

AN ANALYSIS OF PROJECT MANAGEMENT PRACTICES IN GHANA
(A CASE STUDY OF ZOOMLION GHANA LIMITED)

By

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DECLARATION

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma at the Kwame University of Science and Technology, Kumasi or any other educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

Projects are one of the highly risk-prone industry that most countries face in both developed and developing countries and also developmental projects have become a significant contributor to the national economy. There have been countless records of abandoned projects primarily due to the level of project failures associated with the industry. The increasing resources have resulted in organizations putting in place project management methods and practices in order to take full advantage of sections of profitable projects. The study aimed to investigate the practice of project management at Zoomlion Ghana Limited as a case study. The study was based on a descriptive survey design and adopted both quantitative and qualitative approach in addressing the issues. Fifty (50) employees from the companies' head office Accra were sampled using a purposive (judgmental) sampling technique to select respondents. Data was collected using close ended questionnaire based on a five Likert scale point to ascertain answers from respondents. The results then was presented in tables, graphs and charts. The research demonstrates that each project's project management procedures must be conducted in all five stages or phases before execution. It was noted from the findings that the decrease in project income and the rise in project delivery costs have greatly affected the impact on efficiency in project implementation processes. The outcome confirms that the practice of rigid organizational structure within the organization and the inapplicable use of management software hinders the successes of project implementation at Zoomlion Ghana Limited. It was highly recommended that more training programmes on PM practices should be organized as well as employing more experienced and qualified personnel to handle project to avoid cost, time over run and project delays. Also, the project management processes should be documented and taught at all levels.

Keywords: projects, project management, project management practices, management practices

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LIST OF ABBREVIATIONS

ASCE	American Society of Civil Engineers
CEO	Chief Executive Officer
GDP	Gross Domestic Product
IS	information System
IT	information Technology
KPI	Key Performance Indicators
LGO	Local Government Organizations
NCTP	Novelty, Complexity, Technology and Pace
PM	Project Management
PMI	Project Management Institute
PMCM	Project Management Capability Model
PMBOK	Project Management Body of Knowledge
SME	Small and Medium Size Enterprise
WBS	World Breakdown Structure

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The long-term existence of every corporate business in a nation is to some extent dependent on the activities of management to put in place corporate policies and strategies to suit the changing trend of business projects (Navarre & Schaan, 1999). The harmonization is required by management to work towards the changing business environment. The ever-increasing of resources have resulted in organizations putting in place project management methods and practices in order to take full advantage of sections of profitable projects (Smith, 2002).

Every organization requires some amount of key business drivers that serve as a basic business tool in the area of project management practices. These business drivers control the level of attractiveness and success (Boulder, 2000).

According to Tharnhain (1994), in most developed countries, modern project management practices has completely achieved success because these organizations work together with the personnel from the functional lines, business units and geographical areas. Currently, a lot of business organizations do not depend on a single project, but numerous similar practices that must be put together to achieve organizations' objectives.

According to Arnaboldi et al (2004), the implementation of project management practice in organisation was acknowledged as a well-organized technique that would assist advance management skills and also enable organisations in different industries to finish projects effectively and achieve development goals. Project management practices are also considered as basic tools with which the various organizations adopt in improving business techniques and

approaches such as business improvement, Lean Management and total quality management which increases projects efficiency and competitiveness in a country.

A lot of studies have shown that a lot of organizations are implementing project management practices, taking this unique approach to its origin where formerly it wasn't considered as part of the project area. There is no doubt that the project management environment cannot operate in isolation without considering other multiple projects. Consequently, most of the project choices encountered will involve the project milestone, resources and costs engaged in other projects, compelling various project information assessment and assessment (Smith, 2002).

A lot of projects that have been undertaken have not been able to meet deadline or completion date due to organizations non-involvement of project management practices. The project management institute (2000) reiterates that a good project management practices aid business organization to meet client's desires by regulating laid down duties and minimizing possible number of tasks or duties that may not be attended to. This is why a practice of project management cannot be left out or prevented as it guarantees that accessible resources are properly managed in an efficient and effective manner.

Project management across the globe is mostly practiced by public organizations as compared to their counter part from the private organizations (Weinstein & Jackques, 2010). A lot of studies conducted has confirmed this finding. According to the management and Organization unit (MOU) of committing support framework (2000), Organizations have failed to accomplish their timeline projects as well as failing to implement their current project management practices.

These failures can be attributed to the avoidance of project management to answer project management capability model (PMCM) in their project implementation. Elliot (2008) described

PMCM as a description of the procedures that an organisation implements to ensure and upgrade its project management capacities. A lot of organization looks for newer and advance ways of achieving a competitive edge over its rival organizations. Achieving this goal requires a lot of examination on improving organizations performance across all the functional areas (Ollows, 2012).

Currently, a lot of both public and private organizations manage projects within a progressively more complex environment. This can be seen in the areas of outsourcing, new product development, and policy implementation as well as management of current policy initiatives which involves system development and implementation which must be managed properly.

As a result of this, to achieve this kind of project in business demands several serious of project management practices which needs to be carried out by project management teams. This must be undertaken by meeting specific project objectives. The ability for organizations to meet their intended goals and objectives is the kind of project management practices that is undertaken. Any organization that fails to successfully execute its project is as a result of its failure to employ effective project management practices during the phase of the project (Karim, 2012).

Looking at the current strategic impact of projects, it is more advisable for organization to switch to following effective management practices that measure advancement of projects can be carried out in alignment with stated time, cost and quality. These three features are the primary tools require in almost every project in the world (Belasssi & Tukul, 1996)

Projects are one of the highly risk-prone industry that most countries faces in both developed and developing countries (Ahmed & Azhar, 2004). In Ghana, a lot of high investment projects are

lying idle as a form of unusual delays in project completion, with cost overruns due to poor project management practices (Ghana News Agency, 2007).

Generally, organizations that undertakes projects are regarded as one of the most expensive industry which involves huge capital and investments for project accomplishments, most indigenous organizations are continually facing variety of situations and challenges which has led to major problem in this sector especially in developing countries. The situations and challenges faced by this industry many are unknown, unexpected, frequently undesirable, and often unpredictable factors (Fong, 1987).

In Ghana, little or no recognition has been considered regarding project management practices most especially in the area of project management tools, methods and techniques employed by the project management by the organization. These practices are not well spelt out and this has resulted into failure of organizations carrying out their duties in relation to their budget, specifications and deadlines related to projects awarded. Also, social, cultural and political structures as well as inadequate financial support are all obstacles towards the positive project planning and implementation (Idoro & Patunola-Ajayi, 2009). In line with these, the study selected Zoomlion Ghana Limited as a case study and attempted to explore the procedures, tools and techniques required in administering the project management practices associated with projects in order to meet time, cost and produce a quality task for client.

1.2 STATEMENT OF THE PROBLEM

The project management Institute (2008) is a body that has been set to put in place laid down rules, regulation and practices that that project management must follow. These practices are universally accepted way of handling projects. It spells out the process of initiation, planning, execution, monitoring and controlling and closing as the paramount techniques to guarantee the successful implementation of projects of all kind. Project management has become of the industry that helps every organization to expand using the available resources. In developed countries, handlers of projects should be certified and professionals and all projects must pass through the five phases above. Even though, this industry is regarded as one of the buoyant and significant contribution to national economy in terms of GDP, socio-economic development and employment generation. Zoomlion Ghana Limited is a public private company that undertakes countless projects with the prime aim of improving waste management as well as environmental sanitation in Ghana and across Africa.

Nevertheless, in Ghana, there have been countless of abandoned projects and projects which are yet to be implemented due to projects awarded to wrong people as a result of favouritism and nepotism. The net effect includes incomplete data, poor definition of project scope and operational requirements. There are numerous complaints about project delays and poor performance of projects by those executing such projects but nothing is done to address these perennial problems (Nkansah, 2012).

In order to ascertain and analyse this problem, the research would look at comprehensive project management practices that can be outlined to mitigate the time constraints that hinders successful completion of projects and problems that are likely to affect on-going projects and future projects.

The study would seek to address whether projects have failed due to inappropriate project management processes or whether avoidance of the entire processes.

1.3 AIM OF THE STUDY

Generally, the research seeks to investigate the project management practices at Zoomlion Ghana Limited in Ghana.

1.4 OBJECTIVES OF THE STUDY

- i. To explore the processes used in the implementation of the projects in Zoomlion Ghana Limited.
- ii. To determine the effects of the implementation of project management practices on performance of projects at Zoomlion Ghana Limited
- iii. To identify the issues that hinders the successful implementation of project management practices.

1.5 RESEARCH QUESTIONS

- i. What are the processes used in the implementation of the projects in Zoomlion Ghana Limited?
- ii. What are the impacts on project results at Zoomlion Ghana Limited of implementing project management procedures?
- iii. What are the problems that hinder the effective execution of the methods of project management?

1.6 MOTIVATION OF THE STUDY

There have been a lot of project in the country which has not been able to undergo all the phases and stages of the project management processes. Most clients and business owners who are end users of projects are interested in quality projects and timely completion of projects. Also, in Ghana a lot of projects have failed due to poor management practices. If these practices are not considered appropriately, it can affect ongoing and future projects. A lot of projects have failed to follow due project management practices and procedures in evaluation of projects. Even though, the PMBOK has outlined the stages and steps which might be factored in the implementation process of projects by project managers, project consultants and other project expertise, they have failed to consider these requirements.

This subject matter has been a great concern to the researcher to look at the best direction required to find out the best management practices to improve projects and produce timely projects in meeting stakeholder's goals and objectives. Another motivation for embarking on this study is to find out why in Ghana good projects are not being able to be implemented successfully as compared to developed countries using Zoomlion Ghana Limited as a case study

1.7 IMPORTANCE OF THE STUDY

The study's primary goal is to analyse the country's project management methods. This study's aim will assist readers and scientists comprehend this subject better and serve as a guide or data for them. This is because details of project management information, project management procedures, and project management procedures will be provided.

The study will be useful to project managers, project experts, consultants and government in making informed decisions. The findings will help the project managers and professional experts in taking better decisions to enhance efficiency and effectiveness in the industry.

Current studies in the facet of project management has become prevalent in the 21st century and in accomplishment of projects. The study is very important to project managers and legislators in both the private and public sector. In most developing countries, where projects of distinct dimensions and structures are embarked on, the incorporation of project management methods in the government and private sector is gradually becoming a major problem. The research aims to reveal that the implementation of project management methods is essential methods for project executives and policy makers in the country's government and private sector to achieve their highest production. Moreover, without adopting project management methods, no government operation can deliver better outcomes.

The research is intended to come out with better guide and effective project management practices that is required by the state in ensuring efficient use and utilization of government resources and subsequently providing better operations to meet the requirements of the citizens. Also, the study project management practices would also help stakeholders to avoid the failure to keep projects within the cost estimate, to achieve the required completion date and as well achieve the required quality and operational requirements.

Finally, the study will be useful to academicians and researchers who might be interested in pursuing research in the same area of studies. This will serve as a reference for them.

1.8 METHODOLOGY

The research study adopted the survey technique and this involves descriptive models to describe each of the many factors needed for the research. This descriptive research used was an action-based involving the use of structured questionnaires to solicit primary information from project management practices in Ghana and opinions from project professionals in this area from Zoomlion Ghana Limited, Accra. The scope of this research was limited to the Head office of Zoomlion Ghana Limited in Accra as a result of quick information delivery. A representative sample size was determined and selected from the population for the study using purposive method of sampling. A sample size of 50 respondents were randomly selected from the staffs of Zoomlion Ghana Limited. The data used for the research consisted of both the primary and secondary data. The Primary data were collected basically from the selected respondents by the use of structured questionnaires. Secondary data were also composed from both published and unpublished reports from the internet, books, and journals, other related documents on project management practices among other studies done on the subject matter. The study also used both qualitative and quantitative data for its analysis. Finally, data collected were analysed using Excel and the results obtained were presented with statistical tools such as frequencies, tables, central tendencies, involving mean, percentages and standard deviation and RII.

1.9 SCOPE AND ORGANIZATION OF THE STUDY

The study investigated the project management practices in the organization of this industry and the central focus was Zoomlion Ghana Limited. The Head Office was chosen as a case study because of poor project performance of the company and readiness to assist researcher with required information.

The research will be structured into five chapters, Chapter one will talk about the overview of the study. It would highlight the statement of the problem, objectives of the study, the research questions, the significance of the study and the limitations.

Chapter two would present a literature review linked to the project management study, project management practices and other project management methods needed for the execution of the project. The section will also examine ideas and definitions already made by writers in the selected research.

The processes and techniques used in conducting the research would be detailed in Chapter Three. It would explain the entire research design and methodology to be used, the methods used to collect information, and the statistical processes used to evaluate the data.

Chapter four would feature the information gathered evaluation and present it in forms that readers would understand easily and easily. Tables, numbers, charts, and stories will be included.

Chapter 5 is the final and final component of the study and the overview of results, conclusions and suggestions on the study subject will be presented. Appendices of the studies will be the references of the books and materials consulted.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This section critically gives an overview of the entire work being reviewed in a way to present theories, propositions and concepts that others have given about this subject matter. The literature review is presented in two main sections, namely theoretical review of literature and empirical review of literature. The purpose of this section is to provide an overview of the notion of project management (PM) and project management methods in the context of coping with current events in the public private partnership. It also has another section which is the empirical review of literature which encapsulate related work of study which have already been implemented and how the results relate to the implementation of the study.

2.2 CONCEPTUAL DEFINITIONS

This subsection defines some fundamental definitions and main concepts such as project management, project management methods and provides insight on them. It will discuss some clarification on the various classes of projects, the project's development stages and the advantages of the project in contemporary organisations.

2.2.1 What is Project?

Scholars and writers have provided a lot of modern definitions on this word. In the research literature, the word project is defined in various ways. This is explained below:

The PMI's Guide to the Project Management Body of Knowledge (PMBOK 3rd Edition, 2004), defines a project as a temporary endeavour undertaken to create a unique product or science. The definition explains some features that every project undertaken must have.

Temporary is the first characteristic. The word temporary implies that a definite beginning and a definite end is required for each project. The project's end is accomplished when the project's intent has been realized or it has become very clear that the project's intention cannot be achieved or that the project's demands are no longer in place and the project is finished. The term "temporary" does not necessarily imply a brief period of time since multiple projects can last for many years.

Moreover, the word temporary nature of projects cannot only be associated to a product, goods or service or the sequential result does not apply to the product, service or the resultant result of projects. Most projects that are undertaken or implemented serves as a national testimonial that can yield to produce results that will endure for last few for centuries. (PMI's, 2004, Guide to Project Management Body of knowledge, 3rd Edition).

The other feature that makes a project distinct from the other is its uniqueness. Uniqueness is an essential characteristic required for every project deliverable. This is because it differentiates every deliverable from another alike purpose. For example, there are a lot of capital-intensive undertakings developed from projects but each facility is unique or separate. (PMI's, 2004, Guide to Project Management, 3rd Edition, p.6)

Another definition of Project can be referred as a “value creation undertaking based on specifics, which is completed in a given or agreed timeframe and under constraints, including resources and external circumstances” (Ohara, 2005, p.15).

Disnmore et al (2005) propose that the temporary nature of projects can be simply require that they are not termed as just means that they are not repetitive or continuous activities.

Their definition came out with the following characteristics upon which a project is been defined. According to them, a project is usually embarked upon to generate a specific (unique) deliverable,

which can either be a product (good), services or some results. As a result, a project undertaken can be described as:

1. A produce or artefact that is quantifiable that can either be an end item or a component item.
2. An ability to perform a service such as business function supporting production or distribution.
3. An outcome, such as results or documents, for instance, a research project progresses into knowledge that can be used to decide whether or not a trend is present or a new process that becomes valuable to the society and the nation as a whole.

Cleland & Kezner (1985), in a research came out with similar characteristics that defines a project. They outlined that projects are arrangement of two resources put together that is a blend of human and non-human resources joined together in a provisional business organization intended to accomplish a specific objective. Their study came out with the following characteristics which describes a particular project. They are:

1. A well-defined commencement and completion (specified time to finish up a project).
2. Accurate, accurate and predetermined objective or set of objectives.
3. A series of interconnected or complex activities.
4. A budget that is restricted.

2.2.2 What is Project Management?

As per the report of ASCE Quality Manual (1987), project management can be adequately defined as “Project management is the art of directing and coordinating human and material resources throughout the life of a project by using modern management techniques to achieve predetermined objectives of scope, cost, time, and quality and participation satisfaction.”

The dictionary of the Oxford Advanced Learner also regarded the meaning of "procedures" as suitable by looking at it by defining it as: "Ways to do something in a specific organisation or situation that is the usual or anticipated way". The definition shows that things within an organization should be looked at or done in an expected way to meet the standards of the organization

By using the above idea to define project management methods for the purposes of this research, it can be described as, on the other hand, this definition can be expressed as the daily means of exercising managerial and administrative roles and taking choices in accordance with prevalent norms or normal methods of managing and organizing project funds by licensed organization.

2.2.3 Strategic Need of Projects

Projects are ways and methods used in solving the needs that cannot be addressed within the business organizations or usual operational parameters. Projects can therefore be frequently applied as the way or method of accomplishing an organization's strategic plan. Projects are usually approved as a result of one or more of the strategic considerations listed below:

1. A market demand that may arise as in the situation of as may be the case of an oil company permitting a project to construct an oil refinery in response to protracted fuel shortages.
2. The need of an organizational may trigger projects; for instance, a training and development company can give a permission for a project to be established with the view of generating a new course to increase proceeds
3. Also a request from a customer can lead to a strategic project. In the case of waste management and service provider, Zoomlion Company Limited can undertake a project to build recycling plant

in all university schools in Ghana to serve the increasing demand and improve waste management practices to its customers.

4. Advancement of technology can also result in strategic projects. Companies that use information technology and application of software can authorize projects to create a more advance methods and newer ways of solving problems.

5. Lastly, a legal requirement can cause a project to be undertaken. A typical example is the National identification Commission of Ghana undertaking a project to register all Ghanaians by using the biometric system in order to legally show all citizens of Ghana as agreed by the government of Ghana. This strategic need of the project passed through the legal proceedings before it become a law to be passed in the nation (PMI's Guide to Project Management, 3rd Edition).

2.2.4 The Differences in PM Practices

According to Bryde (2003), project management techniques differ from business organization to business organization, and what makes a practice better is the output of the outcomes. Some factors may be ascribed to the reason for the variability in project management methods, but these factors are ascribed not only to the type of organisation, but also to the project type and purpose and, most substantially, to the performance level of the required project. This perspective was also in the same line with an outcome on Kashiwagi & Parmar's (2005) performance effect of quality management practices. The study investigated the effect of Project quality management and how it affects performance. His findings proved that to some extent quality management practices differs from one business to another business and an organization to an organization. Nevertheless, in a comparable research, Gowan and Mathieu (2005) noted that system executives realized that an organization's excellent information systems (IS) project performance can be affected by a

higher degree in the participation of specific project management procedures. The empirical research looked emphatically at the results of projects related to simply meeting target dates for projects.

The findings show that the type of project management procedures involved in managing a project depends on the type of organization. . It shows that consequent relation to the project management team is composed as well in the type of organization. Every organization or business that differs from others requires proof of identity and additional examination. Subsequently, it becomes highly important to determine the effect of such leadership methods on the results of respective projects implemented. Any project performance should not only be considered on the basis of moment or dates of completion, but should also be considered on the basis of project quality. The outcome will have to be combined with both time and quality without leaving the cost involved in the project. It is therefore unquestionable that the three primary fundamental project goals are essential for the overall results of the project.

When project procedures differ from one company to another or from project team to project team, the issue emerges as a consequence of which project practices are deemed the best. Another related result defines how best practices in project management can be considered as the best means of carrying out tasks to attain a higher performance. The main objective of each project manager is to attain pleasing and suitable performance and as a result of this reason certain practices are required to be embarked upon. In determining whether certain practices are best or not, it is necessary to measure to what extent the performance of the projects carried out under such a set of practices is highly commanding (Ramabadron et al., 1997).

2.2.5 Project Management Processes

Every project must undergo through process and without such processes a project can never be completed. The project management process can be realized when applying the right project management knowledge tool, skills, tools and techniques that receive inputs and generates output.

The basic practices implemented by project executives and supervisors in all projects include initiation, planning, execution, monitoring and controlling and closing. (PMI 2010, A Guide to Project Management Body Of knowledge)

The project processes has been discussed in five main sequence defined logically. These five processes have perfect dependencies and are executed in the same sequence on each project. The process includes initiation, planning, execution, monitoring and controlling

Initiation

The initiation phase is at each project phase's first level. The initiation process group includes processes that assist the official approval to initiate a new project or phase of a project. (PMI's, 2010, 3rd Guide to PMBOK, p.43). According to Nathan & Jones (2003), the initiation method is a phase in which the nature and scope of the project are determined. The model procedures at this point describe how to start a project as well as recognizing how to start a project or phase and explaining how the project management team is committed to doing so. At this point, the project procedures consist of creating a potential project proposition and evaluating and validating the project's feasibility. The phase of initiation produces a plan covering the following areas:

1. A charter of a project formally authorizing the project.
2. Analyzing the needs and requirements of business.
3. Current operations review.
4. Financial cost-benefit analysis

5. Stakeholder identification and analysis
6. Project manager appointment.

Planning

After the initiation stage, most projects are planned in such a way to an appropriate level of detail in order to suit client's desires. The scheduling procedures provide a medium through which several vital information is collected from reliable sources, each with fluctuating levels of completeness and trust (PMI's PM BOK Guide, 3rd Edition p.46). For time, cost, and resources, and during risk management, planning is mostly performed by project executives during project executions. All projects must undergo through planning processes in order to achieve a positive result. This makes the planning stage an iterative and ongoing process all the way through the project's life.

Ibbs & Kwak (2002) stressed that every project scheduling method involves improving and maintaining a workable system to fulfil the project's company requirements. It generally involves outlining the scope, establishing the best planning strategy, creating cost and scheduling structure of job breakdown, analyzing estimates and reviewing commitments, improving the project plan, generating risk management plans and forming a powerful project team to generate a project-driven organisational atmosphere. The scheduling method, according to Kerzner (2003), consists of the following points:

1. Determining how to plan (comprehensive planning for instance)
2. Development of the declaration of scope
3. Selecting the team of planners

4. Identification of results and establishment of a Work Breakdown Structure (WBS)
6. Estimating the activity resource demands
7. Estimating activity time and price
8. Development of schedule
9. Development of the
- 10 budget. Planning for risk
11. To obtain official permission to start job.

Execution

More completion processes and procedures are needed at this point. Implementation consists of the methods needed to finish the job set out in the Project Management Plan to undertake and full project specifications (PM BOK Guide 3rd, p.55). During this stage, a lot of coordination and harmonization is important by organizing the people and the resources as well as incorporating and carrying out the activities of the project in accordance to the project management plan. During the processes of execution, the real work on the project is performed

According to the PMBOK Guide, 3rd edition p.56 – 58, it defines and explains how projects and its tasks and all the activities under execution are carried out. Below are the processes:

1. There is a requirement to direct and manage project execution
2. Project managers require to perform quality assurance
3. Always make sure you acquire a project team

4. There is a need to develop a strong project team
5. Make sure information are distributed correctly.
6. Finally select sellers.

Monitoring and Controlling

The project has been conducted under surveillance and control to be closely monitored to prevent possible problems. This stage is made up of how those processes implemented is observed and analyzed. The aim of the observation is to guarantee that there are no probable issues that can be acknowledged in a timely manner and remedial action taken when needed. (PMI, 3rd edition of PM BOK, p.59). All projects need adequate surveillance and assessment at this point. The method of project control ensures that project objectives and objectives are achieved by evaluating enhancement and taking corrective action when necessary. It comprises of collecting progress status of the project, examining variances and communicating the status of the project. During this process stage, the primary benefit of surveillance and controlling is that project efficiency is frequently observed and analyzed to determine variances from the project management plan. In a study by Lewis (2000) he pointed out that there are some activities needed during monitoring and controlling activities at the project management processes. They include:

1. Determine (where we are) continuing project activities.
2. Observe and monitor the variables of the project, i.e. its cost, project scope, project time and quality. Monitoring the variables should be performed by comparing the variables of the project with the plan of project management.
3. Remedial and corrective measures should be well recognized to tackle adequate issues and hazards.

4. Influencing factors that could prevent integrated change control in order to implement only authorized modifications.

Closing

The final stage is the closing. This is where the procedures reach their completion stage formally. It includes the procedures used to legally terminate all project or project stage operations, or potentially hand over the finished project to customers or near a cancelled project. When all the required conditions are met, the closing process is presumed to be completed. It is also the period or stage in which all administrative operations of archiving incidents and documents and documenting lessons learned are finished by formal recognition of the project deliverable. The Project closing entails the following:

1. Project close: This is where all projects are completed and all operations are conducted throughout all process organizations to complete the project or project phase legally.
2. Closure of the contract: It is very essential to finalize all occurrences. The primary objective is to finish all contract papers. (PMI, 2010) A guide to project Management Body of knowledge p.27 – 35)

2.3 TYPES OF PROJECTS

There are distinct kinds of projects being carried out in a wide range of circumstances and this is due to the size of the organisation, the scope and the type of sector being operated. This discrepancy makes it very difficult to create a single extensive project agreement (Shenhar & Dvir, 2004).

Turner & Cochrane (1993) in their study came out with two main recognised approaches for classifying projects. The two categories are the matrix of objective and process, while Shenhar &

Dvir (2004) submitted the second classification based on the four-dimensional structure, namely: novelty, complexity, technology and pace (NCTP). The objective and blended technique of project classification is divided into four kinds. This classification is based on the concept of how well the project's objectives and techniques are defined.

Type 1 projects, which is the matrix of objectives and techniques, are the type of projects in which objectives and techniques are obviously described and clarified, according to Turner and Cochrane (1993). An example of such a project is the classification of project in the area of engineering. They also clarified that the Type 2 projects are those projects that have obviously defined the project's objectives, but the planned technique is vague to them where the objectives remain well-defined yet the technique is unclear. Usually the projects in this grouping remain connected to product development. Furthermore, the project type 3 is regarded as the sort of activities in which the techniques are obviously described but the project's objectives are not obviously defined. A similar project that fall under this category of type of project is software development. Type 4 projects in the objective and matrix with the last type are not obviously described and spelt out the objectives and techniques. The region of studies and also organizational change is an instance of a project that fits into this category of project.

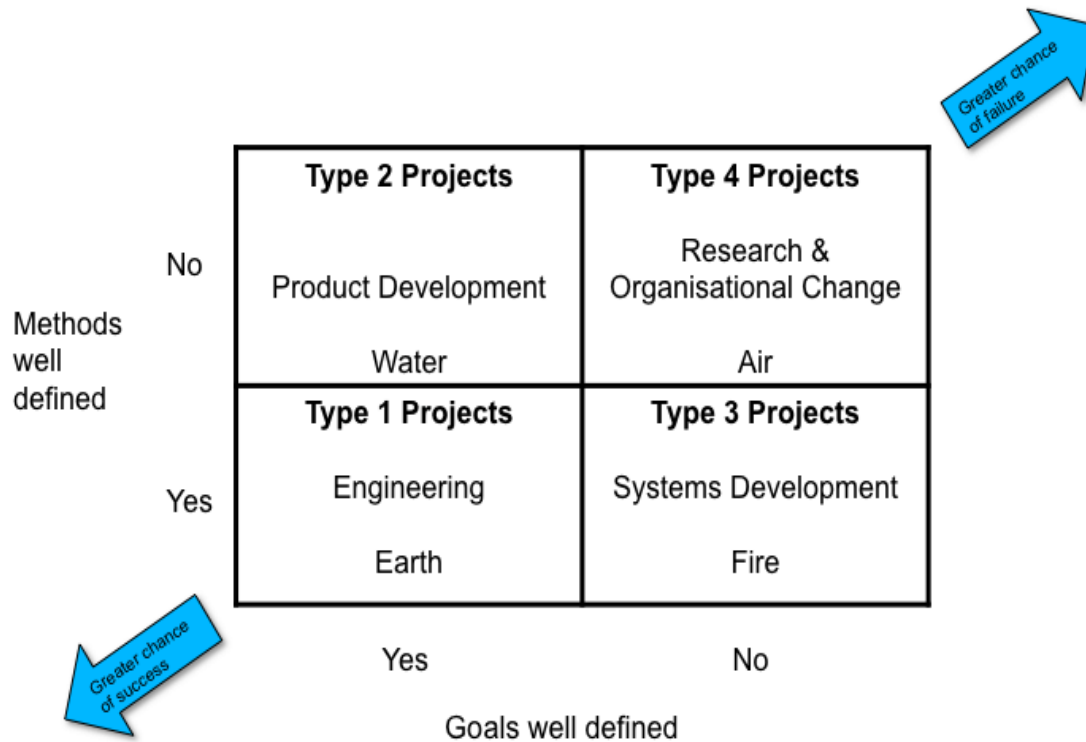


Figure 2.1: Aim-and-technique Matrix (Source: Turner and Cochrane, 1993)

Shenhar & Dvir (2004) came out with the NCTP framework after subsequent works and many studies were conducted. This framework was developed on a four-dimensional key basis: novelty (N), complexity (C), technology (T) and speed (P). There are at least three distinct types of initiatives for each dimension. First of all, as the first dimension, novelty can be linked to product novelty. This means how the cab of the new product has to do with its potential. It also reflects significantly that customers are familiar with this sort of product and how much they will use or apply the product to profit from it. This dimension has three other types of project types subdivisions. The three initiatives are project platforms, product breakthroughs and product derivatives. The current products are well improved, upgraded and created with the derivative products. Derivative products are a form of product that takes into account cost reduction, product enhancement, product changes and added value to a current line of products. Secondly, they can

be defined as those products in relation to platform merchandises where a new cohort of a current product is created and produced. Platform projects include those newly established or produced projects. It is regarded mostly as a fresh collection or family of products produced to form the foundation for multiple derivatives.

In addition, the next type of project is the dimension by which new idea, model, concept or fresh use of a product is made public or marketed (Shenhar & Dvir, 2004). The additional aspect can also be called as technological uncertainty. Many projects fall into this category and such projects are highly capital-intensive and require huge quantities of investment. Projects ranging from low-tech, medium-tech, high-tech and super tech projects in this category. This shows that the greater the technological uncertainty during the beginning of the project, requires comprehensive stage of growth, more design cycles, more testing and many more (Shenhar & Dvir, 2004).

Complexity is the third dimension. This dimension is classified into assembly level, system level and product array level with this type of projects. The assembly level projects consist of generating a collection of parts that will join a single element at a later point. This single component, like a separate product or service, conducts a single task. System-level projects also consist of a multifaceted collection of cooperative components and subsystems. In order to fulfil a precise functioning requirement, these joint sections are put together to form a broad range of tasks. Furthermore, array-level projects in this sort of dimension are the sort of projects that manage big, extensive collection of systems that coordinate to accomplish a common purpose together. Some samples of projects that fall within this type of project are the national air defence system, the city's public transport system, the infrastructure of national telecommunications, among (Shenhar & Dvir, 2004, pp.1277-1278).

The last dimension is pace. The fourth dimension of this project describes tasks that vary in setting urgency, time and goal. This enables the structure to be recognized as a wild, viable and critical bombardment (Shenhar & Dvir, 2004).

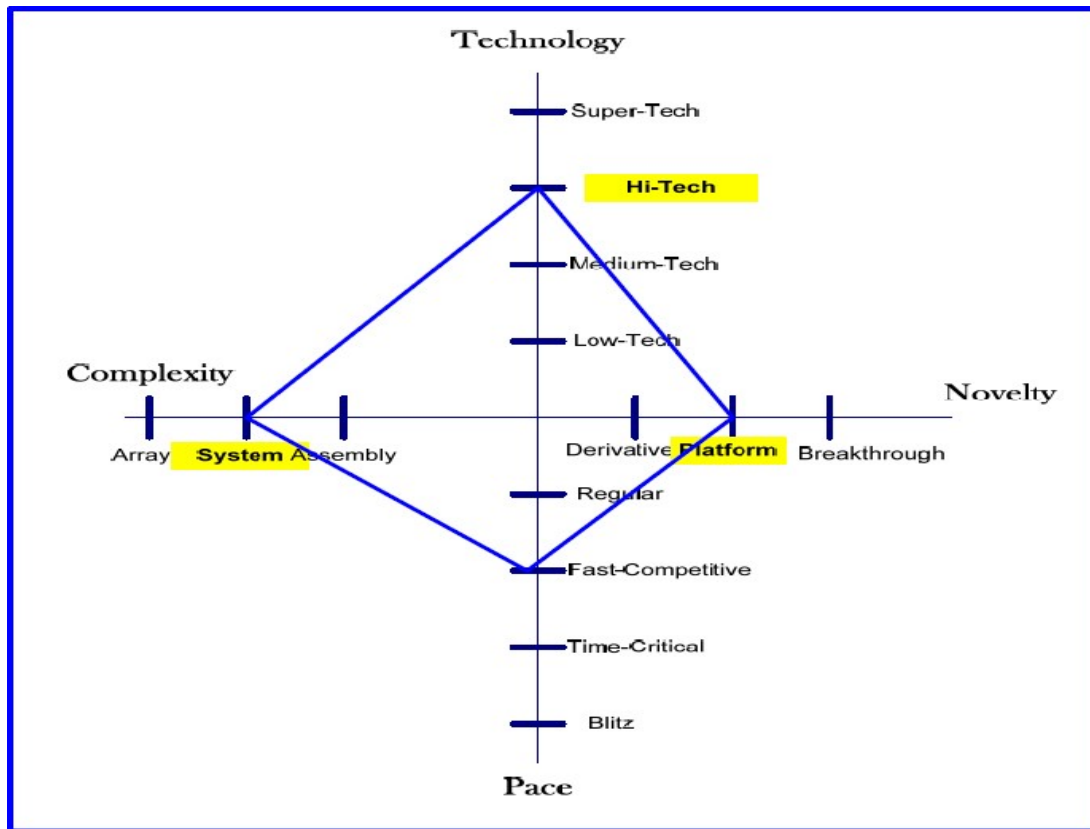


Figure 2.2 shows the four-dimensional NCTP structure with various kinds of projects. (Source: Shenhar & Dvir, pp. 2004, 1270).

Again, Khazanchi & Zigurs (2004) report classifies these projects into three classes centered around the nature of their complexity, apart from these two recognized methods. Complexity has been defined here in terms of team scope, philosophy, linguistic, sex configuration, individual physical appearance, assets and knowledge (Khazanchi & Zigurs, 2004). These kinds of projects are put in three areas of lean, hybrid, and extreme projects.

1) **Lean Projects:** Lean projects can be classified as a project type of low amount and capacity, very restricted range and comparatively low risk. Lean projects have a tendency to be subdivided into convenient and suitable parts due to relatively clear and tangible requirements or results. These projects aims and purposes are generally definite, explicit, and that is why the outcome is accomplished in a short time by implementing recognized methodologies. (Khazanchi & Zigurs, 2004).

2) **Hybrid Projects:** Hybrid projects can be defined as projects having complexity, diversity and risk concentrations. These initiatives need to adopt leadership approach implementation methods that focus on harmonizing individuals and operations. As a result, the techniques and machinery that improve harmonization should be provided outstanding prominence in hybrid projects (Khazanchi & Zigurs, 2004).

3) **Extreme Projects:** The type of project deemed to be highly complex, wide-ranging and high-risk in extreme conditions. Most of these initiatives are mission serious. This implies they are very severe and they have precise and precise deadlines. Extreme projects therefore have a lot to do with a amount of team players and stakeholders ' strong interaction and participation. For this reason, to achieve this assignment, an intense project requires a strategy put in place by leadership. This management approach must concentrate on communication. Communication is required here not only to prevent shared knowledge of the problem before any study can start, but also at all phases of the project (Khazanchi & Zigurs, 2004).

2.4 CURRENT PRACTICES IN PROJECT MANAGEMENT

Many scholars have developed various methods and techniques that cover most aspects of project management from their sources to completion, and these have been widely circulated in books, articles and journals through professional bodies. But these methods and techniques are presently underway in the true world and to what extent these methods are employed in regulating projects as described by the research of Abbasi and Al-Mharmah (2000) in the least developed countries and White and Fortune (2002) in developing nations.

The study carried out by Abbasi and Al-Mharmah (2000) included a sample of 50 firms selected from these businesses to investigate project management techniques in Jordan. The data was collected through a questionnaire completed by interviewing officer in-charge of the planning and management department. The main part of the questionnaire focused on investigating these companies' most used techniques of project management.

2.5 PROJECT PERFORMANCE MEASUREMENT

The performance of projects can be measured with the cost, time and quality factors. Two significant works of research that have developed formulas for measuring project efficiency have been acknowledged. In his studies, Chan & Chan (2004) used key performance indicators (KPIs) to evaluate building success using significant performance indicators. Among other factors, the formulae taken for project performance measurement were determined by four major areas. The chosen areas are the measurement dimensions. For their calculation and computation, the significant aspects for which formulas are needed. To evaluate the efficiency of each dimension, one or more indicators were needed.

Second, performance metrics were used by Ling et al. (2002) to evaluate project effectiveness in model creation to forecast design-build and design-bid-build performance.

2.5.1 Construction Time and the Effect of Certain PM practices

Building time refers to the duration of completion of a construction project. Often projects are postponed. In a study article by RICS, Morledge et al (1996), which collected data on 215 completed company and industrial projects, it was found that 136 (63%) were supplied late. It was stated that the lateness was due mainly to unrealistic customer perceptions about the duration of the project during the preconstruction stage. The state is a significant customer in the construction industry. Under financial and political factors, the government generally takes choices.

Such variables may come with rules setting deadlines for completion of projects. The project team members may attempt to accomplish an unrealistic task in their attempt to fulfill it. Such conditions reflect what was discovered in their investigations by Kumaraswamy and Chan (1995) about determinants of construction duration. They discovered that the overall time scales of many projects appear to be established as a consequence of company and/or political variables. They claimed that subsequent planning and programming methodologies were then designed to meet these time goals rather than any objective assessment of the length.

Therefore, contractors are faced with enhanced pressure. Ward et al (1991) also found out that customer-time expectations are often either based on their own knowledge of comparable works or on advice from professional advisors. This behaviour of customers can be an indication of the compliance or rejection of advice of project advisors who were officially hired to guide project management. The impact on project results may be distinct in circumstances where project advisors, deemed to be project management specialists, play the significant role in setting building time. Activities of all parties are therefore crucial for the project outcomes.

It should be noted, however, that other factors also place enormous stress on contractors in order to complete the project on time. As a result of a highly competitive marketplace, Austin et al (1994) acknowledged increased pressure on contractors to complete projects on time; and that contractors will try their best under these circumstances but that the goals are simply unrealistic. On the other hand, if the time is realistic, poor performance in time would prompt consideration of the extent to which contractors attach importance to the time objective of the project.

By using a web-based tool prepared to acquire information on the effect of certain factors on overrun moment in business projects, sent to the CEOs of 100 randomly chosen building firms, delayed progress payments have been recognized as a significant cause of overrun building time (Choudhury & Phatak, 2004). In perspective of this, the characteristics of the nature and source of funds, the primary region from which payment time is mostly determined for construction projects, require thorough inquiry in order to understand a number of methods that may cause delays in progress payments. While delayed progress payment has been recognized as a significant cause of overrun building time, the project manager's capacity to address the problem is also critical to the project's timing efficiency. Therefore, it is necessary to identify the kinds of procedures in which contractors participate in managing the project's time dimension. Customers who frequently participate in agitating practices for countless modifications in design before practical completion also play an important part in the cost impacts of the project. The manner in which contractors react to orders for variation may also have consequences for project results.

In anticipating the effectiveness of design-build and design-bid-build initiatives, Ling et al (2002) acknowledged certain variables that affect cost efficiency. These include: the amount of repetitive elements in a project, the extent to which offers are invited to finish the design, and the amount of paid-up capital employed by contractors.

2.5.3 Construction Quality and the Effect of Certain PM practices

According to CIRIA (1985) as cited in Parfit & Sanvido (1993) Fitness for intent is described as "the totality of the characteristics needed to fulfill a specified need." The extent to which projects are tracked, project consultants' experience, contractors' quality, previous performance records and the amount of variation orders given all affect quality (Kashiwagi & Parmar, 2004). To achieve adequate quality output, it would be important how all these variables can be coordinated competently. It is the duty of the project management team leader to guarantee that these variables combine well to deliver excellent results in quality.

Quality accomplishment was regarded to be a characteristic of the building procedures (Serpell & Alarcon, 1998). These processes include the notion of the procurement form and the tendering process. The fragmented nature of the construction industry and the distinctive nature of each building project provide the project management team with an excellent obligation to set up the building process that will take the project to a good conclusion. The focus here actually is on processes and processes that affect a construction project's quality.

The subsequent problem that occurs is how often project managers tailor certain PM procedures to match a project's uniqueness to generate exceptional quality output, with a sense of each project's uniqueness. Therefore, some of the procedures to be recognized may include the selection procedure for organizations that are required to carry out the design and supervision. A contractor can sometimes be assigned on the grounds of a fee through negotiation. Where design and construction are performed as a full package, both may be allowed by competition.

Consequently, the selection procedures applied to contractors are by no means always the same. Various methods influence the achievement of the project at variable rates. For example, prior study stated that "competitive tendering may adversely influence the result of significant projects

and the amount of distinct agreements is linked to the likelihood of achievement; distinct techniques of choice will present distinct rates of danger to project team members" (Chan, 1995). Also, the selection procedures taken by customers for project advisors should not be ignored as several study works have given less attention to this aspect of project management.

In a study work on variables influencing the quality efficiency of construction projects, Chan and Tam (2000) recognized project management intervention by the project team as the most strong predictor of customer satisfaction with quality using factor analysis and step-by-step regression analysis. Significant processes, which are usually implemented for the quality management of building projects by project management team members, should therefore be emphasized. Other factors indicated that the attention needed should be included: the effectiveness of the construction team leader, the emphasis on quality of the customer, and the concentrate on time of the customer.

2.6 CHALLENGES TO PROJECT MANAGEMENT IMPLEMENTATION

Project implementation in several cases faces some challenges which hinders the smooth implementation of these projects.

Kashyap (2019) enumerated some 10 challenges that organizations faces in the implementation of projects. Below are the challenges discussed by him:

1. Keeping Teams on The Same Page
2. Poorly Defining the Goals And Objectives
3. Unrealistic Deadlines
4. Finding The Right Project Management Software
5. Scope Creep is Insidious And Creepy
6. Insufficient Team Skills

7. Miscommunication Cause Conflicts
8. Risk Management
9. Challenges of Teamwork
10. Lack of Accountability

According to his study, a lot of projects ongoing and future projects will face these challenges when not critically considered. The findings showed that in the project management procedures, most of the excellent project executives and project team leaders are facing these problems. The correct combination of planning, controlling, and tracking can create a difference in how project executives finish their project based on time, budget, and results of high quality.

1: Keeping Teams on the Same Page

First of all, dealing and handling a project team is widely spread out as one of the biggest challenges faced by project managers. It is very important for teams to be on the same line and same page with team members. This makes the processes flow orderly and makes things happen interactively. This helps each project team member to know exactly what's going on, what they need to do, and what each of them is working towards in accomplishing the project goals

2: Poorly Defining the Goals and Objectives

A Poorly defined goals or goals without objectives can push a great project in danger and lead to project failure. A project will be successful when goals are clearly defined and enumerated. One significant stage in a project is to clearly define goals and objectives and that turn out to be a major challenge in every project implementation.

When projects are poorly defined, the project managers and team members might not understand the entire processes involved in the project implementation and what is actually required and expected from the project. This is an indication that a failed project or an unsuccessful project can be attributed to failure by management in clearly stating the defined goals and objectives needed for the task. A lot of confusion has resulted in most projects due to projects unawareness on what to be done, what to do, why the project is been done and when is the project been completed. It is dangerous to commence a project without clearly stating and outlining the objectives, the specific direction and an organized plan. This is more or less like starting a journey with no idea where you are travelling to and how to get to your destination. This lead to time wastage, effort and energy. Equally, projects will suffer successful implementation when ether is no line of clarity and proper planning existing beforehand before the commencing of the project

3: Unrealistic Deadlines

Projects with unrealistic deadline can undermine the successful implementation of the project. It is very important for project managers and project supervisors to impose deadline on their project members to help fasten them in their task performance on job site. One of the greatest challenges that is faced by project teams or managers is the struggle of unrealistic project deadlines and expectations required from them by their clients and stakeholders. Most project timelines do ultimately fail because of the impracticable 'initial deadlines'. As a result of innovation and technology, projects management activities should be set based on realistic goals and achievable targets as everyday competition and business rivalry becomes more aggressive. From then, what arises is a frantic attempt where the team tries to fit the requirements in the already drawn boundaries.

4: Finding the Right Project Management Software

Using the wrong technology hinders the successful implementation of the project implementation. It can be boring and tiresome to find out the correct technology for your project team that falls within your budget, to implement your projects. A well-designed and advance project management tool or software ensures that projects are making headway as intended and anticipated and allow you to get visibility into all your projects. Most times, the cost involved makes it difficult in securing the right tool particularly those that meet your needs.

5: Scope Creep is insidious and Creepy

This challenge of Scope creep comes about naturally and it becomes an issue in the course of project accomplishment. This sneaks up unexpectedly and hit projects unaware. For instance, when a planned project takes a different shape because the client wants more functionality for the same price and this is the fear of every project manager. At times, this unplanned functionality put fears in the minds of the project manager or supervisor since it can affect the implementation and execution of the project. Also, a lot of stakeholders and clients do not have any idea of defining their project needs and also no laid down plans for their projects. This issue has placed a lot of project managers and team members in a challenging spot as unstable or new changes of events by clients can over and over again bring about project failure.

6: Insufficient Team Skills

Every good team requires skilled team members for successful completion of tasks. Any team that fails may be as a result of its team members. If team members are not clever, ingenious or are not properly trained on the job may affect the performance and desirability of the assigned tasks. Also, this can create more problems for the final project in terms of quality and cost and its completion timeline. A lot of projects have failed because the right and skilled team members have not been

assigned a suitable role but roles have been assigned based on their availability. Projects can be successful if only expertise required for the projects handles such task. If team members are not skilled or trained enough to meet the challenges and perform roles allocated to them in an efficient manner may eventually affect the project. A lot of projects are very demanding and challenging due to its requirement of some level of understanding, knowledge and know-how of the project. Therefore it is very appropriate for project managers and team leaders to select whether team members need to undergo some sort of training or education to be equipped with some requisite skills needed for the job. Apart from that, when team members decide to point fingers at each other, blame themselves and lacking proper accountability can affect the quality of the project and eventually abruptly end the project.

7: Miscommunication causes conflicts

Sometimes, miscommunication can cause conflicts hindering project execution and performance. A lot of projects could not meet its deadline or time schedule as a result of arising conflicts between and among project managers and team members. Miscommunication or poor communication is one of the major project management challenges that get in the way to hinder the success of a project. Communication skills is one of the weapons of every project manager and without it projects will be brought to a halt. As a matter of fact, a clear and open communication is the best remedy between project managers and project team members. This is the main reason why project managers stress a lot on effective communication. This is because, most often, successful communication transforms into successful projects as about 57 percent of projects fail due to interruption in communications.

8: Risk Management

According to Wikipedia, “Risk management is the identification, assessment, and prioritization of risks followed by coordinated application of resources to minimize, monitor and control the events.” Most times, projects do not yield results as intended so risk management is regarded as one of the major project management problems that project managers have to address. Risk management experts can state how seasoned a project manager is with his ability to oversee risks that might creep up in a project anytime. Even though risks cannot be avoided but it can be minimize. These type of risks can be an uncertainty in the business market, financial market, and concealed defects in the project plan or even unfamiliar factors that can influence the success of a project.

9: Challenges of Teamwork

In a study published in the Harvard Business Review, it emerged that" the time spent by managers and employees in combined activities has blown by 50 percent or more over the past two periods.' Unless the team actually works, teamwork cannot function and attain production. A committed team is made up of various employees, each with a distinct character, handling and catering to each other's requirements and ensuring beneficial performance from each other, although it can sometimes be a daunting job. There can be variations and misunderstandings in a team with several individuals working together on a project that can have an undesirable effect on the project and work setting. Disputes and inconsistencies between team members are often a task to be addressed by project executives. They must continually search for ways to bring together each individual in a team to advance the project.

10: Lack of Accountability

Accountability is one of the function that is relevant in the implementation of every business project. Every individual wants to be accountable, but some teams do. A project manager must ensure that during their daily workloads the team is held accountable. Accountability is obviously seen as blame play when things go in the incorrect direction, but when things are correct, it is hardly in the image. It takes time, money, effort and individuals to harmonize the parts of a multifaceted project. These funds are one of a project manager's or supervisors ' employment. Project management training is an essential step in managing the unforeseen issues that project executives can encounter on a daily basis in order to prevent all of these.

2.7 EMPIRICAL REVIEW

Smith (2002) in an examination on the topic assessing the effectiveness of project management practices in project-driven organizations came out with some outcomes. This study was conducted in order to promoting best practice in project management and its application. The study was centered on the best assessment tool keen in achieving PM practices and how effective are current project management practices in the South African communications industry of Johannesburg. The study adopted a survey questionnaire approach as a measuring tool for conducting questionnaire to the respondents by means of electronic mail as way of improving the questionnaire approach in a more user friendly way. 28 project managers of Telkom were invited to answer questions pertaining to the study, of which only 21 responded amounting to a response rate of 75 percent. For the various projects, a statistical assessment was carried out to decide:

- a. Whether the organization's overall project management standards and practices are in line with the defined best practices?
- b. How efficient are the techniques and processes for overall project planning and execution?
- c. How effective was the finished project to do a comparative assessment of the variables that might have influenced the project's success or failure?

According to the results, it was evident that the standards and procedures that takes place in most of organization are well grounded and established to suit the project based on the planning methodologies, processes being documented, and the accessibility of templates. The outcome also showed that about a great amount of the respondents do partake in various projects at one particular time. It was revealed that, respondents whose are engaged in multiple projects requires a shared pool of resources and staff to manage projects effectively. This emphasis that there is a strong link between multiple resources and multiple projects when it comes to evaluation of multiple projects.

Secondly, the study proved that the general procedures/techniques that functions during the planning and execution of projects is always matched positively with the best practices. On the other hand, the study found out that there are still prospect for advancement in terms of identifying associated risks. Nearly half of the participants showed that hazards are rarely proactively acknowledged during the project planning phase. This also stated that risks have a negative effect on the timing and cost objectives of a project and it is therefore very prudent and worthwhile to proactively develop a preventive and/or contingent solution for probable hazards during the project's scheduling stage to minimize the likelihood and seriousness of the hazards.

In terms of Project observation of completed projects, respondents answered that the success or failure depends requires some factors from the perspective of three key fixed variables which are

generic goals to every project. The three fixed variables are time, cost and performance. They are used in determining whether the projects can be categorized as either being a success or a failure. From a critical relative analysis, the results confirmed that the fixed variables are of statistical significance in determining correlation among the success or failure of a project.

The study examination showed that there is a correlation between a number of project success factors and failure factors, and according to the study it can not be determined that its scheduling heavily influences the achievement of projects, although some of the results suggest this.

A study undertaken by Fitsilis and Chalatsis (2014) on the subject of project management procedures in Greek government organisations through the study of small-and medium-sized Greek Local Governmental Organizations (LGOs) examined in their job how PM procedures are pragmatic for small-and medium-sized LGOs and how they prevent the implementation, implementation and implementation of these PM procedures. The study was an exploratory research conducted using the 360-million feedback research methodology. It also applied the qualitative approach in answering questions obtained from the field from the various respondents. A semi-structured questionnaire (interview) was methodically analyzed from various stakeholders from similar organizations who were the target audience of the study.

The stakeholder groups sampled for interview were classified based on LGO staff who are actively engaged in PMCM's development procedures, mostly technocrats. Secondly, technical consultants who supplied technical support to LGOs for the development of the PMCMs and finally reviewers (evaluators) of the PMCM scheme, who evaluated the established scheme as members of the administrative authority responsible for the final evaluation and certification. The results from the study established that there are two kinds of factors that affects the implementation of these processes and this is derived from the internal environment of the organizations and this hinders

processes. It stated that the internal environmental factors impacts negatively on the proper and suitable implementation of PMCMs. According to the respondents, the convergent of thoughts and beliefs between stakeholder groups has brought about the uneven distribution of workload within the main business operation that is ben carried out. Another important point raised by members showed that the technical unit of the organization embarks on heavier workload and tasks as compared to those in the planning or managerial unit, since away from project management, they also perform some other roles such as the support of the selected bodies and work related with technical issues such as buildings permits, urban plans, technical audits and others. The results confirmed that, a most cases the source of failures and delays in the management of project practices by LGOs L can be attributed to work overload. Furthermore, a lot of similar study in this area on the subject of project management in Greek LGOs came out with related views that experienced, experts and proficient personnel in the core business sectors of the organization is a key point. Results from PETA (2008), ITA (2005) and MOU (2000) supported this assertion.

Notably, it was qualitatively considered that a greater number of employees were measured as a sufficient in the examination nonetheless scientifically, it is insufficient to measure personnel in relation to their professional credentials and their capabilities as in this subject matter.

The findings were also evident that the most significant constraining factor for the proper implementation of a PMCM in a small-medium LGO, is inadequate educational/professional qualifications of the employees on project management. Most study conducted in Greek in the area of project management proved that qualifications of personnel were limited. A study by IEKEM (2009) in Greece supported this statement as well as revealed that a significant part, Kaul and Collins (1995) who concluded in their study that important subject and courses in project management are not taught in the Greece curricula. In evaluation of educational level of personnel

of LGOs on the nine knowledge areas using the definition of PMBOK from the project Management Institute (2008). The outcome confirmed that knowledge level of the staff in relation to project management were very low including scope of management and risk management were all adjudged to be completely inadequate.

The study explained that another constraining factor that restrict project management practices was insufficient collaboration/coordination between the involved departments. A lot of related study has confirmed this result with regards to project management capability in Greek LGOs. According to a study by EETAA (2010) and Papatheodorou (2009) affirmed that a lot of confusion, misunderstandings and conflicts do arise most often at the various work-process of LGO, where they are involved more than one organizational unit such as the project management. Another constraining factor that was recognized was the lack of commitment by the management of LGOs. Several studies including research by PETA (2008) and Bolles & Hubbard (2007) confirms that the level of management commitment is key in every organization.

In an Ollows (2012) review where the research concentrated on the effect of project management procedures on organisational performance in SMEs in Kenya using Letan Limited as a case study. The research considered three measuring tool of measuring organizational performance using project performance. The project was measured based on three criteria in terms of cost, time and quality. The study gathered and collected data using the survey questionnaire approach in administering questionnaire to respondents. Methodically, the descriptive and inferential analysis was used to analyze the results from the respondents. The research embraced both qualitative and quantitative data in the analysis of the outcomes and the blended design strategy used for project performance measurement and the impact of these methods. The research targeted 37 Letan

Limited staff, 22 of whom were sampled using purposeful sampling techniques from this company's project management department.

From the results, the research showed that the linking of project management methods was very crucial for about 65 percent of participants. In addition, it was obvious that project management practices significantly affect organizational performances. The study has proved that to have a high significant result in increasing organization performance through better project delivery. In terms of project management practices, it was realized that project cost management was considered more significantly, followed by project scope management, project communication management and project risk management respectively.

Another result was based on the impact on organizational performance of the moment, price and quality efficiency of projects. In the measurement of organizational performance on the basis of these three criteria, it was realized that 85% of the 20 projects obtained from the organization were below the trend in terms of time performance or timeline, since these projects were completed above the budget and also about 90% of the projects performed above the trend in terms of quality performance. This result shows that in the situation of Serpell and Alarcon (1998), quality performance was assessed as a significant feature of the processes taken during the project phase. Lastly, the findings achieved on the effect of project management practices on organisational performance showed that the majority highly agree with the assertion that project management practices increase organisational efficiency and, furthermore, it was emphasized that involvement in project management procedures is of relative significance and of the greatest significance. The examination also agrees with the outcomes of Mullaly's (2005) previous study, which concluded that two constructs, project performance and company performance, measure organisational performance. The empirical findings of the calculated evaluation show that a powerful connection

exists between the methods of project management and organisational performance showing that project cost management is extremely linked to time, cost and quality performance. Chan & Chan's research (2004) showed the same interrelationship.

Olateju, Abdul-Azeez & Alamutu (2015) also studied the subject of project management practice in the public sector of Nigeria in their studies. As in the PM practices, the study examined the PM lifecycles, tools and techniques. The research was carried out precisely in Lagos, Nigeria, because it was a metropolitan area and a quickly growing town. A survey research approach was adopted using both primary data and secondary data tools in gathering information from respondents. The study carefully and randomly selected twenty-three public institutions under Lagos State Government for data analysis using the descriptive analysis techniques.

From the results, it disclosed that most participants were well-educated and qualified for positions in the departments of project management in the field of instructional qualification. It was a strong ground for a good chance to use and apply PM instruments and methods better. In addition, owing to its simplicity and simple comprehension, some main instruments and methods including Gantt charts, WBS and CBA were regarded to be properly and properly used in the numerous government organizations. However, many critics believed that absence of in-depth understanding of these instruments and methods would still pose a critical challenge to implementation. It also realizes that, in terms of perceived advantages, the arrangement is that, among others, the skilful application of PM instruments will support project monitoring, better communication, better use of resources and better performance. Another problem that participants addressed was the problem of high price, lack of knowledge in managing PM projects, and real-world modelling problems. The participants firmly thought that, in order to tackle the problems of weaknesses confronting

project management practices, more emphasis should be placed on training staff in project management abilities and then employing the correct and skilled experts who fit the job best.

According to Ali (2010), who studied project management methods in a less developed country's government sector organisations in his research. The study's aim was usually to scrutinize the practices of project management and then to discover the significant problems that deter the effective application of these practices. The research was carried out in the town of Pakistan, taking into account this country's public sector organisations. Three primary industries were the key project area that required a lot of attention and this was the planning area, the service and the advisor and a contractor. The research surveyed eleven public sector organisations for the country's good job and as a consequence, the institutions were thoroughly selected as a case study separately. Two samples from the planning industry were from the study, eight from the service sector and eleven from the contractor industry. In its evaluation, with a semi-structured interview, the research took the qualitative method approach while producing information for case study purposes from the primary source. All information was gathered within the public sector organisations in Pakistan from project managers, senior executives, and project supervisors. It was discovered that the maturity level of public sector projects in Pakistan is at level 2 where procedures are still dependent on people and minimal guidance is also accessible in the execution procedures of the project. The assessment showed that a project's achievement is still unpredictable, and differences in price and schedule persist throughout the projects. More so, it was revealed that there is no integration of databases, although schedule information is generally abundant. Although some of the organisations surveyed showed continued progress and progress in terms of projects but progress to level 3 in the planning and service industries. Overall, Pakistani government sector organizations ' skill level is at level 2. The study also came out with the various

types of limitations in a less developed country connected with the projects. These constraints are characterized by the theme of less developed country, public sector organization, culture and project management. The main purpose for the categorization is to distinguish between the issues which can be upgraded by taking an initiative at the organizational level and the issues which can only be upgraded by taking a major policy initiative at the political level. This identification of different level or types of constraint may help the international donor agencies to better notice the situation in the less developed countries toward managing the public sector projects. The theme of less developed country, organisation of the government industry, culture and project management characterize these limitations. The main purpose of the categorization is to distinguish between the issues that can be upgraded by taking an organizational level initiative and the issues that can only be upgraded by taking a major political initiative at the political level. This identification of distinct levels or kinds of constraints may assist global donor organizations to better understand the scenario for managing public sector initiatives in the less developed countries.

CHAPTER THREE

METHODOLOGY

3.1 INTRODUCTION

This chapter focuses on the research methods and procedure for the collection of data. It involves the research design, sampling and population, instrument used for the collection of data, validity and reliability and limitations.

3.2 RESEARCH SETTING

The study was undertaken at the Zoomlion Ghana Limited, with the head office Greater Accra as the central focus for the survey. The Greater Accra Region of Zoomlion Ghana Limited has other offices at areas like Adenta where administrative works and duties are performed there. There are seven other district offices. These are: the regional district, James Town district, Madina district, Kaneshie district, Achimota district, Dzowulu district and Spintex district. The Head Office was chosen as a case study because of poor project performance of the company and readiness to assist researcher with required information.

3.3 RESEARCH DESIGN

The survey technique has been used in this research; this involves descriptive models to describe each of the many factors needed for the research. This descriptive research was an action-based involving the use of structured questionnaires to solicit primary information from project management practices in Ghana and opinion from project professionals in this area from Zoomlion Ghana Limited. It employed both the qualitative and quantitative research approach in completing and accomplishing the desired set objectives that relates to the questions. The main reason for choosing this approach was to gather and collect numeric data for interpretation as

well as using non-numeric data for its analysis. Research survey design was employed to help find answers to the research questions. Also, it was very important to adopt the quantitative techniques because the questionnaire approach was used in collecting data from respondents instead of interview. Another reality, as Yin (2003) mentioned, is that no single source of information has full benefit over all other sources. Most scientists therefore agree that qualitative research should attempt to use as many distinct sources as possible.

3.4 SAMPLING TECHNIQUE AND SAMPLE SIZE

3.4.1 Population and Sampling

The population of the present study comprised of seven (7) project management practitioners, eight (8) project consultants, six (6) project supervisors, eleven (11) project managers and eighteen (18) project team members. Responses obtained from the sample respondents were a representative of the opinions of project management practices associated to projects undertaken or implemented in the Waste Management Sector of Zoomlion Ghana Limited.

3.4.2 Sample Frame

Due to time constraints and financial resources the Head Office of Zoomlion Ghana Limited was chosen out of all the major waste management and sanitation firms in the Accra Metropolis. The researcher selected Zoomlion Ghana Limited based on proximity, accessibility and availability of information. A total of fifty (50) project experts were selected for the study. The expected 50 sample size was achieved successfully without any challenges. The respondents represented experts and professional employees who perform roles and duties in this area under study.

3.4.3 Sampling Technique

As a result of the varied nature of the sample population, Purposive (judgmental) sampling technique was used to select respondents. Moreover, interviewees were chosen based on a purposive sampling by considering their knowledge and expertise in this sector. The respondents included skilled and practitioners who have been directly involved in projects in this sector for at least some years.

3.5 DATA COLLECTION METHODS

Primary and secondary source of information will be used for data collection. Primary data would be collected through questionnaires that would be administered to employees of the construction firm. Useful information collected through the use of both open and closed ended questionnaire to gather information for the study. The questionnaire will be distributed physically or through email. The secondary data would also be collected from journal publications, articles and internet sources and other vital company documents. The questionnaire was designed in two sections; the first part is intended to gather the respondents ' population data, including the interviewee's role or position, education level, years of work experience, and number of projects worked on in the last 5 years. The questionnaire section B was divided into three sections. The first chapter involves the procedures used by Zoomlion Ghana Limited to implement projects. The second and third chapter also examined the impacts of implementing project management practices and problems that impede the effective execution of project management procedures. This questionnaire was developed to facilitate data collection.

3.6 INSTRUMENTATION

The objectives of the study were: first, to examine the procedures used in the execution of projects in Zoomlion Ghana Limited, to identify and evaluate the impacts of the execution of project management procedures and, lastly, to solve problems that impede the effective execution of project management procedures. The study in achieving this purpose from respondents organized its questionnaire to guide respondents to achieve the objectives of the study. A structured questionnaire was used to collect data from the company using Likert scale questionnaires. The self-administered questionnaire to the managers involved both open-ended and close ended. The purpose of the structured questionnaire serves as an instrument to draw the desired information and data. This was used to collect the information needed from the organizations and this was self-administered to consultant, project managers, project supervisors, team members and others. The research questionnaires were designed with the aim of meeting the desired research objectives.

A five-point Likert type scale questions was also used numbering from 1 to 5 which ranged from strongly disagree to agree was used since they are appropriate and abide by the principles of validity, reliability, and consideration.

3.7 DATA ANALYSIS

Data analysis usually involves reducing the raw data into a manageable size, developing summaries and applying statistical inferences. Consequently, the following steps was taken to analyze the data for the study: The data collected were coded and entered into the computer using the Microsoft Office programme, Excel. Data collected was then re-analysed using descriptive and inferential statistics. This helped to perform easy descriptive analyses that were presented using

the interpretation statistical instruments. The findings were then evaluated and displayed using statistical instruments like frequencies, tables, key trends, including mean, median, percentage mode and normal deviation and the Relative Importance Index.

3.8 VALIDITY AND RELIABILITY

A pilot was conducted to test and determine the reliability and validity of the questionnaire and interview questions. This was performed to determine if the tool covers the breadth of the content region and to determine whether the format used in the design is suitable for acquiring the data needed. Some specific elements and objects were found during the pilot research to eliminate reworded, rebuilt, or removed unnecessary and incorrectly worded questions. The pilot test also disclosed potential difficulties experienced by the scientist during the real data and information gathering exercise and precautionary measures to guarantee precision were placed in place.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 INTRODUCTION

This section presents data analysis and outcomes interpretation. First is discussed the summary statistics of the factors; followed by the outcomes of the multiple preliminary trials. The findings of empirical models follow and then the debate of these outcomes follow and lastly the section finishes with a summary of the outcomes. This chapter is evaluated on the basis of the outcomes of the questionnaires published for the research to guarantee the achievement of specified study goals. The debate begins with both the respondents ' general data and their corresponding companies.

4.2 DEMOGRAPHICS

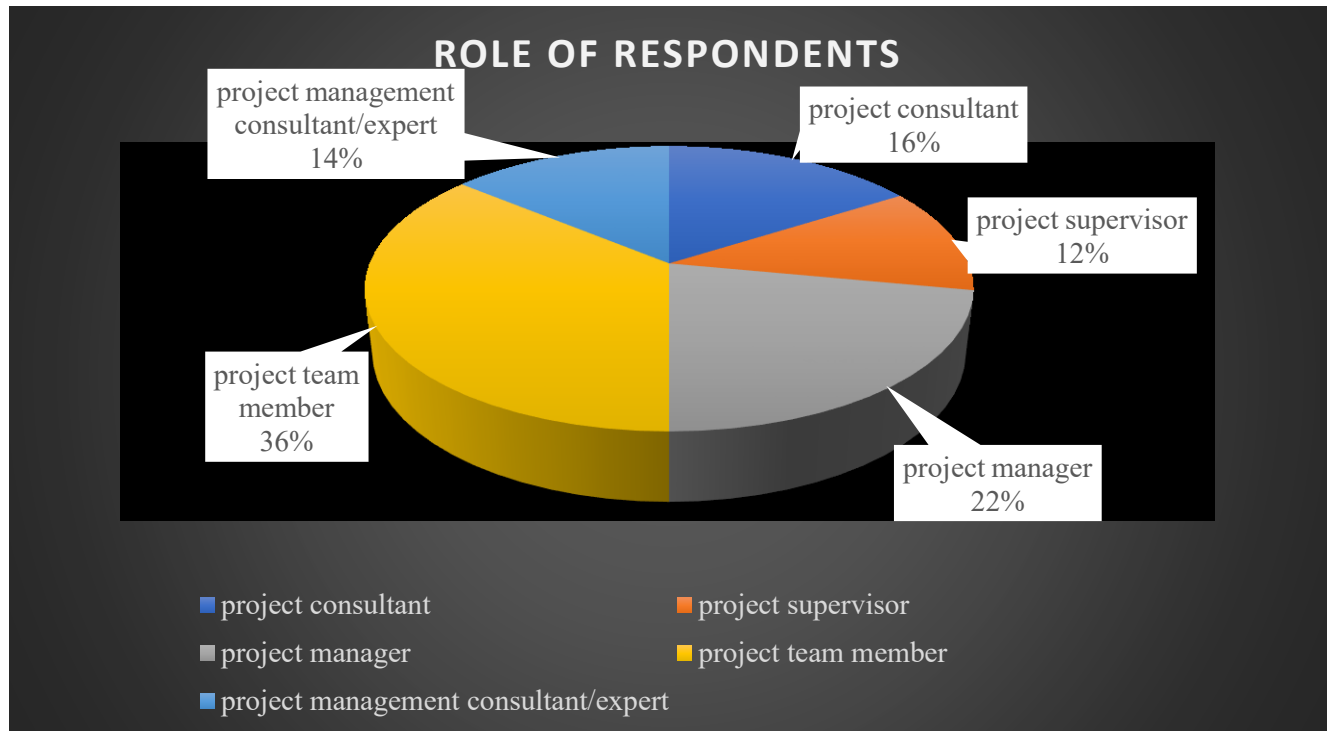
According to Proctor (2000), demographic data are essential to acquire fundamental information about the respondent. It provides identification about the respondent such as age, gender, educational level, occupations, role of respondents etc. This data is very important because it demonstrates whether the participants are able and able to answer the questions regarding the study's goals. This also provides a good view of who the respondents are and it is important to have an idea about the demographic features of the respondents since it can influence their responses in one way or the other. Even though demographic variables are very important, our study ignored the variables of respondents' age and marital status.

4.3 GENERAL INFORMATION

A total response rate of 50 questionnaires were issued to the target respondents and everybody responded to the questionnaire representing 100% rate of collection.

This section gives a snapshot of the background data (demography) of the respondents from which the data was collected. The background data of the respondents focuses on the role or the position of the respondents, the educational status of the respondents and the total number of projects that has been handled to determine its capabilities and skills related to project management as well as the total work experience of respondents. This provides a good view of who the respondents are and gives a positive results and clearer understanding from the response to the questions stated in relation to the objectives of the study. It is important to understand and know such basic information about our respondents since it will also give us a view of how their responses would be skewed towards one side or not.

Figure shows the role or position of respondents in the organization



Source: Researchers Field work (August, 2019)

Figure 3.1: Role of respondent in organization

The Figure above shows the responses received from respondents who were interviewed during the survey. All the respondents intended to answer the questionnaire answered all the questions and this was the breakdown. This section discusses their respective role or position in the firm. From the results, 8 people representing 16% has a position as the project consultants of Zoomlion Ghana Limited whilst 6 people indicting 12% were also project supervisor. Again, about 11 people responded to the questionnaire who described their role as project managers of the company. From the figure, it can be observed that about 18 people and 7 people respectively were part of the project

team department and project management experts who were actively working in the organization. The project team interviewed were 36% while that of the project management experts were 14%.

Table 4.1 Educational status of employees of Zoomlion Ghana Limited

Educational status	Freq.	Percentage
O'level/SHS	4	8
Diploma/HND	12	24
Bachelor Degree	23	46
Master's Degree	8	16
Other Qualification	3	6
Total	50	100

Source: Researcher's Field work (August, 2019)

From table 4.3, the educational status of the workers is also an important component of the management and staff members of Zoomlion Ghana Limited who were the respondents for the study. Employees with first degree form a major component of the work force with a total number of 23 employees which represents 46 percent of the workforce. Employees with Master's Degree and Diploma or higher National Diploma certificate also form an integral part of the workforce of the company. This is represented by 16 and 24 percent of the total workforce holding such qualification each. Individuals with O'level and Senior High School certificate depicts 8 percent while other professional qualification forms 6 percent respectively of the respondents interviewed.

Work Experience at the workplace

Table 4.2. Years of Experience of employees of Zoomlion Ghana Limited

Experience	Freq.	Percentage
Below 1 year	2	4
1-5 years	19	38
6-10 years	14	28
11-15 years	9	18
Above 15 years	6	12
Total	50	100

Source: Researcher's Field work (August, 2019)

Years of experiences at the workplace are an important determinant of organizational productivity and project performance. From the table above, most of the workers have 1-5 years of working experience representing 38 percent. This means that, most of the workers there have served in this organization not quite long ago. The next highest levels of experience of 6-10 years have 14 people. This is represented by 28 percent of the total workforce. The table shows that, 2 employees of the company have less than 1 year working experience. This is represented by 4 percent of the total workforce. Employees with long serving years of experience of 11-15 years are 9 representing 18 percent. The table however shows that 6 workers of the company have above 15 years of working experience. This is represented by 12 percent.

Table 4.3 Processes used in the implementation of projects in Zoomlion Ghana limited

Statements	SA	A	U	D	SD	RII
Does the organization follow the 5 stages of PM processes as stated in the PMBOK	7	9	14	15	5	0.608
Challenges of Teamwork from project members	20	15	10	5	0	0.400
Nature and scope are always determined	15	10	12	8	5	0.512
All projects are being developed with a proposal	16	9	15	7	3	0.488
Time, resources and cost are considered during the phases of the project	17	14	9	5	5	0.468
Coordination and harmonization of resources is core in the organization	11	13	9	6	3	0.412
Project managers and project team ensures quality assurance	14	12	14	4	6	0.504
Projects do not require feasibility studies	5	9	11	12	13	0.676
Projects are carefully observed and monitored to avoid possible errors	18	13	10	7	2	0.448
Are corrective measures taken when project does not meet project plan	10	15	18	3	4	0.504
Each process is documented and recorded	25	15	7	2	1	0.356
Final projects are verified before closure or handed over to clients	11	24	8	6	1	0.448

Source: Researchers Field work (August, 2019)

In analysing the responses obtained from the respondents, the Relative Importance index was used. These were the following outcomes obtained from the survey.

In determining the processes used in the implementation of projects in Zoomlion Ghana Limited, it came out that 15 of the members disagree that the organization follows the 5 stages of project management processes as stated in the PMBOK. Also, majority, that is, 15 members were also not decided whether the company agrees or disagrees to this assertion. Only 7 and 9 people from the survey strongly agreed and disagreed that it follows due procedures of the project management processes

Also, in terms of challenges that must be worked out before implementation, it was confirmed that majority of the response from the survey were in agreement to this statement and that they strongly agree and also agree to this assertion while 10 members were neutral and none even disagree to this issue.

Another process required is determination of the nature and scope of the project. 15 and 10 members strongly agree and agree respectively to the above statement and 12 of the members were undecided while 8 and 5 disagrees and strongly disagree to this statement.

In terms of finding out whether projects are being developed with a proposal, the response established that majority (16) people strongly agree that projects are being developed with a proposal first before its commencement. This was followed by 15 people who were undecided about this while 10 people out of the 50 respondents disagrees to this view.

Another relevant fact that was surveyed was on the time, resources and cost factor. The question asked was to find out if these factors are factored during the phases of the project. The outcome showed that about 17 people of the company considers time, resources and cost as a vital factor

while 14 members also agree same to this fact. This explains that more than half of the respondents agrees to this point. Also, about the same number of people surveyed came out to say that they disagree and strongly disagree to this statement.

From the graph, it can be seen that in terms of coordination and harmonization of resources been the core practiced in the organization, the results to this was fairly ok. 11 and 13 members strongly agree and agree to this assertion. This means that Zoomlion Ghana Limited considers coordination and harmonization of resources as its core element. 9 people were neutral to this point and about same 9 people were not in agreement to this point.

Furthermore, when asked when project managers and project team ensures quality assurance, the answers were quite well as 14 people attested strongly that they ensure quality assurance while 12 also agreed to this and 14 people were undecided whether quality assurance was practiced in the company or not. 4 of them disagrees while 6 also strongly disagrees to this view.

With the issue of whether projects require feasibility studies or not, majority of the respondents stated that they strongly disagree or disagree to this. The response also came out with a figure of 13 and 12 members respectively. 11 of them were undecided while 5 and 9 members strongly agreed and agreed to this statement.

Another main processes that was surveyed from the respondents was on observation and monitoring. From the survey, the questions on monitoring and observation in avoiding possible errors proved that the company strongly does monitoring and observation at each phase of the project and that these function were key to the processes required in project implementation. Majority of the members confirmed this results. From the graph, it was observed that 18 members agreed strongly to this assertion as well as 13 members were also in support of it. On the other

hand, 10 members were neutral and undecided as 9 of them were also not in agreement to this position.

It was deduced from the results in terms of whether corrective measures are taken when project does not meet project plan that it agrees to this statement while 18 members were neutral, only a few responses came from members who were not in agreement to this assertion. This indicates that corrective measures been put in place at the company was very key and relevant during the project management processes and implementation.

Since recording and documentation is regarded as one of the best things every functional organization is required to adopt. The response from this statement indicated that each process within the company is been documented and recorded. From the graph, it can be seen that a greater number of the response shows both agree and strongly agreed and that is 15 and 25 people respectively while just only 2 and a single person disagree and strongly disagree to this.

Finally, in finding out whether projects are verified before closure or handed over to clients, it came out that 24 members agreed that this statement was very true. Also, 11 members strongly agreed to this process of project implementation. On the other hand, 8 of the members were not on each side, which means were not in support of the assertion of whether they been in agreement or disagreement to this statement. 1 member strongly disagree to this while 6 of the respondents disagree to this process of project implementation.

From the computation the study disagreed with the findings of Ofori (2013) that the organization follows the 5 stages of PM processes as stated in the PMBOK and also his study deduced that time, resources and cost are not considered during the phases of the project since every stage of a project

may face some amount of risk. On the other hand, Smith (2002) disagrees to this assertion and Fistsilis & Chalastis (2014).

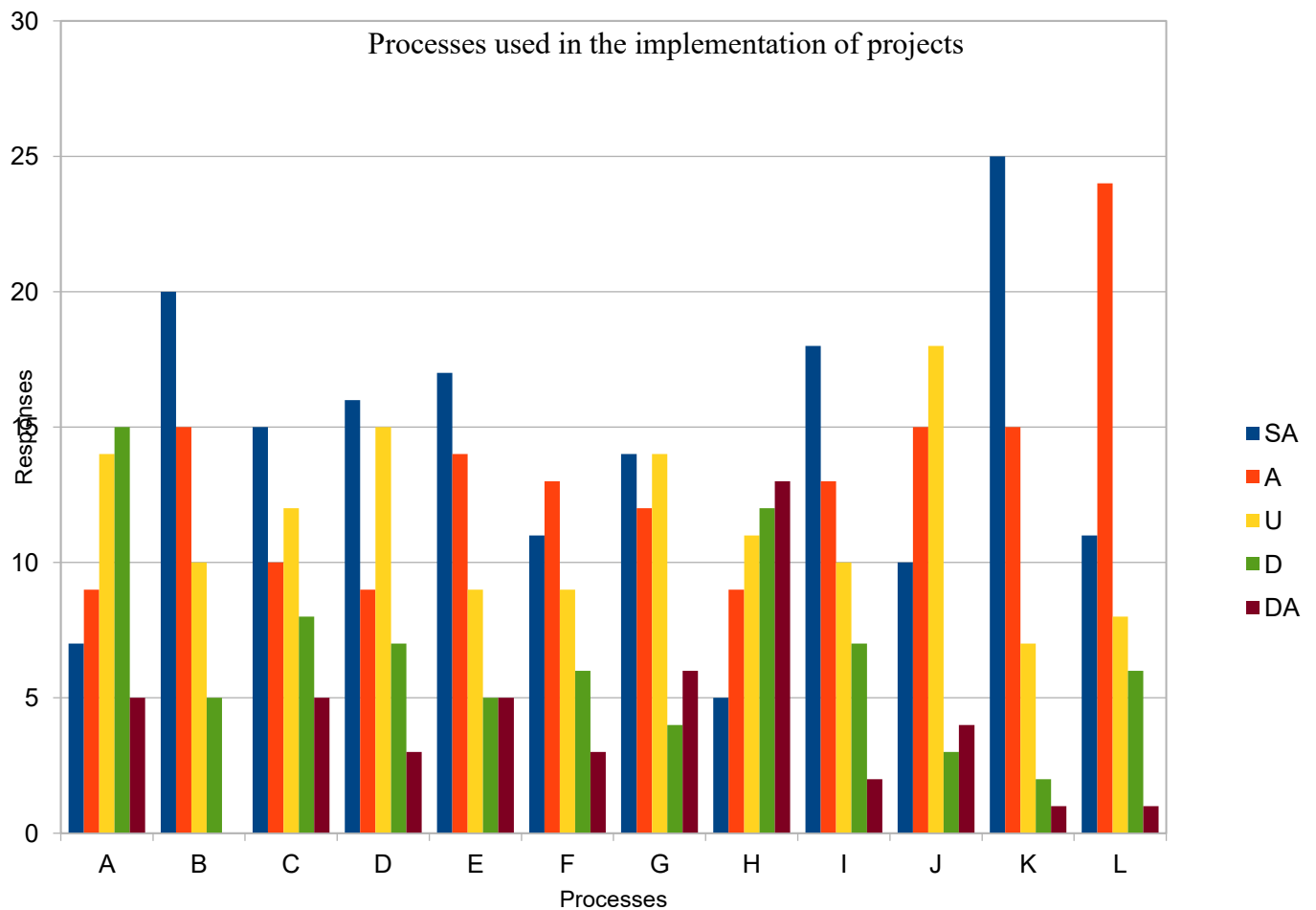


Figure: 3.2 showing processes used in the implementation of projects (Source: Researchers Field work (August, 2019))

4.4 EFFECTS OF THE IMPLEMENTATION OF PROJECT MANAGEMENT PRACTICES ON PERFORMANCE OF PROJECTS.

Table 4.4 below ranks the effects of implementing project management practices on performance of project at Zoomlion Ghana Limited using the mean, median, standard deviation and its Skewness. It also used the principle of ranking to determine the severity of effects in implementing project practices on performance by the company.

Table 4.4: Effects of the implementation of project management practices

Statement	Mean	Median	Ranking	S. D	Skewness
Reduce expenses of project delivery and ensure enhanced profits	4.80	5.00	1 st	0.404	-1.547
Higher degree of project success improves the competitive advantage	4.70	5.00	4 th	0.463	-0.900
Higher degree of project successes increases market share	4.50	5.00	7 th	0.677	-1.101
Produce quality deliverables	4.78	5.00	2 nd	0.418	-1.394
Provide customer advantage arising from meeting customer expectation	4.72	5.00	3 rd	0.454	-1.011
Provides value measure to the organization	4.52	5.00	5 th	0.677	-1.101
Better understanding of project requirement leading to motivated staff (employee satisfaction)	4.52	5.00	5 th	0.677	-1.101

Source: Researchers Field work (August, 2019)

In this section, the survey tried to find out the effects of the implementation of project management practices on performance. Ranking the results to determine how project management practices impacts performance of the company; Reduce project delivery costs and increased profits of projects were adjudged the highest effects that impacts on performance in the implementation of

project with a high mean score of 4.80. This was followed by the effect of producing high quality deliverables with a mean figure of 4.78. the respondents believe that project management practices have a greater effect of producing projects that are of quality standards and also producing quality deliverables as required by the project management institute. The 3rd effects of the implementation of project management practices of performance was adjudged as providing customer advantage arising from meeting customer expectation. The respondents agree that a project management practices well followed has the effect of meeting customer requirement thereby increasing its expectation. Also, customer advantage has a greater chance of winning the same clients or customer for another projects. This result of the study came out with a mean mark of 4.72

Moreover, the response of higher degree of project successes increasing the competitive advantage of a particular project was ranked as 4th. This statement came out with a mean mark of 4.70. It is more likely to indicate how the success of a project has a greater impact on competitive advantage over other companies. More companies will acquire projects based on their successes and as a result projects that have higher failure degree records is liable to affect the company losing projects and contracts that relates to project management. More interestingly, from the results obtained from the questionnaire, respondents believe that project management practices have an effect of granting better understanding of project requirement leading to motivated staff (ie. employee satisfaction) and also has the effect of providing value measure to the organization. The results came out with the same score for each statement with a mean mark of 4.52 ranked as 5th. This shows that the same number of respondents agrees to this assertion on the effects of projects management practices on performances. Per the response, a higher degree of project successes increasing market share was the last options ranked as an effect of project management practices on performance. The response shows that high degree of project successes has no effect on

increasing market share. The results indicate that respondents strongly disagree to this assertion and that there is no way a completed project which has undergone through all the required project management practices will increase its market share. This was ranked as 7th with a mean score of 4.50. From the above response, it was realized that the study of Mensah (2009) was in agreement of the reduction of expenses of project delivery and the increase in expenditure cost arising from delay propjets and thereby affecting organizational profit.

Table 4.5 Issues that hinder the successful implementation of project management practices

Statements	SA	A	U	D	SD	RII
Rigid organizational structure	8	19	9	2	12	0.564
Poor definition of goals and objectives	6	11	16	8	9	0.612
Unrealistic deadlines	7	15	11	9	8	0.584
Finding the right project management software	13	11	7	8	11	0.572
Insufficient team skills	8	17	5	5	15	0.608
Project management risk	12	6	9	7	16	0.636
Miscommunication and conflicts	8	13	12	8	9	0.588
Lack of Accountability	13	9	11	10	7	0.556
Challenges of Teamwork from project members	16	8	5	11	10	0.564
Lack of PM knowledge	11	5	17	6	11	0.604
Lack of leadership commitment	10	8	15	9	8	0.588

Lack of professional training	9	11	13	10	7	0.580
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Source: Researchers Field work (August, 2019)

A lot of issues and factors have hindered the successful implementation of project management practices in many organizations. The study tried to look at the responses of members within the organization and how the stated questionnaires affects the successful implementation of project management practices. The Relative Importance Index was used for the analysis.

First of all, rigid organization structure is laid down structures which are very complicated and does not allow the smooth flow of decision whether vertical to horizontal or both. The results showed that 19 people agrees to this statement and that those that are rigid organization structure within the organization which hinders the successful implementation of the project management practices. 9 of the members was undecided to this statement while 12 also were strongly in disagreement to this and 2 disagreed to this.

In terms of finding out if defining goals and objectives within the organization was considered poor. The highest response from the respondents totalled 16. These people were not decided whether the definition of goals and objectives were poor or not. 11 of them also agreed to this statement while 9 and 8 respectively disagreed and strongly disagreed.

Moreover, in identifying whether unrealistic deadlines hinder the successful implementation of project management practices, 15 of the respondents agree that deadlines were unrealistic and this was a challenge to the organization. 11 of them were undecided while 9 and 8 also disagreed and strongly disagreed to this view.

The right software used in managing projects are very important and as a matter of fact if the right software are not used for the right project implementation may hinder the success of a project implementation. From the graph, the results obtained established that 11 people agreed to finding the right management project software was a challenge while 11 people also strongly disagree to this. 13 also strongly agrees that it was a challenge. This means that the right project management software was a big challenge in Zoomlion Ghana Limited.

Insufficient team skills is also a major contributor to the challenges that are faced in the implementation of project management processes. The results agrees that there are not insufficient skilled team members who assists in the day to day operation of the company. 5 of them were undecided while other 5 were also in disagreement to this. However, 15 members strongly disagrees that the company has an issue of insufficient team skills.

Risks are unavoidable in every project implementation. Also, risks are uncertain events or happenings that takes place during the implementation phases of the projects. This hinders the successful implementation of projects or even delays project as well as hindering its quality or leading to high cost of the project. The results showed that 12 of the people strongly agrees that project management risk hinders the success of projects while 6 agrees to same. 9 were undecided while 10 and 7 of the people strongly disagree and disagree to this statement.

Miscommunication and conflicts are also challenges faced during the project management implementation. Per the results, it showed a response of 8 members who strongly agreed to it while 13 agreed to this. 12 were undecided as 8 of the members and 9 as well were in disagreement and strongly disagreeing to this statement.

On the point of accountability, the graph showed that a high number of people strongly agreed that lack of accountability is one of the factors that hinders smooth progress of the process. 11 of them were not decided while about 17 people out of 50 were in disagreement with this comment.

In relation to knowledge on project management, the respondents believed that PM knowledge is not a factor that hinders the success of a project implementation. 17 of the people were neutral on this while 11 people each were strongly in disagreement of this fact. This confirms that experience outweighs knowledge in terms of project management success.

Lack of leadership and leadership commitment as well as lack of professional training all came out with strong assertion under neutral. Also, majority of them believe that lack of leadership commitment and lack of professional training is a serious threat to successful project implementation. According to Baiden –Amissah (1999) the most pressing issues that hinders the successful implementation of project management practices was lack of professional training, followed by insufficient team skills, project management risk and finally lack of knowledge from the PMBOK. His study strongly believes that for this problem to be solved training should be organised regularly in order to equip personnel with the requisite skills and ideas for project management practices to be achieved.

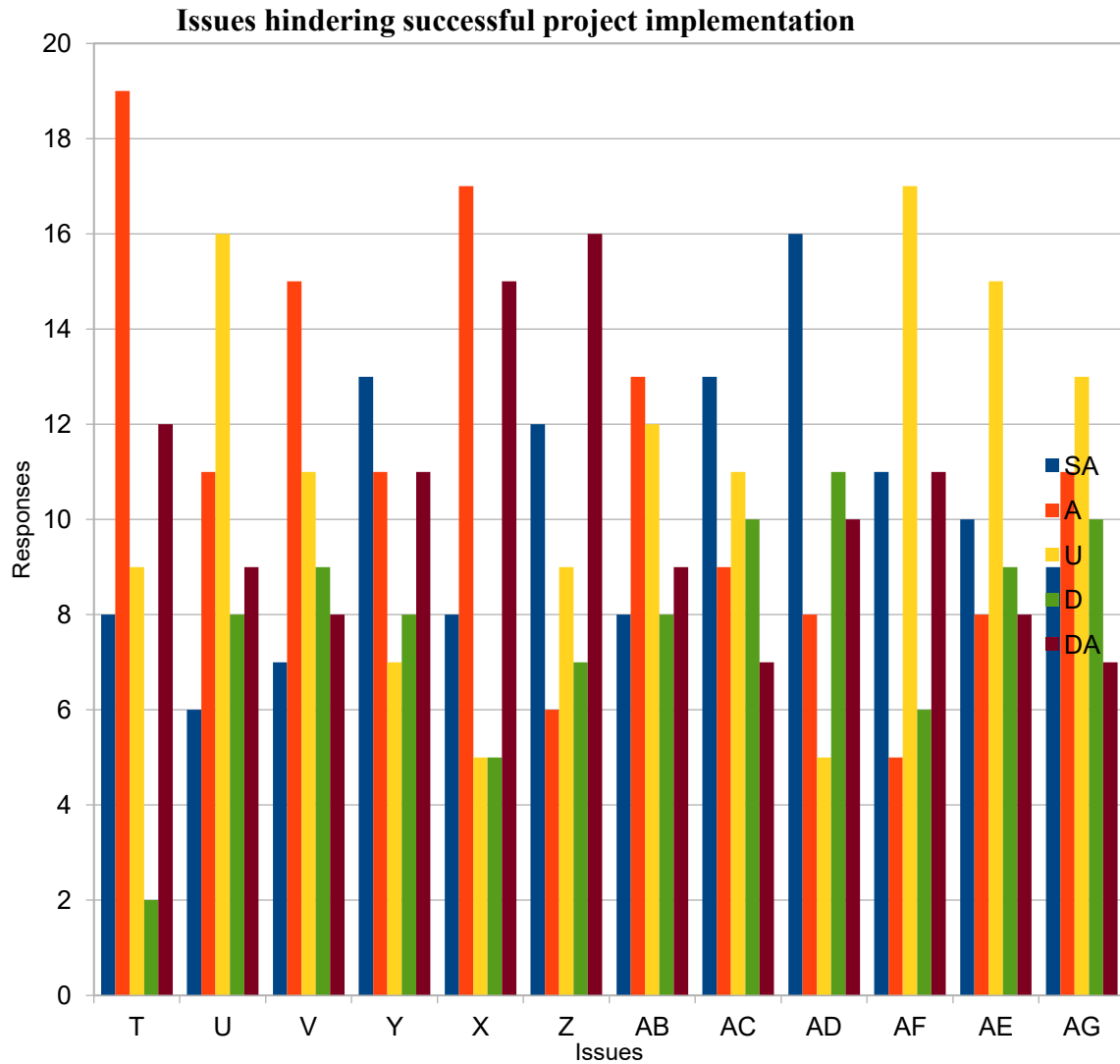


Figure 3.2 showing issues hindering successful project implementation (Source: Researchers Field work (August, 2019))

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

This research aimed to create an assessment of project management procedures in Ghana to develop appropriate project management methods to achieve effective project delivery and optimize project performance using Zoomlion Ghana Limited as a case study. This section provides a summary of the main results, results from the research results and suggestions. It also introduces the constraints of the study and proposed fields for further studies.

5.2 SUMMARY OF FINDINGS

The present study was motivated by three goals: to identify and analyse processes used in the implementation of projects in Zoomlion Ghana Limited; to determine the effects of the implementation of project management practices on performance of projects at Zoomlion Ghana Limited and to identify the issues that hinders the successful implementation of project management practices at Zoomlion Ghana Limited. The research goals examined were endorsed by the outcomes acquired in the study. The main results are summarized below in line with the study goals.

First, in identifying and analysing the processes used in the implementation of projects at Zoomlion Ghana Limited it came out that the company has a high rate of procedures it follows in the project management processes. Majority of the respondents were in agreement of the survey and that the five processes of project management practices are followed which includes initiation stage, planning stage, execution stage, monitoring and controlling closing. This affirms the study of Nkansah (2012). From the results it can be concluded that at each phase of the project management

practices the various stages or processes are critically addressed or looked at. The literature review also discussed the breakdown of the processes at each individual stage. Hence project management is seen as a necessary standard ascribe to all stages of every defined project at every sector. It can be confirmed that all processes are well documented and corrected. It also proved a majority, 25 percent response of all processes. Also, about 25 people disagree that project do not require feasibility studies. Also, the study showed that final projects are verified before closure or handed over to clients. Majority of the respondents agreed to this statement and were in support of this.

Second, when it came to determining the effects of project management procedures on project performance at Zoomlion Ghana Limited, the greatest effects on project performance were assessed from the table that reduced project shipping expenses and enhanced project revenues. The study used ranking to access this position and the results came out with the highest mean of 4.80 and a standard deviation of 0.404 with a negative Skewness. This was an indication that the company ensures that its implementation practices on projects comes out with quality projects at a reduce project cost and thereby increasing profits of projects. However, the study concluded that higher degree of project successes increases market share was ranked the least effects of project implementation on performance with a mean of 4.50. This attest to the fact that this statement has no correlation with the effects of implementation of projects on performance.

Finally, in identifying the problems that hinder the effective execution of project management procedures at Zoomlion Ghana Limited, it was discovered that a rigid organizational structure hinders project execution achievements. From the graph, it was realized that about 25 people agreed to the assertion of this point. This means that in the company their lot of laid down organization structures that are very rigid. Also, the right software used in managing projects are very important and as a matter of fact if the right software is not used for the right project

implementation may hinder the success of the project execution. From the graph, the results obtained established that 24 people agreed to finding the right management project software was a challenge. This means that the right project management software was a big challenge in Zoomlion Ghana Limited and has adverse results on the success factor of the project.

5.3 CONCLUSIONS

The paper discussed came out with an analysis on project management practices in Ghana to develop a proper project management technique in achieving a successful project delivery and optimizing project quality. The three major findings of the research are as follows:

1. Project management practices of every project requires to undergo through all the five stages or phases before implementation. Hence a break down in one of the stages can affect the entire project quality delivery in terms of cost and time.
2. Reduction in project delivery costs and increased profits are the most effects that affects the impacts on performance in the implementation processes of projects. This means that any project that is been undertaken via the stages or the methodical procedures results into reduce project delivery cost and thereby increasing returns.
3. Lastly, it was found out that rigid organizational structure hinders the successes of project implementation. This can be concluded that the project management team should critically looked at the organizational structure of the company and make it more flexible for easy decision and communication. Additionally, the study also concludes that the right management project software application should be provided by the company to help in the project delivery. Project management software will enhance quick delivery and will

also help in following the tools and techniques ascribed by the Project Management Institute as stated in the PMBOK.

5.4 RECOMMENDATIONS

The following recommendations were concluded after thorough analysis of the findings:

1. Project management organizations in Ghana need to organize project management training programs specifically for their staff to equip them with the necessary instruments and methods to manage projects and understand project management as a whole.
2. Moreover, qualified and experience personnel with knowledge and skills in project management background should be employed by clients, contractors and consultant to oversee the project management process.
3. Project management processes must be introduced and adhered to in any project evaluation to ensure that projects at Zoomlion Ghana Limited are carried out efficiently and successfully. More importantly, to warrant a high degree of project success, it is essential to effectively carry out the various undertakings under each of the five processes.
4. Zoomlion's entire leadership must show dedication and support in project execution to improve the success rate of project deliveries as well as properly resource project team members with the correct instruments for efficient project execution.
5. The role of identifying projects through systematic processes should be encouraged for each project and should be documented and registered for future reference at each stage.

5.5 LIMITATIONS OF THE STUDY AND FUTURE RESEARCH

The findings of this study cannot be statistically generalized for the entire Ghana economy as it was geographically restricted, with only participants from a random sample of a project company in the Greater Accra region and Zoomlion Ghana Limited to be specified. That is, the study was limited to a chosen area, other regions were not taken into consideration as well as foreigners who have ideas about projects. Again, some of the participants from the project management department who were in the top hierarchy were usually busy, making it hard to fill out the questionnaires on time. In addition, some participants were also unwilling to disclose data about the organization's adopted project management tools and methods, and this was considered private and confidential. The investigator, however, reassured them that the data they acquired would be used for academic study purposes.

Generalizing the findings to other previous work was a limitation in a sense that every organization has its own unique set of cultural variables and components. The study was also limited to the use of structured questionnaires as data collection tools. Most of the questionnaires were closed and this denied the respondents an opportunity to express their views that might be outside of the framework. Another important restriction is that this research did not take into account other experts with some knowledge and knowledge on the topic.

5.6 AREAS FOR FURTHER RESEARCH

In the future, the effect of project management methods on various project results in Ghana could be a very useful area of research work study.

Another useful avenue for future research is to take into consideration the distinction of projects that have successfully implemented project management practices in developing countries as case

studies to identify the critical success factors and the challenges faced in deploying those practices and how they overcame these challenges.

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APPENDIX



KWAME NKURUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY –INSTITUTE OF DISTANCE LEARNING

QUESTIONNAIRE TO RESPONDENTS:

The following questionnaire is being administered by final year student of KNUST for a thesis project on the topic “**An Analysis of Project Management Practices in Ghana (A Case Study of Zoomlion Ghana Limited)**”

Your kind corporation is hereby being sought to help answer these questions. Assurance is hereby given that any information provided would be treated with the necessary confidentiality it deserves and will be used solely for purposes of academic study.

Kindly complete this questionnaire by filling in the blanks with a tick [✓] against the most appropriate answer.

SECTION A: General Information

Please tick [☐] the appropriate option.

1. Which of the following best describes your role in the organization

Project Consultant [☐] Project Supervisor [☐] Project Manager [☐]

Project team member [☐]

Others (specify)

2. Level of Education:

O' level/SHS [☐] Diploma/HND [☐] Bachelor's [☐] Master's [☐]

Others [☐] Please Specify

3. Total years of work experience with the organization

Below 1year [☐] 1-5 years [☐] 6-10 years [☐] 11-15 years [☐] above 15 years [☐]

4. Total number of projects worked on in the last 5 years

0 -3 [☐] 4 - 7 [☐] 8 -12 [☐] more than 12 [☐]

SECTION A: Processes used in the implementation of projects in Zoomlion Ghana Limited.

Below are different variables on **the processes used in the implementation of projects**. Please show how strongly you agree or disagree by making a tick [☐] in the appropriate box. The rating is as follows: **SA—Strongly Agree, A-Agree, U-Uncertain, D-Disagree, SD-Strongly Disagree.**

No.	Statements	SA	A	U	D	SD
5	Does the organization follow the 5 stages of PM processes as stated in the PMBOK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Projects have strategic plan and timeline	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Nature and scope are always determined	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	All projects are being developed with a proposal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10	Time, resources and cost are considered during the phases of the project					
11	Coordination and harmonization of resources is core in the organization					
12	Project managers and project team ensures quality assurance					
13	Projects do not require feasibility studies					
14	Projects are carefully observed and monitored to avoid possible errors					
15	Are corrective measures taken when project does not meet project plan					
16	Each process is documented and recorded					
17	Final projects are verified before closure or hand over to clients					

SECTION B: Effects of the implementation of project management practices on performance of projects.

Below are different variables on **the effects of implementing project management practices on performance of project**. Please show how strongly you agree or disagree by making a tick [✓] in the appropriate box. The rating is as follows: **SA—Strongly Agree, A—Agree, U—Undecided, D—Disagree, SD—Strongly Disagree.**

No.	Statements	SA	A	U	D	SD
18	Reduce project delivery costs and ensures increased profits					
19	Higher degree of project successes increases the competitive advantage					
20	Higher degree of project successes increases market share					

21	Produce quality deliverables					
22	Provide customer advantage arising from meeting customer expectation					
23	Provides value measure to the organization					
24	Better understanding of project requirement leading to motivated staff (employee satisfaction)					

SECTION C: Issues that hinder the successful implementation of project management practices.

Below are different variables on **the obstacles that hinders a successful implementation of project management practices**. Please show how strongly you agree or disagree by making a tick [√] in the appropriate box. The rating is as follows: **SA—Strongly Agree, A-Agree, U-Undecided, D-Disagree, SD-Strongly Disagree.**

No.	Statements	SA	A	U	D	SD
25	Rigid organizational structure					
26	Poor definition of goals and objectives					
27	Unrealistic deadlines					
28	Finding the right project management software					
29	Insufficient team skills					
30	Project management risk					
31	Miscommunication and conflicts					
32	Lack of Accountability					

33	Challenges of Teamwork from project members					
34	Lack of PM knowledge					
35	Lack of leadership commitment					
36	Lack of professional training					

**THANK YOU VERY MUCH FOR AVAILING TIME TO COMPLETE THE
QUESTIONNAIRE**