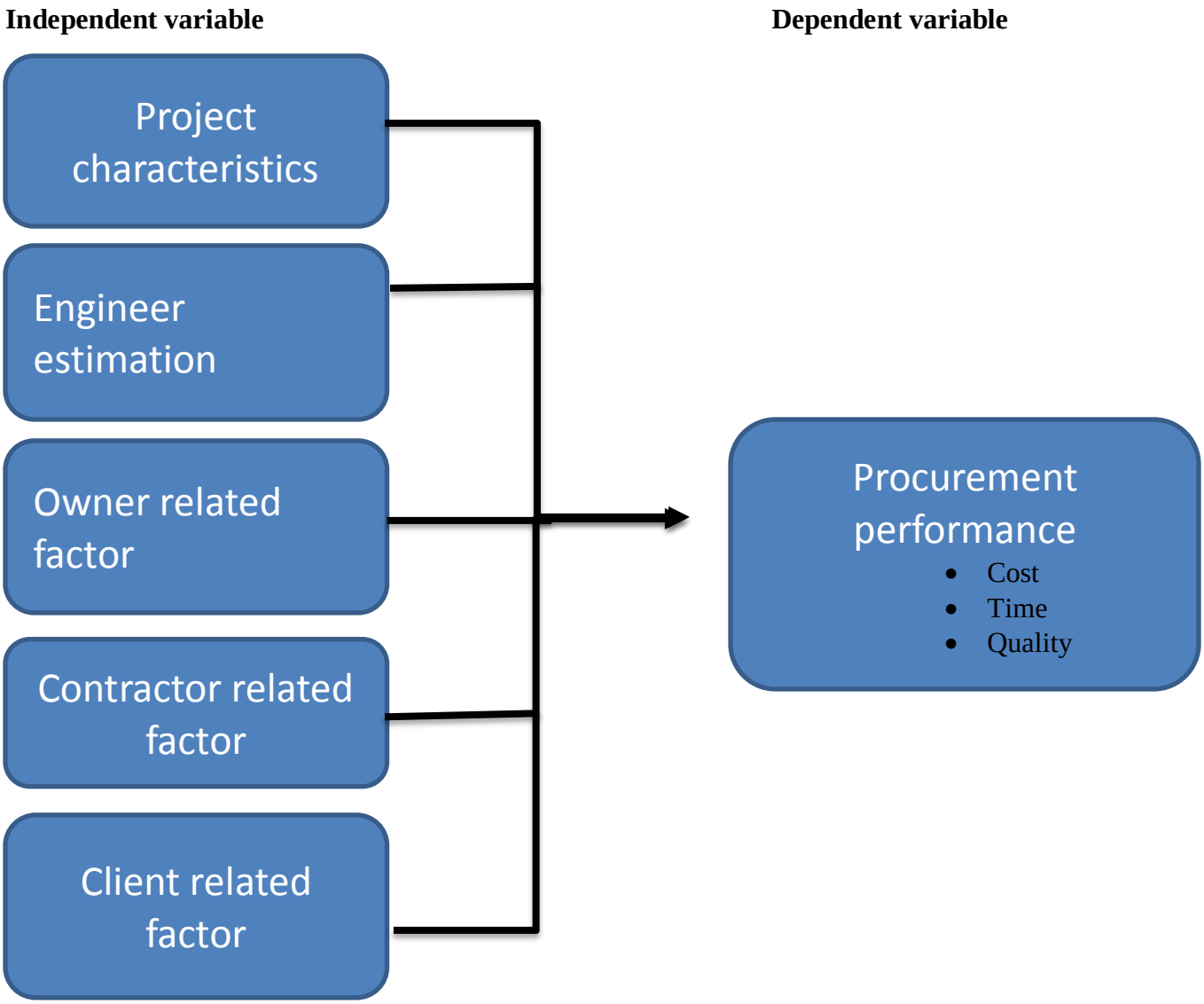


**Figure 2.1 Conceptual framework of the study**

# Chapter Three
# 3. Research Methodology

## 3.1 Introduction

This chapter is presents the research methodology that followed in this study. Research methodology includes the steps that assumed by a researcher in studying the research problem as informed by logic (Gargand Kothari, 2014). The research presents the methodology that used to carry out the survey, what informs the selection of the research design, the target population, sampling method used, and data collection instrument and how data analyzed; interpreted and presented.

## 3.2 Research Approach and Design

The approach, which followed by the researcher in this study, is quantitative approach since the data, which is gathered through questionnaire is quantitative (numerical). Moreover, this study adopts explanatory research design. This is because explanatory research employed to find out the relationship between dependent and independent variables. In this research design, empirical data was collected for questionnaires.

## 3.3 Target Population

Target population is the collection of elements that possess the information sought by a researcher (Solverman, 2016). According to Taylor, Bogdan and (DeVault, 2015) a population refers to the entire group of persons or elements that have at least one thing in common. Target population defined as all members of a real or hypothetical set of people, events or objects to which a study wishes to generalize the results of a study. (Bryman and Bell, 2007). According to Amin (2005:235), a target population is the population to which the researcher ultimately wants to generalize the results. The target population for this study would be one hundred (80/100) respondents. The target population of this study includes procurement employees, engineers, engaged project owner employees from of Family planning by choice, client from selected government hospital & contractors of the project.

**Table 3.1 Target population of the study**

| Ser. No. | Target population | Total no. of project participant | Randomly selected 80% respondents |
|---|---|---|---|
| 1 | Project owner employee | 52 | 42 |
| 2 | Selected government hospital employee | 18*4=72 | 58 |
| 3 | Contractors of the project | 14 | 11 |
| **Total** | | **138** | **111** |

## 3.4 Sample Size and Sampling Procedure

In order to come up with the sample, the study employed simple random sampling method. This method is used because it's easy in assembling the sample, it is inclusive of the population and lacks subjectivity selection which makes it reasonable to make a true generalization. (Mugenda and Mugenda, 2008). The perfect sample is directly related to the type of research one is conducting. This study is used a random sampling technique formula to estimate sampling size, is employed in this study. Based Yamane (1967:886) formula, a sample of 80 participants will used to which a questionnaire is distributed.

## 3.5 Sampling Technique

This research is used simple random sampling because of the following reason namely; the ease of assembling the sample. It considers a fair way of selecting a sample from a given population since every member was give equal opportunity of being selected. Due to the representativeness of a sample obtained by simple random sampling, it is reasonably generalizing from the results of the sample back to the population, as one of the goals of research is able to make conclusions pertaining to the population from the results obtained from a sample.

The sample is calculated using Yamane (1967:886), a 95% confidence level and P = .5 are assumed. Which has ideal formula for populations of targeted population 100. i.e. n Where n-is the sample size N-Is the population size and the level of precision. i.e. n n=100/1.25n=80(respondents).

### 3.1.1 Instruments of Data Collection

Primary data is collected using questionnaire items, which are to be administered by the researcher. The questionnaire compromises questions which are related to the study objectives.

The closed ended questions provide alternative answers from which respondents select the answer because they are easier to analyst and are economical in terms of time.

In order to be able to select the appropriate method of analysis, the level of measurement should be understood. In this research, ordinal scales are used. Ordinal scale is a ranking or a rating data that normally uses integers in ascending or descending order. The numbers assigned to the agreement or degree of influence (1, 2, 3, 4, 5) do not indicate that the interval between scales are equal, nor do they indicate absolute quantities. They are merely numerical labels. Based on this scale, the researcher has the following table:

**Table 3.2 Rating scale for significance level of factors on project performance**

| Significance Level | Extremely significant | Very significant | Moderately significant | Slightly significant | Not significant |
|---|---|---|---|---|---|
| Scale | 5 | 4 | 3 | 2 | 1 |

### 3.1.2 Data Collection Procedure

There are two types of data, primary and secondary data type. Primary data was collected using different methods such as direct observations, interviews, and questionnaires. Secondary data was collected from journals, existing reports, and statistics by donor-funded project. However, in the study the researcher is chooses the primary data collection mainly the survey method that is found to be the most accurate method in studying a large number of populations.

Prior to actual data collection, pilot test was done with research instruments to test the clarity of the questions for face validity. This is done by giving 10 respondents the questionnaire. The unclear questions are corrected. Questionnaires are then have administered or dropped and then picked latter after four to five days.

## 3.6 Validity and Reliability of the Instruments

Reliability refers to how consistent the instrument is as far as its measurement of the variables is Concerned (Taylor, Bogdan and De-Vault, 2015). The researcher employs the test-retest reliability test, where the consistency of the questionnaire has evaluated Cronbach alpha (Using SPSS version 20.0). It is used to test internal consistency that reveals whether the content of the questions is reliable.

## 3.7 Ethical Considerations

It is important to note that the code of ethics is approached via three main themes namely ethical treatment of research participants, competence and honesty. These themes form the basis upon which the researcher conducts the research. This includes respect for persons as well as their beneficence, i.e. the process of ensuring that the well–being of participants and justice which is equity ensured by a professional researcher.

# Chapter Four

# 4 Data Analysis and Interpretation

## 4.1 Introduction

This chapter deals with the analysis and interpretation of data gathered from the Factors Affecting Procurement Performance in selected government hospital renovation the case of family planning by choice project. The data obtained through questionnaires and documents are analyzed and interpreted. Accordingly, the basic questions rose in chapter one were appropriately treated.

## 4.2 Data Analysis

The questionnaire was measured respondent's agreement of in total **24** items were selected to capture. This measurement is consistent the researcher used a rating scale from (5) extremely significant to (1) Not significant.

Questionnaires were distributed to those procurement employees, engineers, engaged project owner employees from Family planning by choice, client from selected government hospital & contractors of the project. A total of 111 (one hundred eleven) questionnaires were distributed to eligible respondents of those **109 (98%)** were returned and usable for further analysis. Based on the responses obtained from these sample respondents and data collected from documents, the analysis and interpretation were made following each table.

### 4.1.1 General Profiles of Respondents

In this section, data related to respondents such as Gender, Age, Educational back ground & organization represent is presented.

**Table 4.1 Demographic Profiles of Respondents**

| Items | Frequency | Percent |
|---|---|---|
| **Gender** | | |
| 1. Male | 94 | 86.24% |
| 2. Female | 15 | 13.76% |
| **Total** | 109 | 100 |
| **Age** | | |
| 1. 18-25 | 24 | 22% |
| 2. 26-30 | 31 | 28.4% |
| 3. 31-45 | 30 | 27.5% |
| 4. Above 45 | 24 | 22% |
| **Total** | 109 | 100 |
| **Educational Background** | | |
| 1. High school graduate | 8 | 7.4% |
| 2. Diploma | 27 | 24.77% |
| 3. Degree | 31 | 28.44% |
| 4. Masters & above | 43 | 39.45% |
| **Total** | 109 | 100 |
| **Organization Represent** | | |
| Owner of project | 42 | 38.53% |
| Client on government hospital | 56 | 51.38% |
| Contractors | 11 | 10.09% |
| Other specify | 0 | 0 |
| **Total** | 109 | 100 |

**Source:** Compiled from survey data

Among **109** respondents, **94 (86.24%)** were **male**, **15(13.76%)** of respondents have **female**.

From all the respondents **24 (22%)** of the respondents were aged from **18-25**, **31(28.4%)** of the respondents were aged between **26-30. 30 (27.5%)** of the respondents were aged between **31-45 30(27.5%), 24 (22%)** of the respondents were aged above 45.

The great majority of respondent that educational back ground to be, Masters and above **43 (39.45%), 31 (28.44%)** Degree, the rest constitute Diploma & High school graduate **27 (24.77%)** and **8 (7.4%)** respectively educational back ground.

From all the respondents **56 (51.38%)** of the respondents were client on government hospital employee **42 (38.53%)** of the respondents were owner of project employee, **11(10.9%)** of the respondents were contractors and non**e** of the respondents were from other work specified.

**Table 4.2 project characteristics**

| **Item Description** | **Level of Respondents opinion** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **(5) Extremely Significant(** | | **(4) Very significant** | | **(3) Moderately significant** | | **(2) Slightly significant** | | **(1) Not significant** | |
| **Project Characteristics** | Fre. | Per. | Fre. | Per. | Fre. | Per. | Fre. | Per. | Fre. | Per. |
| 1.Type of project ( Renovation of government hospital by family planning by choice) | 34 | 31.2 | 65 | 59.6 | 4 | 3.7 | 1 | 9 | 5 | 4.6 |
| 2.Building training center for family planning by choice | 31 | 28.4 | 58 | 53.2 | 15 | 13.8 | 1 | 9 | 4 | 3.7 |
| 3.Size of the project | 28 | 25.7 | 63 | 57.8 | 17 | 15.6 | 1 | 9 | 0 | 0 |
| 4.Shorten completion period given for the contract | 28 | 25.5 | 76 | 69.7 | 4 | 3.7 | 1 | 9 | 0 | 0 |

**Source:** Compiled from survey data

In the above table project characteristics shows that out of the **109** respondents, the family planning by choice renovation project is 65 **(59.6%) & 34 (31.2%)** were very significance & extremely significance. Building training center for family planning by choice shows that **58 (53.2%) & 31 (28.4%)** respondents were very significance & extremely significance. Size of the project shows that **63 (57.8%) & 28(25.7%)** respondents were very significance & extremely

significance. The project completion period for the contract shows that **76 (69.7%)** & **28 (25.6%)** respondents were Very significance & extremely significance respectively. The great majorly of respondents were very significance & extremely significance in the project characteristics description.

**Table 4.3 project procurement procedure with engineer estimation**

| **Item Description** | **Level of respondents opinion** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **(5) Extremely Significant(** | | **(4) Very significant** | | **(3) Moderately significant** | | **(2) Slightly significant** | | **(1) Not significant** | |
| **Project procurement procedure (with engineer estimation)** | Fre. | Per. | Fre. | Per. | Fre. | Per. | Fre. | Per. | Fre. | Per. |
| Tendering method. | 9 | 8.3 | 56 | 51.4 | 19 | 17.4 | 17 | 15.6 | 8 | 7.3 |
| Competitive lowest bidding | 4 | 3.7 | 65 | 59.6 | 15 | 13.8 | 17 | 15.6 | 8 | 7.3 |
| Variation order | 4 | 3.7 | 61 | 56.0 | 22 | 20.2 | 18 | 16.5 | 4 | 3.7 |

**Source:** Compiled from survey data

According to the above table project procurement procedure (with engineer estimation shows that out of the **109** respondents, there will be tendering method **56 (51.4%)** respondents were very significant, **17 (15.6%) & 8 (7.3%)** were slightly significant & not significant respectively, **19(17.4%) & 9(8.3%)** of respondents moderately significant & extremely significant respectively. This item shows that Tendering method is significant for the project of family planning by choice.

Competitive lowest bidding shows that 65 (59.6%) respondents were very significant. **17 (15.6%) & 8 (7.3%)** were slightly significant & not significant respectively, **15(13.8%) & 4(3.7%)** of respondents moderately significant & extremely significant respectively. This item shows that competitive lowest bidding is very significant.

Variation order **61 (56%)** respondents were very significant. **18 (16.5%) & 4 (3.7%)** were Disagree & strongly disagree respectively, **22(20.2%) & 4(3.7%)** of respondents slightly significant & extremely significant respectively. The great majorly of respondents were very significant in the Project procurement procedure (with engineer estimation)

**Table 4.4 Project owner related factors**

| **Item Description** | **Level of Respondents opinion** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | (5) Extremely Significant ( | | (4) Very significant | | (3) Moderately significant | | (2) Slightly significant | | (1) Not significant | |
| **Project owner related factor** | **Fre.** | **Per.** | **Fre.** | **Per.** | **Fre.** | **Per.** | **Fre.** | **Per.** | **Fre.** | **Per.** |
| 8.Project team leaders working relationship with other | 16 | 14.7 | 41 | 37.6 | 47 | 43.1 | 5 | 4.6 | 0 | 0 |
| 9.Motivating skill of the project staffs | 50 | 45.9 | 38 | 34.9 | 16 | 14.7 | 5 | 4.6 | 0 | 0 |
| 10.Project team leaders experience | 16 | 14.7 | 65 | 59.6 | 23 | 21.1 | 5 | 4.6 | 0 | 0 |
| 11.Control of contractors works | 13 | 11.9 | 69 | 63.3 | 22 | 20.2 | 5 | 4.6 | 0 | 0 |
| 12.Planning effort | 24 | 22.0 | 58 | 53.2 | 22 | 20.2 | 5 | 4.6 | 0 | 0 |
| 13.Budget progress monitoring | 24 | 22.0 | 49 | 45.0 | 31 | 28.4 | 5 | 4.6 | 0 | 0 |
| 14.Technical skill of the project staffs | 17 | 15.6 | 56 | 51.4 | 27 | 24.8 | 5 | 4.6 | 4 | 3.7 |
| 15.Project leaders early and continuous involvement in the project | 21 | 19.3 | 66 | 60.6 | 10 | 9.2 | 12 | 11.0 | 0 | 0 |

**Source:** Compiled from survey data

In the above table project owner related factors shows that out of the **109** respondents, Project team leaders working relationship with other, it will do so **41 (37.6%) &16 (14.7%)** were very significant & extremely significant respectively, **47(43.1%)** respondents were moderately significant. None of respondents answered is not significant at all. Motivating skill of the project

staffs will that 50(45.9%) & **38 (34.9%)** respondents were extremely significant & Very significant respectively.

Project team leaders experience shows that **65 (59.6%) & 16(14.7%)** respondents were very significant & extremely significant, **23 (21.1%)** respondents were moderately significant. Control of contractors works shows that **69 (63.3%)** & **13 (11.9%)** respondents were very significant & extremely significant respectively. **22(20.2%)** respondents were moderately significant. **5 (4.6%)** of respondents were slightly significant & none of respondents were selected not significant to the item. Project planning effort Shows that **58 (53.2%) & 24(22%)** respondents were Very significant & extremely significant, **22 (20.2%)** respondents were moderately significant. **5 (4.6%)** of respondents were slightly significant & none of respondents were selected not significant to the item. Budget progress monitoring shows that **49 (45%) & 24(22%)** respondents were very significant & extremely significant, 31 (28.4%) respondents were moderately significant. **5 (4.6%)** of respondents were slightly significant & none of respondents were selected non-significant to the item. Technical skill of the project staffs shows that **56 (51.4%)** & **17(15.6%)** respondents were very significance & extremely significant, **27 (24.8%)** respondents were moderately significant. 5 (4.6%) of respondents were slightly significance & **4 (3.7%)** of respondents were non-significant to the item. Project leaders early and continuous involvement in the project shows that **66 (60.6%) & 21(19.3%)** respondents were very significant & extremely significant, **10 (9.2%)** respondents were moderately significant. **12 (11%)** of respondents were slightly significant & none of respondents were selected non-significant to the item. The great majorly of respondents were very significant & extremely significant selected in the Project owner related factor.

**Table 4.5 Contractor related factors**

| Item Description | Level of Respondents opinion | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | (5) Extremely Significant( | | (4) Very significant | | (3) Moderately significant | | (2) Slightly significant | | (1) Not significant | |
| **Contractor related factors** | Fre. | Per. | Fre. | Per. | Fre. | Per. | Fre. | Per. | Fre. | Per. |
| 16.commitment to meet cost, time limitation and quality | 9 | 8.3 | 19 | 17.4 | 56 | 51.4 | 17 | 15.6 | 8 | 7.3 |
| 17.Implementing an effective safety, quality assurance and environmental program | 4 | 3.7 | 15 | 13.8 | 65 | 59.6 | 17 | 15.6 | 8 | 7.3 |

**Source:** Compiled from survey data

According to the above table, Contractor related factors shows that out of the **109** respondents, there will be commitment to meet cost, time limitation and quality **56 (51.4%)** respondents were moderately significant. **17 (15.6%) & 8 (7.3%)** were slightly significant & not significant respectively, **19(17.4%) & 9(8.3%)** of respondents very significant & extremely significant respectively. This item shows that contractor related factors were not observable. Implementing an effective safety, quality assurance and environmental program shows that 65 (59.6%) respondents were moderately significant. **17 (15.6%) & 8 (7.3%)** were slightly significance & not significance respectively, **15(13.8%) & 4(3.7%)** of respondents very significance & extremely significance respectively. The great majorly of respondents were moderately significant in the Contractor related factors.

**Table 4.6 Client related factor (government hospital renovation)**

| Item Description | Level of Respondents opinion | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | (5) Extremely Significant( | | (4) Very significant | | (3) Moderately significant | | (2) Slightly significant | | (1) Not significant | |
| **Client Related factors (government hospital)** | Fre. | Per. | Fre. | Per. | Fre. | Per. | Fre. | Per. | Fre. | Per. |
| 18.Size of client organization (renovation size) | 4 | 3.7 | 45 | 41.3 | 42 | 38.5 | 18 | 16.5 | 0 | 0 |
| 19.Clients emphasize on low construction cost | 8 | 7.3 | 46 | 42.2 | 49 | 45 | 6 | 5.5 | 0 | 0 |
| 20.Clients emphasize on quick construction instead of quality | 8 | 7.3 | 54 | 49.5 | 41 | 37.6 | 6 | 5.5 | 0 | 0 |
| 21.Client ability to make project construction decisions. | 8 | 7.3 | 62 | 56.9 | 29 | 26.6 | 10 | 9.2 | 0 | 0 |
| 22.Client interfere during construction | 12 | 11 | 69 | 63.3 | 22 | 20.2 | 6 | 5.5 | 0 | 0 |
| 23.Delay of progress payment to contractors | 7 | 6.4 | 8 | 7.3 | 17 | 15.6 | 77 | 70.6 | 0 | 0 |

**Source:** Compiled from survey data

As can be shown the above Client Related factors (government hospital) table that out of the **109** respondents, Size of client organization (renovation size) **42 (38.5%)** respondents were moderately significant. **45 (41.3%) & 4 (3.7%)** were very significant & extremely significant respectively, 18 **(16.5%)** & of respondents slightly significant. And none of respondents were not significant. Clients emphasize on low construction cost are shows that **49 (45%)** respondents were moderately significant. **46(42.2%) & 8 (7.3%)** were very significant & extremely significant respectively, **6 (5.5%)** & of respondents slightly significant & none of respondents were not significant. Clients emphasize on quick construction instead of quality **41 (37.6%)** respondents were moderately significant. 54 (49.5%) & 8 (7.3%) were very significant

& extremely significant respectively, **6 (5.5%)** & of respondents slightly significant & none of respondents were selected not significant. Client ability to make project construction decisions. **62 (56.9%)** & 8 (7.3%) were very significant & extremely significant respectively, **29 (26.6%)** respondents were moderately significant. 10 (9.2%) & of respondents slightly significant & none of respondents were selected not significant.

Delay of progress payment to contractors **77 (70.6%)** of respondents were slightly significant, **7 (6.4%)** of respondents were extremely significant, whereas **8 (7.3%)** of respondent were very significant & none of respondents were strongly disagree. Others remaining **17 (15.6%)** of respondents were moderately significant. The results show that there were observed delay of progress payment to contractors slightly significant.

**Table 4.7 over all procurement performance**

| **Item Description** | **Level of satisfaction** | | | | | |
|---|---|---|---|---|---|---|
| | **Satisfied** | | **Not satisfied** | | **Neutral** | |
| | **Fre.** | **Per.** | **Fre.** | **Per.** | **Fre.** | **Per.** |
| 24. Over all, how satisfied you with the procurement performance of the project given by family planning by choice renovation work? | 78 | 71.6 | 23 | 21.1 | 8 | 7.3 |

**Source:** Compiled from survey data

The overall satisfaction with the procurement performance of the project given by family planning by choice renovation work, the great majority **78 (71.6%)** were satisfied, **23 (21.1%)** were not satisfied & 8 **(7.3%)** were neutral. In other words, the family planning by choice renovation project work in government hospital was capable in fulfilling the client satisfaction in overall performance.

## 4.3 Factor Analysis

One of the research questions aimed to determine the major factors underlining the Procurement performance. To answer this question the Scale was factor analyzed by principal component analysis.

4.3.1 Correlation Analysis

Correlation analysis helps to define the direction of the relationship between various variables (between -1 and +1) and also helps to gain insight into the strength of their relationship. Table 4.8 illustrates the correlation between various variables under the study. The dependent variables are maintaining a degree of association. Therefore, the correlations between the variable were computed using Pearson coefficient.

**Table 4.8 Correlation Matrix**

| | Project characteristics | Engineers estimation | Owner related factors | Contractor related factor | Client relator factor | Over all Procurement performance |
|---|---|---|---|---|---|---|
| Project characteristics Pearson correlation | 1.000 | | | | | |
| Engineers estimation Pearson correlation | .138 | 1.000 | | | | |
| Owner related factors Pearson correlation | .368 | .292 | 1.000 | | | |
| Contractor related factor Pearson correlation | .298 | .077 | .005** | 1.000 | | |
| Client relator factor Pearson correlation | .184 | -.031 | .000** | .278 | 1.000 | |
| Over all Procurement performance Pearson correlation | .131 | -.049 | .000** | -.127 | -.218 | 1.000 |

**Correlation coefficient is normally reported as a decimal number somewhere between +1.00 and -1.00

**Source:** Compiled from survey data

The Pearson's correlation for the above data is shown in... Notice that at the entry in the matrix of correlations were the magnitude of relationship between the variable ranges from -.031which is markedly low positive correlation (between Project characteristics and engineers estimation) 0.368 which is low positive (between Project characteristics and Owner related factors). Similarly the magnitude of relationship ranges .292 Very low positive correlation (between Engineers estimation and Owner related factors) .298 very low positive correlation (between contractor related factor and Project characteristics) it shows positive sign that with increase one variable, the other increases as well. .

The extent of relationship between the variable ranges from 0.138 which is very low negative correlation (between engineers estimation and Client related factor) -0.049 which is markedly low negative (between engineer estimation and procurement performance). Similarly the magnitude of relationship ranges -.127 Very low negative correlation (between contractor related factor and procurement performance) it shows negative correlation indicates that with an increase one variable, the other decreases as well.

The magnitude of relationship between the variable ranges from 0.000 which is zero correlation (between Owner related factor and Client related factor) & (between Owner related factor and procurement performance) it indicates no relationship between the two variable and the value on one of the variable provides no assistance in predicting the value on the second variable.

### 4.3.2 Regression Analysis

Regression was asymmetrical relationships among variables, which was cause and effect relationships. In this section the multiple linear regression model in table below. The analysis done with SPSS 20.0 statistical package. The collected information was analyze, summarize, interpreted and presented.

**Table 4.9 Regression Descriptive statics**

**Descriptive Statistics**

| | Mean | Std. Deviation | N |
|---|---|---|---|
| Over all procurement performance of the project | 1.3578 | .61649 | 109 |
| Project characteristics | 4.1055 | .61548 | 109 |
| Engineer estimation | 3.3792 | .65021 | 109 |
| Owner related factors | 3.8589 | .43271 | 109 |
| Contractor related factor | 2.9725 | .70328 | 109 |
| Client related factor | 3.3899 | .43816 | 109 |

The table below displayed the outputs of the multiple linear regressions. The sum squares due regression, the residual sum square, the total sum squares and their corresponding degree of freedom were clearly display. This table also displayed the mean square of regression and the residual as well as the computed F-value.

**Table 4.10 Model summary**

Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | Durbin-Watson |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square Change | F Change | df 1 | df2 | Sig. F Change | |
| 1 | .471a | 0.222 | 0.184 | 0.55686 | 0.222 | 5.873 | 5 | 103 | 0 | 1.901 |

a Predictors: (Constant), client related factors, engineer estimation, project characteristics, contractor related factor, project owner related factor

b Dependent Variable: Over of procurement performance of the project

**Table 4.11 Regression ANOVA**

**ANOVA[a]**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 9.106 | 5 | 1.821 | 5.873 | .000[b] |
| | Residual | 31.940 | 103 | .310 | | |
| | Total | 41.046 | 108 | | | |

a. Dependent Variable: Over all procurement performance of the project

b. Predictors: (Constant), client related factor, engineer estimation, project characteristics, contractor related factor, and Owner related factors.

The outputs in table above were the results of the multiple linear regression analysis with SPSS 20.0 statistical package. The sum of squares of regression (9.106) was the variations created on the procurement performance due to the independent variables or due to the predictor variables or total variations explained jointly by the independent variables. When the ratio of sum square of regression (9.106) to the total sum of squares (41.046) was take the result.

The sum of squares of the residual (31.940) was the variation created in procurement performance due the random error. The ratio of sum of squares of the residual (31.940) to total sum square (41.046) was equal to the (e) value given above.

The sum squares of total (41.046) were the total variations created in procurement performance jointly by the random errors and by the independent variables or was the sum of explained and unexplained variations. 5, 103, and 108 were degree of freedom (DF) for the regression, residual and total respectively, which were the number of values that can vary in any calculation of the statistics for variables.

The mean square of the regression (1.821) was the variation in the regression (9.106) divided by its corresponding degree of freedom (5). The mean square of the regression (1.821) thus was the explained variation per its degree of freedom. In the same way, the mean square of the residual (0.310) was the variation in the residual (31.940) that was the unexplained variation per its degree of freedom.

The F-value (5.873) in table was the ratio of explained variation to unexplained variation after they were divided by their corresponding degree of freedom. This implied that, dependent variable jointly predicted or significantly explained the independent variable.

**Table 4.12 Regression Coefficients**

Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.848 | .596 | | 4.780 | .000 |
| | Project characteristics | .327 | .096 | .326 | 3.397 | .001 |
| | Engineer estimation | .036 | .088 | .037 | .405 | .686 |
| | Owner related factors | -.617 | .152 | -.433 | -4.050 | .000 |
| | Contractor related factor | -.081 | .083 | -.093 | -.987 | .326 |
| | Client related factor | -.096 | .140 | -.069 | -.690 | .492 |

a. Dependent Variable: Over of procurement performance of the project

The standardized coefficient of assurance (0.326) with the standard error (0.096) indicated that a unit amount of change on project characteristics carried a change of 0.326 on procurement performance when engineer estimation, owner related factors, contractor related factor and client related factor held constant. As project characteristics (as independent variable) increased by a unit amount, procurement performance increased by 0.326. As project characteristics decreased by a unit procurement performance decreased by 0.326. The standard error (0.096) of project characteristics indicated the amount of change in the standardized coefficients of project characteristics (0.326) from sample to sample. The T-test value (3.397) for project characteristics was significant at 0.001 significant levels. Because the computed T-value was greater than the tabulated T-value at 1% level of significant. Thus, the project characteristics was significantly influence or predicted the procurement performance with the standard error of 0.096.

# Chapter Five
# 5 Summary, Conclusions and Recommendation

Based on the analysis carried out and the findings reported, this chapter of the study tries to summarize the findings and discussions in the conclusion. Then, the recommendation makes out potential therapy to increase Procurement Performance in selected government hospital renovation the case of family planning by choice project. In such a way that whom, how and what should be done would be clearly articulated as well.

## 5.1 Summary of Finding

The research on measuring Procurement Performance in selected government hospital renovation the case of family planning by choice project has focused primarily on how to meet the Procurement Performance in selected government hospital renovation the case of family planning by choice project. The findings have been broken down into the seven opinion of project owner, client of government hospital, contractors. The percentage scores were also computed to describe the level of respondents' opinions.

- Among **109** respondents, the great majority were male **94(86.24%)** & **15(13.76%)** respondents were female.
- From all the respondents **24(22%)** were aged between**18-25**, **31(28.4%)** of the respondents were aged between**26-30, 30 (27.5%)** of the respondents were aged between**31 - 45, 24 (22%)** of the respondents were aged above **45**. So, from all the respondents the majority are aged from **26-30**.
- The great majority of respondent that educational back ground to be Masters & above **43 (39.45%),** the rest constitutes **27 (24.8%)** Diploma, Degree 31 **(28.44%)** and **8(7.4%)** respectively.
- From **109** respondents **56(51.38%)** were client on government hospital **42(38.53%)** were project owner staff, **11(10.09%)** were contractors of the renovation project.
- The great majority of respondents **65 (59.6%)** were very significant type of project (Renovation of government hospital by family planning by choice, **58(53.2%)** were very significant building training center for family planning by choice, 63**(57.8%)** were very

significant that size of project and **76 (69.7%)** were very significant that project completion period for contract is short.

- Most of the respondents **65(59.6%)** on project procurement procedure with engineer estimation is competitive lowest bidding, Variation order **61(56%)** and **56 (51.4%)** on tendering method were very significant.
- Project team leaders working relationship with other, it will do so **41 (37.6%) &16 (14.7%)** were very significant & extremely significant respectively, **47(43.1%)** respondents were moderately significant. None of respondents answered is not significant at all.
- Motivating skill of the project staffs will that 50(45.9%) & **38 (34.9%)** respondents were extremely significant & Very significant respectively.
- Project team leaders experience **65 (59.6%) & 16(14.7%)** respondents were very significant & extremely significant, **23 (21.1%)** respondents were moderately significant.
- Control of contractors works **69 (63.3%)** & **13 (11.9%)** respondents were very significant & extremely significant respectively. **22(20.2%)** respondents were moderately significant.
- Project planning effort **58 (53.2%) & 24(22%)** respondents were Very significant & extremely significant
- Budget progress monitoring **49(45%) & 24(22%)** respondents were very significant & extremely significant.
- Technical skill of the project staffs **56 (51.4%)** & **17(15.6%)** respondents were very significance & extremely significant.
- Project leaders early and continuous involvement in the project **66 (60.6%) & 21(19.3%)** respondents were very significant & extremely significant. The great majorly of respondents were very significant & extremely significant selected in the Project owner related factor.
- Contractor related factors, commitment to meet cost, time limitation and quality **56 (51.4%)** respondents were moderately significant. **17 (15.6%) & 8 (7.3%)** were slightly significant & not significant respectively, implementing an effective safety, quality assurance and environmental program 65 (59.6%) respondents were moderately significant. **17 (15.6%) & 8 (7.3%)** were slightly significance & not significance

respectively. The great majorly of respondents were moderately significant in the Contractor related factors.

- Client Related factors (government hospital), Size of client organization (renovation size) **42 (38.5%)** respondents were moderately significant. **45 (41.3%) & 4 (3.7%)** were very significant & extremely significant respectively.
- Clients emphasize on low construction cost **49 (45%)** respondents were moderately significant. **46(42.2%) & 8 (7.3%)** were very significant & extremely significant respectively
- Clients emphasize on quick construction instead of quality **41 (37.6%)** respondents were moderately significant. **54 (49.5%) & 8 (7.3%)** were very significant & extremely significant respectively.
- Client ability to make project construction decisions. **62 (56.9%) & 8 (7.3%)** were very significant & extremely significant respectively, **29 (26.6%)** respondents were moderately significant.
- Delay of progress payment to contractors **77 (70.6%)** of respondents were slightly significant, **7 (6.4%)** of respondents were extremely significant.
- The overall satisfaction with the procurement performance of the project given by family planning by choice renovation work, the great majority **78 (71.6%)** were satisfied, **23 (21.1%)** were not satisfied & **8 (7.3%)** were neutral.

## 5.2. Conclusions

Based on results of this study finding, the researcher can conclude that: -

- The great majority on Procurement Performance in selected government hospital renovation in the case of family planning by choice project participant were male, young staff, their educational background masters & above.
- The first finding conclude that the project characteristics that type of project Renovation of government hospital by family planning by choice, building training center for family planning by choice, size of project and project completion period for contract is short, great majority of respondent were very significant.

- As the results of the study, shows that most of the respondents on project procurement procedure with engineer estimation, competitive lowest bidding, Variation order and on tendering method were very significant.
- As we observed from the results that the project related factor project team leaders working relationship with other, motivating skill of the project staffs, project team leaders experience respondents, control of contractors works, project planning effort, budget progress monitoring, technical skill of the project staffs, project leaders early and continuous involvement in the project were very significant & extremely significant. The great majorly of respondents were very significant & extremely significant selected in the project owner related factor.
- As the results of the study shows that Contractor related factors, commitment to meet cost, time limitation and quality, implementing an effective safety, quality assurance and environmental program were moderately significant. The great majorly of respondents were moderately significant in the Contractor related factors.
- As the results of the study shows that Client Related factors (government hospital), Size of client organization (renovation size), Clients emphasize on low construction cost, Clients emphasize on quick construction instead of quality, Client ability to make project construction decisions respondents were moderately significant & very significant.
- Delay of progress payment to contractors were slightly significant.
- The overall satisfaction with the procurement performance of the project given by family planning by choice renovation work, the great majority were satisfied.
- In other words, the family planning by choice renovation project work in government hospital were capable in fulfilling the client satisfaction in overall performance.

## 5.3 Recommendation

Based on the research findings, the following recommendations are made: -

- Procurement Performance in selected government hospital renovation in the case of family planning by choice project female participants should increase in order to empower women.
- Project procurement procedure with engineer estimation, competitive lowest bidding, and variation order and on tendering method very significant. Need based assessment and verification on the assessment shall be strengthen in order to avoid variation works.

- Competitive bidding procurement procedure has failed in some of the selected government hospitals renovation project, so lowest bidder must not necessarily win the bid. Therefore, employers should strictly review the cost offering of the bidders.
- Project owner related factor that Project team leaders working relationship with other, Motivating skill of the project staffs, Project team leaders experience respondents, Control of contractors works, Project planning effort, Budget progress monitoring, Technical skill of the project staffs, Project leaders early and continuous involvement in the project were Very significant & extremely significant. Family planning by choice renovation project was result-based project. Strict project planning, monitoring and evaluation work has been done. Thus this method of project implementation shall continue.
- Contractor related factors, commitment to meet cost; time limitation and quality, implementing an effective safety, quality assurance and environmental program were moderately significant. The great majorly of respondents were moderately significant in the Contractor related factors. Thus, clients should supervise renovation project timely based on work schedule, budget, and the standard quality.
- Client Related factors (government hospital), Size of client organization (renovation size), Clients emphasize on low construction cost, Clients emphasize on quick construction instead of quality, Client ability to make project construction decisions respondents were moderately significant & very significant. Thus Low budget and good quality renovation work shall continue. Client should give priority to construction quality and give time for the construction in order to maintain good quality and long lasting structure.
- Delay of progress payment to contractors must be improved.
- The overall satisfaction with the procurement performance of the project given by family planning by choice renovation work, the great majority were satisfied. Therefore this kind of project shall continue, it has addressed the gap on maternal and child health units at government hospital. It gave good working environment to medical staff and safe medical area to mothers.
- In other words, the family planning by choice renovation project work in government hospital were capable in fulfilling the client satisfaction in overall performance.

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# APPENDIX

**Addis Ababa University School of Commerce Graduate studies**

**Project Management Distance Program**

**Dear Respondents,**

The purpose of this questionnaire is to gather information to conduct a research on factors affecting procurement performance in selected government hospital renovation project in the case of family planning by choice. This information will be used solely for academic purpose for the fulfillment of MBA degree. All information you will provide to my study will kept strictly confidential. However, the findings of the research may use to improve the procurement performance for renovation project.

**Thank you very much for active cooperation!**

**Section I: General Information**

**Background of the respondent**

**Please put an (X) mark of your choice against each question.**

**Gender:** Male☐ Female☐

**Age:** 18-25☐ 26-30☐ 31-45 ☐ above 45☐

**Educational Background:** High school graduate ☐ Diploma ☐ Degree ☐ Masters and above ☐

**Which organization do you represent?**

Owner of project ☐ Client on government hospital ☐ Contractor ☐ other specify --

**Section II factors affecting procurement performance in selected government hospital renovation in the case of family planning by choice project.**

Below are numbers of factors affecting the procurement performance of renovation projects in the case of selected government hospital by family planning by choice. From your experience, please express your opinion on the importance of the following factors as key performance indicators of renovation projects. (Please tick (□) the appropriate box).

| **Item Description** | *Extremely Significant (5)* | *Very Significant (4)* | *Moderately Significant (3)* | *Slightly Significant (2)* | *Not Significant (1)* |
|---|---|---|---|---|---|
| **Project Characteristics** | | | | | |
| Type of project ( Renovation of government hospital by family planning by choice) | | | | | |
| Building training center for family planning by choice | | | | | |
| Size of the project | | | | | |
| Shorten completion period given for the contract | | | | | |
| **Project procurement procedure (with engineer estimation)** | | | | | |
| Tendering method. | | | | | |
| Competitive lowest bidding | | | | | |
| Variation order | | | | | |
| **Project owner related factor** | | | | | |
| Project team leaders working relationship with other | | | | | |
| Motivating skill of the project staffs | | | | | |
| Project team leaders experience | | | | | |
| Control of contractors works | | | | | |
| Planning effort | | | | | |
| Budget progress monitoring | | | | | |
| Technical skill of the project staffs | | | | | |
| Project leaders early and continuous involvement in the project | | | | | |
| **Contractor related factors** | | | | | |
| commitment to meet cost, time limitation and quality | | | | | |
| Implementing an effective safety, quality assurance and environmental program | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Client Related factors (government hospital)** | | | | | |
| Size of client organization (renovation size) | | | | | |
| Clients emphasize on low construction cost | | | | | |
| Clients emphasize on quick construction instead of quality | | | | | |
| Client ability to make project construction decisions. | | | | | |
| Client interfere during construction | | | | | |
| Delay of progress payment to contractors | | | | | |

| **Factor Description** | Satisfied | Not satisfied | Neutral |
|---|---|---|---|
| 24. Over all, how satisfied you with the procurement performance of the project given by family planning by choice renovation work**?** | | | |

If you have further comment on overall performance of the project, please specify on the space provide----------
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**Thank you**