

**AN INVESTIGATIVE STUDY OF PROJECT MANAGEMENT PRACTICES IN THE
ELECTRICITY COMPANY OF GHANA ACCRA, WEST REGION**

BY

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Science and Technology in partial fulfillment of the requirements for the degree of**

COMMONWEALTH EXECUTIVE MASTERS IN BUSINESS ADMINISTRATION

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DECLARATION

I hereby declare that this submission is my own work towards the CEMBA degree and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgment has been made in the next.

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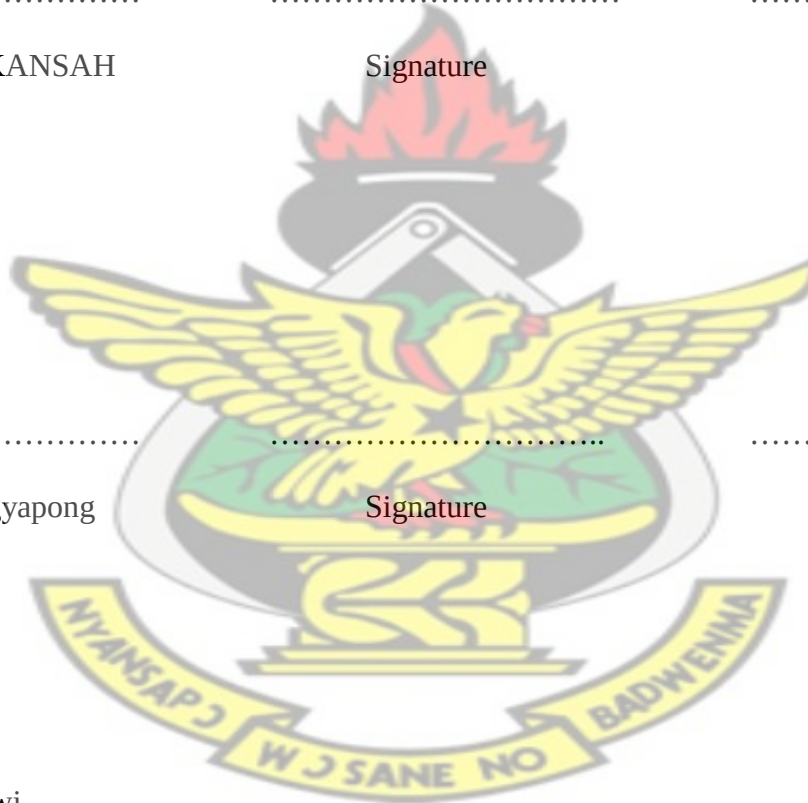
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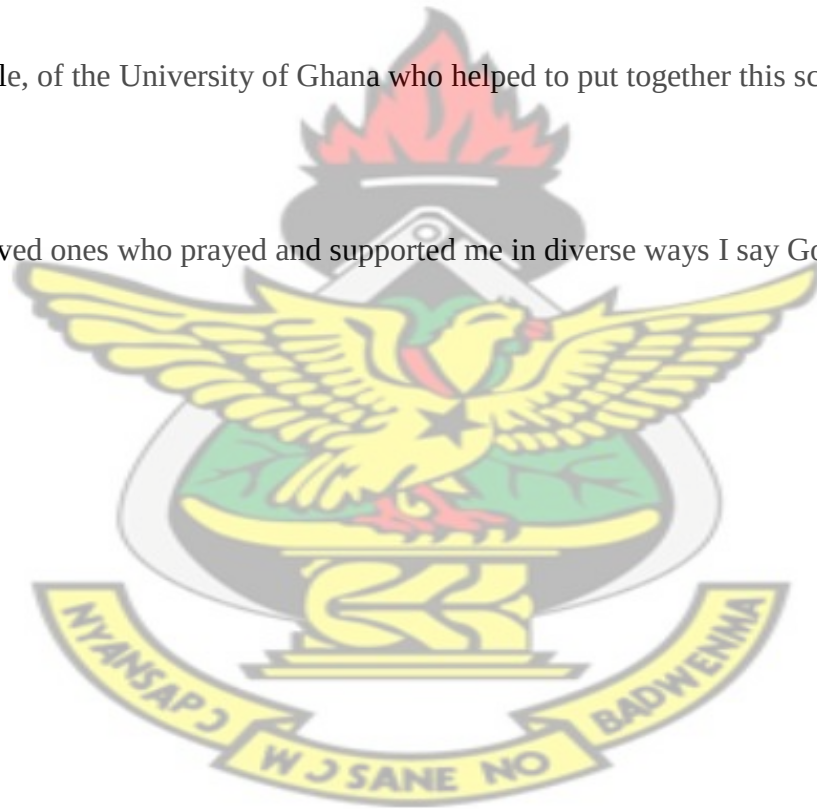
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Finally, to all loved ones who prayed and supported me in diverse ways I say God bless you in many ways.



DEDICATION

I wish to dedicate this piece of work to my wife, Mrs. Celine Asante Nkansah and my lovely daughter Maame Akua Serwaa Nkansah.

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ABSTRACT

The processes of initiation, planning, execution, monitoring and controlling and closing are the standards used to ensure the effective implementation of all projects. However, most organisations undertake projects without necessarily adhering to these standard project management practices leading to the failure of most projects. The Electricity Company of Ghana (E.C.G.) is the sole power distributing company in six out of ten regions in Ghana. It carries its mandate through a number of projects aimed at building substations and distribution networks. The purpose of this study was to investigate the extent to which project management processes are adopted in the implementation of projects in the Accra West Region of ECG. It was also to investigate the success rate of projects undertaken by the region and find out the causes of project failure in the company. The method used to carry out this research was solicitation of information from the engineers and managers who supervise projects through questionnaires. Data gathered was analysed using the Statistical Package for Social Science (SPSS). The major findings of the research indicated that the project management processes of initiation, planning, execution, monitoring and controlling and closing were adopted in the implementation of projects in the Accra West Region of ECG. It was highly recommended that management of ECG ensures that its regions implement projects using the standard processes to the letter for a high success rate of its projects.

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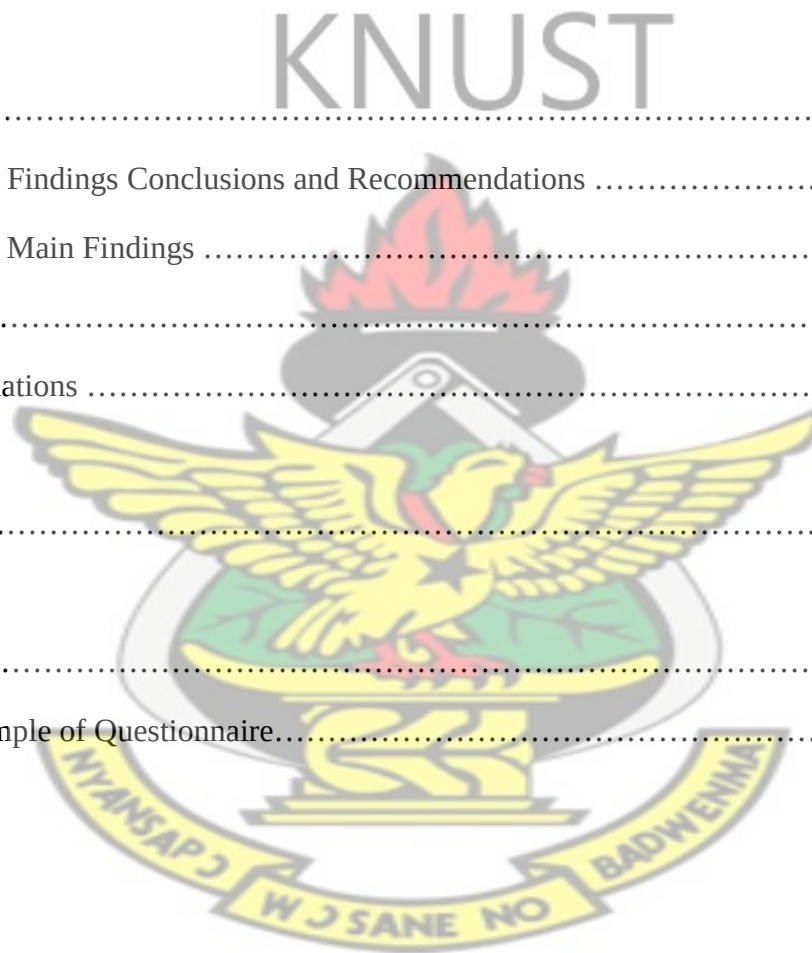
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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Project Management is the application of knowledge, skills, tools and techniques to project activities to meet project requirements (PMBOK Third Edition, 8). Project management is accomplished through the application of the processes of initiating, planning, executing, monitoring and controlling and closing.

A project is temporary endeavour undertaken to create a unique product or service (PMBOK Third Edition, 5). The temporary nature of projects makes it have the characteristic of having a definite beginning and an end which is sharply contrasted by operations which are repetitive, permanent or semi-permanent functional work to produce products or services.

The primary challenge of project management is to achieve all of the project goals and objectives whilst meeting the demands of project constraints. (Lewis 2006). Phillips (2003), outline typical project constraints as scope, time, cost and quality. A secondary objective is to optimize the allocation and integration of inputs to meet pre-defined objectives. These challenges ran through project management practises in several industries and become a hindrance to achieving most objectives and results required from the execution of projects.

The purpose of this study is to investigate project management practises in the Accra West Region of the Electricity Company of Ghana (ECG).

The Electricity Company of Ghana is the sole power distributing company in six out of the ten political regions of Ghana. It is able to achieve its objectives through a vast network of substations, overhead and underground transmission lines and energy meters which constitute a power distribution system. The construction of the power distribution systems and deployment of energy meters to various households are all undertaken through projects.

Project management practices are essentially imperative in E.C.G. to ensure that the best results are obtained from all projects undertaken for effective delivery of power to customers.

The Electricity Company of Ghana can best be described as the Matrix organization which combines its usual operations of purchasing power from the Ghana Grid Company (GRIDCO) and distributing to various consumers in its operational regions with the business of executing projects aimed at helping to improve its own operations.

The challenges that E.C.G. faces in its delivery of power, most prominently the frequent power outages to consumers require a rapid deployment of many projects to address the problem.

In spite of the numerous projects the company handles it is expected that the basic processes in project management which consist of initiation, planning, execution, monitoring and controlling and closing are carried out to the letter in order to achieve good results.

1.2 Problem Statement

The Project Management Institute (PMI), the body that regulates project management practices, worldwide describe the processes of initiation, planning, execution, monitoring and controlling and closing as the best procedures to ensure the successful execution of all projects.

Ideally, projects must go through all the processes mentioned above with the expect supervision of certified project managers to be certain of their good implementation. Indeed in some countries projects that are not taken through all these processes and supervised by professional project managers do not get implemented.

In Ghana, most donor funded projects such as the recently executed Tetteh Quarshie to Mallam Highway also known as the N1 highway come with conditions that makes it mandatory for the project to be handled by a professional project manager and also for it to go through all the five known processes of Project Management.

The Electricity Company of Ghana undertake a number of projects either funded by its owner the Government of Ghana (GOG) or donors such as the World Bank under the Ghana Energy Development Projects (GEDAP). The primary aim of undertaken these projects is to improve its distribution network for effective delivery of service to its customers. The company in most cases is constrained by time and cost in executing its projects thus there is always the problem of foregoing the Project Management Practises.

Again, there is not much literature on whether the Electricity Company of Ghana follows the laid down Project Management Practices in the implementation of its projects in order to guide the implementation of future projects.

It is in view of this that this study seeks to investigate the Project Management Practices used to execute projects in the Electricity Company Of Ghana in the Accra west Region

It will also be expedient to investigate whether the failure of projects or project deliverables are caused by inappropriate Project Management processes used. Thus the study will seek to find out the factors that might cause a project or it's deliverable to fail.

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1.3 Objectives of Study

Generally, the objective of the research is to investigate the processes engaged in by the Accra West Region of the Electricity Company of Ghana in execution of projects.

Specifically, the study aims:

1. To examine whether the Accra West Region of E.C.G. adopt Project Management practices in the implementation of projects.
2. To investigate the processes used in the implementation of the projects in ECG Accra West Region.
3. To identify the success rate of projects undertaken in ECG, Accra West Region.
4. To determine the causes of project failure in ECG, Accra West Region.

1.4 Research Questions

The major research question this study will seek to address is whether project management practices are followed in project Implementation in the Electricity Company of Ghana, Accra West Region.

In a much more specific sense the study tends to address the following question:

1. Are project management practices adopted in the implementation of projects in E.C.G Accra West Region?
2. What are the processes adopted in the execution of projects in ECG Accra West Region?
3. What is the success rate of projects executed in ECG Accra West Region?
4. What are the causes of project failures in the ECG Accra West Region

1.5 Scope of Study

It is important to state that the main objective of this study is limited to investigating the project management practices employed in the execution of projects in the Electricity Company of Ghana with a link to project successes and failures. It does not seek to execute a specific project.

Again, there are projects with long life and short life undertaken in E.C.G. The coverage of this study is limited to projects with life span not exceeding three (3) years.

1.6 Significance of the Problem & Justification for Studying It

The major relevance of this study is to enable me investigate whether the processes of Project Management which comprises initiation, planning, execution ,monitoring and controlling, and closing are employed for projects implementation in the Electricity Company of Ghana Accra west region.

In addition, findings from this study will guide Engineers and Project Managers in E.C.G in the execution of projects and thereby increase the success rate of projects and project deliverables.

This study will serve as an additional literature on Project Management Practises with particular case of ECG for reference in the University.

1.7 Limitation of Study

It is important to state that the coverage of this study will be limited to Engineering projects in the Accra West Region only. The respondents to interviews will be Engineers who are in charge of the projects within the Accra West Region.

1.8 Organisation of Work

The research study has been organised into five chapters: introduction, Review of Literature, Methodology, Analysis of Results, Conclusion and Recommendations and appendices.

Chapter one which introduces the work contains the background to the study, problem statement, objectives of the study, scope and limitation of the study.

Chapter two focuses on the review of relevant literature in previous works done on this topic.

The various methodologies for the research make up the third chapter. It focuses on the research setting, population for data collection, sampling size and sampling techniques, research design, data collection and analysis procedure.

The fourth chapter will analyse all results of all data collected and chapter five draws conclusions and recommendation.

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CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Overview of Projects

According to PMI's Guide to the Project Management Body of Knowledge (PMBOK 3rd Edition, 2004), project is a temporary endeavour undertaken to create a unique product or science. From the above definition it can be deduced that a project has some basic characteristics:

Temporary – temporary means that a project has definite beginning and definite end. The end is reached when the project's objectives have been achieved or it becomes clear that the project objectives cannot be met or the needs for the project no longer exist and the project is terminated.

Temporary does not mean short duration, as many projects can last for several years.

In addition, the temporary nature of projects does not apply to the product, service or the resultant outcome of projects. Most projects that are undertaken or create a national monument will produce results that will last for centuries. (PMI's Guide to Project Management Body of knowledge, 3rd Edition, 6)

Disnmore et al (2005) suggest that the temporary nature of projects just means that they are not repetitive or continuous activities.

Unique Products, Services or Results

A project is normally undertaken to create a specific (unique) deliverable, which can be a product (good), services or some results. In effect projects can create:

1. A produce or artifact that is quantifiable that can either be an end item or a component item.
2. A capability to perform a service such as business function supporting production or distribution
3. A result, such as outcomes or documents, for example a research project develops knowledge that can be used to determine whether or not a trend is present or a new process will benefit society.

Uniqueness is an important characteristic of project deliverables because it distinguishes every deliverable from another similar purpose. For example there are many office buildings developed from projects but each facility is unique or distinct. (PMI's Guide to Project Management, 3rd Edition, 6)

Progressive elaboration

Progressive elaboration of projects refers to developing in steps and continuing by increments. For example a projects scope will be broadly described earlier in the project and made more explicit and detailed as the project team develops a better and more complete understanding of the objectives and deliverables. Progressive elaboration indicates that projects are undertaken by gradual build of steps and activities until the final deliverable is achieved.

Cleland and Kezner (1985), in their work; A Project Management Dictionary of Terms includes the following characteristics for projects:

A project is a combination of human and nonhuman resources pulled together in a temporary organization to achieve a specified purpose.

A project, then, can be defined as possessing the following characteristics:

1. A defined beginning and end (specified time to completion).
2. A specific, preordained goal or set of goals.
3. A series of complex or interrelated activities.
4. A limited budget

2.2 Strategic Need of Projects

Projects are means of addressing needs that cannot be addressed within the organizations, normal operational limits. Projects are therefore, often utilized as a means of achieving an organization's strategic plan. Projects are typically authorized as a result of one or more of the following strategic considerations:

1. A market demand as may be the case of an oil company authorizing a project to build an oil refinery in response to chronic fuel shortages.
2. An organizational need; for example, a training and development company authorizing a project to create a new course for increased revenue
3. A customer request as in the case of an Electric Utility Company such as ECG undertaking a project to build a new substation to serve growing demand and improve power delivery to its customers
4. A technological advance as depicted in software companies authorizing projects to say create a new generation of video games.

5. A legal requirement for example the Electoral Commission of Ghana undertaking a project to register all Ghanaians of 18 years and above in a new biometric voters register to make them eligible to vote in general elections as stipulated in the constitution of Ghana. (PMI's Guide To Project Management, 3rd Edition, 7)

2.3 Project Life Cycle

Projects like an organism develop and change continuously. Projects go through different phases in what is termed the project life cycle.

Most project management books divide the life of a project into four phases.

In one instance Thamhain and Wilemon (1975) divides a project's life into project formation, project build up, main programme phase and phase unit, while Adams and Brandt (1983) categorizes projects into conceptualization, planning, execution and termination .

The Project Management Body of Knowledge (PMBOK) guide third edition describes the phases as initiation or Birth phase, in which the outputs and critical success factors are defined, the Planning Phase, characterized by break down the project into smaller parts/tasks, An Execution phase in which plan is executed and lastly Closure or Exit phase, that marks the completion of the project.

The essence of grouping project activities into phases is to enable the project manager and the project team to effectively plan and organize resources for each activity, and also objectively measure achievement of goals and justify their decisions to move ahead, correct or terminate.

It is important to distinguish the phases of a project from the five project management process groups.

2.4 Project Management Processes

Project Management is accomplished through processes, using project management knowledge, skills, tools and techniques that receive inputs and generates output.

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

These five processes have clear dependencies and are performed in the same sequence on each project.

Initiation

The initiation process group consists of the processes that facilitate the formal authorization to start a new project or a project phase. (PMI's PMBOK Guide 3rd Edition, 43). According to Nathan and Jones (2003), the initiating process determines the nature and scope of the project. The project initiating process also recognizes that a project or phase should begin and the project management team is committed to do so. It includes developing a proposal for a potential project and analyzes and validates feasibility of the project.

The initiation stage produces a plan that encompasses the following areas:

1. A project charter formally authorizing the project.
2. Analyzing the business needs and requirements.
3. Reviewing of the current operations.
4. Financial analysis of the costs and benefits
5. Identification and analysis of stakeholders

6. Appointment of a project manager.

Planning

After the initiation stage, the project is planned to an appropriate level of detail. The planning process group helps gather information from sources with each having varying level of completeness and confidence (PMI's PM BOK Guide, 3rd Edition 46). Planning is done for time, cost, resources and risk management during execution. Project planning is an iterative and ongoing process throughout the project's life.

Ibbs and Kwak (2002) assert that, the project planning process leads to the development and maintenance of a workable scheme to accomplish the business needs for the project. It includes defining overall scope, identifying planning strategy, developing the work breakdown structure for cost and schedule, refining estimates and analyzing commitments, optimizing the project plan, developing risk management plans, and organizing the project team to establish a project-driven organization environment.

According to Kerzner (2003), the planning process consist of

1. Determining how to plan (example detailed planning)
2. Developing the scope statement
3. Selecting the planning team
4. Identifying deliverables and creating a Work Breakdown Structure (WBS)
5. Identifying the activities needed to complete those deliverables and networking the activities in logical sequence
6. Estimating the resource requirements for the activities
7. Estimating time and cost for the activities

8. Developing the schedule
9. Developing the budget
10. Risk planning
11. Gaining formal approval to begin work.

Execution

Execution consists of the processes used to complete the work defined in the Project Management Plan to accomplish project requirements (PM BOK Guide 3rd, 55). It involves coordinating people and resources, as well as integrating and performing the activities of the project according to the project management plan. Actual work on the project is done during the execution process.

The PMBOK Guide, 3rd edition 56 – 58 describes the activities under execution as

1. Direct and manage project execution
2. Perform quality assurance
3. Acquire project team
4. Develop project team
5. Information distribution
6. Select sellers.

Monitoring and Controlling

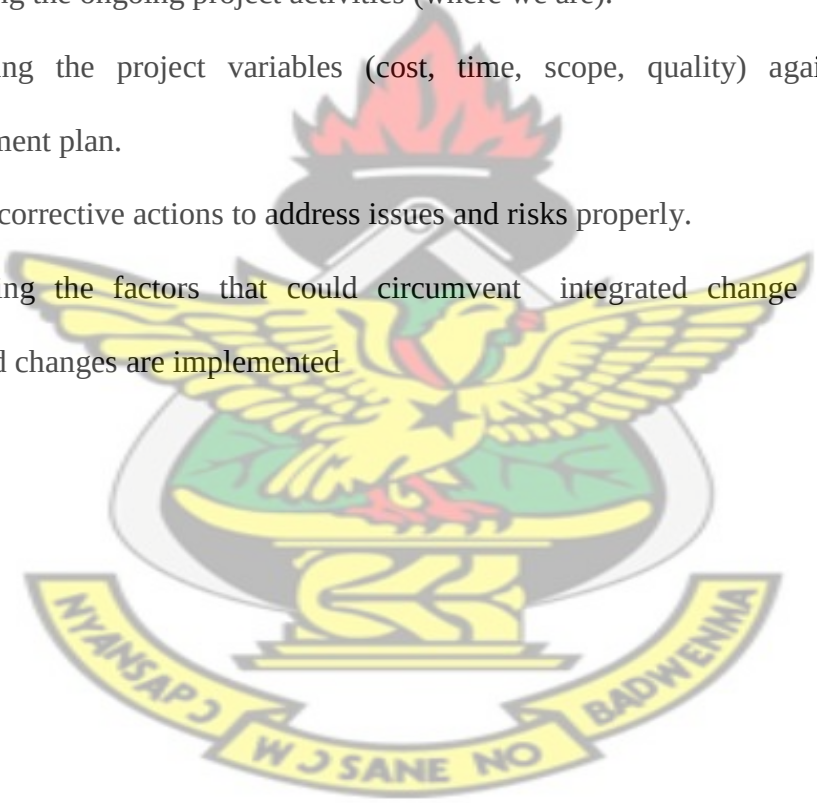
Monitoring and controlling consist of those processes performed to observe project execution so that potential problems can be identified in a timely manner and corrective action taken when necessary. (PMI's, PM BOK 3rd Edition, 59). The project controlling process ensures that project

objectives are met by measuring progress and taking corrective actions when necessary. It includes collecting project progress status, analyzing variances, and communicating project status.

The key benefit in monitoring and controlling is that the project performance is observed and measured regularly to identify variances from the project management plan.

Lewis (2000) indicates that monitoring and controlling activities include;

1. Measuring the ongoing project activities (where we are).
2. Monitoring the project variables (cost, time, scope, quality) against the project management plan.
3. Identify corrective actions to address issues and risks properly.
4. Influencing the factors that could circumvent integrated change control so only approved changes are implemented



Closing

Closing includes the processes used to formally terminate all activities of a project or a project phase, hand off complete product to others or close a cancelled project.

The closing process is complete when there is a formal acceptance of the project deliverable and all administrative activities of archiving of files and documenting lessons learned are completed.

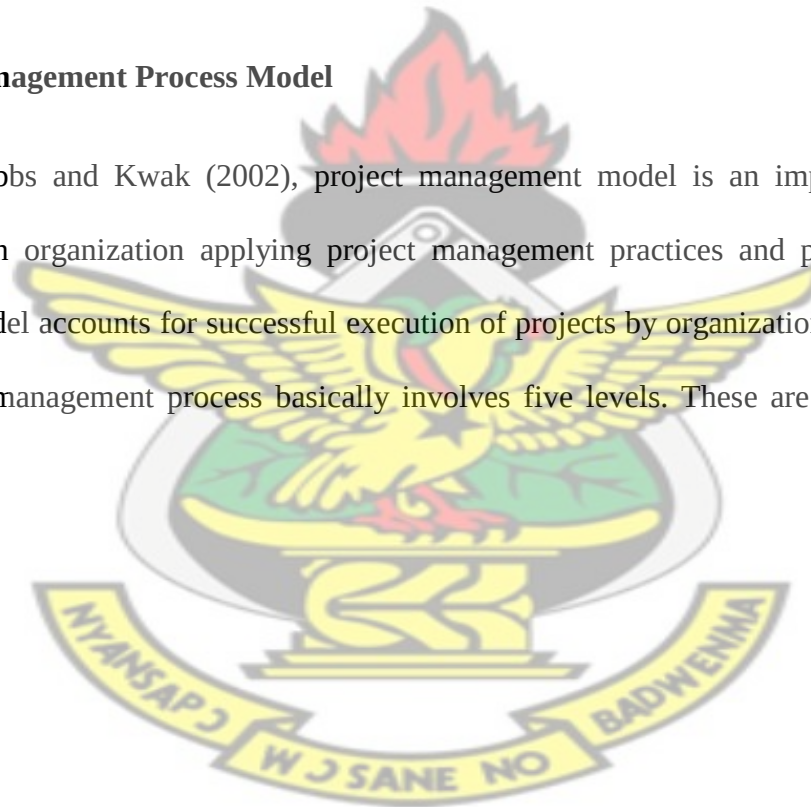
Project closing consist of:

1. Project close: finalize all activities across all of the process groups to formally close the project or phase of project.
2. Contract closure: Complete all documents on all contracts.

(PMI, (2010) A guide to project Management Body of knowledge p27 – 35)

2.5 Project Management Process Model

According to Ibbs and Kwak (2002), project management model is an important source of reference for an organization applying project management practices and processes. This is because the model accounts for successful execution of projects by organizations (Ibbs & Kwak, 1997). Project management process basically involves five levels. These are illustrated in the model below.



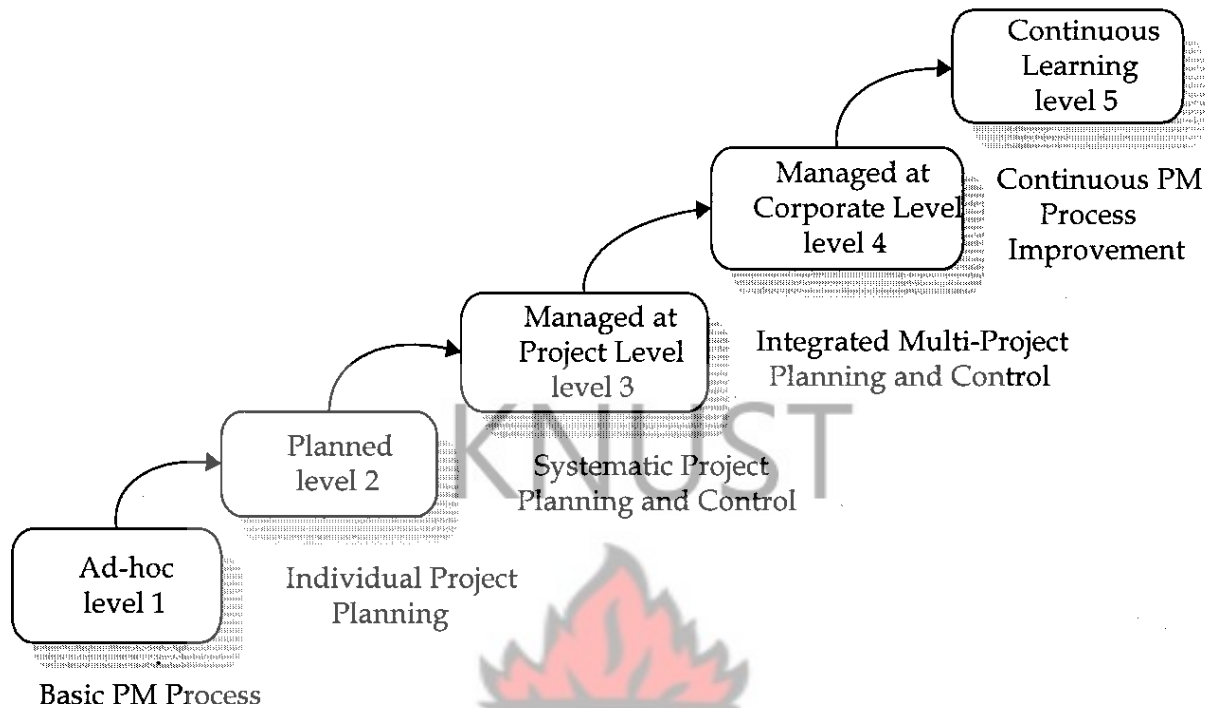


Figure 2. 1: Basic Project Management Process (After Ibbs & Kwak, 2002)

The project management model advanced by Ibbs and Kwak (2002) deals with the following project management knowledge areas.

1. Project integration management
2. Project scope management
3. Project time management
4. Project cost management
5. Project quality management
6. Project human resource management
7. Project communication management

8. Project risk management

9. Project procurement management

Every successful project incorporates these practices to deliver projects in line with the requirements and satisfaction of clients/customers. Below is a discussion of the practices.

Project Integration Management

Project integration management according to (the PMBOK, 3rd edition, 2004) involves the efficient and effective coordination of the various elements or components of the project. When properly integrated, project goals and objectives are achieved according to lay down standards. At the integration level, issues such as applications, processes, organizations and project life cycle phases are considered vital. Five basic levels are involved in this stage. In the first level, project plans are not prepared in a structured format and no project management information system is available.

At level 2, informal PM tools and practices including basic project plan and project organizational structure are defined. At level 3, formal PM methodology is established and managed. Also, a project management information system is managed to collect, review and distribute necessary project management data. Level 4 involves project control processes that are integrated and coordinated across various knowledge areas and projects. Project managers and supervisors integrate project management information system for multiple projects and they also ensure that control processes are integrated to minimize the risk of scope, cost, schedule, and quality. At the final level (level 5), the entire integration process is planned, optimized and sustained for continuous project management process improvement purposes.

Project Scope Management

This aspect of project management ensures that all the factors and variables for defining and controlling the project are included. These variables or factors are project planning and cost control, tradeoff analysis, project charter preparation, the kickoff meeting, a scope-of-work statement, validation of the project scope, and initiation of a change control process (Ibbs & Kwak, 2002). This stage of project management process involves five levels and each level has its own activities.

At level 1, project managers are assigned on an ad-hoc basis and there is no methodology to initiate and control the project. At level 2, informal work breakdown structures and scope-change control processes are defined and available. Also, the PM team agrees to initiate the project informally. At level 3, formal project charter and project manager roles are established. Also, scope planning, definition, and verification processes are managed. At level 4, the product and scope management are integrated to ensure project success. Also, scope-change-control and verification process are documented and integrated. At level 5, the entire process of scope management is planned, optimized, and sustained for continuous PM process improvement.

Project Time Management

According to Ibbs and Kwak (2002), project time management ensures completing a project on time, which is one of the major challenges for any project manager or organizations involved in projects. Time management in projects includes defining activity and sequence, duration estimation, schedule development, and schedule control. Resource allocation and leveling, network crashing, and fast tracking of projects are used to effectively manage the project schedule. Regarding time management, in level 1 there is no standard template for project

schedules. The process of schedule development is unrealistic and out of sequence. At level 2, an organization is able to develop informal schedules for planning and tracking. Also, activity lists and work breakdown structure templates are defined. At level 3, a variety of scheduling tools and techniques are available for effective schedule control. At level 4, formal schedule control processes and practices are integrated. At level 5, formal project time management tools are optimized and sustained for continuous project management process improvement.

Project Cost Management

Project cost management ensures that the project is completed within the approved budget. Cost management is crucial because cost overruns are common resulting in serious cost problems during project execution. Project cost management includes resource planning, cost estimating, cost budgeting and control, earned value analysis, and depreciation and capital budgeting. There is no cost estimating process available at level 1 because the results would be poor and would most likely exceed the original budget. At level 2, informal cost estimating tools and techniques are available. Cost baseline, resource requirements, and work breakdown structures are defined. At level 3, resource planning and cost estimating are well coordinated and life-cycle costing is used and managed. At level 4, formal resource planning, cost estimating, and budgeting processes are integrated. Also, project stakeholders have wide perspectives of different project cost metrics. Level 5 organizations have formal cost estimating tools and techniques that are optimized and sustained for continuous PM process improvement.

Project Quality Management

Project quality management ensures that the project will meet or exceed all activities of the overall management function. It includes an overview of quality concepts, the cost of quality, statistical process control, variation and measurement, and quality improvement. At level 1, project overruns and reworks are common and expected. There are no quality audits, quality assurances, or quality control processes. Only on-site inspection is conducted for quality checkup. Level 2 organizations have informal quality management systems. Noncompliance issues are addressed through inspection and audits only if it is mandatory by project contract. At level 3, formal quality policies and standards are established. Quality planning and assurance activities are managed and conducted to find quality problems. At level 4, the objectives to achieve high quality project management processes and project quality are integrated. Also, project progresses toward accomplishing project quality are quantified, implemented, and integrated. At level 5, the quality management system is optimized and sustained for continuous PM process improvement.

Project Human Resource Management

Project human resource management ensures the most effective use of the people involved with the project. It is to manage, motivate, and organize people effectively. It includes assigning project roles and responsibilities, reporting organizational relationship, staffing, motivation, leadership, team development, and conflict resolution. Level 1 organizations struggle with the concept of project driven organization resulting in conflicts between functional project managers. At level 2, an informal organizational chart and staffing management plan are defined. At level 3, customers and suppliers are often included as members of the project to receive team building activities and training together. At level 4, improvements in both individual skills and team

capabilities are integrated to perform effectively. Organization is rewarded and recognized by project-oriented teams. At level 5, the human resource management system is optimized and sustained for continuous PM process improvement. (McCauley M. 1993)

Project Communications Management

Project communication management ensures timely and appropriate generation, collection, dissemination, storage, and disposition of project information. Open and clear communications are required among planners, implementers, and all levels of the organization for project success. It includes having a communication plan, information distribution path, progress reporting, and information sharing system for management and customers. Level 1 organization has no formal project performance reporting systems. The project performance review is often limited to basic status reporting. A project review is only held if requested by a contract. At level 2, an information retrieval and distribution system is defined and informal performance reports and reviews are conducted. At level 3, project data are maintained in a structured format and project performance data are regularly analyzed, reviewed, and revised for project assessment. At level 4, information on scope, schedule, cost, risk, quality, human resource, and procurement are integrated in project performance reporting. Also, communication management processes and techniques are integrated with an organizational structure. At level 5, organizations have a systematic communications management system that is optimized and sustained for continuous PM process improvement (Ibbs & Kwak, 2000).

2.6 Successful Project Implementation

In addition to defining the concept of organizational projects, it is important, before attempting any discussion of the steps leading to a successful project, to describe just exactly what a "successful project" is. Project implementation success has been defined many ways to include a large variety of criteria. However, in its simplest terms, project success can be thought of as incorporating four basic facets. A project is generally considered to be successfully implemented if it

1. Comes in on-schedule (time criterion).
2. Comes in on-budget (monetary criterion).
3. Achieves basically all the goals originally set for it (effectiveness criterion).
4. Is accepted and used by the clients for whom the project is intended (client satisfaction criterion).

‘By its basic definition, a project comprises a defined time frame to completion, a limited budget, and a specified set of performance characteristics. Further, the project is usually targeted for use by some client, either internal or external to the organization and its project team. It seems reasonable, therefore, that any assessment of project implementation success should include these four measures stated above. (Pinto et al, 1987)

2.7 Project Success Factors

According to the 1994 Standish CHAOS Report, there are top 5 factors found in successful projects. These include:

1. User Involvement
2. Executive Management Support
3. Clear Statement of Requirements
4. Proper Planning
5. Realistic Expectations

Jiang et al (1996), in another literature study, list 13 other factors as contributing to the success of projects. His lists of factors include:

1. Clearly defined goals (including the general project philosophy or general mission of the project, as well as commitment to those goals on the part of the team members).
2. Competent project manager. The importance of initial selection of skilled (interpersonally, technically, and administratively) project leader.
3. Top Management Support. Top or divisional management support for the project that has been conveyed to all concerned parties.
4. Competent project team members. The importance of selecting and, if necessary, triaging project team members.
5. Sufficient resource allocation. These are Resources in the form of money, personnel, logistics, etc.
6. Adequate communication channels. Sufficient information is available on the project objectives, status, changes, organizational coordination, clients' needs, etc.

7. Control Mechanisms. (Including; planning, schedules, etc.). Programs are in place to deal with initial plans and schedules.
8. Feedback capabilities. All parties concerned with the project area able to review project status, make suggestions, and corrections through formal feedback channels or review meetings.
9. Responsiveness to client. All potential users of the project are consulted with and kept up to date on project status. Further, clients receive assistance after the project has been successfully implemented.
10. Client consultation. The project team members share solicited input from all potential clients of the project. The project team members understand the needs of those who will use the systems.
11. Technical tasks. The technology that is being implemented works well. Experts, consultants, or other experienced project managers outside the project team have reviewed and critiqued the basic approach.
12. Client Acceptance. Potential clients have been contacted about the usefulness of the project. Adequate advanced preparation has been done to best determine how to sell the project to the clients.
13. Trouble-shooting. Project team members spend a part of each day looking for problems that have surfaced or are about to surface. Project team members are encouraged to take quick action on problems on their own initiative.

According to Johnson, (2001) the success rate for projects has actually increased since the original Standish CHAOS report. Johnson attributes this increased success rate to more project

people using the Standish “Recipe for Success” that was established in 1998. Johnson tells us that the overall project success rate has increased from 16% in 1994 to 28% in 2000.

2.8 Project Failure Factors

The 1994 Standish CHAOS report also lists the following factors as contributing to the failure of projects:

1. Incomplete Requirements
2. Lack of user involvement
3. Lack of Resources
4. Unrealistic Expectations
5. Lack of Executive Support
6. Changing Requirements & Specifications
7. Lack of Planning
8. Didn't need it Any Longer
9. Lack of IT management
10. Technical Illiteracy

Field, (1997) states that, “projects fail too often because the project scope was not fully appreciated and/or user needs not fully understood.” Hulme, (1997) tells us that “MIS projects and associated procurements take place in an environment characterized by the following: Lack of management continuity and an incentive system that encourages overly optimistic estimates of the benefits that can be attained from doing the project.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Research Setting

The study was conducted using the Electricity Company of Ghana. Specifically, the Accra West Region of the company was the focus. The Accra West Region of the Electricity Company of Ghana has seven districts. These are: the regional district, Korle-Bu district, Dansoman district, Kaneshi district, Achimota district, Bortianor district and Nsawam district. The Accra West Region is chosen because of proximity to the researcher. In addition, it is the largest of the regions in terms of number of districts.

3.2 Research Design

The study utilized a survey design. This design was appropriate because the study sought to investigate engineer's views or opinions regarding some of the project management practices of the Electricity Company of Ghana.

A quantitative research approach was adopted to achieve the research objectives. This approach was chosen because the study collected numeric data instead of non-numeric. Quantitative approach was also appropriate because questionnaire instead of interview was used to collect the data in the study.

3.3 Population

The study comprised all project engineers in the seven districts of the Accra West Region of the Company. . The target comprised engineers, assistant engineers, divisional engineers as well as district engineers. A total of 14 Engineers in the six districts and the project office in the region were interviewed.

3.4 Sample Size and Sampling Techniques

A total of thirteen (13) engineers were selected for the study. The expected 14 sample size was not achieved because a participant declined to participate in the study due to work demands and schedules.

3.5 Sources of Data

Two different types of data were used. These were primary and secondary data. Primary data in this study comprised data collected via questionnaire and used for analysis while secondary data was sourced from the articles, magazines and various publications in project management which were contacted.

3.6 Instrument

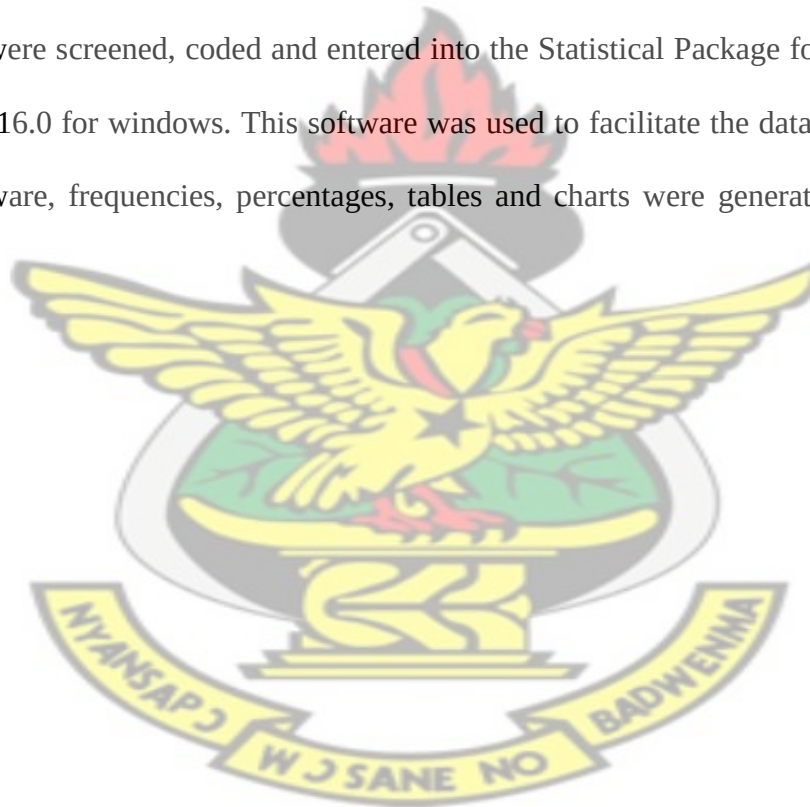
The study utilized a self report questionnaire to collect data from the participants in the study. A questionnaire will be designed and used to collect relevant data from the selected sample. The questionnaire will be in two sections. Section collected information on demographic background of participants such as tenure, position, and number of projects managed or supervised. Section B gathered information of project management practices of Electricity Company of Ghana.

3.7 Data Collection Procedure

The researcher sought permission from the head of each of the districts within the Accra West Region by explaining the purpose of the study to the various heads. This was appropriate as required by research ethics. After approval is given, the researcher would seek the consent of the participants who agree to take part in the study before delivering the questionnaires to them to fill. Participants would be assured of confidentiality of information that they will provide. Data collection would take one month.

3.8 Data Analysis

Data collected were screened, coded and entered into the Statistical Package for Social Sciences (SPSS) version 16.0 for windows. This software was used to facilitate the data analysis process. Using this software, frequencies, percentages, tables and charts were generated to explain the data.



CHAPTER FOUR

4.0 RESULTS AND INTERPRETATION

4.1. Introduction

The study examined project management practices of the Electricity Company of Ghana, Accra West Region. Specifically, the study ascertained project management practices adopted during implementation of projects; examined the processes used in the implementation of projects; determined the success rate of projects undertaken by ECG, Accra West Region; and investigated the causes of project failure.

This chapter presents the results of the study. The results are presented in line with the research objectives stated. However, demographic background of the respondents would be presented first.

4.2 Demographic Characteristics of Respondents

Relevant demographic data such as districts, position, tenure in organization, number of years respondent managed or supervised projects, working time dedicated to projects, percentage of time dedicated to project management and number of projects managed or supervised within the last three years.

Districts of Respondents

All the seven (7) districts in the Accra West Region of the Electricity Company of Ghana were represented in the study. As shown in Table 1, the majority of respondents 3(23.1%) were selected from Kaneshie district with 15.4 percent and 15.4 percent drawn from Accra West, Nsawam and Project office respectively. A respondent each was drawn from Achimota district (7.7%), Bortianor (7.7%), and Dansoman (7.7%) respectively.

Table 4.1: District Location of Respondents

	Frequency	Percent (%)
Accra West	2	15.4
Achimota	1	7.7
Bortianor	1	7.7
Dansoman	1	7.7
Nsawam	2	15.4
Project Office	2	15.4
Kaneshie	3	23.1
Korle bu	1	7.7
Total	13	100.0

Position of Respondent

In relation to job position, 38.5 percent of respondents worked as project managers while 30.8 percent worked as District Engineers. A respondent said he/she worked as an assistant project Engineer. In addition, a respondent reported that he/she was an assistant IT officer (7.7%) while another claimed he was a divisional manager (7.7%). A respondent however, did not state his position (7.7%).

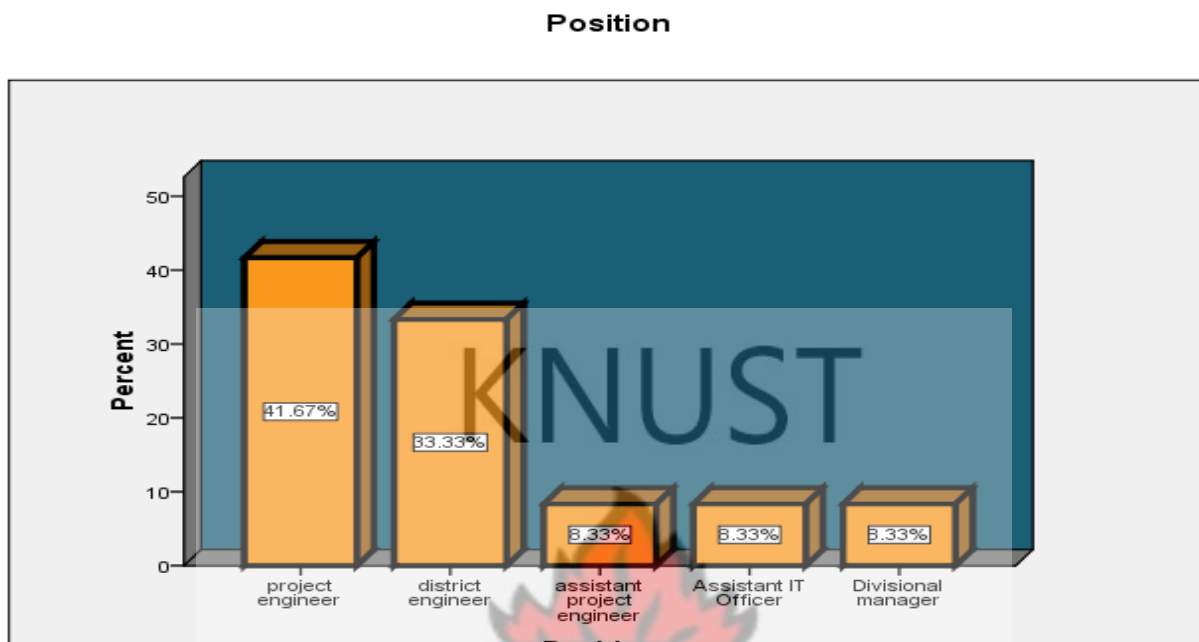


Fig. 4.1 Designation of Respondents

Tenure in Organization

In terms of tenure, it was observed that the majority of respondents had been in the Company between 5 and 10 years (38.5%) with 30.8 percent reporting 10 to 15 years. In addition, 23.1 percent had been in the Company for less than 5 years while a respondent had reported working for 15 years and above with the Company (7.7%).

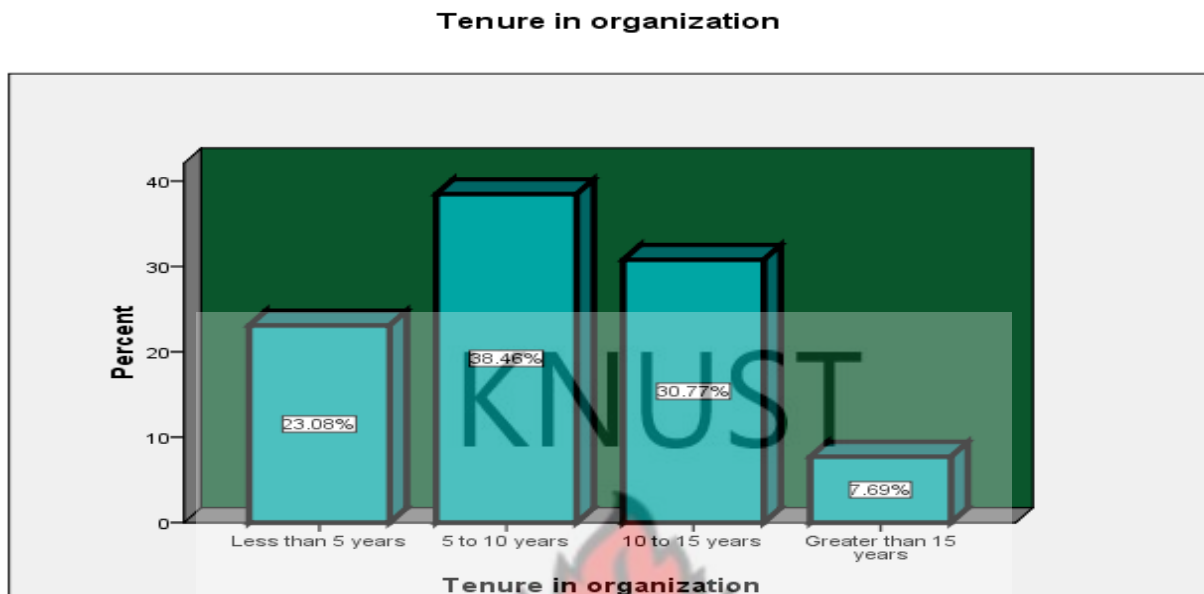


Fig. 4.2 Tenure in organization

Number of Years Worked on Projects

Number of years worked on projects ranged from 1 to over 5 years with the majority of respondents serving between 3 to 5 years (n=5) and more than 5 years (n=5) respectively. In addition, some respondents reported that they have worked on projects between 1 to 3 years.

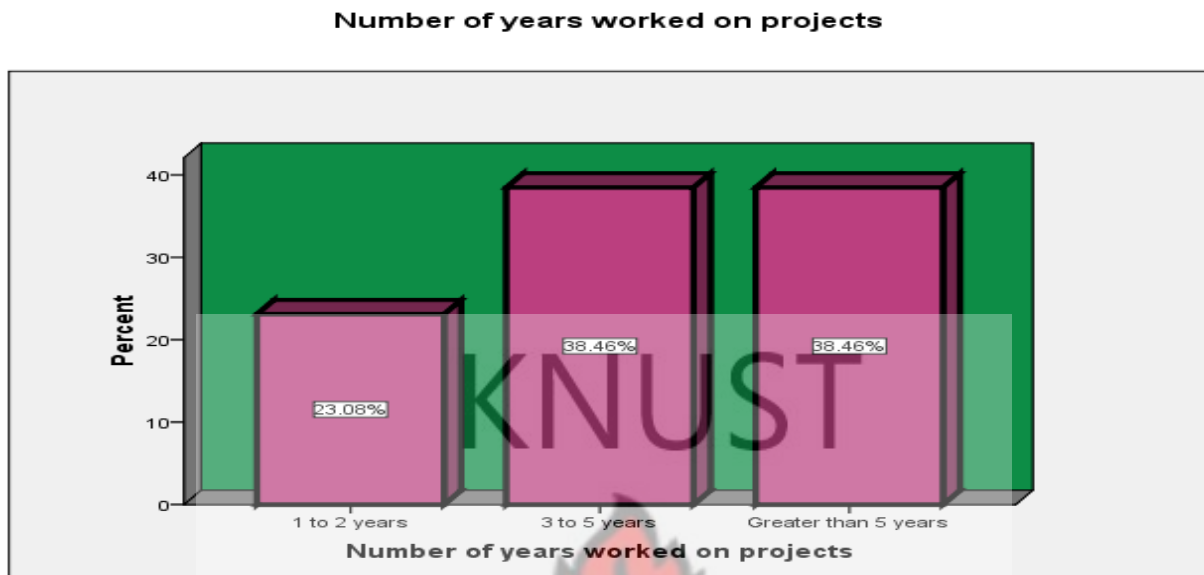


Fig. 4.3 Number of years worked on projects

Working Time and Percentage Dedicated to Projects

The majority of respondents were found to dedicate significant amount of their time to projects with 69.2 percent (n=9) dedicating over 50% of their time to projects. However, 30.8 percent (n=4) reported that they dedicated between 26 to 50% of their time to projects. Similarly, it was observed that, the majority of respondents dedicated more than 50% of their time to project management while 38.5 percent (n=5) dedicated between 26 to 50 percent of their time to project management. In addition, 15.4 percent (n=2) dedicated less than 25% of their time to project management.

Working time dedicated to projects



Fig. 4.4 Working time dedicated to projects

Percentage of time dedicated to project management



Fig. 4.5 Percentage of time dedicated to project management

Number of Projects Managed/Supervised within the last three years

In relation to number of projects managed, the study showed that the majority of respondents managed more than 10 projects within the last three years with 7.7 percent each managing projects fewer than 5 and between 6 and 10 within the last three years respectively.

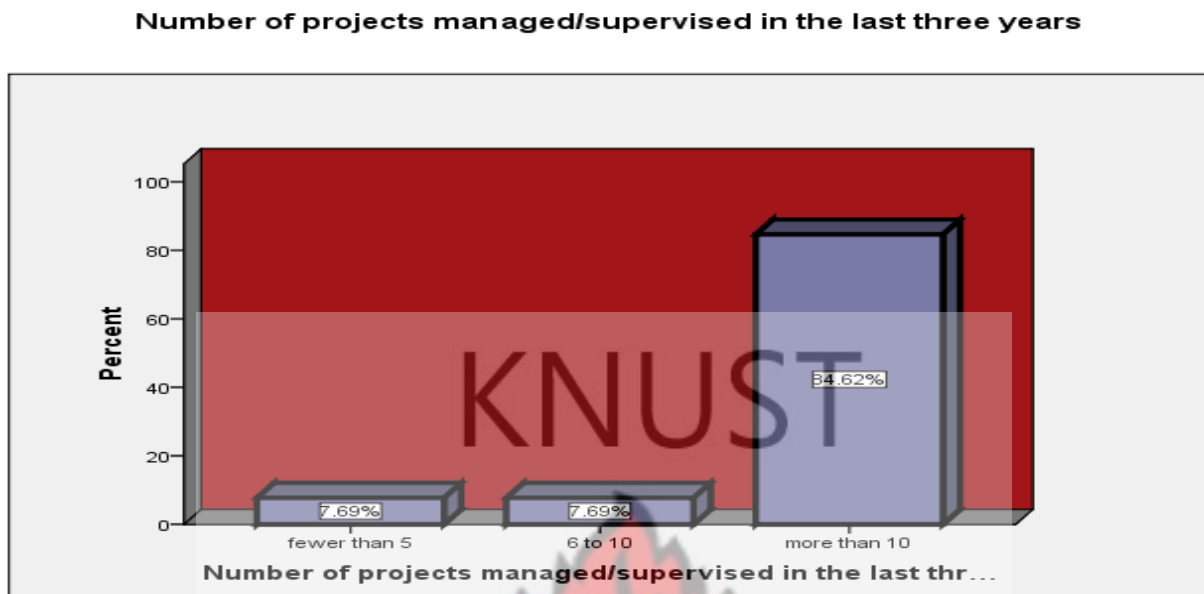


Fig. 4.6 Number of projects managed/supervised in the last three years

4.3 Project Management Implementation Practices

Project implementation usually goes through five phases. The study sought to determine the extent to which this was applicable in ECG. The views of respondents were sought regarding each of the phases. As shown in the figures below, the Company fully adopted and implemented the initiation and execution phases while the planning, monitoring and closing were not always entirely implemented. Specifically, all the respondents surveyed (n=13) indicated that the initiation process (100%) and the execution (100%) processes of project management were fully implemented by the Company.

Table 4.2: Initiation Process

	Frequency	Percent
Yes	13	100.0
Total	13	100.0

Table 4.3: Execution Process

	Frequency	Percent (%)
Yes	13	100.0
Total	13	100.0

Regarding the other three phases namely; planning, monitoring/control and closing phases, it was observed that respondents did not endorse complete implementation by the Company.

Regarding planning, 76.9 percent (n=10) reported that it was implemented with 23.1 percent (n=3) expressing different opinions.

Planning process

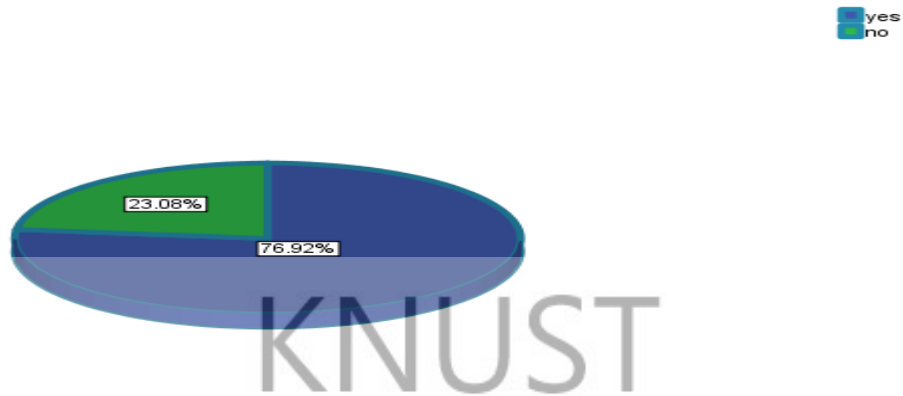
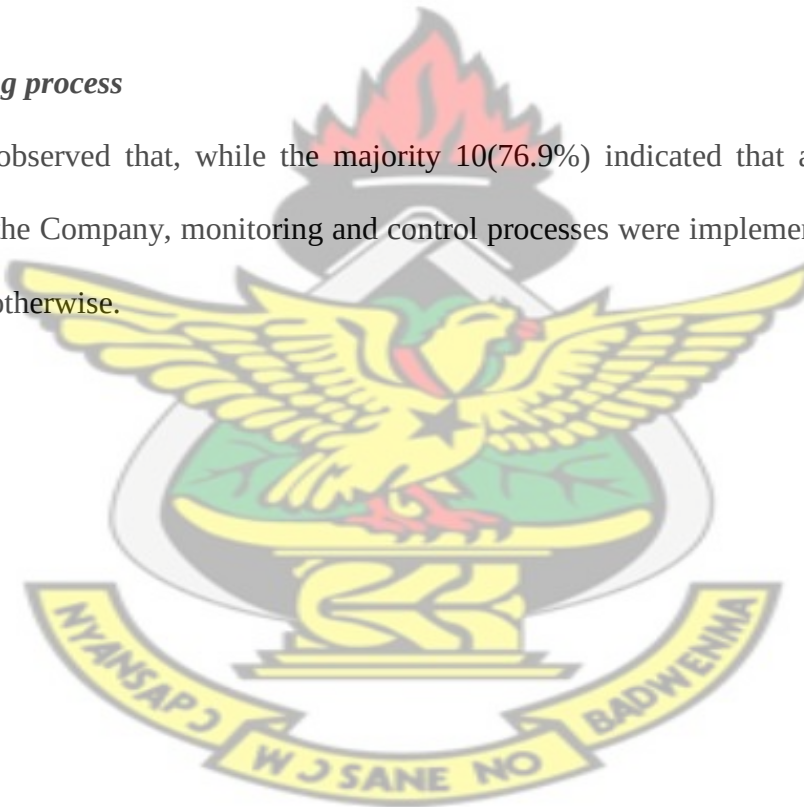


Fig. 4.7 Planning process

Further, it was observed that, while the majority 10(76.9%) indicated that as part of project management of the Company, monitoring and control processes were implemented, 23.1 percent (n=3) indicated otherwise.



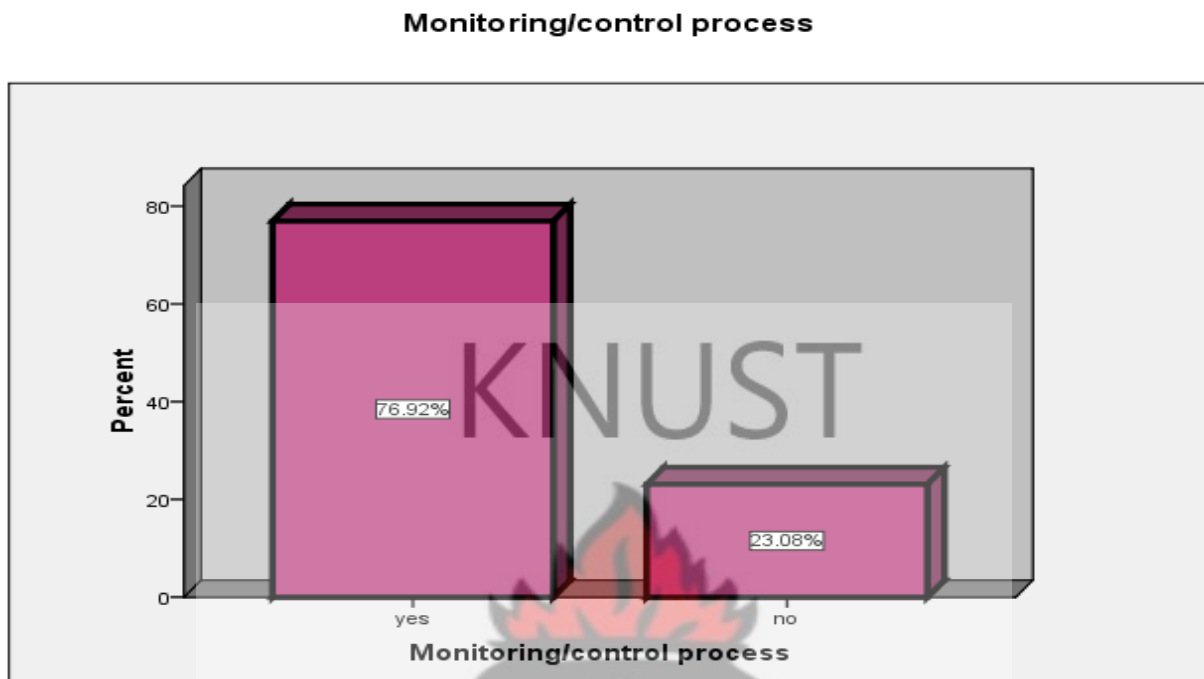


Fig. 4.8 Monitoring/Control process

Finally, it was revealed that, the closing phase was mostly implemented. 92.3 percent of respondents reported that, ECG implemented the closing phase of project management while 7.7 percent (n=1) said this phase is not implemented.

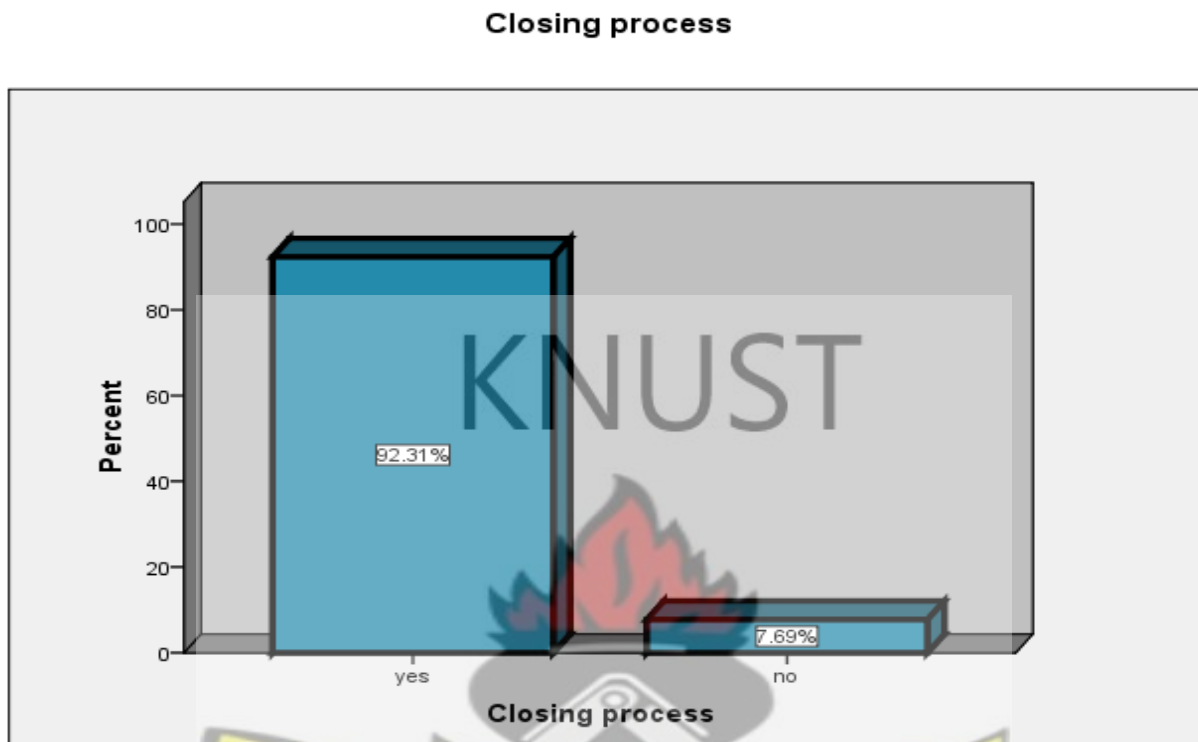


Fig. 4.9 Closing Process

Following from the above analysis, it can be said that Electricity Company of Ghana, Accra West Region adopts and implements project management practices such as initiation, planning, and execution, monitoring/control, and closing processes though planning, monitoring and closing phases were sometimes not implemented.

4.3. Processes Used in Implementation of Projects in ECG, Accra West Region

Further to the adoption of project management practices by ECG, the study sought to determine the various processes in each of the phases and whether ECG followed them. Each of the phases

involved some processes. For instance, the initiation phase involved three main processes such as product/project description, project charter and identification of project constraints.

Initiation Phase

This phase involved three processes. The first process which deals with product or project description was found to be followed by ECG. The majority of respondents expressed strong agreement (46.15%) with the view that product or project description is done at the initiation phase with 38.46 percent agreeing with the statement. Only 7.69 percent of respondents disagreed with the statement with 7.69 percent indicating that they were not sure.

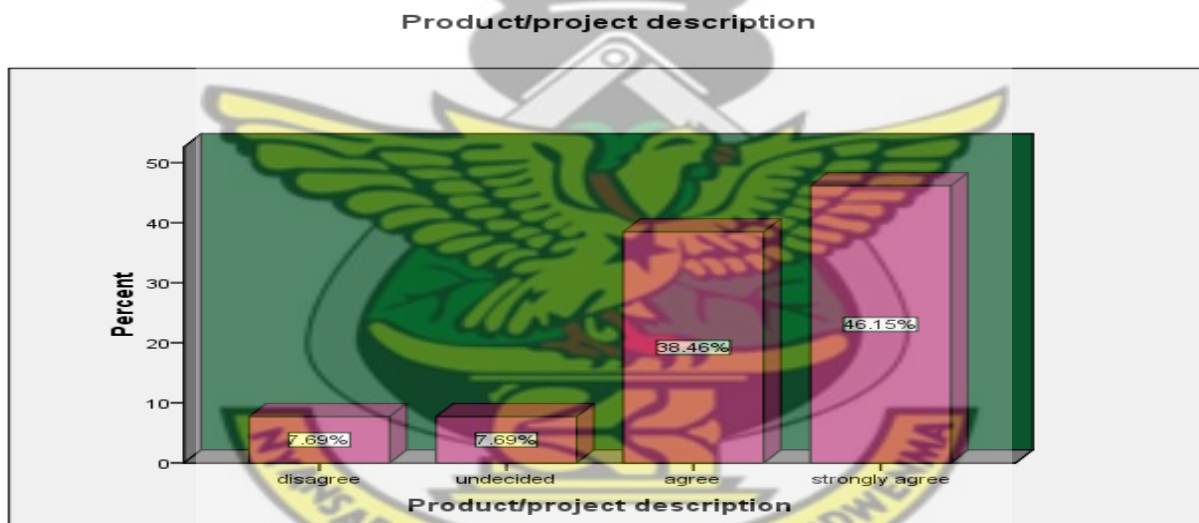
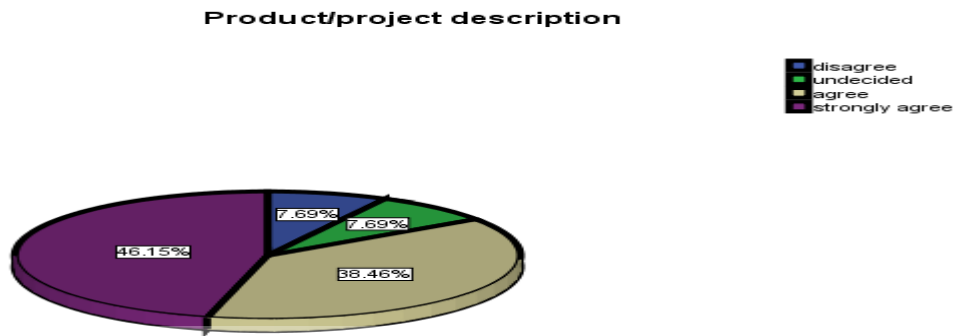


Fig. 4.10 Product/Project description

Similarly, it was observed that, the majority of respondents indicated strongly that project charter or definition of project objectives took place at the initiation stage of ECG projects (38.46%) with 30.77 percent agreeing with the statement. However, 15.38 percent of respondents expressed disagreement while 15.38 percent were undecided.



KNUST

Further, identification of project constraints was reported by majority of respondents to take place during the initiation phase of project implementation at ECG. Specifically, 30.77 percent of respondents expressed agreement with the statement that project constraints are identified at the initiation phase with 23.08 percent strongly agreeing. However, 46.15 percent disagreed with the statement. Thus, though not all the respondents suggested that project constraints are identified at the initiation phase, the majority expressed that view.

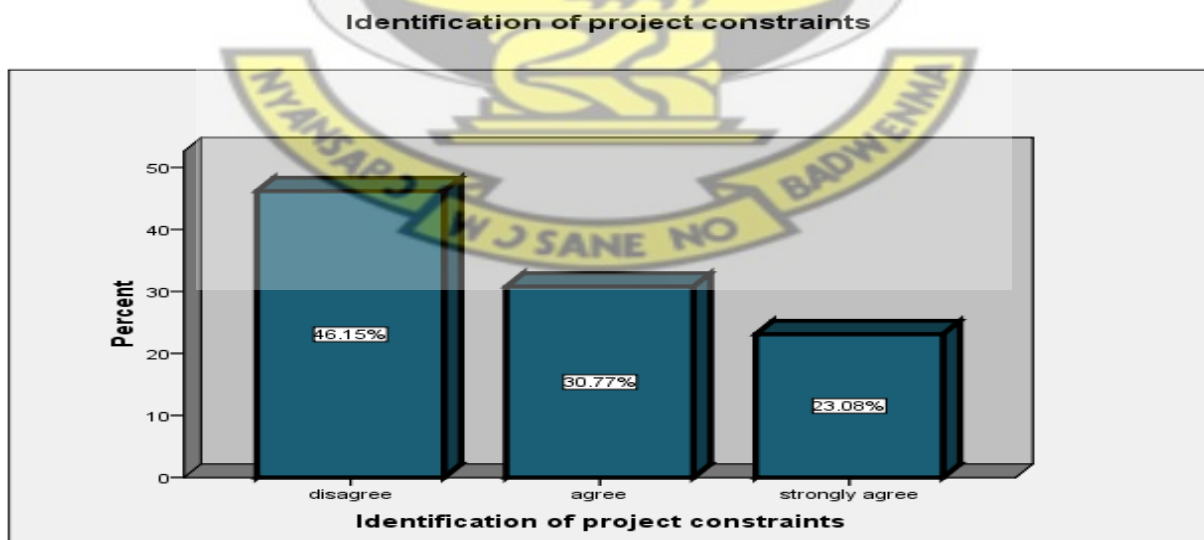


Fig. 4.11 Identification of project constraints

Planning Phase

Within the framework of project management, planning involves, project scope definition, activity definition (timing), product analysis, cost-benefit analysis and alternative identification (i.e. brainstorming and lateral thinking). The study revealed that these elements under the planning phase were followed in project implementation at ECG. Specifically, analysis of scope definition as an element under planning showed that, the majority of respondents strongly agreed that (45.45%) it was part of the planning phase with 36.36 percent also agreeing with the statement. In addition, 9.09 percent were undecided while 9.09 percent expressed disagreement with the statement.

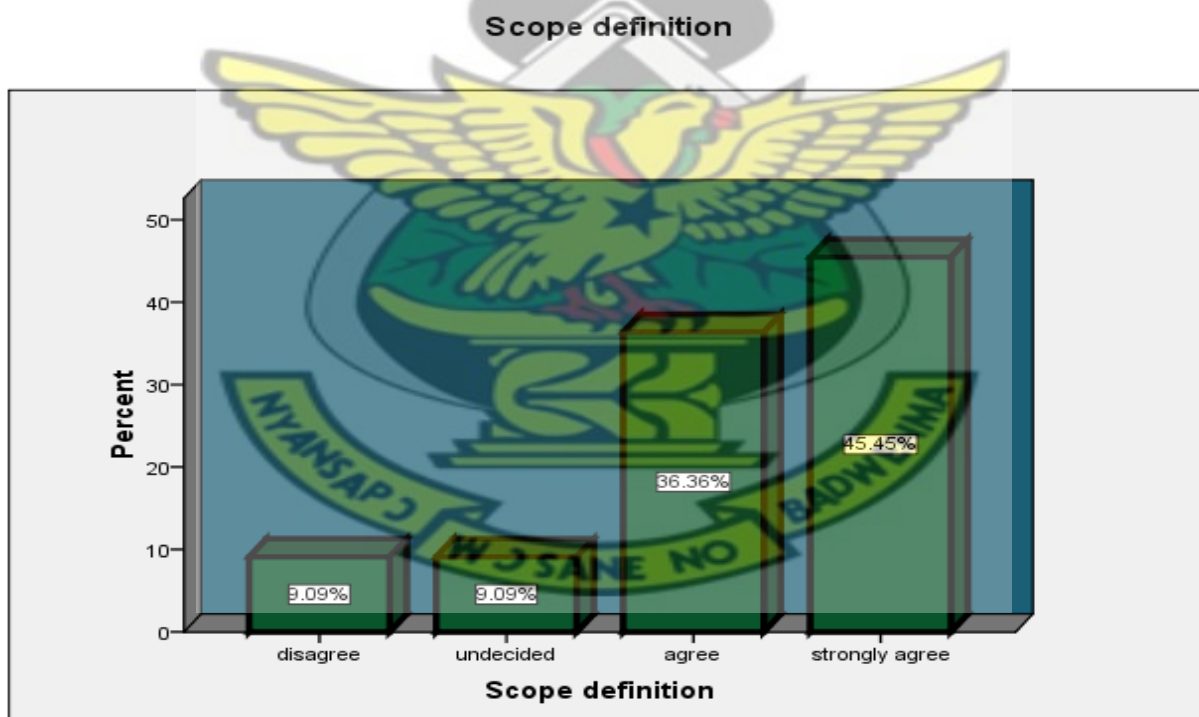


Fig. 4.12 Scope definition

In relation to activity definition, the majority of respondents agreed (66.67%) that activity definition was done at the planning phase of project implementation in the company with 16.67 percent strongly agreeing with the statement. However, 8.33 percent were undecided while 8.33 percent also expressed disagreement with the statement that activity definition was done at the planning phase.

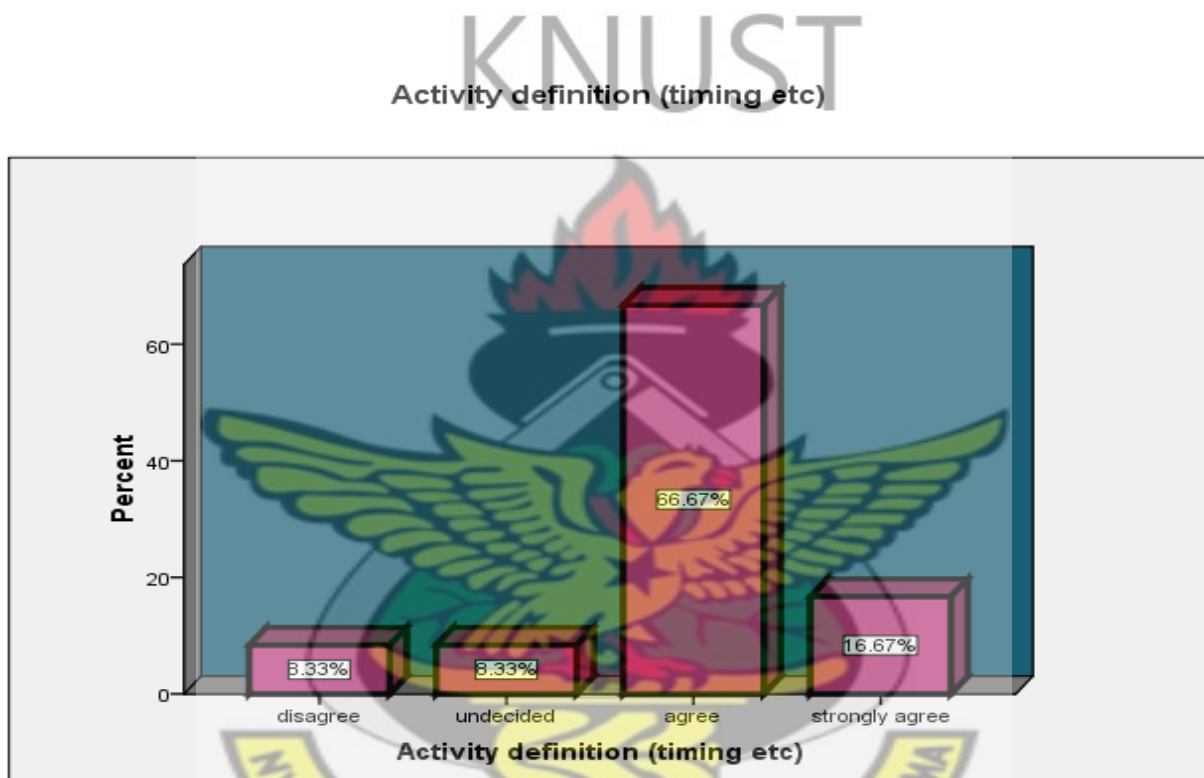


Fig. 4.13 Activity definition (timing etc)

Similarly, the majority of respondents expressed agreement that product analysis was an integral part of the planning phase of project implementation with 15.38 percent strongly agreeing with the statement. However, 30.77 percent said they were undecided while 23.08 percent disagreed that product analysis was part of the planning phase of product implementation.

Product analysis

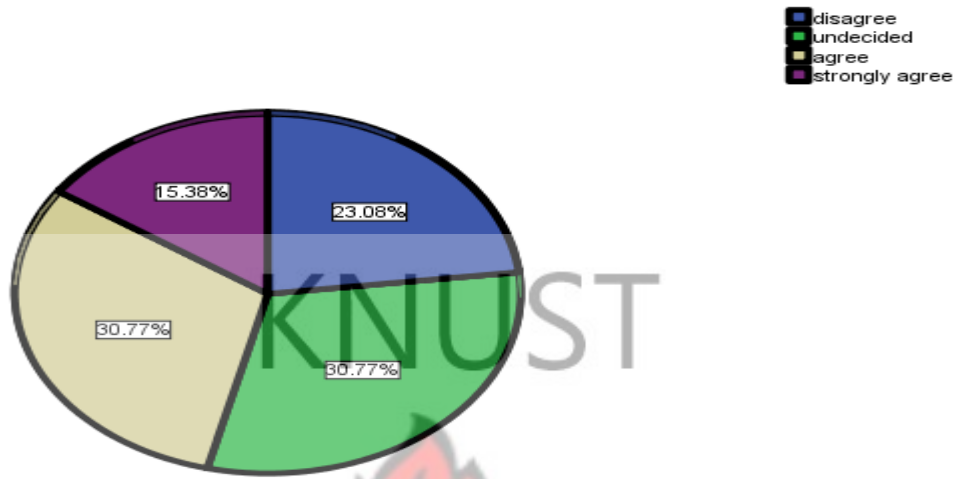


Fig. 4.14 Product analysis

Further, the majority of respondents expressed agreement that cost-benefit analysis was done at the planning phase of project implementation (61.54%) with 15.38 percent strongly attesting to the fact that it was done at this stage. However, 7.69 percent of them strongly disagree with the view that cost-benefit analysis was done during the planning phase while 15.38 percent said they were not certain.

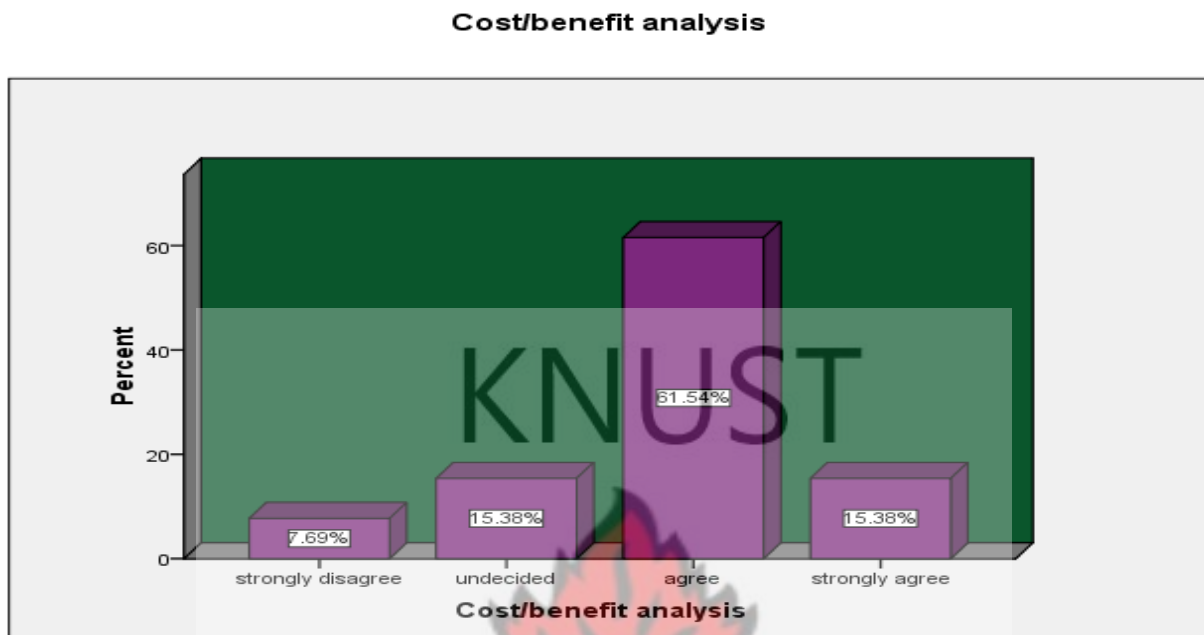


Fig. 4.15 Cost/benefit analysis

Finally, there was a general agreement by respondents that alternative identification which involved brainstorming and lateral thinking was an element of the planning phase of project implementation at ECG. Specifically, 30.77 percent expressed agreement while 15.38 percent strongly agreed with the statement that alternative identification was part of the planning phase of project implementation. However, 23.08 percent expressed disagreement while 30.77 percent were undecided.

Alternative identification (brainstorming & lateral thinking)

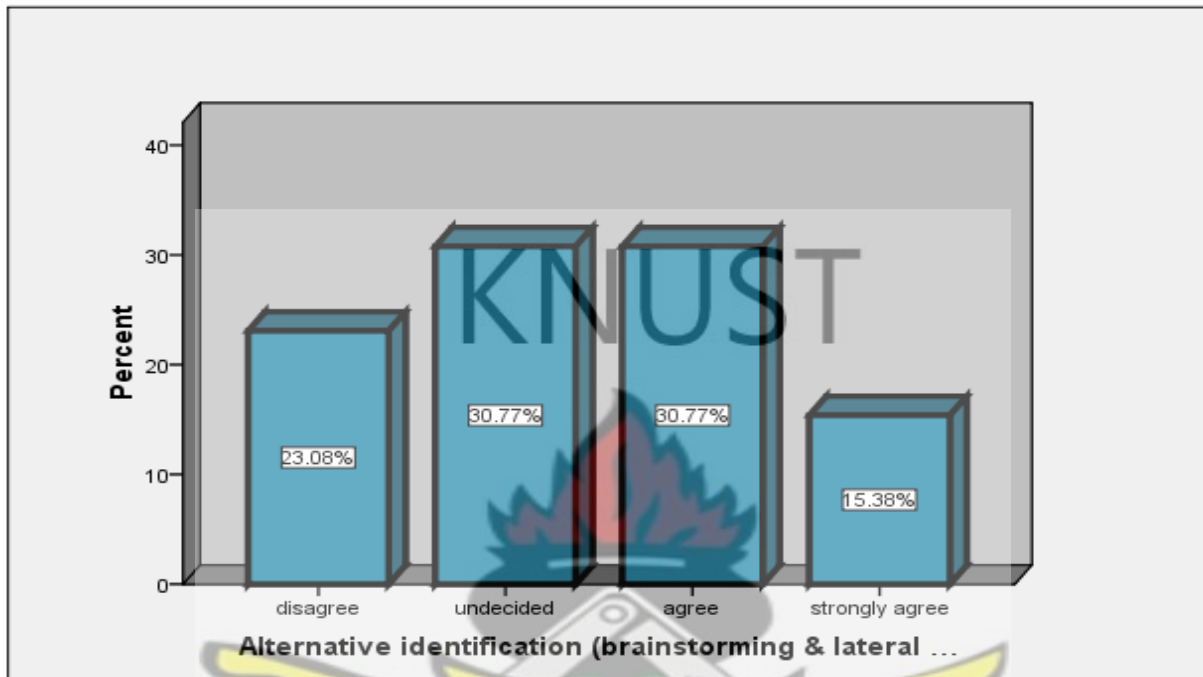


Fig. 4.16 Alternative identification (brainstorming & lateral thinking)

Execution Phase

The study also analyzed the various elements at the execution phase of project implementation. Out of the six elements, information distribution was highly rated followed by project plan execution and scope verification and then team development and finally quality assurance. The majority of respondents indicated strongly that during the execution phase of project implementation, project related information was distributed (69.23%), 15.38 percent agreed that that information was distributed in that phase while 15.38 percent said they were not certain whether information was distributed at the execution phase or not.

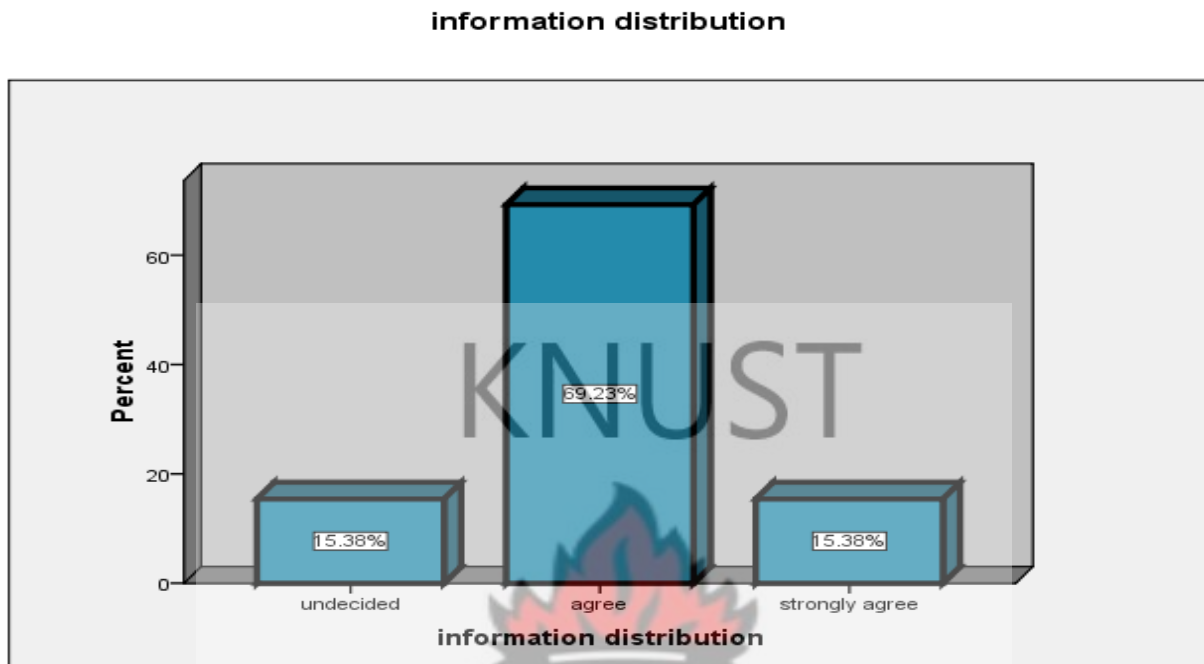


Fig. 4.17 Information distribution

Similarly, the majority of respondents agreed that scope verification was done during project execution (46.15%) with 15.38 percent strongly agreeing with the statement. However, 23.08 percent expressed disagreement with the issue while 15.38 percent were undecided about regarding whether scope verification was an element under the execution phase of projects.

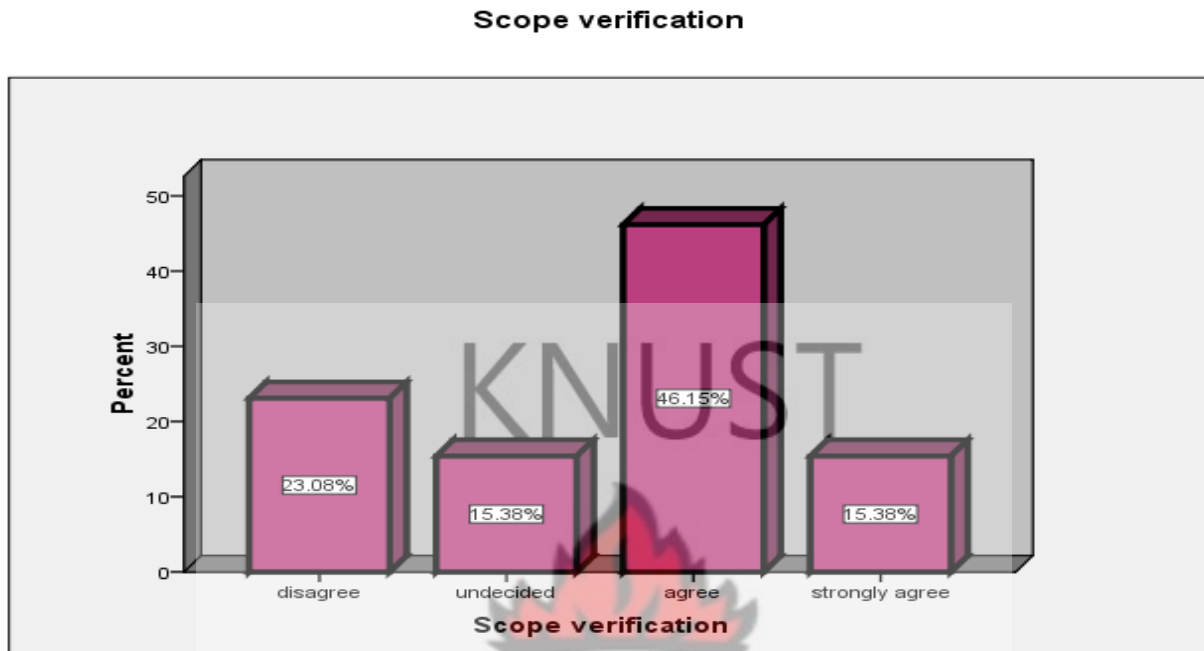


Fig. 4.18 Scope verification

The study also revealed that team development was an important element in the project execution phase. In relation to team development, 38.46 percent of respondents expressed agreement with the issue while 30.77 percent strongly agreed with the issue. However, 23.08 percent said they were not certain whether team development was an element in the execution phase or not while 7.69 percent of them disagreed with the issue.

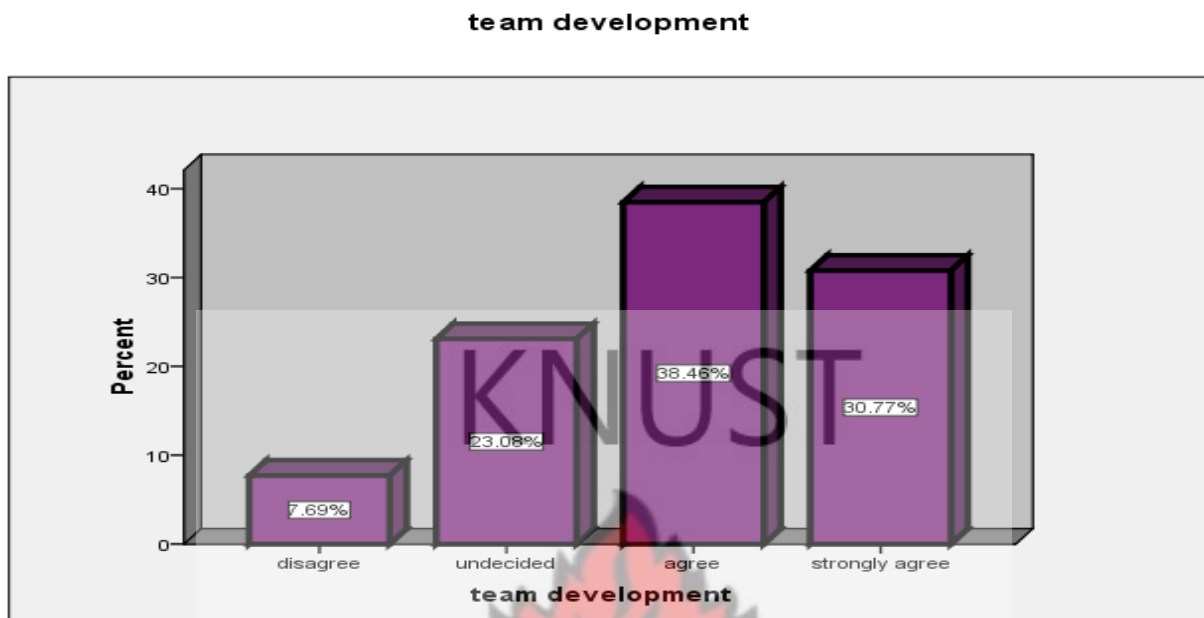


Fig. 4.19 Team development

Similarly, contract administration was reported by the majority of respondents as part of the execution phase of project implementation (46.15%). In addition, 38.46 percent indicated that contract administration was part of the execution phase of project implementation while 15.38 percent said they were not sure whether it was part of it or not.

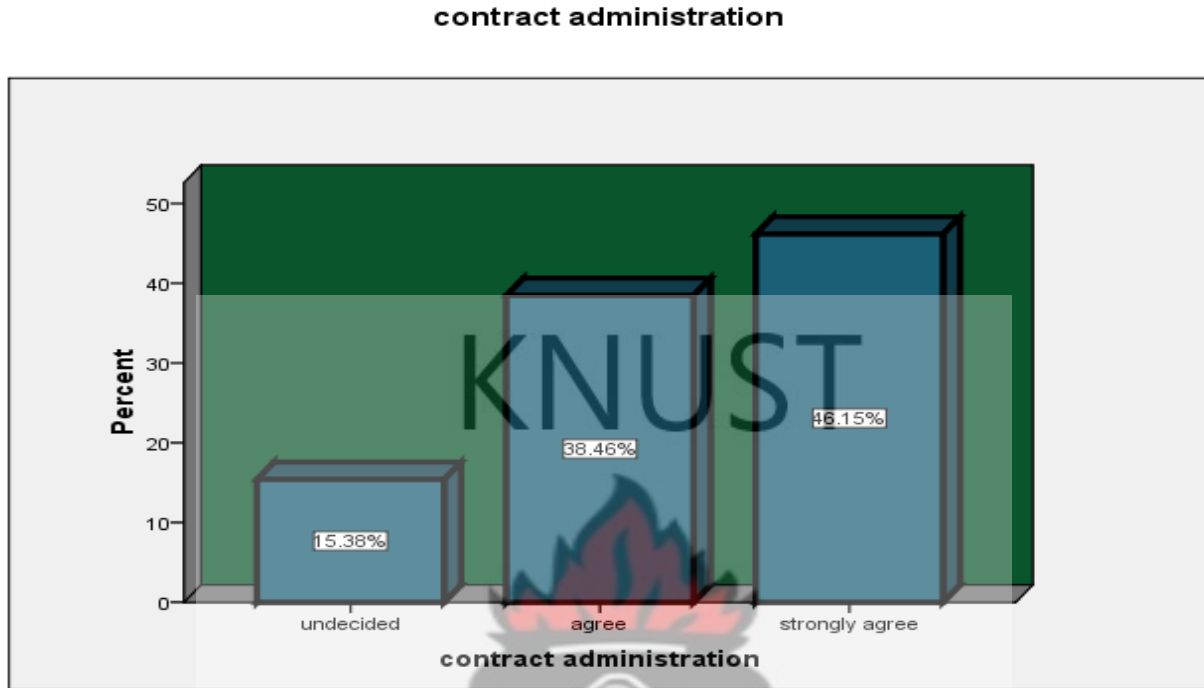


Fig. 4.20 Contract administration

Quality assurance was reported as an element under project execution with 30.77 percent agreeing with the issue while 15.38 percent expressed strong agreement with the statement. However, 30.77 percent indicated that they were not certain whether quality assurance was implemented at the execution phase of projects or not while 23.08 percent said it was not part of the execution phase of project implementation.

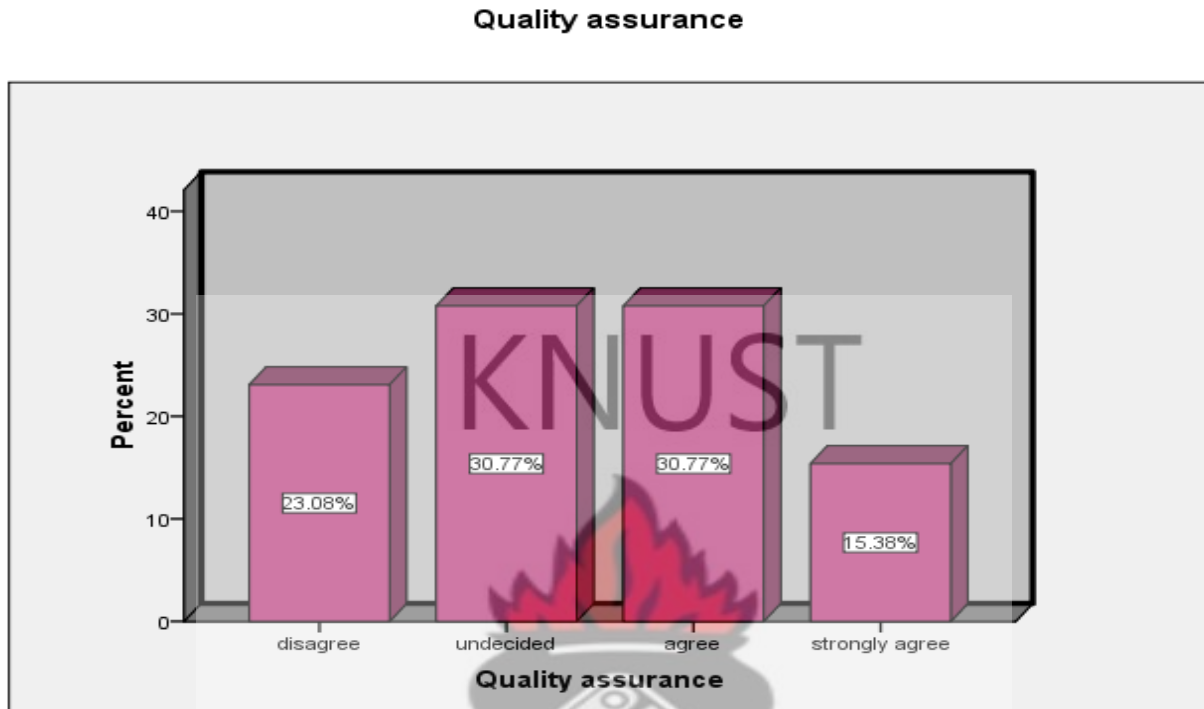


Fig. 4.21 Quality assurance

Finally, it was observed that project execution plan was an element under the execution phase of project implementation. Specifically, 46.15 percent of respondents strongly stated that this issue was part of the execution phase of project implementation with 46.15 percent agreeing with the issue. Only 7.69 percent of respondents reported that they were undecided on the issue.

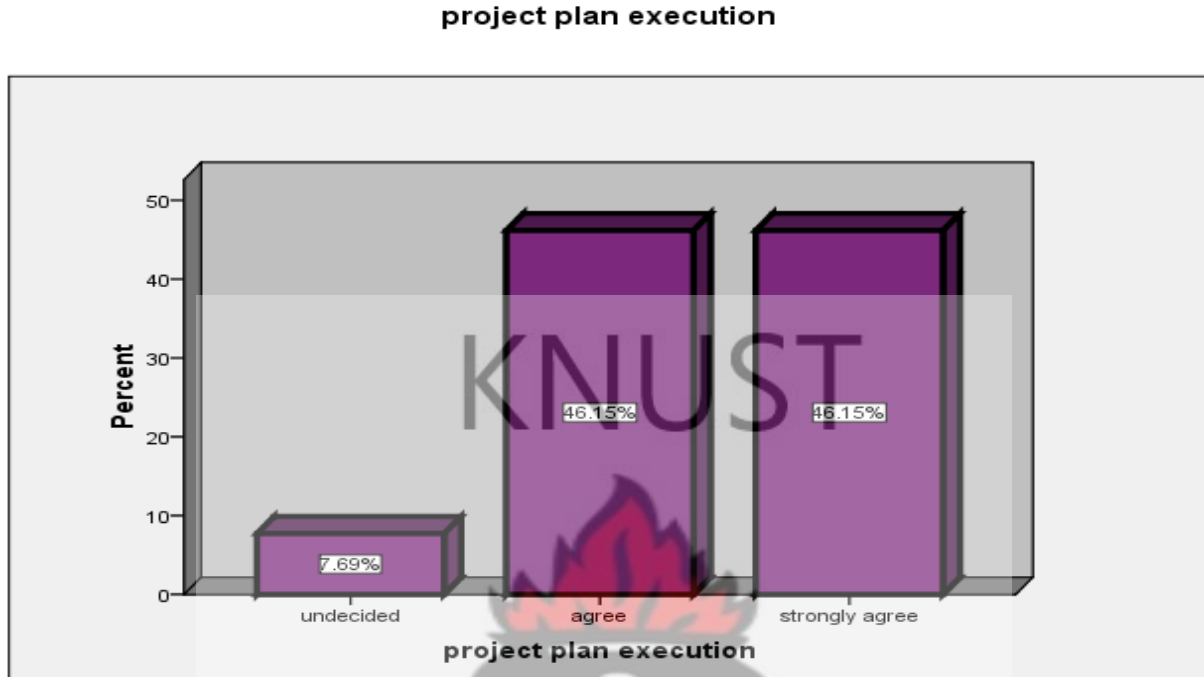


Fig. 4.22 Project plan execution

Monitoring and Control

Another important phase of project implementation is monitoring and control. Under this phase several activities are carried out to ensure that projects implemented are successfully monitored and controlled. The study found that, most respondents strongly agreed that at the monitoring and control phase ongoing projects are measured against variables with 38.46 percent also agreeing with the issue. However, 15.38 percent disagreed with the issue while 7.69 percent said they were not certain.

measures ongoing project activities against variables (cost, time, scope, quality)

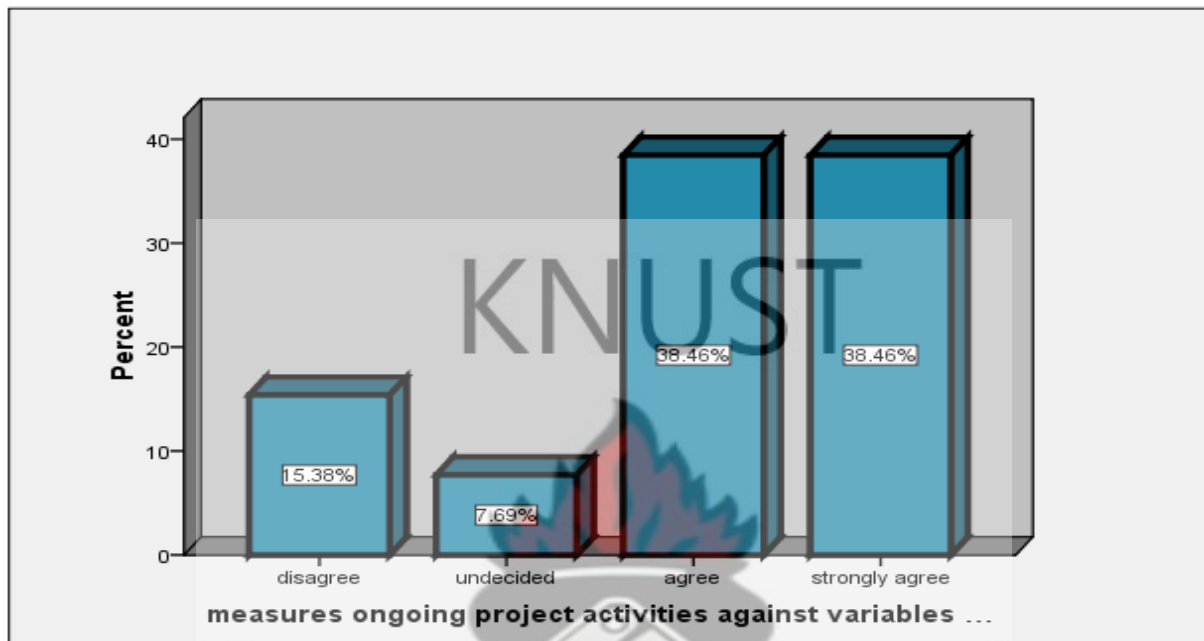


Fig. 4.23 Measuring ongoing project activities against variables

In addition, it was observed that control scope, cost, time and quality were carried out in an attempt to monitor and control projects. The majority of respondents agreed that (53.85%) scope, cost, time and quality were part of the monitoring and control phase. Also, 23.08 percent strongly agreed with the issue while 7.69 disagreed with the issue. However, 15.38 percent were undecided about the issue.

control scope, cost, time and quality of projects

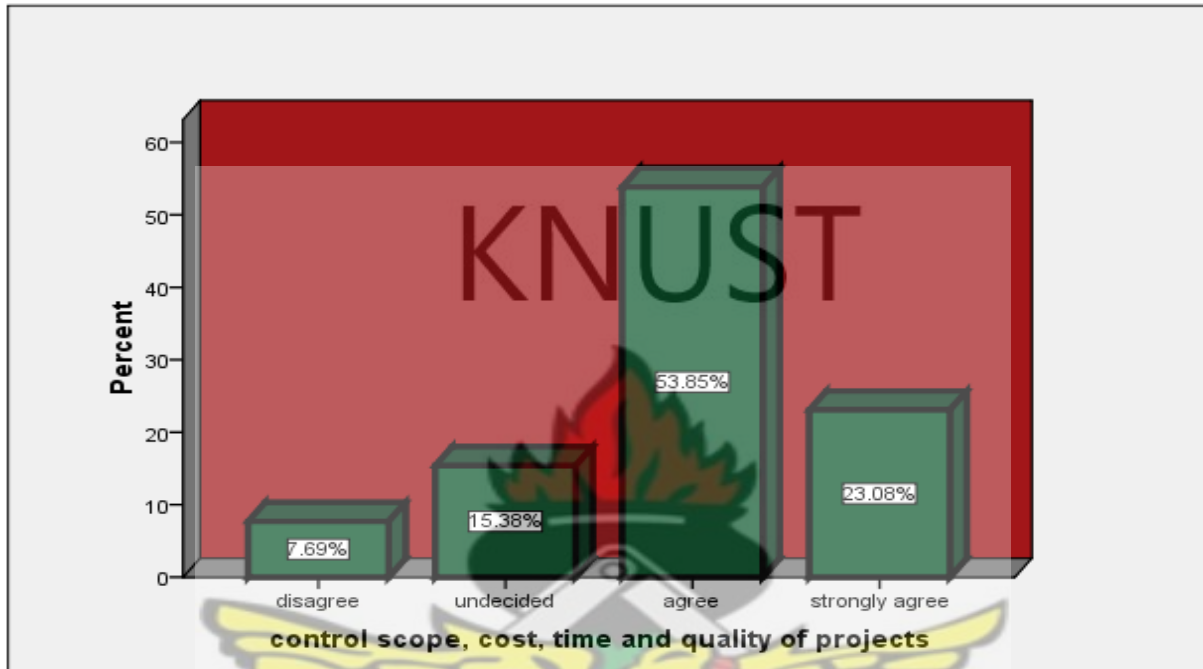


Fig. 4.24 Control scope, cost, time and quality of projects

Further, as part of monitoring and control phase of project implementation, it was observed that change management was integrated. The analysis showed that, 30.77 percent of respondents strongly agreed that change management was integrated into the monitoring and control phase with 23.08 percent also agreeing with the issue. However, 38.46 percent expressed uncertainty about whether it was part of the monitoring and control phase or not while 7.69 percent disagreed with the issue.

integrate change management (request for changes and approvals) in projects

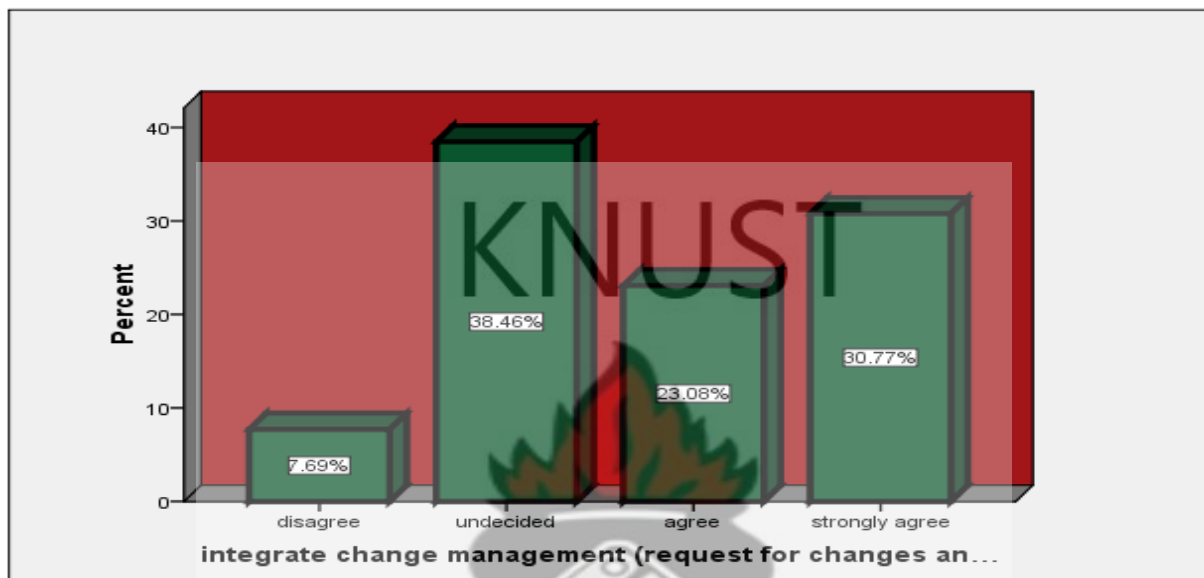


Fig. 4.25 Integrate change management

Finally, the analysis revealed that project performance was reported as part of the monitoring and control. Most respondents agreed that project performance was reported (45.45%) with 27.27 percent also expressing strong agreement with the statement. However, 27.27 percent of respondents expressed uncertainty about whether project performance was reported or not.

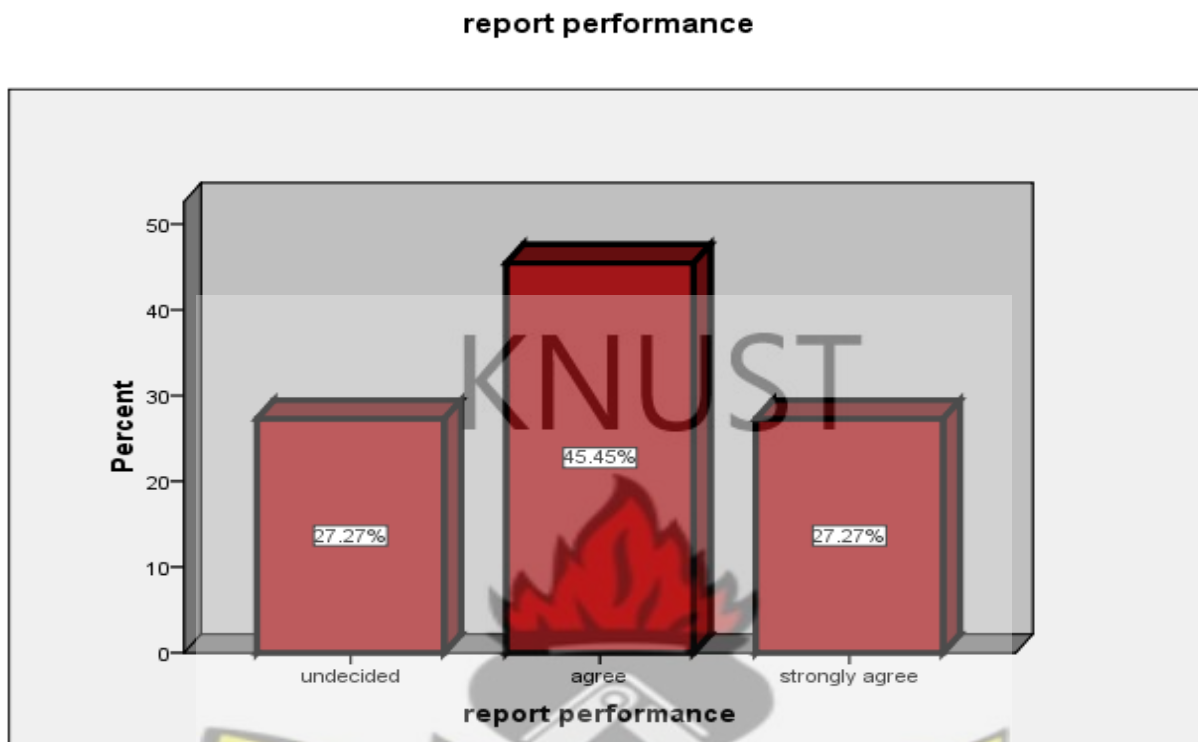


Fig. 4.26 Report performance

Closing Phase

The last phase of project implementation which talks about closing of projects consists of two elements: contract close out and settlement of contract. The results showed that the majority of respondents agreed strongly that (53.85%) that contract close out takes place at the closing phase of project implementation, 38.46 percent agreed with the issue with only 7.69 percent of respondents disagreeing with the issue.

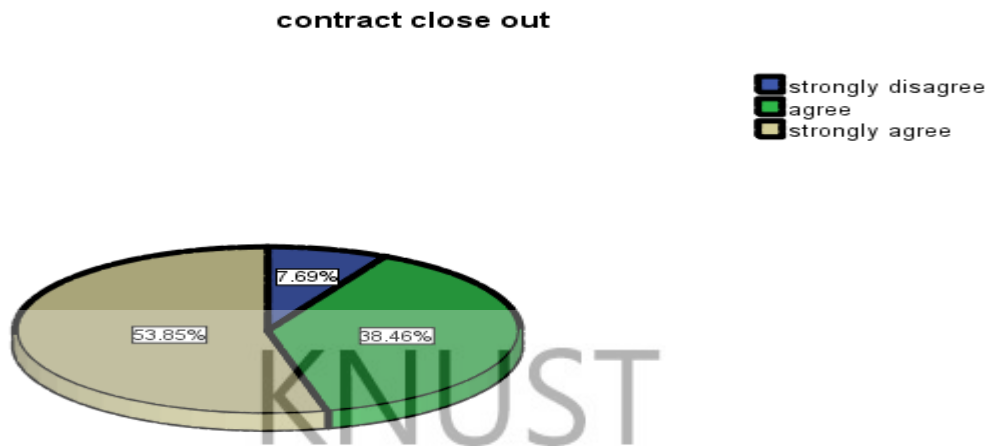


Fig. 4.27 Contract close out

Similarly, the majority of respondents expressed strong agreement that settlement of contracts occur at the closing phase of project implementation (53.85%) while 38.46 percent expressed agreement with the issue. However, only 7.69 percent expressed strong disagreement with the issue.

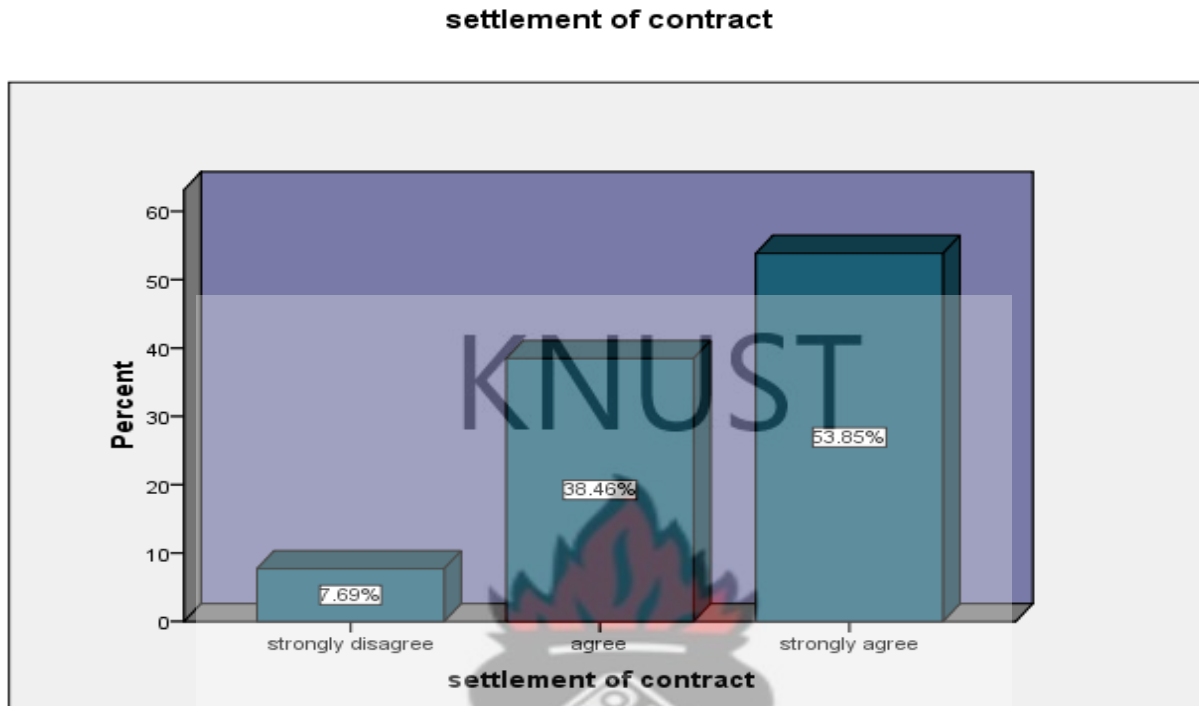


Fig. 4.28 Settlement of contracts

4.5. Success or Failure rate of Projects.

The study sought to determine whether the adoption of project management processes led to project success or failure of ECG, Accra West Region. The study found that, projects were successful when the processes such as initiation, planning, execution, monitoring/control and closing were adopted and implemented. Specifically, success rate of more than 75 percent (61.54%) and between 51 and 70 percent success rate respectively were accomplished when project management processes were adopted and implemented. This implies that, the adoption of process management processes would always produce an above average performance or success rate.

success rates of projects under these processes

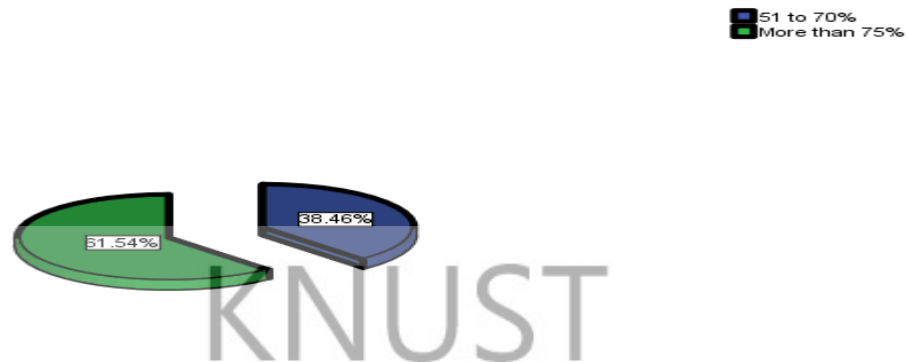


Fig. 4.29 Success rates of projects under the PM processes.

It was however observed that, projects suffered when project management processes were not adopted. The success rates of projects executed without these processes were far below those executed with the adoption of project management processes. The study found that the success rate of more than 75 percent (8.33%) was smaller when the processes were not adopted than when the processes were adopted (61.54%). In addition, the success rates of projects when project management processes such as initiation, planning, execution, monitoring/control and closing were not adopted less than 25 percent (50%) and between 21 and 50 percent (41.67%) respectively. This shows that, the adoption of project management processes significantly increase the success rates of projects than when those processes are not adopted.

success rates of projects not taken through these processes

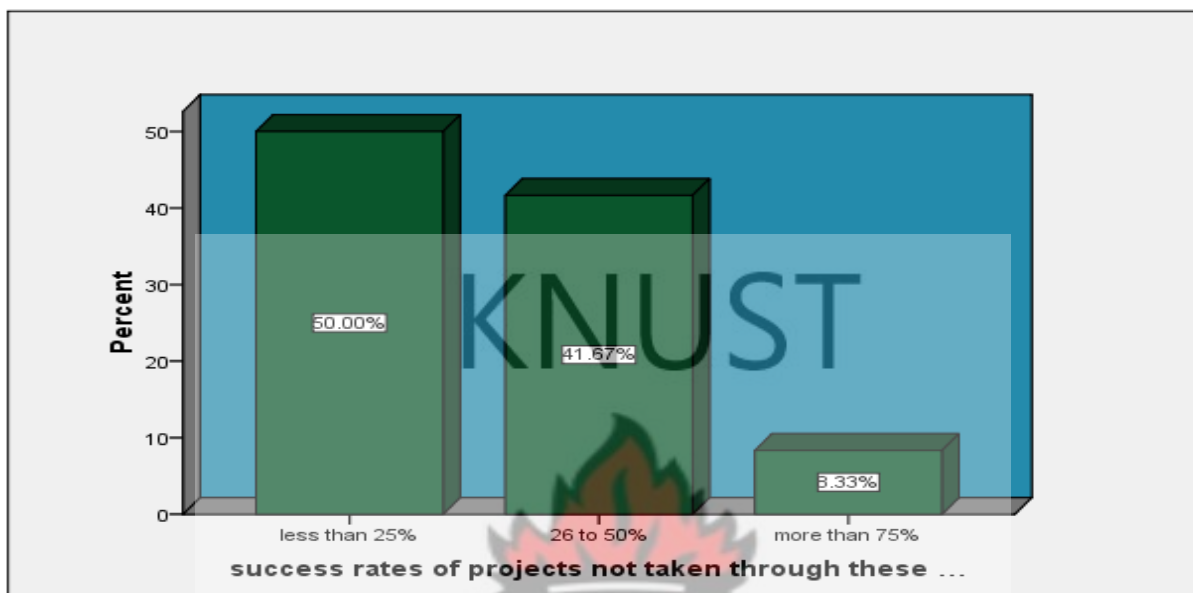


Fig. 4.30 Success rates of projects not taken through PM processes

4.6. Ratings of Project Success within the last three years

It was realized that, project success generally ranged from good to excellent with most of the projects executed within the last three years rated as very good (53.85%). In addition, 30.77 percent of some of the projects were rated as good while very few were rated as excellent (15.38%).

ratings of success of projects executed within the last three years

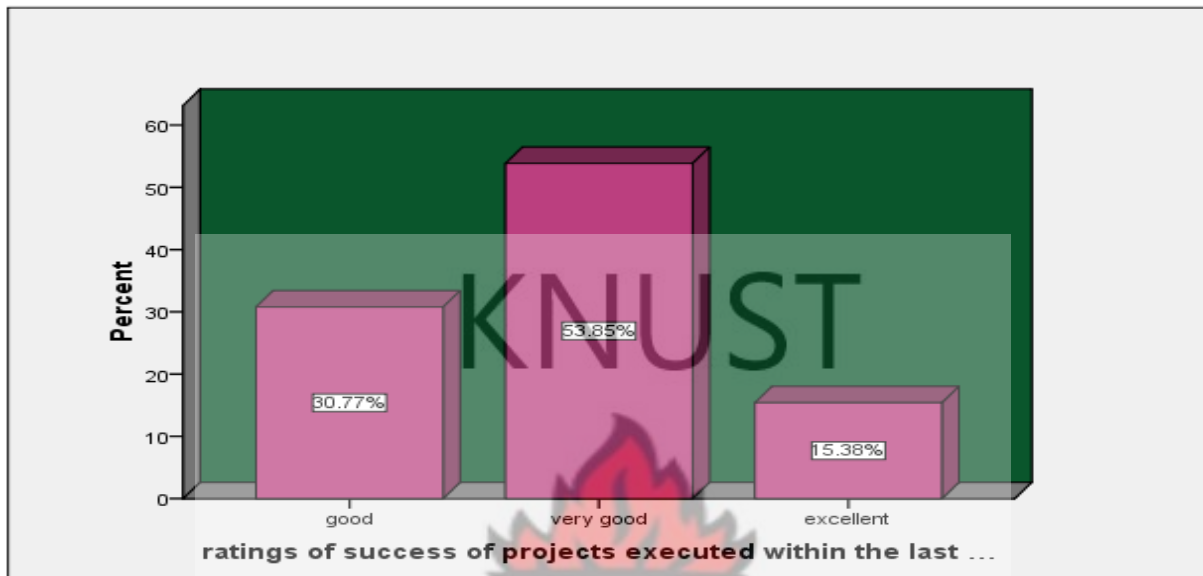


Fig. 4.31 Rating of success of projects executed within the last three years

4.7 Factors that Contribute to Success of Projects

Factors that contribute to the success of projects were explored. A number of factors were reported by respondents as contributing to the success of projects. The analysis showed that, executive management support and adequate communication channels contributed significantly to project success while realistic expectations contributed less to success.

Executive Management Support

Regarding executive management support, the majority of respondents expressed agreement that it contributed to project success (69.23%) with 30.77 percent strongly agreeing with the statement. This shows that, all respondents found management support as a critical factor in project success.

executive management support

agree
strongly agree

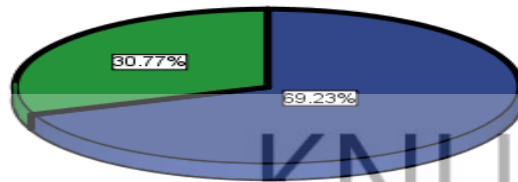


Fig. 4.32 Executive management support

Adequate Communication Channels

In relation to project success, adequate communication was found to impact significantly to success. Most of the respondents agreed that (69.23%) adequate communication channel was an important factor in project success while 30.77 percent expressed strong agreement with the statement.

adequate communication channels



Fig. 4.33 Adequate communication channels

Proper Planning

In terms of project success, the majority of respondents agreed that (46.15%) that proper planning was a significant factor. Similarly, 46.15 percent expressed strong agreement that proper planning significantly accounted for project success in ECG Accra West Region. However, 7.69 percent of respondents expressed uncertainty. This means that some respondents were not sure whether the success of projects was accounted for by proper planning or not.

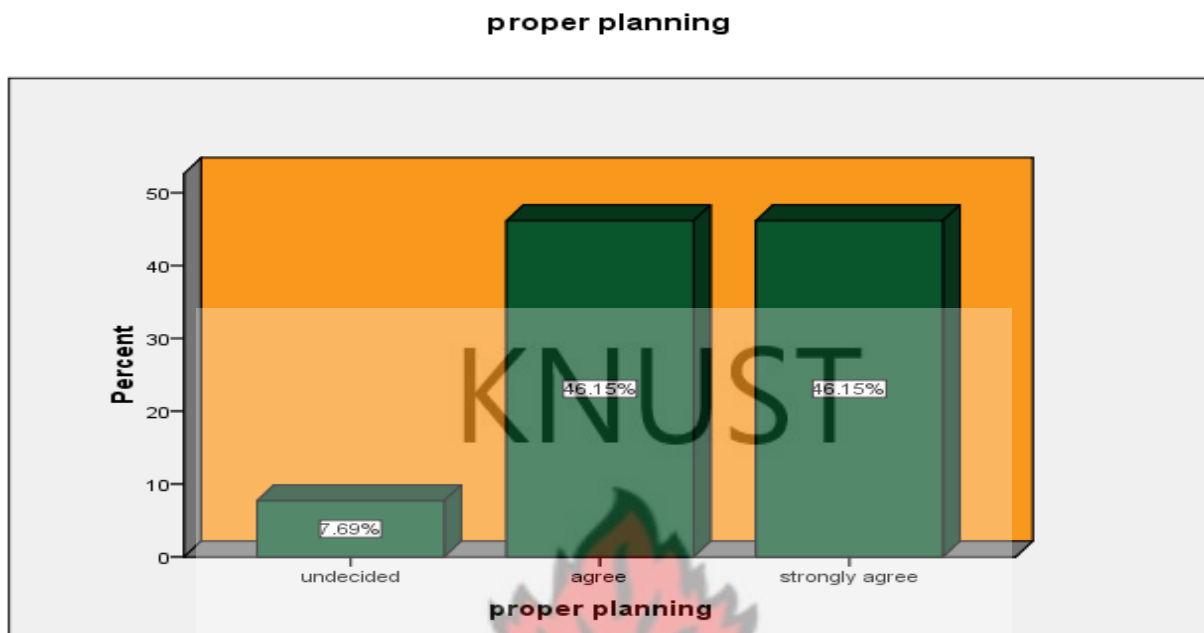


Fig. 4.34 Proper Planning

Realistic Expectations

It was also observed that, realistic expectations impacted on project success. Whereas 38.46 percent of respondents expressed agreement about the contribution of realistic expectations to project success, 30.77 percent expressed strong agreement about the contribution of realistic expectations. However, some respondents were not sure of the contribution of realistic expectations to project success (23.08%) while 7.69 percent expressed disagreement with the statement.

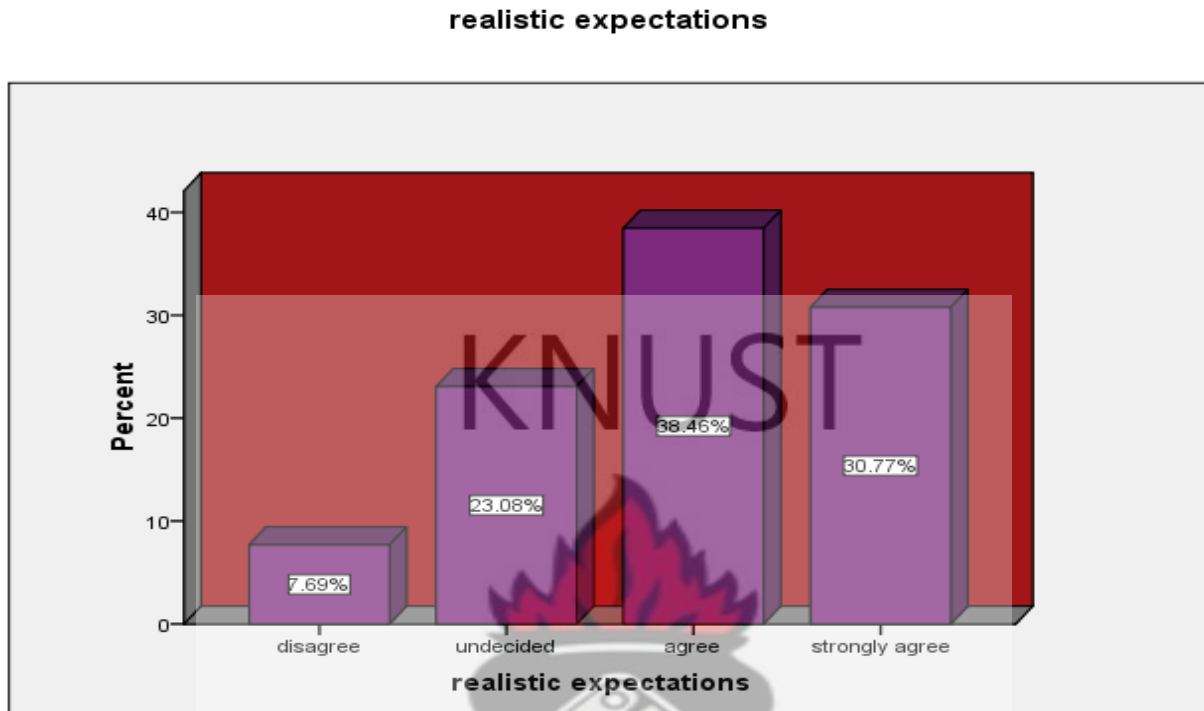


Fig. 4.35 Realistic Expectations

Sufficient Resource Allocation

Project resource allocation significantly accounted for project success. Most of the respondents expressed strong agreement that sufficient resource allocation accounted for process success (46.15%) with 38.46 percent agreeing with the statement. However, 7.69 percent of respondents expressed disagreement with the statement while another 7.69 expressed uncertainty about the contribution of allocation of sufficient resources to project success.

sufficient resource allocation

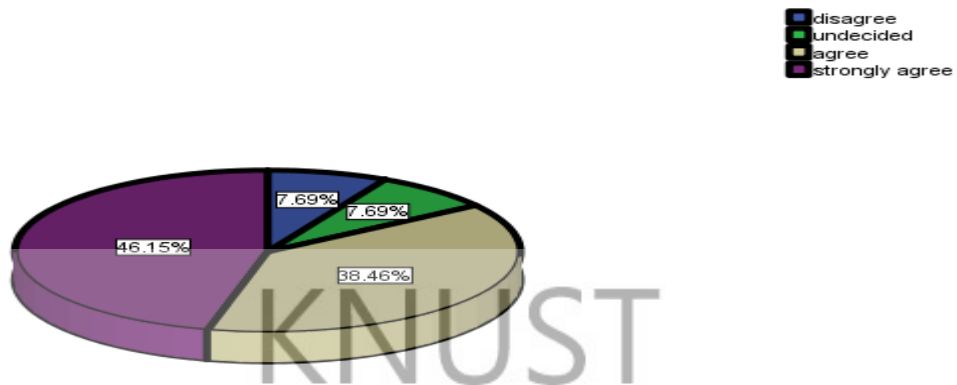


Fig. 4.36 Sufficient resource allocation

Competent Project Team Members

The contribution of project team to project success was also explored. The study found that, the availability of competent project team members was a critical factor to project success. 53.85 percent of respondents expressed strong agreement that competent project team members determined project success while 30.77 percent also endorse the issue. However, 7.69 percent expressed contrary views while 7.69 percent were not sure of the contribution of competent project team members to project success.

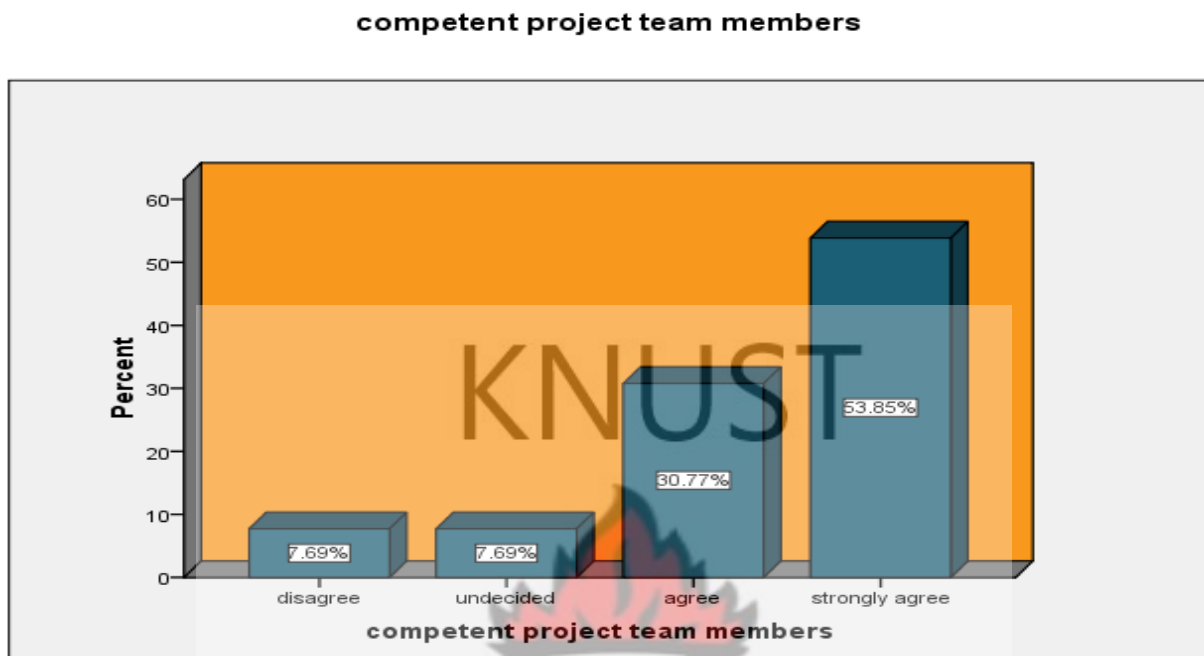


Fig. 4.37 Competent project team members

Control Mechanisms

The majority of respondents agreed that control mechanisms significantly resulted in project success (46.15%) with 23.08 percent expressing strong agreement with the issue. However, 23.08 percent expressed uncertainty about the contribution of control mechanisms to project success while 7.69 percent of them disagreed with the impact of control mechanisms on project success.

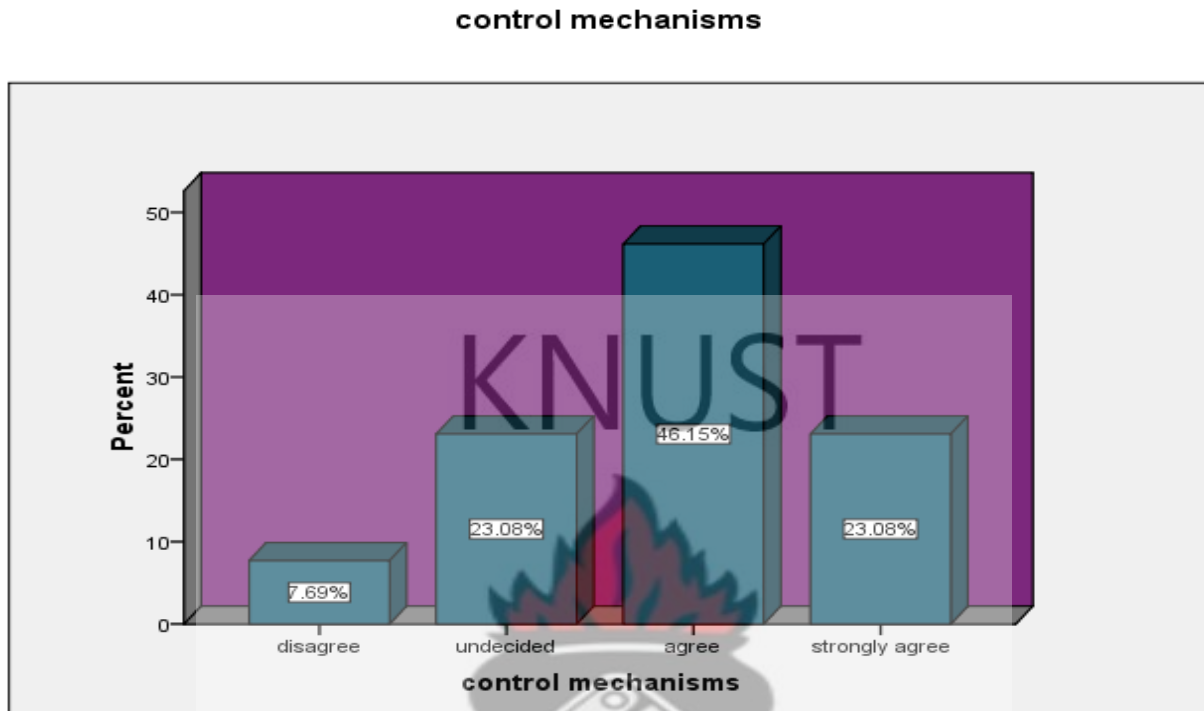


Fig. 4.38 Control mechanisms

Clearly Defined Goals

The results obtained in the study suggest that, clearly defined project goals were critical to project success. Specifically, 46.15 percent of respondents agreed with the statement that clearly defined goals lead to project success with 15.38 percent strongly endorsing the statement. However, 23.08 percent of respondents expressed contrary views while 15.38 percent expressed uncertainty about the impact of clearly defined project goals on project success.

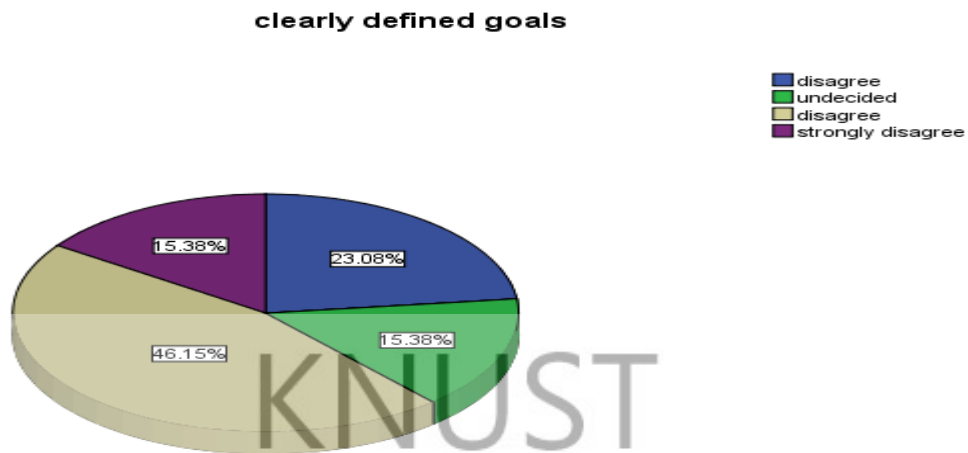


Fig. 4.39 clearly defined goals

4.8. Causes of Project Failure

Several factors ranging from lack of executive management support and commitment to lack of client or customer involvement in projects have been documented as major reasons for project failure.

Lack of Management Support and Commitment

This factor was reported to be a major contributing factor to project failure. Most respondents agreed that lack of management support and commitment significantly accounted for project failure (53.85%) with 7.69 percent expressing strong agreement with the issue. However, 23.08 percent disagreed with the statement. Subsequently, 15.38 percent expressed strong disagreement. Despite this, it can be concluded that, lack of management support and commitment significantly accounted for project failure in ECG Accra West Region.

lack of management support and commitment

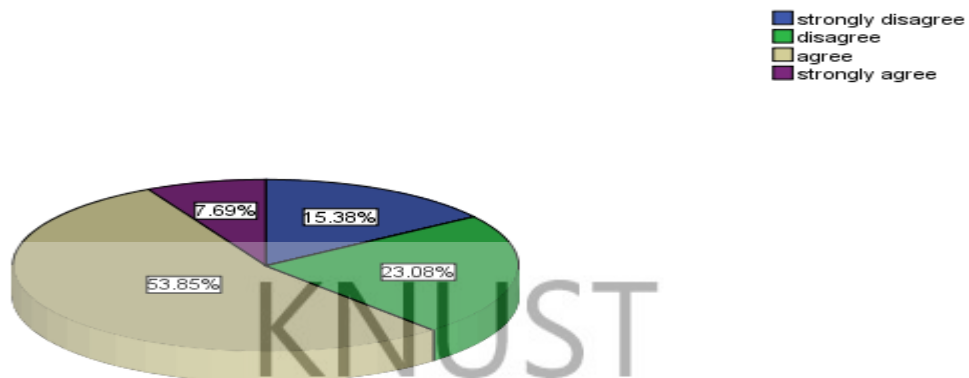


Fig. 4.40 Lack of management support and commitment

Lack of Clear Statement of Project Requirements

Lack of clear statement of project requirements was not found to be a major determinant of project failure in ECG. In particular, 38.46 percent of respondents expressed disagreement with the view that lack of clear statement of project requirements accounted for project failure while 15.38 percent also supported the notion by strongly indicating that lack of clear statement of project requirements did not account for project failure. However, 15.38 percent expressed agreement that lack of clear statement of project requirements accounted for project failure with 7.69 percent of them strongly supporting. However, 23.08 percent expressed uncertainty about the contribution of the factor in determining project failure.

lack of clear statement of project requirements

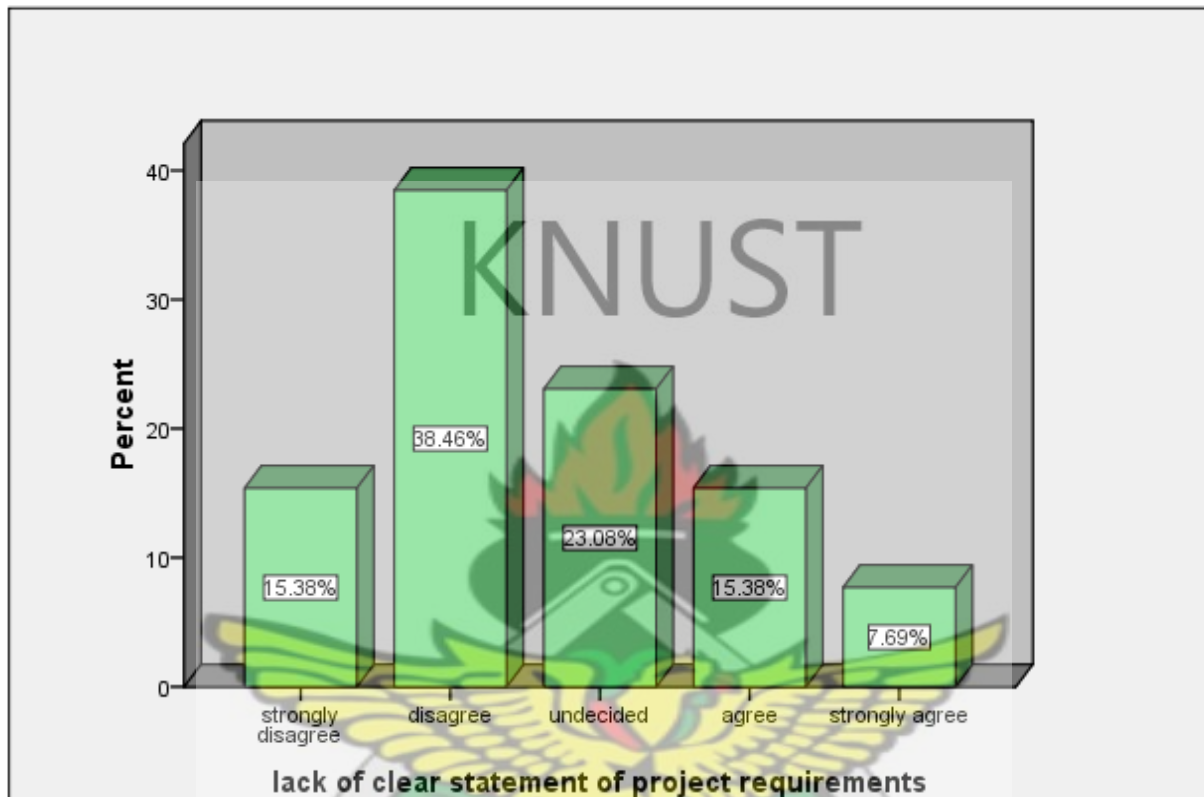


Fig. 4.41 Lack of clear statement of project requirements

Lack of Proper Planning

The majority of respondents reported that lack of proper planning accounted for project failure. Specifically, 30.77 percent of respondents agreed that lack of proper planning was a major determinant of project failure with 30.77 percent supporting the notion by expressing strong agreement with the issue. However, 15.38 percent expressed strong disagreement with the view that lack of proper planning resulted in project failure. 15.38 percent of respondents were not sure whether this factor accounted for project failure or not.

lack of proper planning

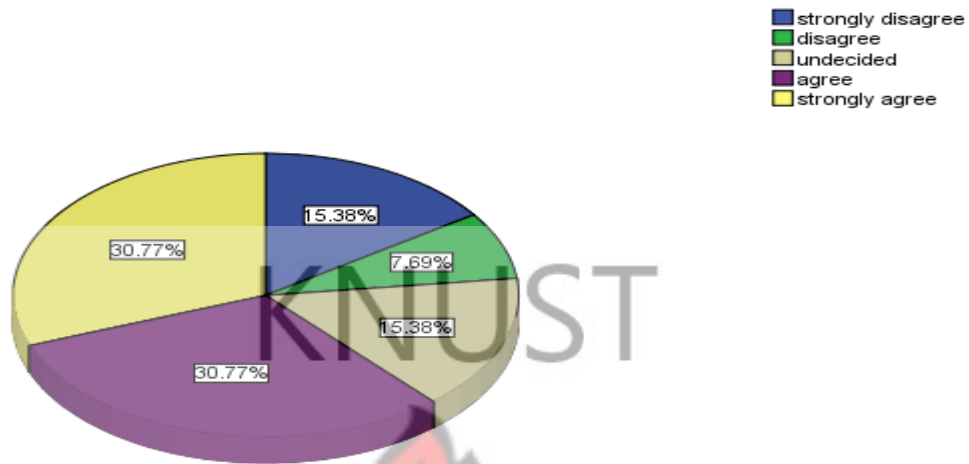


Fig. 4.42 Lack of proper planning

Poorly Defined Project Goals

On the average, most respondents did not find this factor as a major determinant of project failure. 15.38 percent of respondents strongly disagreed with the view that poorly defined project goals account for project failure while 23.08 percent also endorsed the same view. however, 23.08 percent agreed that it accounted for project failure with 7.69 percent strongly supporting. 30.77 percent of respondents were not certain about the contribution of this factor to project failure.

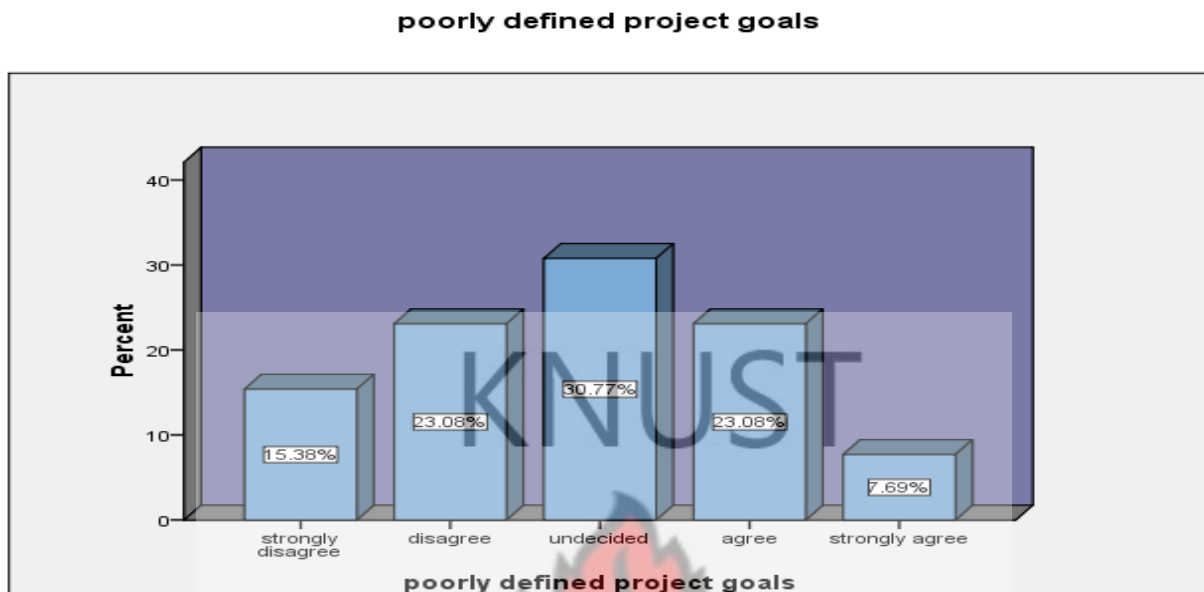


Fig. 4.43 Poorly defined project goals

Lack of Control Mechanisms

Project failures have been attributed to lack of control mechanisms. The study revealed that, 38.46 percent of respondents agreed that lack of control mechanisms were determinants of project failures with 15.38 percent expressing strong agreement with the statement. However, 15.38 percent of respondents disagreed that project failures could be attributed to lack of control mechanism and another 15.38 percent expressed strong disagreement with the statement. Also, 15.38 percent indicated their uncertainty about whether lack of control mechanisms accounted for project failure.

lack of control mechanisms

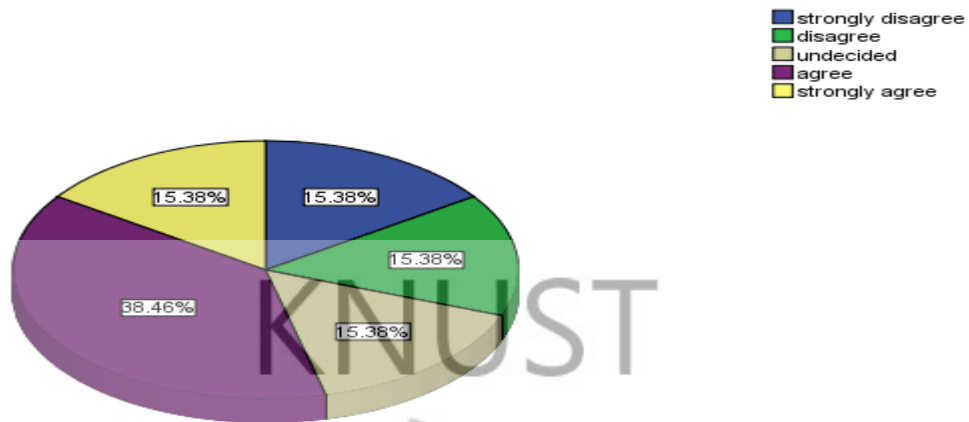


Fig. 4.44 Lack of control mechanisms

Lack of Competent Project Team

This factor did not significantly determine the failure of projects as reported by respondents. 30.77 percent of respondents indicated that lack of competent project team did not account for the failure of projects. Subsequently, 23.08 percent also reported strongly that, project failure cannot be attributed to lack of competent project team. However, 23.08 percent of respondents indicated strongly that, the failure of projects could be accounted for by lack of competent project team, and yet another 7.69 percent expressed agreement with the statement that lack of competent team could account for project failure. 15.38 percent of respondents were undecided as to whether lack of competent project team determined project failure or not.

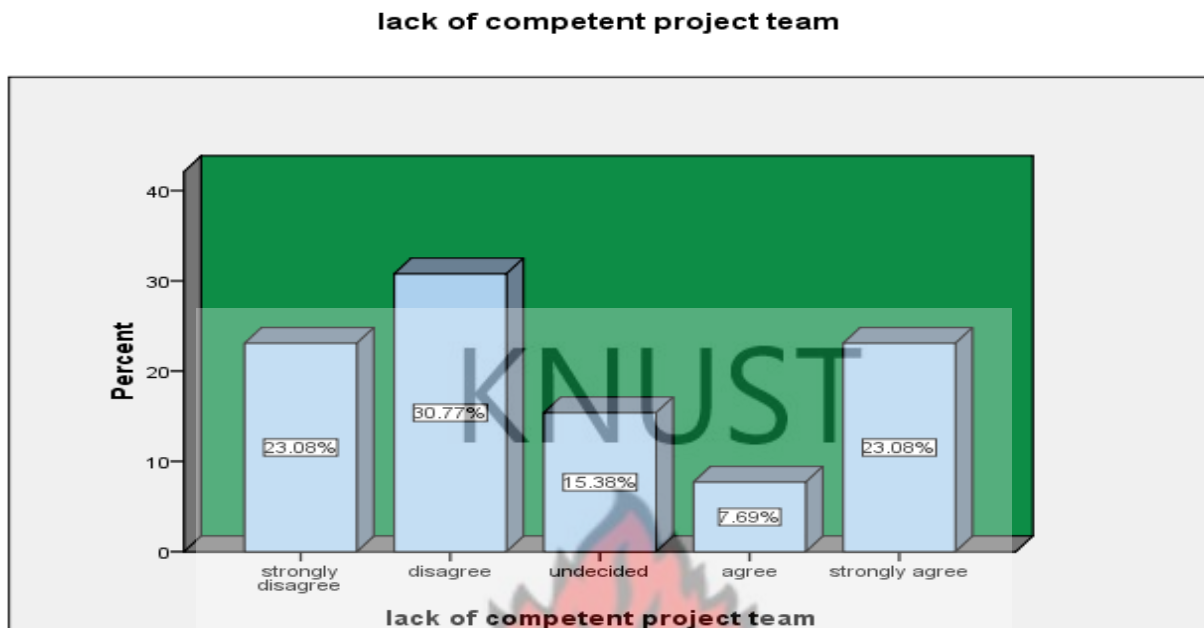


Fig. 4.45 Lack of competent project team

Lack of Sufficient Project Resources

The study found that lack of sufficient project resources accounted for project failures. The impact of sufficient project resources was reported noted as a relevant factor in project success. Thus, the majority of respondents agreed that lack of sufficient resources account for project failure (46.15%). This was supported by 30.77 percent of respondents who expressed strong agreement with the statement that lack of sufficient project resources accounted for project failure. However, 15.38 percent of respondents disagreed with the statement while 7.69 percent also expressed strong disagreement with the statement.

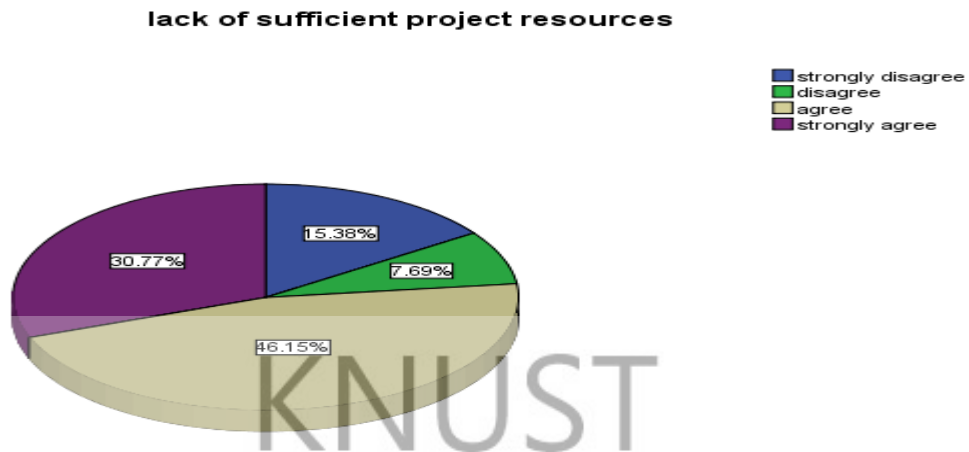


Fig. 4.46 Lack of sufficient project resources

Unrealistic Time Frame and Expectations

It was observed that, expectations and time frame significantly determines the success or failure of projects. In particular, it was reported by the majority of respondents that unrealistic time frame and expectations resulted in project failure (30.77%). However, 30.77 percent of respondents were also undecided as to whether project failure could be attributed to unrealistic time frame and expectations. 7.69 percent also expressed strong agreement with the issue that unrealistic time frame and expectations resulted in project failure. 15.38 percent expressed strong disagreement with the issue that unrealistic time frame and expectations resulted in project failure while another 15.38 percent expressed disagreement with the issue.

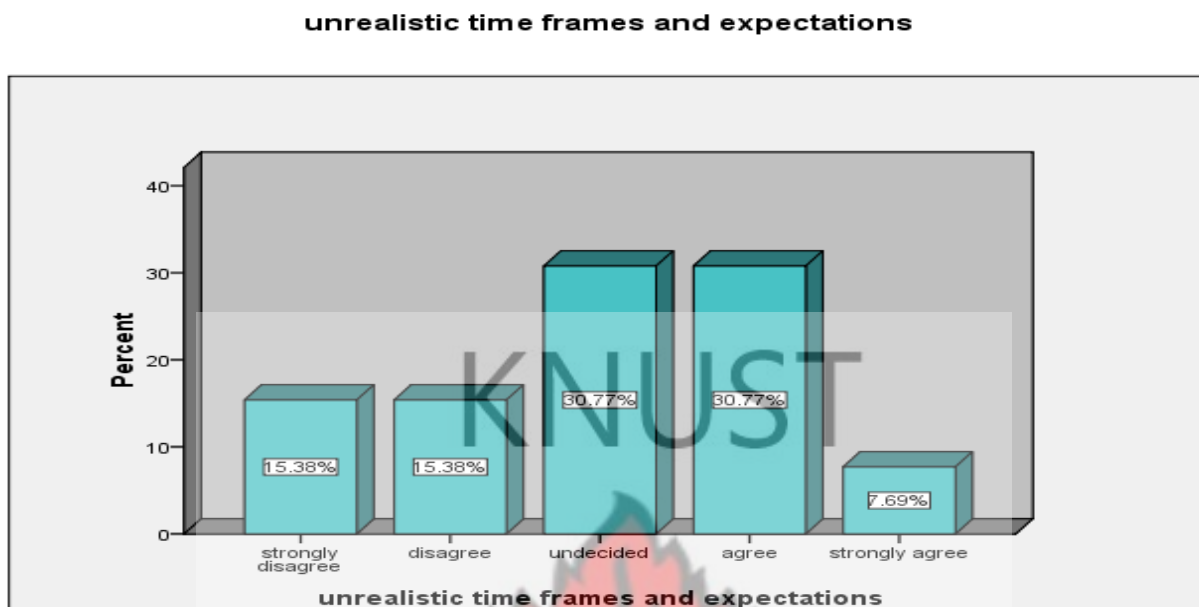


Fig. 4.47 Unrealistic time frames and expectations

Poor Communication

Communication is vital in project implementation and management. The study revealed that, poor communication resulted in project failure (38.46%). Similarly, 15.38 percent of respondents strongly agreed that, poor and inadequate communication resulted in project failure. However, 15.38 percent expressed strong disagreement with the issue with another 15.38 percent expressing disagreement with the view that poor communication resulted in project failure. 15.38 percent were however undecided as to whether project failure was as a result of poor communication or not.

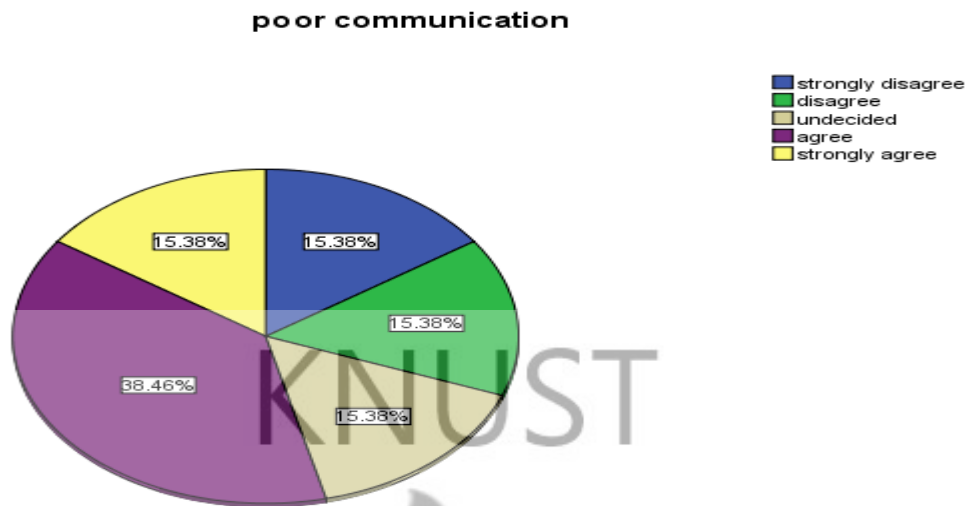


Fig. 4.48 Poor communication

Lack of Client/Customer Involvement

This factor was not found to significantly lead to project failure as the majority of respondents were undecided as to whether it accounted for the failure of projects or not. However, 23.08 percent of respondents expressed strong agreement with the statement that lack of client involvement resulted in project failure with another 23.08 percent agreeing with the statement. 15.38 percent expressed strong disagreement with the issue while 7.69 percent also disagreed with the issue.

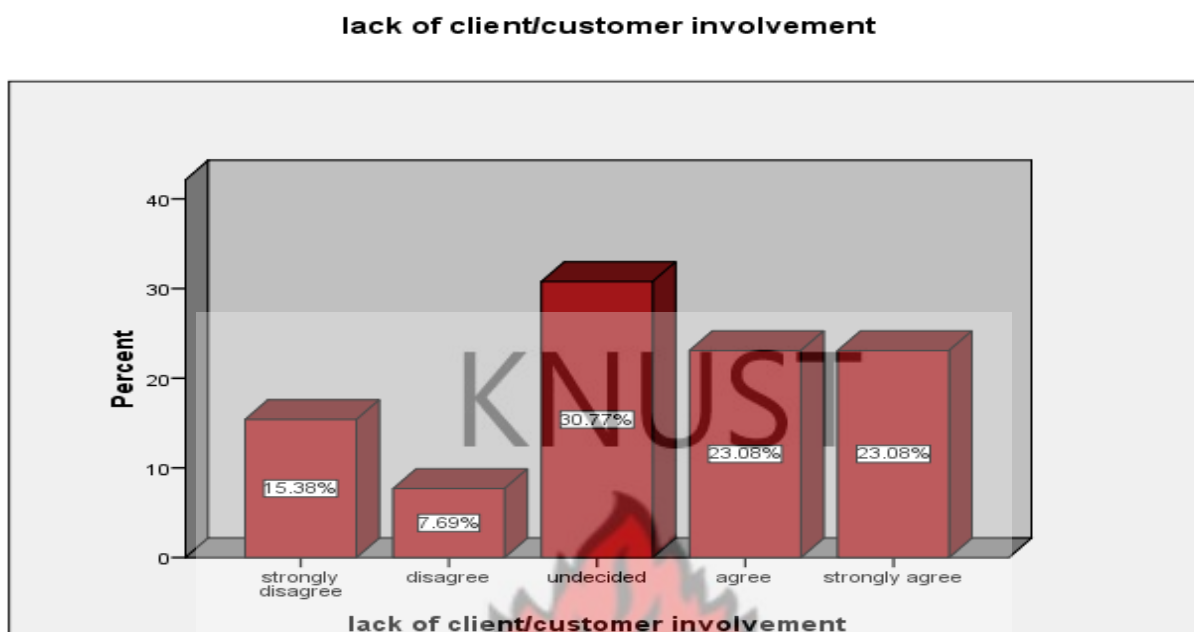


Fig. 4.49 Lack of client/customer involvement



CHAPTER FIVE

5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1. Summary of Main Findings

The study investigated project management practices of the Electricity Company of Ghana, Accra West Region. In line with this primary objective, the study investigated four specific objectives. These were: to determine whether ECG adopts project management practices in the implementation of projects; to investigate the processes used in the implementation of the projects in ECG; to identify the success rate of projects undertaken in ECG; and to determine the causes of project failure in ECG, Accra West Region. The results obtained in the study supported the research objectives examined. Below are summary of the major findings in line with the research objectives.

1. Adoption of Project Management Practices in the Implementation of Projects.

The first objective of the study which sought to determine whether ECG adopts project management practices in the implementation of projects was achieved. The study found that, project management practices such as initiation; planning, execution, monitoring/control, and closing were adopted by ECG, Accra West Region in the implementation of their projects. Similarly, it was revealed that the various activities in each of the five phases were adhered to by the Company.

2. Processes Used in the Implementation of Projects

The study also revealed that the project management processes of initiation, planning, execution, monitoring and controlling and closing were adopted in the implementation of projects in the Accra West Region of ECG. It was also revealed that the various activities in each of the five phases were adhered to by the Company.

3. Success Rate of Projects

The third objective which sought to determine the success rate of projects following adoption of project management practices was supported. Specifically, it was found that, the success rates of projects was more than 75% when project management processes were adopted compared to the 25 to 50% success rates when such processes were not adopted.

4. Causes of Project Failure

Finally, the study found that a number of factors accounted for failure of projects in the Accra West Region of ECG. In particular, lack of management support and commitment, lack of proper planning, lack of control mechanisms, lack of sufficient project resources, and poor communication were found to account for failure of ECG Accra West Region projects.

5.2. Conclusion

Based on the outcome of the study, it can be concluded that the objectives of the study were achieved. In particular, Project Management processes were found to be adopted in the implementation of projects in ECG Accra West. Adherence to these Project Management processes was found to produce significantly high levels of project success than non-adherence to the processes. It was also observed that failure of ECG projects were attributable to factors such as lack of management support and commitment, poor communication, lack of sufficient project resources, lack of control mechanisms and poor planning.

5.3. Recommendations

Based on the findings of the study, the following recommendations are made:

- To ensure effective and successful implementation of projects in ECG Accra west Region, Project Management processes must be adopted and adhered to the letter. Specifically the various activities under each of the five processes must be carried out effectively to ensure high success rate of projects.
- Management of ECG must demonstrate commitment and support in the implementation of projects to increase the success rate of projects executed in ECG, Accra West Region.
- There should be a conscious effort by the Company to set up a Project Management office with well trained professional project Managers and team members who can effectively implement the company's projects successfully.
- The Company should clearly separate its project activities from operations and resource project team members adequately for effective implementation of all projects that will ultimately lead to high success rate of its projects.

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