FACTORS INFLUENCING IMPLEMENTATION OF PROJECT MANAGEMENT IN PUBLIC-FUNDED PROJECTS IN KENYA – THE CASE OF KENYA PIPELINE COMPANY, NAIROBI COUNTY

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DECLARATION

This research project report is my original work and has not been presented for any academic award in any other university.

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This research project report has been submitted for examination with my approval as the university supervisor.

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DEDICATION

This research project is dedicated to my colleague Engineers at the Kenya Pipeline Company who are currently in the process of implementing a number of multi-billion, very crucial core business projects for the company and the country at large. Implementation of Project Management shall go a long way towards us realizing our project objectives.

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I would also like to make special mention of my dear wife Jackline Omolo who inspired me to undertake this masters course in the first place, gave me encouragement all through and created an enabling environment for me to be a scholar during the period of the course.

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LIST OF ABBREVIATIONS AND ACRONYMS

CSR	Corporate Social Responsibility
DSM	Design Structure Matrix
KPC	Kenya Pipeline Company
LOC	Local Oil Companies
MOC	Multinational Oil Companies
NGOs	Non-Governmental Organizations
PM	Project Management
PMBOK	Project Management Book of Knowledge
PMI	Project Management Institute

ABSTRACT

The purpose of this study was to establish factors influencing the implementation of project management in public funded projects. This study was guided by the following objectives: to assess the influence of stakeholders' involvement in the implementation of project management in public funded projects; to find out the influence resource mobilization in the implementation of project management in public funded projects; to establish the extent to which technical skills

influence the implementation of project management in public funded projects and to determine the extent to which leadership influences the implementation of project management in public funded projects. Descriptive research design was adopted where both qualitative and quantitative methods of data collection were applied. The target population for the study were the employees of Kenya Pipeline Company, Nairobi County. The target population consisted of project managers and employees in Kenya Pipeline Company. Simple random sampling was used to select employees from the Kenya Pipeline Company while purposive sampling was used to select the project managers. A total of 311 respondents were targeted by the study out of which a total of 238 responded giving a response rate of 77%. Questionnaires and interview schedules were used as instruments for data collection. Questionnaires were used to collect data from the employees while interview schedules were used to collect data from project managers. Data was analyzed through the use of a computer software SPSS. Primary data from the field was edited first. Coding was then done to translate question responses into specific categories. Coding was expected to organize and reduce research data into manageable summaries. Quantitative data collected was analyzed by descriptive statistics while a content analysis technique was used to analyze qualitative data. Descriptive statistics such as frequencies and percentages were used to describe the data. The analyzed data was presented in form of tables. In determining the influence of staff technical skills on the implementation of project management the study found out that the technical skills were inadequate and that technical skill is essential in project management. Regarding the influence of stakeholders' involvement in the implementation of project management the study found that stakeholder's level of involvement to be in small extent. On the influence of resource mobilization on the implementation of project management the study found out that inadequate allocation of resources can lead to failure in the implementation of project management to a very large extent. Furthermore, the study also revealed that poor leadership can lead to stalling of project management to a very large extent. From the findings of the study, it can be concluded that staff technical skills has effect on the implementation of project management in that necessary skills play a key role in execution of duties by the employees. The study further concluded that stakeholders' participation influences the implementation of project management. In addition, it can also be concluded that even though there was funding, inadequate funding affects the implementation of project management. It can finally be concluded that leadership influences the implementation of project management. The study recommends that stakeholder's participation should be improved in project management in order to reduce resistance from stakeholders. The study recommends that the project managers should provide the necessary resources and facilities for project management without under budgeting. The study further recommends that the qualified staff should be recruited and trained on project management. The study finally recommends that participative leadership should be adopted to avoid poor project management. . The researcher therefore recommends that another study be done factors challenges facing of donor-funded projects in Kenya which was not a concern in this study.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Project management is management specific to a project. It encompasses the knowledge, skills, and activities, as well as the tools and techniques, to bring a project to its desired outcome. The project manager is the person charged with fulfilling the project objectives. The project manager can work independently or with others as part of a project management team. To properly manage a project, one has to identify the project requirements, clearly define the objectives and project deliverables, balance the "triple constraint" of time, scope, and cost, and collaborate with project stakeholders (PMI, 2004).

Project management methods have been extensively used by many public and private entities to solve their problems, manage scarce resources and, achieve important objectives (Andersen, 2008). For developing countries, the potential benefit of project management is extremely high and the proper application of it may even be critical; as in those countries; resources are extremely scarce and, achievement of project objective, in most cases, is extremely important.

Morris (2002) suggested that a research carried out at Oxford and in the USA in the 1980s showed that many of the factors that cause projects not to meet their schedule or cost targets are not covered by the PMBOK type model. He went on to say, "Much of the PMBOK material is helpful in managing projects, but is not sufficient to manage them successfully. This should be no surprise as focusing on execution alone, without due consideration to context and strategy, will invariably lead either to inappropriately selected objectives or in optimal strategies for accomplishing them. The Standish Group 2004 Report indicated that the main reason for project failure (in developed countries) is not the absence of general resources or financial resources, but the lack of Project management capability (Malan etal, 2007). Further, in the developed countries

external conditions such as market & politics are less important for the success of projects (Torp, Austeng, & Jekale, 2004).

Projects in developing countries are highly influenced by their external environment (Jekale, 2004). Moreover, the project environment in many developing countries is unstable and characterized by rapid change of markets, shift of funding sources, frequent change of government policies and the business environment. In addition, projects in those countries are affected by prevalence of corruption, war, drought and governments political priorities (Alutu & Udhawuve, 2009). For example in Nigeria, the cost of construction materials was reported to have shown a 400% increase over a period of two years because of change in government policies (devaluation of its currency and inflation) (Sonuga etal,2002). The presence of only three PMI chapters in Africa countries attest to the value and attention given to project management in developing countries. Further, according to (Nguyen, 2007), many of the efforts to transfer project management knowledge and technology to developing countries were not successful mainly due to : lack of support of senior management and a perception that project management methodology is not applicable in developing countries.

Institute of Economic Affairs (2012) indicated that the Government of Kenya has in the recent past decentralized funds to the constituencies with the aim of controlling imbalances in regional development and engendering citizen participation in the management of public resources towards poverty alleviation and improving service delivery. Decentralizing funds to the constituencies and counties aims at ensuring that development planning is done at the constituency level where community needs can be captured best through public participation in the analysis, identification and prioritization of development projects and through participatory planning processes. Community involvement in project identification and implementation

ensures that projects implemented through decentralized funds respond to the needs of the community. It also contributes towards community ownership of projects. It is upon this background that this study aims at assessing factors influencing the implementation of project management in public funded projects.

1.1.1 Kenya Pipeline Company

The Kenya Pipeline Company (KPC) Limited is a State Corporation that was established on 6th September, 1973 under the Companies Act (CAP 486) of the Laws of Kenya and started commercial operations in 1978. The Company is 100% owned by the Government and complies with the provisions of the State Corporations Act (Cap 446) of 1986. The Company operations are governed by relevant legislations and regulations such as the Finance Act, the Public Procurement Regulations, and Performance Contracting (Kenya Pipeline Company, 2015)

The main objective of setting up the Company was to provide efficient, reliable, safe and cost effective means of transporting petroleum products from Mombasa to the hinterland. In pursuit of this objective, the Company constructed pipeline network, storage and loading facilities for transportation, storage and distribution of petroleum products in Kenya and the East Africa region (Kenya Pipeline Company, 2015)

KPC's Vision is to be a globally predominant petroleum products handling and related services provider. Their mission is to efficiently receive, store, transport and deliver petroleum products and provide related services while adhering to international standards, exceeding customer expectations and optimizing value through continuous innovation. The Company's customers are the oil marketing companies categorized as Multinational Oil Companies (MOC's), Local Oil Companies (LOC's) and Independent Oil Dealers (Kenya Pipeline Company, 2015)

KPC has also strategically implemented Corporate Social Responsibility which has enhanced the Company's image thereby creating great public goodwill from those living along the pipeline. CSR is about capacity building for sustainable livelihoods. It respects cultural differences and finds the business opportunities in building the skills of employees, the community and the

government", In a nutshell, CSR is about business "giving back to society"(Kenya Pipeline Company, 2015)

Over the years, the company has supported projects in the areas of: environment, education, health, provision of water, and sports. In doing this, the company is playing its role in assisting the Government to realize the objectives of Vision 2030. From the 2010/2011 fiscal year, KPC has continued to make significant contributions to development through the implementation of CSR projects spread throughout the country (Kenya Pipeline Company, 2015)

Currently, Kenya Pipeline Company is undertaking seven on-going projects which will be the focus of this study. The projects include: Replacement of the Mombasa Nairobi Pipeline project, Installation of a Third Mainline Pump Set at the Intermediate Pump Stations on the Mombasa-Nairobi Pipeline project, Construction of Additional Tanks at Nairobi, Kenya – Uganda Refined Petroleum Products Pipeline, Liquefied Petroleum Gas (LPG) Storage & Bottling Facilities, Construction of Additional Loading Arms at Eldoret and Construction of a Parallel Pipeline from Sinendet to Kisumu project. It is against this background that this study aims at assessing factors influencing the implementation of project management in public funded projects (Kenya Pipeline Company, 2015)

1.2 Statement of the Problem

The implementation of most projects in developing countries is amalgamated with normal operational undertaking in functional organizations that have low project management capacity (Jekale, 2004). Further, corruption has become a challenge complicating project management in those countries (Andersen, 2008). As (Jekale, 2004) has summarized it "Poor support infrastructures, low level of technology, low capacity of implementing institutions, unreliable communication, poor and protracted documentation, high turnover of leadership and workmen, low level or absence of accountability and transparency, and long and tedious formal decision-making procedures are typical conditions in developing countries which complicate project management" In Kenya many public funded projects fail or are never completed due to various reasons. It is upon this background that this study aimed at assessing factors influencing the implementation of project management in public funded projects.

1.3 Purpose of the Study

The purpose of this study was to establish factors influencing the implementation of project management in public funded projects.

1.4 Research Objectives

The following specific objectives guided the study:

(1) To assess the influence stakeholders' involvement on the implementation of project management in public funded projects.

(2) To establish the extent of the influence of resource mobilization on the implementation of project management in public funded projects.

(3) To establish the influence of technical skills on the implementation of project management in public funded projects.

(4) To determine the extent to which leadership influences the implementation of project management in public funded projects.

1.5 Research Questions

(1) How does stakeholders' involvement influence the implementation of project management in public funded projects?

(2) To what extent does resource mobilization influence the implementation of project management in public funded projects?

(3) To what extent do technical skills influence the implementation of project management in public funded projects?

(4) To what extent does leadership influence the implementation of project management in public funded projects?

1.6 Significance of the study

The Kenya Pipeline Company will be able to use the findings and recommendations of this study to come up with more effective measures of implementing project management in their projects. Similar gains may be realized by other public funded projects in other towns in Kenya and therefore the study findings may have a major impact not only to the projects in Nairobi but also in the entire country. The study may point out the issues that need to be addressed in order to have effective project management.

Policy makers and practitioners can also use the findings to come up with policies and strategies that would improve the implementation of public funded projects. The recommendations made will also go a long way towards the improvement of project management.

In addition, the findings may also be useful to mentors, education providers and Project Managers dealing with project management. Finally, this study will be of value to researchers and scholars as it forms a basis for further research. It may also be a source of reference material for researchers conducting research in other related topics.

1.7 Assumptions of the Study

This study was based on the assumption that the respondents were willing to answer the questionnaire and that they answered the questions truthfully. The study also assumed that the respondents had basic knowledge in project management. This study was based on the assumptions that resource mobilization affects the implementation of project management in public funded projects, stakeholders' involvement affects the implementation of project management in public funded projects, technical skills affects the implementation of project

management in public funded projects and finally political risks affect in the implementation of project management in public funded projects.

1.8 Limitations of the Study

The researcher faced financial constraints during the study since the researcher required research assistants during data collection. An extra cost was incurred on training. The researcher did not generalize findings to the whole country since the study was carried out only in Nairobi. To counter this limitation, the researcher hired one research assistant in order to reduce expenses.

1.9 Delimitations of the Study

One of the delimitations of this study was that by carrying it out in Kenya Pipeline Company, the researcher saved on the time due to familiarity to the organization of study.

1.10 Operational Definition of Terms

Implementation: The act of execution of something that must follow a specific process

Leadership*:* For the purposes of the discussion in the study, leadership is the ability to make strategic decisions and use communication

Project Manager*:* A project manager is the individual with overall responsibility for managing the project, also responsible for guiding the project towards the achievement of the desired objectives

Resource mobilization: Money and materials required in order for activities to function

specific task effectively.

Stakeholders' involvement: The process where organizations involve people who may be affected by decisions it makes or can influence the implementation of its projects.

Technical skill: Knowledge and proficiency in certain specialized field needed to accomplish

1.11 Organization of the Study

This study was organized into five chapters. Chapter one covered background of the study, statement of the problem, objective of the study, research questions, purpose of the study, significance of the study, limitations of the study, delimitation of the study, basic assumptions of the study and definition of significant terms. Chapter two reviewed the relevant literature on Project management. Chapter three described the research methods used, the research design target population, sample and sampling procedures, research instruments, reliability of the instrument and administration of the instrument and data analysis techniques. Chapter Four contained research analysis, findings and discussions while Chapter Five had the summary of research findings, conclusion of the study as well as recommendations.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter presents relevant literature on the concept of project management, the influence of stakeholders' involvement in the implementation of project management in public funded projects, the influence of resource mobilization in the implementation of project management in

public funded project, effect of technical skills in the implementation of project management in public funded projects and influence of leadership in the implementation of project management in public funded projects.

2.2 The Concept of Project management

The project management institute (PMI) defines project management as the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements (Project Management Institute, 2013). This means that project management is all about managing resources efficiently and effectively in order to get a project completed successfully. The PMI identified some five process groups that form the building block for any project life cycle. These process groups are: initiation process group, planning process group, execution process group, monitoring and control process group and closing process group

Each of these processes takes place at least once in the life cycle of every project. It is important however, to note that while this is in the case of a single phase project, some or all of the process groups may be repeated in projects that are executed in two or more phases (Wysocki, 2009). Public projects are often referred to as government funded non-profit orientated projects which focus on citizen value and manage relationships between associated actors. Actors in the public project are those who have a right to act because they have a stake in the issue. Another expression of the word actor is stakeholders. (Binnekamp, Gunsteren, & Loon, 2006).

2.3 Stakeholders involvement in Project Management

Project Management Book of Knowledge defines stakeholders as persons or organizations for example customers, sponsors, the performing organization, or the public, who are actively

involved in the project or whose interests may be positively or negatively affected by the performance or completion of the project. (Project Management Institute, 2008)

In Project Management Book of Knowledge, stakeholder management is described as the process of communicating and working with stakeholders to meet their needs and addressing issues as they occur (Project Management Institute, 2008). The efficient management of stakeholder is claimed to be a key to project success (Karlsen, 2002).

Traditional Project Management approach is characterized by its well-organized sequenced steps for development, and the stress on the importance of predetermined stakeholder requirements in the beginning phase. Traditional Project management often comprises five process namely: Initiating, Planning, Executing, Monitoring and Controlling, and Closing (Project Management Institute, 2008). The role of the stakeholder in the traditional project is to set project requirements and demands on scope, time, cost, and quality (Adjei & Rwakatiwana 2009)

Stakeholder management in traditional project management also shares the predetermined and well-organized character. Steps of stakeholder management in traditional project management approach (Project Management Institute, 2008) are summarized.

Collect identification information by assessing major requirements/expectations/interest and categorizing into groups (Internal/external, supporter/neutral/resistor, etc.).

Setting Stakeholder Management Strategy - defines an approach to increase the support and minimize negative impacts of stakeholders throughout the entire project life cycle.

Planning Stakeholder Communications which is the process of determining the project stakeholder information needs and defining a communication approach.

Identifying the information needs of the stakeholders and determining a suitable means of meeting those needs is an important contributor to project success.

Managing Stakeholder expectations is the process of communicating and working with stakeholders to meet their needs and addressing issues as they occur. It involves communication of activities directed toward project stakeholders to influence their expectations, address concerns and resolve issues (Project Management Institute, 2008).

Leybourne (2009) stated that the initiating process of traditional project management according to PMBOK emphasizes on the need for documenting stakeholders' business needs/requirements before starting the project, and by doing so promotes the predetermination of stakeholder requirements. Aguanno (2005) argued that this early lock down of stakeholder requirement can have a retrogressive effect if predetermined environment changes or stakeholders come up with new demands afterwards.

Traditional approach to stakeholder management implies active planning for stakeholders' through consideration of communication channels and different techniques that help to build and control stakeholder relationships. For example, Freeman et al (2007) explained how to use seven everyday techniques to better manage stakeholder relationships. These techniques include: stakeholder assessment, stakeholder behavior analysis, understanding stakeholders in more depth, assessing stakeholder strategies, developing specific strategies for stakeholders, creating new modes of interaction with stakeholders and developing integrative value creation strategies.

2.4 Technical Competency in Project Management

Murch (2001) suggested that project managers should possess sufficient technical knowledge and skill to perform their jobs. This is particularly vital in the construction industry where the

majority of projects undertaken are highly technical and complex, and an understanding of engineering and scientific principles is essential. In such an environment, the project manager should have at least a working level understanding of the technical challenges the project team is facing. Technical skills enhance the ability of the project manager to lead and manage through an understanding of the complex issues that persist during a project life cycle.

In a study conducted by Posner (1987) and cited by Meredith and Mantel (2002), successful project managers were seen as having relevant experience or knowledge about the technology required by the project, but seldom were effective project managers seen as technical experts. Posner (1987) advocates that reliance on only "technical expertise" was often found to be detrimental because it decreased flexibility and a willingness to consider alternative perspectives. However, project managers do need to be sufficiently well versed in the technology to be able to ask the right questions and acquire adequate insight in an attempt to manage outcomes.

A research conducted by Monson (2000) concluded that technical expertise does not correlate directly to successful Project Management. This is commonly reflected in the organizational structure as the most technically competent personnel are frequently used as project consultants rather than as project managers." Monson claims that it is no accident that significant problems in PM arise in engineering related professional areas. Engineers, as well documented, are taught with a curriculum that generates a correct answer (outcome based) without partial credit allotted for the work supporting the final answer (process based). For example a research study related to project characteristics conducted by Williams (2000) implied that as technical complexity increases, the likelihood of project success diminishes.

The bottom line is technical competence (the ability to solve complex engineering or scientific problems) serves to enhance the project manager's credibility with customers, senior leadership and the project team. However it is not apparent that the project management's credibility is the most critical factor for project management competency. Orvis (1987) indicated that the core skills of engineers relate to the application of logic and engineering principles since scientists and engineers often perform numerical calculations. Their operations range from the single task of determining the value of a function to the complex task of numerically integrating a differential equation – tasks that require considerable skill, time, and energy.

2.5 Leadership in Project Management

A leader is a person who sees something that needs to be done, knows that they can help make it happen, and gets started (Kevin, 2007).Project managers continue to face many challenges and problems concerning leadership, for example, leadership style, stress, uncertainty, motivation, learning, and teamwork (Berg & Karlsen, 2007). Hauschildt, Gesche, & Medcof (2000) reported that the success of a project depended more on human factors, such as project leadership, top management support, and project team, rather than on technical factors. They also found that the human factors increased in importance as projects increased in complexity, risk, and innovation. The researchers found that the critical role of the project manager's leadership ability had a direct correlation to project outcomes (Hauschildt et al., 2000).

A research study by Cambridge University's School of Business and Economics concluded that 80% of projects failed because of poor leadership (Zhang & Faerman, 2007). The findings further suggested that poor leadership skills reflected limited or no teamwork, inadequate communication, and an inability to resolve conflicts as well as other human related

inefficiencies. Kumar (2000), in a study of reengineering projects, found that failure was primarily linked to the organizational context and could attribute to the lack of leadership, organizational culture, the lack of integration, and the lack of commitment by senior management.

While leadership may be singled out as an individual contributor to failure, it transcends all other organizational factors (Roepke, Agarwal, & Ferratt, 2000). Leadership affects corporate culture, project culture, project strategy, and project team commitment (Shore, 2005). It also affects business process reengineering, systems design and development, software selection, implementation, and maintenance. Without appropriate leadership, the risk of project failure increases (Shore, 2005). Although researchers in project management have identified leadership as critical to the success factor of projects (Finch, 2003), the topic of leadership in relation to project success has not been adequately studied.

Determination of a successful project outcome is measured by the extent to which the project accomplished complex endeavors that met a specific set of objectives within the constraints of resources, time, and performance objectives (Thilmany, 2004). Indications of successful project outcomes are the accomplishment of the specific objectives of the project as defined by the project stakeholders and are dependent on the combined efforts of project management and the project team.

Essential to the successful outcome of projects are the project manager and the project team (Berg & Karlsen, 2007). The project manager is responsible for leading the project team towards achieving the desired outcome of the project (Kerzner, 2006). The role of project manager combines human and technological resources in a dynamic, temporary organization structured to

deliver results that include social as well as technological aspects (Blackburn, 2002). Leadership in a project environment requires the project manager to integrate and lead the work of the project team (Berg& Karlsen, 2007). Project management is not an isolated activity, but rather a team effort . A team requires leadership in order to function effectively.

In the project environment, possessing management skills is not sufficient to be successful (Thite, 2000). Project management practices require that managers have knowledge and experience in management and leadership, and the relationship to project success (Berg & Karlsen, 2007). In a business environment it is believed that a manager makes sure tasks and duties are completed, while a leader is sensitive to the needs of people and what followers need to be exceptional employees. Thite (2000) suggested that integrating leadership concepts allows project managers to apply logic and analytical skills to project activities and tactics. Thite (2000) further suggested that project managers can integrate leadership concept by being sensitive to and working with project team members as individuals with needs and desires related to their work and careers.

There are, however a variety of leadership styles that may be applicable for dealing with the many challenges faced by project management. Situational leadership, for example, is based on the premise that the style of leadership, which may be appropriate for one situation, may not be appropriate for another. New wave leadership, a concept of team-based leadership, reduces the focus on top executives and allocates responsibility for organizational success across all sectors of the organization. Transformational leadership is based on the notion of followership to a higher cause; that is, to focus on the goals of the organization rather than self. Transactional leadership is the social exchange between the leader and follower (Northouse, 2004).

A leadership style that has been found to enhance the human resource skills of interpersonal relationship, motivation, decision making, and emotional maturity, required to mobilize project team members is participative leadership (Schmid & Adams, 2008). Leary-Joyce (2004) refers to participative leadership as servant-leadership, which incorporates the leader's ability to include, discuss, take ideas, look for ways to help people come on board, and celebrate every success that comes along.

The leader serves by building the skills of followers, removing obstacles, encouraging innovation, and empowering creative problem solving (Spears, 2004). The characteristics associated with servant leadership include incorporating active listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of people, and community building. It is believed that leadership is a needed competency for successful project outcomes, yet there is limited empirical research linking leadership to project performance. It is believed that servant leadership enhances the human resource skills necessary to mobilize project teams (Schmid & Adams, 2008).

Neuhauser (2007) asserted that project managers have a dual responsibility when managing a project: (a) managing the technical components of the project (plans, schedules, budgets, statistical analysis, monitoring, and control involved in the various knowledge areas and processes), and (b) managing the people in such a way to motivate the team to successfully complete the project goals. Srica (2008) argued that since the late 1990s project management has experienced a shift toward a stronger emphasis and focus on the organizational and human aspects of project work. This is in comparison to the past, where the emphasis was more on the technical aspects of project accomplishment

Project managers draw on a variety of leadership approaches that are not necessarily effective, due to the absence of formal leadership training among project managers (Skipper & Bell, 2006). The basic principles and methodology that defines the approach to project management are defined by the Project Management Body of Knowledge, but this body does not provide guidelines for leadership in a project environment (Pomfret, 2008). Transactional leaders tend to focus more on accomplishing tasks, influencing followers through goal setting, defined outcomes, and feedback while providing rewards for achieving the desired results (Dvir, Edin, Avolio, & Shamir, 2002).

Patterson (2003), leadership theories, such as transformational leadership or transactional leadership, focused on the organization and were inadequate to explain behavior that was altruistic in nature, or follower focused. The acceptance of servant-leadership, which is follower focused better explains the altruistic behavior that is displayed by the leader (Patterson, 2003; Patterson, Russell, & Stone, 2004). The virtues of servant leadership are regarded as qualitative characteristics that are part of one's character and incorporate the ethical values of being good, excellent or trustworthy. These ethical constructs defined servant-leaders and shaped attitudes, characteristics, and behavior (Patterson, 2003).

2.6 Resource mobilization in Project Management

Project cost management is one of the most important aspects in project management that require much attention since its mishandling can lead the project into a complete failure. It can affect the end result by either not meeting the performance requirement set by the sponsor or a total cancelation of the entire project if not carefully managed. It is the process of estimating how

much the whole project will cost by breaking down the project into component and determining the cost (Mintzer, 2002). This is done by taking into account the entire scope of the project i.e. all the activities needed to be done in the whole project, the materials and equipment involved as well as the labor factors. In his 2009 edition, Kerzner identified some tools and techniques that can be used for project budgeting which include recent experience in similar work, professional and reference material, market and industry surveys, knowledge of the operations and processes, estimating software and databases if available and interviews with subject matter experts (Kerzner, 2009).

There are two ways that a project budget can be planned according to Mintzer (2002). It can be done either by top down or bottom up budgeting. The top down budgeting is the method which starts with the estimation of the entire project then allocating funds to the various components of the project or from the top management to the lower-level managers. An example could be that of a big project from large corporations or a government budget for a certain ministry (Mintzer, 2002). On the other hand, bottom up budgeting is where budget is started from the team members of the project and the works they need to do taking into consideration including miscellaneous and make the estimations going up through to the total budget. This method is commonly used in smaller projects like those of NGOs as it is able to give the project manager a clearer view as to how much the whole project will cost knowing all the tasks that need to be performed in the project (Mintzer, 2002).

This means that, in order to make a good budget for a project, it is important that the project manager is able to identify all the requirements in the project so that the scope of the project is

clearly defined. Failure to identify some items in the project can have negative implications on the project since their acquisition price may be increased as the time draws close as compared to that of those which were adequately researched before purchase or hire (Mintzer, 2002).

Development project resource management can improve schedule performance by increasing the quantity of resources, productivity and utilization. Total resource quantities and associated productivities are often limited and difficult or expensive to improve, leaving resource utilization as a primary management tool to reduce project durations. Managers can have a large effect on resource utilization through the policies they use to allocate resources among development activities, even when the total quantity and productivity of resources are fixed. For example a design manager can impact when all design components are completed by allocating the optimal fraction of the available designers to the initial design of components, checking designs to identify needed changes, and the correcting or improving of component designs (John, 2007).

John (2007) indicated that applying too few resources to any given activity slows progress and applying too many can cause crowding that reduces productivity and wastes resources that could be used more efficiently by other activities. Therefore the effective and efficient allocation of scarce resources among development phases and among activities within phases is a realistic management opportunity for improving project schedule performance.

Sterman's (2000) description of policies as decision-making rules is adopted here. In this context resource allocation policies are formal heuristics or guidelines which managers use to make individual decisions about where to apply resources. For example the critical path method mantra is an informal resource allocation heuristic that could be formalized into a policy of filling all

resource needs of critical path activities before allocating resources to other activities. Improved understanding of how resource allocation policies impact project schedules can improve performance.

Despite the potential of improving resource allocation policies to reduce development durations, relatively little research has investigated allocation policy design. Resource allocation policies can include many types of information, including resource needs across activities and time, productivities of resource types, and resource availability. The current work focuses on how three policy features impact development project durations: (1) whether to base allocations on current or future conditions, (2) how quickly to adjust resources and (3) how much control to exert over resource adjustment speed (John, 2007).

The design of resource allocation policies is difficult because of the inherent characteristics of development namely: iteration and delays in implementing allocation decisions. Development processes are iterative by nature. Iteration creates closed loop flows of work in which defects or optional changes for improvement are discovered, changes are made, and the work is checked or tested again for additional change requirements. Iteration can greatly magnify the total work effort needed for completion because rework can expose or create additional change requirements, which creates more rework etc. An emerging body of product innovation literature deploys the design structure matrix (DSM) methodology to explore the iteration and allied interdependence problems (Sosa et al., 2004). This methodology accounts for iterations by mapping the dependencies between a value chain of innovation tasks in terms of precedence, information exchange requirements and probability of rework. Browning and Eppinger (2002)

have explored a network using simulation to assess costs and schedule risks. Helo et al. (2004) have deployed DSM with systems thinking methodology to assess economic impacts of uncertainty within feedback loops and studied a number of alternatives in decision-making to possibly avoid iterative situations.

Effective and efficient resource allocation for iterative projects or project phases is difficult because of challenges in accurately predicting the sizes of work backlogs, specifically the amounts of work that must be initially completed, work to be inspected or tested to discover change requirements, and work to be reworked. These work backlogs evolve during projects. Consider, for example a design phase without the benefits or burdens of starting with previously developed work. At the beginning of the phase all work packages must be initially completed and none are yet available for quality assurance or rework. As work is designed the design backlog (and the need for designers) decreases and the quality assurance and rework backlogs (and their resource needs) increase, but at different rates. The quality assurance and rework backlogs later decrease as work is approved and designs finished. The dynamics of rework cycles make work backlogs difficult to predict. Given the limitations of human cognition (Simon, 1996), especially in managing dynamic systems (Senge, 1990), managers cannot predict resource needs accurately enough for effective resource allocation.

Delays in making allocation decisions, implementing reallocations, and productivity ramp-up of re-allocated resources also make resource allocation policy design difficult. Resource adjustment delays can be large due to the number of information and physical activities that must occur for a complete change in allocation, the time requirements for those activities, and the prerequisite

information needs in those processes. Intuitively, managers should incorporate resource adjustment delays into allocation policies. But several types of managerial errors can thwart these efforts, including the previously discussed challenges in predicting the sizes of multiple interacting backlogs, the uncertain sizes of actual delays, and the lack of understanding of how demand forecasting and allocation delays impact performance (Yassine et al., 2003) assume there are no resource allocation delays, that these exchanges are perfectly synchronized, or both.

Resource allocation can be based on a simple heuristic that is, allocating resources to each development activity in the same proportion that the activity's current backlog contributes to the total backlog (Repenning, 2001). This policy is attractive for at least three reasons: (1) current conditions are relatively easy to observe and use, (2) current conditions are easier than forecasted demands to defend to policy critics and (3) basing allocations on current conditions and direct proportions is cognitively simple. But such a policy has at least two important defects. The policy fails to include the impacts of future changes in backlogs and the growth in total effort required due to rework. In contrast, Joglekar and Ford (2005) recommend basing allocations on estimates of future resource demands that are continuously adjusted based on current conditions. This approach partially addresses the challenges posed by allocation delays.

2.7 Theoretical Framework

Project Management Process Maturity Model-PM2

The PM2 model is one of the pioneer PM maturity models developed. The model was developed by William C. Ibbs and Kwak in 1997. Like the CMM model, the PM2 model has five levels of maturity with slight difference in its use of terminologies. The model divides PM processes and practices into eight PM knowledge areas and six phases of PM processes adopting PMBOK‟s

division. The model evaluates organization's PM maturity through the assessment of these knowledge areas and phases.

The description of the five maturity levels, key project management processes in each level, their organizational characteristics and the focus areas at each level of PM2‟s Model given by (Kwak & Ibbs, 2002) is summarized in Table 2.1.

Table 2.1: Project Management Process Maturity Model-PM2

Table 1: PM2 Maturity Model‟s Summary Maturity Level	**Key PM Processes**	**Major Organizational Characteristics**	**Key Focus Area**
Level-1 (Ad-hoc Level)	No PM processes or practices are consistently available. No PM data are consistently collected or analyzed.	Functionally isolated. Lack of senior management support. Project success depends on individual efforts.	Understand and establish basic PM processes.
Level-2 (planned Level)	Informal PM processes are defined. Informal PM problems are identified. Informal PM data are collected.	Level-2 (planned Level)	Informal PM processes are defined. Informal PM problems are identified. Informal PM data are collected.
Level-3 (managed at project Level)	Formal project planning and control system are managed. Formal PM data are managed.	Team oriented (medium). Informal training of PM skills and practices.	Systematic and structure planning and control for individual project.
Level-4 (Managed at corporate level)	Multiple PM (program Management). PM data and processes are integrated. PM processes data are quantitatively analyzed, measured and stored.	Strong team work Formal PM training for project team	Planning and controlling Multiple projects in a professional manner
Level-5 (Continuous learning)	PM processes are continuously improved PM processes are fully understood PM data are optimized and sustained	Project driven organization Dynamic energetic ,and fluid organization Continuous improvement of PM processes and practices	Innovative ideas to improve PM processes and practices

2.8 Conceptual Framework:

The conceptual framework indicates that the implementation of project management in Kenya Pipeline Company would require effective resource mobilization, stakeholder involvement, technical skills and leadership. Inadequate resources affect the implementation of various project activities. Moreover, limited stakeholder involvement also affects the implementation of project management since stakeholders are the beneficiaries in the various projects. Limited technical

skills among company employees lead to poor execution of project activities and finally leadership also affects the implementation of project management since the various leadership styles affect public projects. If the above factors are to be addressed then the outcome is that there will be implementation of project management with adequate resources, active stakeholder involvement, appropriate skills and little leadership style, with the end result being highly successful projects.

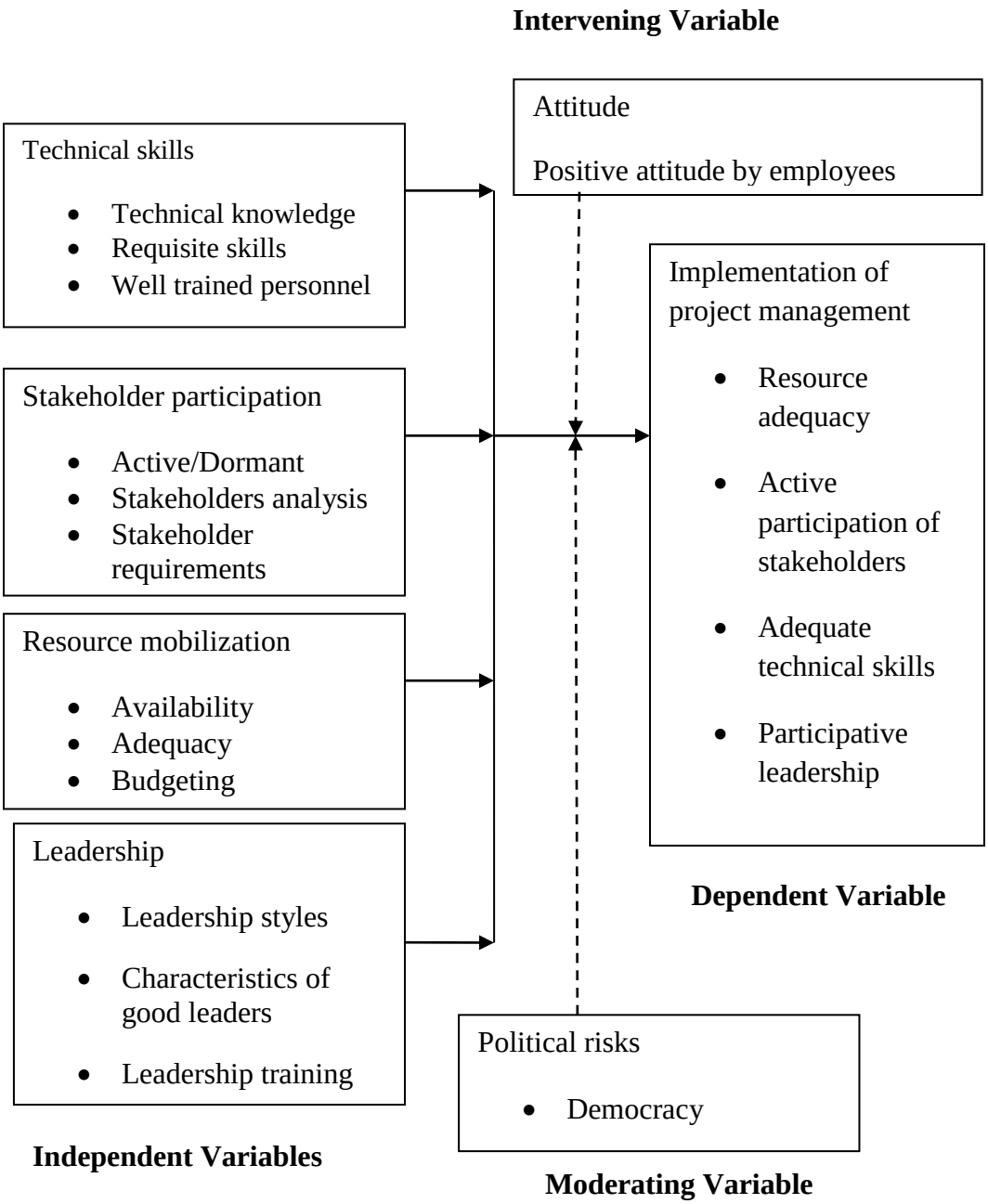

Figure 1: Conceptual Framework

2.9 Research Gap

The reviewed literature highlighted studies that are relevant and similar to this study. In a research conducted by Monson (2000), "Technical expertise alone does not correlate directly to successful PM. This is commonly reflected in organizational structure as the most technically competent personnel are frequently used as project consultants rather than as project managers." Monson claims that it is no accident that significant problems in PM arise in engineering related professional areas. Engineers, as well documented, are taught with a curriculum that generates a correct answer (outcome based) without partial credit allotted for the work supporting the final answer (process based). Even though his study has a similar variable to my study, my study seeks to establish factors influencing the implementation of project management in public funded projects hence the knowledge gap.

In a study conducted by Feng (2001) he found that the fluctuation of government capacity indicates that the government lacks consistency in its power to get a job done. Uncertainty about government effectiveness can be more adverse than the policy itself by deterring investors from committing their assets. Given a bad policy with certainty about its execution the investor can still find ways to make money. Even though this study is similar to my study by highlighting government capacity, my study is different as it seeks to establish how political risks affect the implementation of project management in public funded projects hence the knowledge gap.

In his study Kerzner (2009) identified some tools and techniques that can be used for project budgeting which include: recent experience in similar work, professional and reference material, market and industry surveys, knowledge of the operations and processes, estimating software and databases if available and interviews with subject matter experts. This study is different

from my study, which highlights factors affecting the implementation of project management in public funded projects hence the knowledge gap.

2.10 Summary:

Majority of the authors have expressed their concern for different factors affecting effective implementation of project management based on the literature review. The studies have shown that the lack of adequate resources affects effective implementation of project management. The literature review has also brought to the limelight the fact that project management requires the participation of all stakeholders. Technical skills and political risks also affect the implementation of project management. Finally, the conceptual framework linked the independent variables to the implementation of project management.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines various methodologies the study used in conducting this research, and covers different topics such as research design, study population, sampling design and procedure, data collection instrument, data collection procedures and methods of data analysis. It explains various scientific methods to be used in achieving the study objectives.

3.2 Research Design

This study used descriptive survey design to establish the factors influencing the implementation of project management in public funded projects. The descriptive study sought to obtain information that describes phenomena by asking individuals about their perception, attitudes, behavior or values, (Mugenda and Mugenda, 2003). Moreover, descriptive design is concerned with finding out the who, what, where and how of a phenomenon that exists which is the concern of this study. This design was therefore be appropriate as the researcher was in a position to establish the factors influencing the implementation of project management in Kenya Pipeline Company projects.

3.3 The Target Population

The population for the study was the 1700 employees of Kenya Pipeline Company. The target population consisted of all the employees and heads of departments at the Kenya Pipeline Company in Nairobi County.

3.4 Sample size and Sampling procedures

Sampling is the procedure of selecting elements from a given population that specifies the type of sample to be used. From the population frame, the required number of respondents were selected in order to make a sample. Simple random sampling was used to select 304 employees of all categories in Kenya Pipeline Company. Purposive sampling was used to select 7 project managers within the company.

This research used purposive sampling because it is deemed appropriate as only those who are deemed to have information required for the study were targeted. Simple random sampling was used because it gave equal chances for the respondents to participate in the study and also because simple random sampling requires minimum advance knowledge of the population.

3.4.1 Sample Size

According to Cooper and Schindler (2006), a sample of at least 30 elements (respondents) must exist for generalization purposes. Other research scholars argue that sample size selection to a great extent is judgmentally decided. From the target population of 1700 employees, 311 respondents were subjected to the study using Krejcie and Morgan table. According to Krejcie and Morgan's table, if the target population is 1700 the sample was 311.

Table 2 Sample Size

Targeted Population	Population	Sample
Project managers	7	7
Employees	1693	304
Total	**1700**	**311**

3.4.2 Sampling Procedure

In order to select samples from Kenya Pipeline Company the study used purposive and simple random sampling. Purposive sampling was used to collect data from the project managers while simple random sampling was used to select the other employees.

3.5 Research Instrument

Questionnaires and interview schedules were used as instruments for data collection. In the selection of the instruments to be used in the study, the researcher ensured that the instruments chosen are suitable and appropriate. The researcher used questionnaires due to their characteristic that they can be used to capture large amounts of data which may contain bother quantitative and qualitative data

3.5.1 Questionnaires

Questionnaires are useful instruments of collecting primary data since respondents can read and then give responses to each item and they can reach a large number of subjects (Orodho, 2004). Questionnaires were used to collect data from the employees Kenya Pipeline Company. Both open ended and closed ended questionnaires were used to collect data for the study. The questionnaires were divided into different sections whereby each section addressed questions to

achieve each of the specific objectives of the study. Given time constraints, the use of questionnaires is ideal for collecting data (Onen & Oso, 2008).

3.5.2 Interview Schedules

The researcher used interview schedules to collect data from the project managers. Interview schedules were used based of the fact that more people are willing to communicate orally than in writing, this therefore provided data more readily in an interview. The interview schedules were structured based on the predetermined questions of the study

3.6 Piloting

According to Mugenda and Mugenda (1999), piloting refers to pre-testing of the research instrument by administering it to a selected sample which is similar to the actual sample which the researcher plans to use in the study. The pilot study was used to identify items in the questionnaire that are ambiguous or unclear to the respondents and hence changed or modified them. The pilot study also helped the researcher to familiarize with the administration of the instrument.

3.6.1 Validity of the instrument

According to Mugenda and Mugenda (2003), validity is the degree to which results obtained from the analysis of data actually represent the phenomena under study. A valid instrument should accurately measure what it is supposed to measure. After administering the instruments to the selected respondents, the data obtained was a true reflection of the variables under study. Expert opinion from my supervisors and from other professionals well versed in research issues were used to check on the content validity of the instruments.

3.6.2 Reliability of the instrument

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials (Mugenda & Mugenda, 2003). A pilot study was conducted in projects being done by the Kenya Urban Roads Authority (KURA) which was included in the main study. The aim of pre-testing was to measure the clarity and relevance of the instrument items so that those items found to be inadequate for measuring variables were either discarded or modified to improve the quality of the research instruments.

The researcher used split-half method of testing instrument reliability. This method involved scoring two halves usually odd and even items of a test separately for category of the instruments and then calculating the correlation coefficient for the two sets of scores. The coefficient indicates the degree to which the two halves of the test provide the same results and hence describes the internal consistency of the test. The Spearman Brown's Formula below was used to test on the reliability of the instruments:

$$\frac{2 \times \text{Corr. between the Halves}}{1 + \text{Corr. between the Halves}}$$

i.e.

$$r = \frac{2r}{r+1}$$

Where r = reliability of the coefficient resulting from correlating the scores of the odd items with the scores of the even items. According to Orodho (2004) a correlation co-efficient of about 0.8

is high enough to judge the instruments as reliable for the study. The researcher therefore will consider a correlation coefficient between 0.7 and 0.8 to be reliable. The average reliability coefficient was 0.8 hence the instruments were deemed reliable.

3.7 Data Collection Procedure

The researcher obtained a letter of introduction from the University of Nairobi. An authority letter was then acquired from the National Council of science and Technology before embarking to the field to collect data. One day training was then conducted for the one field assistant to understand the study objectives, master the research instruments and go through the ethical requirements.

The researcher made appointments with the manager of KPC to notify and request for permission to carry out the study in the organization. The researcher administered the instruments personally to the respondents who were given ample time to respond to the questions. This was to ensure achievement of a good return ratio and give the respondents a chance to seek clarification on items which might prove difficult to answer.

3.8 Methods of Data Analysis

Primary data from the field was edited first. Coding was then done to translate question responses into specific categories. Coding was expected to organize and reduce research data into manageable summaries. Both qualitative and quantitative data analysis technique were used to analyze the data. Quantitative data collected was analyzed, presented and interpreted using both descriptive statistics and content analysis techniques was used to analyze qualitative data collected using interview schedules. Descriptive statistics such as means, standard deviation,

frequencies and percentages were used to describe the data. The analyzed data was presented in form of tables. Regression analysis was computed to establish the relationship between variables. The computer program SPSS (Statistical Package for Social Science) Version 17.0 was used to analyze the data. Analysis of data was important in explaining the variables of study.

3.9 Ethical Consideration

The researcher arranged with the management at Kenya Pipeline Company to confirm the dates for data collection and get the consent to carry the research in the organization. This was to eliminate conflicts which might arise from the respondents.

The researcher also sought for a letter from Nairobi University which was used for data collection. This clarified the aim of the research and the nature of the study thus improving cooperation from the respondents during data collection.

The researcher also ensured confidentiality of the information given by the respondents. This was done by using the information without mentioning of the specific names of the people from whom the data was collected.

3.10 Operational Definition of Variables:

Table 3: Operational Definition of variables

Objectives	Variables	Indicators	Measurement	Scale	Data analysis tool
To establish factors influencing the implementation of project management in public funded projects.	Dependent variable	Technical skills Stakeholders involvement Resource mobilization Political risk	Availability of skills Participation of stakeholders Availability of resource Government stability	Ordinal scale Ordinal scale Ordinal scale Ordinal scale	Questionnaires
To find out the influence of technical skills in the implementation of project management	Independent variables Technical skills	Expertise in project management Well trained	Requisite skills Level of training	Nominal Ordinal	Questionnaires
To assess the influence of stakeholders' involvement in the implementation of project management	Stakeholders involvement	Active Level of participation	Number of stakeholders involved in project management. Opportunities for stakeholders to participate in project management.	Ordinal scale Ordinal	Questionnaires
To find out how resource mobilization influences the implementation of project management	Resource mobilization	Availability Adequacy	Types of resources Level of utilization	Ordinal	Questionnaires
To determine the extent to which leadership affect the implementation of project management	Leadership	Leadership styles Characteristics of a good leader	Participative leadership Leadership training	Ordinal Ordinal	Questionnaires

CHAPTER FOUR
DATA ALNAYSIS, PRESENTATION, INTERPRETATION & DISCUSSION

4.1 Introduction

This chapter presents the findings of the study. The focus of this chapter was to discuss the analysis and interpretation of the findings guided with the objectives of the study. The data that was obtained is presented in tabular form using frequencies and percentages.

4.2 Response Rate

The study targeted 304 employees of Kenya Pipeline Company in Nairobi County out of which 238 responded by completing and returning the questionnaires. This gave a response rate of 77% which according to Mugenda and Mugenda (2003) is appropriate for generalization of the findings as it is more than 50%.

4.3 Demographic Information of the Respondents

This section presents background information of the respondents' gender, age, education level, and duration of service. This was necessary in shedding light on the characteristics of the respondents. These are as presented in the following sub-sections.

4.3.1 Distribution of Respondents by Gender

Respondents were asked to state their gender to ascertain whether there is gender balance in the implementation of project management. The findings of the study are as presented in Table 4.1.

Table 4.1 Distribution of Respondents by Gender

Gender	F	%
Male	150	63
Female	88	37
Total	**238**	**100**

According to the findings 63% of the respondents were male, while 37% were female. The findings mean that there were more male than female. This analysis indicates that there was gender disparity since the number of males exceeded that of females slightly. Therefore, it can be concluded that there is gender inequality in the implementation of project management.

4.3.2 Distribution of Respondents by Age

The study sought to determine the respondents' age bracket. The findings of the study are as presented in Table 4.2 below.

Table 4.2: Distribution of Respondents by Age

Age	F	%
19-30 years	45	18.9
31-40 years	73	30.7
41-50 years	32	13.4
Above 50 years	25	10.5
Total	**98**	**100**

The findings of the study revealed that most of the respondents (30.7%) interviewed were aged between the 31-40years. It was also found out that (18.9%) were aged between 19-30 years. (13.4%) of the respondents were aged between 41-50 years. Only (10.5%) of the respondents were aged above 50 years. From the findings, it can be said that majority of the respondents are youths who can be engaged in project management activities. This could be an indication that more youths have engaged in development activities such as local projects therefore increasing the contribution of youths in the growth of the economy.

4.3.3 Level of Education

Respondents were asked to state their highest level of education to ascertain the influence of level of education on the implementation of project management and how well the respondents understood and interpreted questions. The findings of the study are as presented in Table 4.3.

Table 4.3 Education

Level of education	**F**	**%**
Secondary education	27	11.3
College	65	27.3
University Degree	111	46.6
Master's Degree	35	14.7
Total	**238**	**100**

The study found that most 46.6% of the respondents were university graduates. The study also found that 27.3% of the respondents had college education, and 14.7% of the respondents had

masters' degree, whereas 11.3% of the respondents had secondary education. Since majority of the respondents (46.6%) had university qualifications. This can be interpreted to mean that a large percentage of the respondent had knowledge on project management and also they were in a position to answer questions appropriately.

4.3.4 Duration of service

The respondents (employees) were asked the duration of service to ascertain the influence of experience on the implementation of project management. The findings of the study are as presented in Table 4.4.

Table 4.4 Duration of service

Duration of service	**F**	**%**
Less than 3 years	29	12.2
4-5 years	67	28.2
6-10 years	46	19.3
Over 10 years	96	40.3
Total	**238**	**100**

From the analysis, most of the staff (40.3%) interviewed had over 10 years of service. The study also found that (28.2%) had 4-5 years' experience, (19.3%) of the respondents had 6-10 years' experience, while (12.2%) of the respondents had less than 3 years' experience. From the findings it can be said that most of the staff had experience and were therefore considered to

have of information regarding project management. Experience enables employees to tacticfully execute their mandates and also become innovate.

4.4 Staff Technical Skills

In this section the study sought to determine the influence of staff technical skills on the implementation of project management. The findings are presented in the subsequent sections.

4.4.1 Efficiency of projects

The respondents were asked to indicate whether the projects always start and end at the anticipated time. The findings of the study are as presented in Table 4.5.

Table 4.5 Efficiency of projects

Variable	F	%
Yes	133	55.9
No	75	31.5
Not sure	30	12.6
Total	**238**	**100**

Majority (55.9%) of the respondents revealed that the projects always start and end at the anticipated time. 31.5% of the respondents indicated that the projects do not always start and end at the anticipated time, whereas 12.6% of the respondents indicated that they were not sure whether the projects do not always start and end at the anticipated time. The high (55.9%) number of respondents who indicated that the projects always start and end at the anticipated

time is an indication of availability of project efficiency. This analysis can be interpreted to mean there is efficiency in project management. These findings are supported by Project Management Institute (2013) that project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements. This means that project management is all about managing resources efficiently and effectively in order to get a project completed successfully.

The respondents were asked to explain their answers. The following were mentioned: Favorable weather especially in a construction project can lead to successful completion of a project, adequate resources can lead to the success of a project, stability of a country, government bureaucracy.

4.4.2 Availability of technical skills

The study further needed to know whether the respondents have technical skills for the implementation of project management. The findings of the study are as presented in Table 4.6.

Table 4.6 Availability of technical skills

Technical skills	**F**	**%**
Yes	149	62.6
No	89	37.4
Total	**238**	**100**

According to this analysis, majority (62.6%) of the respondents indicated that they have technical skills for the implementation of project management, while (37.4%) of the respondents

indicated that they don't have staff technical skills for the implementation of project management. This analysis was interpreted to imply that the employees did have skills to influence the implementation of project management activities. These findings are further supported by Murch (2001) who suggested that project managers should possess sufficient technical knowledge and skill to perform their jobs. This is particularly vital in the construction industry where the majority of projects undertaken are highly technical and complex, and an understanding of engineering and scientific principles is essential.

4.4.5 Adequacy of human resource capacity

The respondents were asked to indicate the adequacy of human resource capacity for the implementation and sustainability of project management. The findings of the study are as presented in Table 4.7.

Table 4.7 Adequacy of human resource capacity

Technical skills	**F**	**%**
Yes	42	17.6
No	136	57.1
Not sure	60	25.2
Total	**238**	**100**

The findings of the study revealed that (57.1%) of the respondents indicated that the human resource capacity was inadequate, (25.2%) of the respondents were not sure, whereas (17.6%) of the respondents indicated the human resource capacity was adequate. This could be interpreted

that technical skills are not sufficient. Therefore, the human resource capacity should be increased in order to implement project management effectively.

4.4.6 Technical skill is a critical determinant of project management

The respondents were to indicate whether they agree that technical skill is critical determinant of how project activities are carried out. The findings of the study are as presented in Table 4.8.

Table 4.8 Technical skills is a determinant of project management

Variable	F	%
Strongly agree	105	44.1
Agree	51	21.4
Neutral	38	16
Disagree	32	13.4
Strongly disagree	12	5
Total	**238**	**100**

According to the findings, majority (44.1%) of the respondents strongly agreed that technical skill is a critical determinant of how project activities are carried out. The study also found that 21.4% of the respondents agreed that technical skill is a critical determinant of how project activities are carried out. 16% of the respondents were neutral on whether technical skill is a critical determinant of how project activities are carried out. While 13.4% and 5% of the respondents disagreed and strongly disagreed respectively if technical skill is a critical determinant of how project activities are carried out. These findings can be interpreted to imply

that technical skills influence the implementation of project management because it enables effective execution of duties.

4.4.7 Appropriate technology

The respondents were to indicate whether they agree that project managers should have relevant experience or knowledge about the technology required by the project. The findings of the study are as presented in Table 4.9.

Table 4.9 Appropriate technology

Variable	F	%
Strongly agree	58	24.4
Agree	93	39.1
Neutral	41	17.2
Disagree	46	19.3
Total	**238**	**100**

The findings of the study show that most (39.1%) of the respondents agreed that project managers should have relevant experience or knowledge about the technology required by the project. 24.4% of the respondents strongly agreed that project managers should have relevant experience or knowledge about the technology required by the project. While 19.3% of the respondents disagreed on whether project managers should have relevant experience or knowledge about the technology required by the project, only 17.2% of the respondents neither agreed nor disagreed on whether project managers should have relevant experience or knowledge

about the technology required by the project. These findings can be interpreted to mean that indeed knowledge on appropriate technology is important.

4.4.8 Expertise in Project Management

This measure intended to determine to what extent the respondents agreed that human resources on the project should have clear job allocation and designation befitting their expertise. The findings of the study are as presented in Table 4.10.

Table 4.10 Expertise in Project Management

Variable	**F**	**%**
Strongly agree	101	42.4
Agree	53	22.3
Neutral	33	13.9
Disagree	21	8.8
Strongly disagree	30	12.6
Total	**238**	**100**

Based on the findings of the study, 42.4% of the respondents strongly agreed that human resources on the project should have clear job allocation and designation befitting their expertise. The study also found that 22.3% of the respondents agreed that human resources on the project should have clear job allocation and designation befitting their expertise.13.9% of the respondents were neutral on whether human resources on the project should have clear job allocation and designation befitting their expertise. While 12.6% of the respondents strongly disagreed that human resources on the project should have clear job allocation and designation befitting their expertise. This is a clear indication expertise is a requisite in the implementation of

project management. These findings are further supported by Meredith and Mantel (2002),that successful project managers were seen as having relevant experience or knowledge about the technology required by the project, but seldom were effective project managers seen as technical experts.

4.4.9 Training on Project Management

The respondents were asked whether they agreed that human resource should be trained regularly on project management. The findings of the study are as presented in Table 4.11.

Table 4.11 Training on Project Management

Variable	F	%
Strongly agree	85	35.7
Agree	119	50
Neutral	34	14.3
Total	**238**	**100**

The findings of the study indicate that most (50%) of the respondents agreed that human resource should be trained regularly on project management. The study also found that (35.7%) of the respondents strongly agreed that human resource should be trained regularly on project management. Whereas, (14.3%) of the respondent were neutral on whether human resource should be trained regularly on project management. This analysis can be interpreted to mean that the employees needed training on project management to update their skills and knowledge on project management.

4.4.10 Seminars

The respondents were asked whether seminars on project management. The findings of the study are as presented in Table 4.12.

Table 4.12 Seminars

Variable	F	%
Very large extent	80	33.6
Large extent	86	36.1
Small extent	45	18.9
No extent at all	27	11.3
Total	**238**	**100**

This analysis indicates that 36.1% of the respondents agreed that they needed seminars on project management to a large extent. 33.6 of the respondents agreed that they needed seminars on project management to a very large extent. While 18.9% of the respondents indicated that they needed seminars on project management to a small extent. Only 11.3% of the respondents indicated they needed seminars on project management to no extent at all. The fact that majority of the respondents agreed that they needed seminars to a large extent is a clear indication that the employees are willing to learn to improve their skills on project management.

4.4.11 Effectiveness of Seminars to Project management

The respondents were asked to state the effectiveness of seminars to project management. The findings of the study are as presented in Table 4.13.

Table 4.13 Effectiveness of Seminars to Project management

Variable	F	%
Very effective	83	34.8
Effective	107	45
Less effective	38	16
Not effective	10	4.2
Total	**238**	**100**

45% of the respondents indicated that seminars on project management were effective. The study also found that 34.8% of the respondents indicated that seminars on project management were very effective. 16% of the respondents indicated that seminars on project management were less effective. While 4.2% of the respondents indicated that that seminars on project management were not effective. This analysis can be interpreted to mean that seminars are effective tools in project management since majority of the respondents agreed that seminars are effective in project management. Seminars increase efficiency among the employees because seminars widen the employees' horizons and innovativeness.

The respondents were asked to mention other influences of technical skills on the implementation of project management. The following were mentioned: Technical skills increases the success of project management, better technical skills enables employees to execute their duties efficiently.

4.5 Stakeholders Involvement

In this section the study sought to determine the influence of stakeholders' involvement on the implementation of project management. The findings are presented in the subsequent sections.

4.5.1 Stakeholders Participation

The respondents were asked to indicate whether stakeholders participate in project management. The findings of the study are as presented in Table 4.14.

Table 4.14 Stakeholders Participation

Variable	F	%
Yes	134	56.3
No	104	43.7
Total	**238**	**100**

The findings of the study indicate that 56.3% of the respondents indicated that stakeholders participate in project management, while 43.7% of the respondents indicated that stakeholders don't participate in project management. From the findings of the study it can be interpreted stakeholders participation influences the implementation of project management. The fact that majority of the respondents indicated that stakeholders participate in project management is a clear indication of inclusion of stakeholders who are affected by the project either directly or indirectly. These findings are further supported by Adjei & Rwakatiwana (2009) that the role of the stakeholder in the traditional project is to set project requirements and demands on scope, time, cost, and quality. Stakeholder management in traditional project management also shares the predetermined and well-organized character.

The respondents were asked to explain their answers. The following were mentioned: stakeholders participate in project management by providing ideas, stakeholders are also cooperative in the implementation of project management.

4.5.2 Level of Stakeholders Participation

The respondents were asked to indicate the level of stakeholders participate in project management. The findings of the study are as presented in Table 4.15.

Table 4.15 Stakeholders Participation

Variable	**F**	**%**
No extent at all	88	37
Small extent	123	51.7
Large extent	27	11.3
Total	**238**	**100**

Most (51.7%) of the respondents indicated that the level of stakeholders participation in project management is to a small extent. 37% of the respondents also indicated that the level of stakeholders participation in project management is to no extent at all. Whereas 11.3% of the respondents indicated that the level of stakeholders' participation in project management is to large extent. The fact that most of the respondents indicated the level of stakeholders participation in project management is to a small extent portrays a gap in stakeholders participation which can lead to project failure if attention is not paid to the stakeholders.

4.5.3 Communication channels with stakeholders

The respondents were asked to indicate to what extent they agreed that active planning for stakeholders' through consideration of communication channels helps to build and control stakeholder relationships. The findings of the study are as presented in Table 4.16.

Table 4.16 Communication channels with stakeholders

Variable	F	%
Strongly agree	78	32.8
Agree	98	41.2
Neutral	37	15.5
Disagree	25	10.5
Total	**238**	**100**

According to the findings of the study 41.2% of the respondents agreed that active planning for stakeholders' through consideration of communication channels helps to build and control stakeholder relationships. 32.8% of the respondents strongly agreed that active planning for stakeholders' through consideration of communication channels helps to build and control stakeholder relationships. 15.5% of the respondents were neutral on whether active planning for stakeholders' through consideration of communication channels helps to build and control stakeholder relationships. Only 10.5% of the respondent disagreed that active planning for stakeholders' through consideration of communication channels helps to build and control stakeholder relationships. This analysis can be interpreted to mean that communication to stakeholders can lead to the success of project management because of the inclusion of stakeholders. These findings are by Project Management Institute (2008) that managing

stakeholder expectations is the process of communicating and working with stakeholders to meet their needs and addressing issues as they occur. It involves communication of activities directed toward project stakeholders to influence their expectations, address concerns and resolve issues.

4.5.4 Unnecessary stakeholders' involvement

The respondents were asked to indicate to what extent they agreed that too much stakeholder involvement could lead to undue influence on the execution of project activities. The findings of the study are as presented in Table 4.17.

Table 4.17 Unnecessary stakeholders' involvement

Variable	F	%
Strongly agree	30	12.6
Agree	46	19.3
Neutral	35	14.7
Disagree	54	22.7
Strongly Disagreed	73	30.7
Total	**238**	**100**

The study findings indicate that 30.7% of the respondents strongly disagreed that too much stakeholder involvement could lead to undue influence on the execution of project activities. 22.7% of the respondents disagreed that too much stakeholder involvement could lead to undue influence on the execution of project activities. 19.3% of the respondents agreed that too much stakeholder involvement could lead to undue influence on the execution of project activities. 14.7% of the respondents neither agreed nor disagreed that too much stakeholder involvement

could lead to undue influence on the execution of project activities. Only 12.6% of the respondents strongly agreed that too much stakeholder involvement could lead to undue influence on the execution of project activities. This can be interpreted that stakeholders should be involved at all levels of project management. This statement is contradicted by Aguanno (2005) that early lock down of stakeholder requirement can have a retrogressive effect if predetermined environment changes or stakeholders come up with new demands afterwards.

4.5.5 Local people participation

The respondents were asked to indicate to what extent they agreed that project managers work with local people to create opportunities for local people to participate meaningfully in project activities. The findings of the study are as presented in Table 4.18.

Table 4.18 Local people participation

Variable	**F**	**%**
Strongly agree	49	20.6
Agree	158	66.4
Neutral	31	13
Total	**238**	**100**

Majority (66.4%) of the respondent agreed that project managers should work with local people to create opportunities for local people to participate meaningfully in project activities. While 20.6% of the respondent strongly agreed that project managers should work with local people to create opportunities for local people to participate meaningfully in project activities. Only 13% of the respondents were neutral on whether respondent agreed that project managers should work

with local people to create opportunities for local people to participate meaningfully in project activities. This can be interpreted to mean that the impact of project management can be greatly improved by the participation of intended beneficiaries.

The respondents were asked to mention other influences of stakeholders' participation on the implementation of project management. The following were mentioned: too little participation could lead to resistance from stakeholders, and stakeholders facilitate participatory process during implementation of project management.

4.6 Resource Mobilization

In this section the study sought to determine the influence of resource mobilization on the implementation of project management. The findings are presented in the subsequent sections.

4.6.1 Availability of funds

The respondents were asked to indicate whether there is funding to ensure the implementation of project management. The findings of the study are as presented in Table 4.19.

Table 4.19 Availability of funds for Project management

Availability of funds to ensure the implementation of project management	**F**	**%**
Yes	174	73.1
No	64	26.9
Total	**238**	**100**

The findings of the study reveal that majority (73.1%) of the respondents indicated that there was funding to ensure the implementation of project management, while 26.9% of the respondents

there was no funding to ensure the implementation of project management. These findings it can be interpreted to mean that project management requires funding and projects should be well budgeted for.

4.6.2 Adequacy of Fund

The respondents were asked to indicate the adequacy of funds. The findings of the study are as presented in Table 4.20.

Table 4.20 Adequacy of funds

Adequacy of funds	**F**	**%**
Adequate	72	30.3
Inadequate	166	69.7
Total	**238**	**100**

According to the findings whereas, 30.3% of the respondents indicated that the funds were adequate, majority (69.7%) of the respondents indicated that the funds were inadequate. This analysis can be interpreted to mean that inadequate funding can lead to failure in project management.

4.6.3 Project Budgets

The respondents were asked to what extent they agreed that the project budget should provide a clear and adequate provision for various project activities. The findings of the study are as presented in Table 4.21

Table 4.21 Project Budgets

Variable	F	%
Strongly agree	80	33.6
Agree	111	46.6
Neutral	47	19.7
Disagree	-	-
Total	**238**	**100**

The findings of the study reveal that none of the respondents disagreed that of the respondents that the project budget should provide a clear and adequate provision for various project activities. 46.6% of the respondents agreed that the project budget should provide a clear and adequate provision for various project activities. 33.6% of the respondents strongly agreed that the project budget should provide a clear and adequate provision for various project activities, while 19.7% of the respondents were neutral on whether the project budget should provide a clear and adequate provision for various project activities. These findings can be interpreted to mean that budgeting affects the success of project management. These findings are supported by Mintzer (2002) that, in order to make a good budget for a project, it is important that the project manager is able to identify all the requirements in the project so that the scope of the project is clearly defined. Failure to identify some items in the project can have negative implications on the project since their acquisition price may be increased as the time draws close as compared to that of those which were adequately researched before purchase or hire.

4.6.4 Mishandling of Project Cost Management

The respondents were asked to what extent they agreed that mishandling of project cost management can lead the project into a complete failure. The findings of the study are as presented in Table 4.22

Table 4.22 Mishandling of Project Cost Management

Variable	F	%
Strongly agree	238	100
Agree	-	-
Disagree	-	-
Total	**238**	**100**

This analysis indicates that all (100%) the respondents agreed unanimously that mishandling of project cost management can lead the project into a complete failure. These findings it can be interpreted to mean that underestimation of cost can lead to decrease the effectiveness of project management. These findings are further supported by (Mintzer, 2002) that project cost management is one of the most important aspects in project management that require much attention since its mishandling can lead the project into a complete failure. It can affect the end result by either not meeting the performance requirement set by the sponsor or a total cancelation of the entire project if not carefully managed. It is the process of estimating how much the whole project will cost by breaking down the project into component and determining the cost.

4.6.5 Quantity of resources

The respondents were asked to what extent they agreed that project management can improve schedule performance by increasing the quantity of resources. The findings of the study are as presented in Table 4.23

Table 4.23 Quantity of resources

Variable	F	%
Strongly agree	78	33
Agree	124	52
Neutral	11	4.5
Disagree	25	10.5
Total	**238**	**100**

The findings of the study reveal that 52% of the respondents agreed that project management can improve schedule performance by increasing the quantity of resources. 33% of the respondents strongly agreed that project management can improve schedule performance by increasing the quantity of resources.10.5% of the respondents disagreed that project management can improve schedule performance by increasing the quantity of resources. Only 4.5% of the respondents were neutral on whether project management can improve schedule performance by increasing the quantity of resources. From the findings it can said that increasing quantity of resources increases the productivity of project management activities. These findings are supported bynJohn (2007) that applying too few resources to any given activity slows progress and applying too many can cause crowding that reduces productivity and wastes resources that could

be used more efficiently by other activities. Therefore the effective and efficient allocation of scarce resources among development phases and among activities within phases is a realistic management opportunity for improving project schedule performance.

4.6.6 Monitoring actual Expenditure

The respondents were asked to what extent they agreed that project budget should certainly be more carefully estimated and actual expenditure on the project more carefully monitored. The findings of the study are as presented in Table 4.24

Table 4.24 Monitoring actual Expenditure

Variable	**F**	**%**
Strongly agree	125	52.5
Agree	75	31.5
Neutral	27	11.3
Disagree	11	4.6
Strongly disagree	-	-
Total	**238**	**100**

The study findings show that most of the respondents (52.5%) of the respondents strongly agreed that project budget should certainly be more carefully estimated and actual expenditure on the project more carefully monitored. 31.5% of the respondents agreed that project budget should certainly be more carefully estimated and actual expenditure on the project more carefully monitored. 11.3% of the respondent were neutral on whether the project budget should certainly

be more carefully estimated and actual expenditure on the project more carefully monitored. While 4.6% of the respondents disagreed that project budget should certainly be more carefully estimated and actual expenditure on the project more carefully monitored. From the findings it can be said that the government puts emphasis on ensuring that various project activities are budgeted for before approving any proposals for funding.

The respondents were asked to mention other influences of resource mobilization on the implementation of project management. The following were mentioned: availability of cash flow increases the effectiveness of projects, adequate resources provides continuity of a project.

4.7 Leadership

In this section the study sought to determine the influence of leadership on the implementation of project management. The findings are presented in the subsequent sections.

4.7.1 Influence of leadership on project management

The respondents were asked to indicate whether leadership influences the implementation of project management. The findings of the study are as presented in Table 4.25.

Table 4.25 Influence of leadership on project management

Variable	F	%
Yes	155	65.1
No	83	34.9
Total	**238**	**100**

This analysis indicates that 65.1% of the respondents indicated that leadership influences the implementation of project management while, 34.9% of indicated that leadership does not influence the implementation of project management. The findings can be interpreted to mean that leadership influences project management. These findings are supported by Hauschildt, Gesche, & Medcof (2000) that the success of a project depended more on human factors, such as project leadership, top management support, and project team, rather than on technical factors.

4.7.2 Leadership Styles

The respondents were asked to indicate the leadership styles commonly used by their project managers. The findings of the study are as presented in Table 4.26.

Table 4.26 Leadership Styles

Variable	F	%
Participative leadership	84	35.3
Situational leadership	58	24.4
Transformational leadership	31	13
Transactional leadership	65	27.3
Total	**238**	**100**

The findings of the study indicate that 35.3% of the respondents indicated their project managers apply participative leadership. 27.3% of the respondents indicated their project managers apply transactional leadership.24.4% of the respondents indicated their project managers apply situational leadership, whereas 13% of the respondents indicated their project managers apply

transformational leadership. This analysis can be interpreted to mean that participative leadership is the commonly used style because it allows employees to make decisions in all the things that affect them. The findings are further supported by Schmid & Adams (2008) that participative leadership style that has been found to enhance the human resource skills of interpersonal relationship, motivation, decision making, and emotional maturity, required to mobilize project team members. Leary-Joyce (2004) refers to participative leadership as servant-leadership, which incorporates the leader's ability to include, discuss, take ideas, look for ways to help people come on board, and celebrate every success that comes along.

4.7.3 Teamwork

The respondents were asked to indicate to what extent they agreed that leadership skills reflect teamwork and adequate communication in the implementation of project management. The findings of the study are as presented in Table 4.27.

Table 4.27 Teamwork

Variable	**F**	**%**
Very large extent	74	31.1
Large extent	109	45.8
Neutral	22	9.2
Small extent	33	13.9
No extent at all	-	-
Total	**238**	**100**

From the analysis 45.8% of the respondents agreed that leadership skills reflect teamwork and adequate communication in the implementation of project management to a large extent.31.1% of the respondents agreed that leadership skills reflect teamwork and adequate communication in the implementation of project management to a very large extent. 13.9% of the respondents agreed that leadership skills reflect teamwork and adequate communication in the implementation of project management to a small extent, while 9.2% of the respondents were neutral on whether leadership skills reflect teamwork and adequate communication in the implementation of project management. From the findings it can be said that teamwork influences the implementation of project management. These findings are further supported by Zhang & Faerman (2007) that projects failed because of poor leadership skills which reflect no teamwork and inadequate communication. Berg & Karlsen, (2007) suggest that essential to the successful outcome of projects are the project manager and the project team. The project manager is responsible for leading the project team towards achieving the desired outcome of the project.

4.7.4 Mentorship in project management

The respondents were asked to indicate to what extent they agreed that the leader serves by building the skills of followers, removing obstacles, encouraging innovation, and empowering creative problem solving. The findings of the study are as presented in Table 4.28.

Table 4.28 Mentorship in project management

Variable	F	%
Very large extent	162	67.5
Large extent	47	20
Neutral	6	2.5
Small extent	23	10
Total	**238**	**100**

67.5% of the respondents agreed that the leader serves by building the skills of followers, removing obstacles, encouraging innovation, and empowering creative problem solving to a very large extent. The study also found that 20% of the respondents agreed that the leader serves by building the skills of followers, removing obstacles, encouraging innovation, and empowering creative problem solving to a large extent. 10% of the respondents agreed that the leader serves by building the skills of followers, removing obstacles, encouraging innovation, and empowering creative problem solving to a small extent. Only 6% of the respondents were neutral on whether the leader serves by building the skills of followers, removing obstacles, encouraging innovation, and empowering creative problem solving. From these findings it can be said that leaders serve as the mentors in project management.

4.7.5 Leadership training

The respondents were asked to indicate to what extent they agreed that leadership training is essential to project managers in order to increase efficiency in project management. The findings of the study are as presented in Table 4.29.

Table 4.29 Leadership training

Variable	F	%
Very large extent	61	25.6
Large extent	98	41.2
Neutral	30	12.6
Small extent	39	16.4
No extent at all	10	4.2
Total	**238**	**100**

This analysis indicates that most (41.2%) of the respondents agreed that leadership training is essential to project managers in order to increase efficiency in project management to a large extent. 25.6% of the respondents agreed that leadership training is essential to project managers in order to increase efficiency in project management to a very large extent. The study also found that 16.4% of the respondents agreed that leadership training is essential to project managers in order to increase efficiency in project management to a small extent. Only 4.2% of the respondents indicated that leadership training is essential to project managers in order to increase efficiency in project management to no extent at all. From the findings it can be interpreted that leadership training is essential in the implementation of project management. The majority representation is a clear indication that most of the employees want their leaders trained on project management.

4.7.6 Challenges in Project Management

The respondents were asked to indicate to what extent they agreed that variety of leadership styles should be applied in dealing with different challenges. The findings of the study are as presented in Table 4.30.

Table 4.30 Challenges in Project Management

Variable	F	%
Very large extent	105	44.1
Large extent	68	28.6
Neutral	20	8.4
Small extent	45	18.9
No extent at all	-	-
Total	**238**	**100**

The findings of the study show that 44.1% of the respondents indicated that variety of leadership styles should be applied in dealing with different challenges to a very large extent. The study also found that 28.6% of the respondents indicated that variety of leadership styles should be applied in dealing with different challenges to a large extent. 18.9% of the respondents indicated that variety of leadership styles should be applied in dealing with different challenges to a small extent, while 8.4% of the respondents were neutral on whether variety of leadership styles should be applied in dealing with different challenges. This analysis can be interpreted to mean that different challenges may require different approaches therefore the implementation of project management requires different leadership styles.

4.8 Regression Analysis

Regression analysis was conducted to determine the relationship between staff technical skills, stakeholders' involvement, resource mobilization, leadership and the implementation of project management as presented in Table 4.31 below.

Table 4.31 Regression Analysis

Variable	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.309	.443		4.008	.000
Technical skills	.447	.241	.280	1.854	.023
Stakeholders involvement	.735	.168	.554	4.363	.022
Resource mobilization	.513	.234	.337	2.189	.037
Leadership	.485	.226	.367	2.144	.041

According to the analysis, the equation ($\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$) becomes:
$Y= 1.309+ 0.447X_1+ 0.735X_2+ 0.513X_3+0.485X_4$. The regression equation indicates that taking all the four variables constant at zero, implementation of project management was 1.309. The findings also indicate that taking all other independent variables at zero, a unit increase in technical skills led to 0.447 efficiency in the implementation of project management. In addition, an increase in stakeholders' involvement led to 0.735 efficiency in the implementation of project management. Whereas a unit increase in resource mobilization led to 0.513 efficiency. Finally, an increase in leadership led to a 0.485 efficiency. At 5% level of significance and 95% level of confidence, technical skills had a beta value of 0.023, at 5% level of significance stakeholders involvement had a beta value of 0.022, at the same 5% level of significance resource mobilization produced a beta value of 0.037, at 5% level of significance and leadership had a

beta value of 0.041 at the same level of significance. According to the findings it can be concluded that, all the four variables were significant ($p<0.05$) with stakeholders involvement being the least significant and leadership being the most significant. The study therefore concluded that all the four variables had an influence on the implementation of project management.

CHAPTER FIVE
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter, summary of the main findings and conclusions are drawn. Recommendations for action by the management are made and areas for further research identified.

5.2 Summary of the Findings of the Study

This section presents the summary of the findings of the study in chapter four according to the objectives: In reference to demographic characteristic, the study sought to establish influence of the respondents' gender, age and education in the of project management. The findings indicated that there were more men than women in the organization as evidenced by 63% of male respondents and 37% of female respondents. Most of the respondents (30.7%) were between the ages of 31-40 years. 46.6 % of the respondents had university education whereas, 40.3% of the respondents had over 10 years' experience.

5.2.1 The Influence of Staff Technical skills on the Implementation of Project Management

Based on objective one which sought to determine the influence of staff technical skills on the implementation of project management the study found that (55.9%) of the respondents revealed that the projects always start and end at the anticipated time. 31.5% of the respondents indicated that the projects do not always start and end at the anticipated time. On technical skills (62.6%) of the respondents indicated that they have technical skills for the implementation of project management, while (37.4%) of the respondents indicated that they don't have staff technical skills for the implementation of project management. The study also found that 57.1% of the respondents indicated that the human resource capacity was inadequate. In addition, (44.1%) of the respondents strongly agreed that technical skill is a critical determinant of how project

activities are carried out. (39.1%) of the respondents agreed that project managers should have relevant experience or knowledge about the technology required by the project. Moreover, 42.4% of the respondents strongly agreed that human resources on the project should have clear job allocation and designation befitting their expertise. Finally, 36.1% of the respondents agreed that they needed seminars on project management to a large extent.

5.2.2 The Influence of Stakeholders involvement on the Implementation of Project management

Regarding objective two on the influence of stakeholders involvement on the implementation of project management, 56.3% of the respondents indicated that stakeholders participate in project management, while 43.7% of the respondents indicated that stakeholders don't participate in project management. The study also found that most (51.7%) of the respondents indicated that the level of stakeholders participation in project management is to a small extent. Furthermore, 41.2% of the respondents agreed that active planning for stakeholders' through consideration of communication channels helps to build and control stakeholder relationships. 32.8% of the respondents strongly agreed that active planning for stakeholders' through consideration of communication channels helps to build and control stakeholder relationships. In addition, 30.7% of the respondents strongly disagreed that too much stakeholder involvement could lead to undue influence on the execution of project activities. 22.7% of the respondents disagreed that too much stakeholder involvement could lead to undue influence on the execution of project activities. Majority (66.4%) of the respondent agreed that project managers should work with local people to create opportunities for local people to participate meaningfully in project

activities. Lastly, (66.4%) of the respondent agreed that project managers should work with local people to create opportunities for local people to participate meaningfully in project activities.

5.2.3 The Influence of Resource mobilization on the Implementation of Project management

In reference to objective three, which sought to determine the influence of resource mobilization on the implementation of project management, majority (73.1%) of the respondents indicated that there was funding to ensure the implementation of project management. When asked on the adequacy of funds, 30.3% of the respondents indicated that the funds were adequate, majority (69.7%) of the respondents indicated that the funds were inadequate. In addition, 46.6% of the respondents agreed that the project budget should provide a clear and adequate provision for various project activities. Furthermore, all (100%) the respondents agreed unanimously that mishandling of project cost management can lead the project into a complete failure. On quantity of resources 52% of the respondents reported that project management can improve schedule performance by increasing the quantity of resources while, 10.5% of the respondents disagreed that project management can improve schedule performance by increasing the quantity of resources. Similarly, 52.5% of the respondents strongly agreed that project budget should certainly be more carefully estimated and actual expenditure on the project more carefully monitored.

5.2.4 The Influence of Leadership on the Implementation of Project management

Finally, regarding objective four which sought to determine the influence of leadership on the implementation of project management, 65.1% of the respondents indicated that leadership influences the implementation of project management. On the commonly used leadership styles,

the study found that 35.3% of the respondents indicated their project managers apply participative leadership. 27.3% of the respondents indicated their project managers apply transactional leadership.24.4% of the respondents indicated their project managers apply situational leadership, whereas 13% of the respondents indicated their project managers apply transformational leadership. 45.8% of the respondents agreed that leadership skills reflect teamwork and adequate communication in the implementation of project management to a large extent. On mentorship, 67.5% of the respondents reported that the leader serves by building the skills of followers, removing obstacles, encouraging innovation, and empowering creative problem solving to a very large extent. In addition, most (41.2%) of the respondents agreed that leadership training is essential to project managers in order to increase efficiency in project management to a large extent. Finally, 44.1% of the respondents reported that variety of leadership styles should be applied in dealing with different challenges to a very large extent.

5.3 Conclusions

From the findings of the study, it can be concluded that staff technical skills has effect on the implementation of project management in that necessary skills play a key role in execution of duties by the employees. The study further concluded that stakeholders' participation influences the implementation of project management. In addition, it can also be concluded that even though there was funding, inadequate funding affects the implementation of project management. It can finally be concluded that leadership influences the implementation of project management.

5.4 Recommendations

The following were the recommendations of the study:

i. The study recommends that stakeholder's participation should be improved in project management. This will promote the implementation of project management since there will be little resistance from stakeholders.

ii. The study recommends that the project managers should provide the necessary resources and facilities for project management without under budgeting. This will facilitate effective implementation of project management.

iii. The study further recommends that the qualified staff should be recruited and trained on project management. This will give them the skills and knowledge in project management and increase innovativeness among employees.

iv. The study finally recommends that participative leadership should be adopted to avoid poor project management.

5.5 Suggestions for Further Research

This study was carried out in Kenya Pipeline Company in Nairobi County. The study focused on the factors influencing the implementation project management in public funded projects. The researcher therefore recommends that another study be done factors challenges facing of donor-funded projects in Kenya which was not a concern in this study.

5.6 Contribution to the Body of Knowledge

This study contributes to the existing body of knowledge by offering a deeper insight to on factors influencing the implementation of project management. This study has established that

technical skills, stakeholders' involvement, resource mobilization affect the implementation of project management.

REFERENCES

Adjei, D. and Rwakatiwana, P. (2009) Application of Traditional and Agile Project Management in Consulting Firms: A Case Study of PricewaterhouseCoopers. Umeå: Umeå University School of Business.

Aguanno, K. (2005) Managing agile projects. Ontario: Multi-Media Publications Inc.

Andersen, S. W. (2008) Can project management support poverty reduction in Africa. PMI Global Congress 2008 Proceedings. (R. Akiri, Ed.) Project Management Institute (PMI).

Berg, M. E., & Karlsen, J. T. (2007). Mental models in project management coaching. Engineering Management Journal, 19(3), 3-14.

Binnekamp, R., Gunsteren, L. A., and Loon, P. P. (2006) Open Design, a Collaborative Approach to Architecture Open Design and Construct Management Open Design, Cases and Exercises. Amsterdam: IOS Press.

Browning, T. and Eppinger, S.D. 2002 Modeling impacts of process architecture on cost and schedule risk in product development. IEEE Transactions on Engineering Management 49(4): 428–442.

Dvir, T., Edin, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance; a field experiment. Academy of Management Journal, 45(4), 735-744.

Finch, P. (2003). Human resource management practices in project management. Project Management Journal, 34(3), 32-39.

Freeman, R. Harrison, J. and Wicks, A. (2007) Managing for Stakeholders: Survival, Reputation, and Success. New Haven, CT, USA: Yale University Press.

Hauschildt, J., Gesche, K., & Medcof, J. (2000). Realistic criteria for project managers. Selection and Development, 31(3), 23-32.

Helo, P. Hilmola, O. and Maunuksela, A. (2004) The economic nature of feedback loops–Some experiments with Ashby's 'System Thinking' and DSM. International Journal of Innovation and Learning 22197–209.

Jekale, W. (2004) Performance for public construction projects in developing countries: Federal road and educational building projects in Ethiopia. Norwegian University of Science & Technology.

Joglekar, N. and Ford, D. (2005) 'Product development resource allocation with foresight'. European Journal of Operational Research 160(1): 72–87.

Kerzner, H. (2006). Project management: A systems approach to planning, scheduling and controlling. Hoboken, NJ: Wiley.

Kerzner, H. (2009) Project Management: A Systems Approach to Planning, Scheduling, and Controlling. 8th edition. John Wiley & Sons Inc., Haboken, 2009. ISBN 0-471-22577-0

Kumar, S. (2000, September/October) Reengineering: A focus on enterprise integration. Interfaces, 30(5), 54-72

Leary-Joyce, J. (2004). Becoming an employer of choice: Make your own organization a place where people want to do great work. London. Chartered Institute of Personnel and Development.

Leybourne, S. A. (2009) Improvisation and agile project management: a comparative consideration. International Journal of Managing Projects in Business, 2(4), 519- 535.

Mintzer, R. (2002) The everything project management book: tackle any project with confidence and get it done on time. Avon: Adams Media Corporation, 2002. xii, 289 s. ISBN 1-58062-583-5.

Neuhauser, C. (2007). Project manager leadership behaviors and frequency of use by female project managers. Project Management Journal, 38(1), 21-31.

Northouse, P. G. (2004). Leadership: Theory and practice (3rd ed.). Thousand Oaks, CA: Sage Publications.

Patterson, K. (2003). Servant leadership: A theoretical model. (Doctorial dissertation, Regent University, 2003). Dissertation Abstracts International, 64(02), 570.

Patterson, K., Russell, R. F., & Stone, A. G. (2004). Transformational versus servant leadership – A difference in leader focus. Leadership and Organizational Development Journal, 25(4), 350-361.

Pomfret, D. T. (2008). Leadership in the project environment: A correlational study of leadership practices and project performance. (Unpublished Doctorial dissertation). Phoenix University, Phoenix, AZ.

Project Management Institute. (2008). A Guide to the Project Management Body of Knowledge (PMBOK® Guide)—Fourth Edition. Pennsylvania: Project Management Institute, Inc.

Repenning, N. (2001) Understanding fire fighting in new product development. Journal of Product Innovation Management 18(5): 285–300.

Roepke, R., Agarwal, R., & Ferratt, T. W. (2000, June). Aligning the IT human resource with business vision: The leadership initiative at 3M. MIS Quarterly, 24(2), 327-353.

Schmid, B., & Adams, J. (2008). Motivation in project management: The project manager's perspective. Project Management Journal, 39(2), 60-71.

Senge, P. (1990) The Fifth Discipline, the Art and Practice of the Learning Organization. Doubleday/Currency: New York.

Shore, B. (2005). Failure rates in global IS projects and the leadership challenge. Journal of Global Information Technology Management, 8(3), 1-5.

Simon, H. (1996) The Sciences of the Artificial. MIT Press: Cambridge, MA.

Skipper, C. O., & Bell, L. C. (2006). Influences impacting leadership development. Journal of Management in Engineering, 22(2), 68-74.

Sosa, M.E. Eppinger, S.D. and Rowles, C.M. (2004) The misalignment of product architecture and organizational structure in complex product development. Management Science 50(12): 1674–1689.

Spears, L. C. (2004). Practicing servant-leadership. Leader to Leader, 2004(34), 7-11.

Srica, V. (2008). Social intelligence and project leadership. The Business Review, 9(2), 189-200.

Sterman, J.D. (2000) Business Dynamics, System Thinking and Modeling for a Complex World. Irwin McGraw-Hill: New York.

Thilmany, J. (2004). Linking up: Successfully combining project and product management spells marketability. Engineering Management, 126(7), 4-6.

Thite, M., (2000). Leadership styles in information technology projects. International Journal of Project Management, 18(4), 235-241.

Wysocki, K. Robert. (2009) Effective Project Management: Traditional, Agile, Extreme. 5th Edition. Wiley Publishing, Inc., Indianapolis, Indiana. 2009. ISBN: 978-0-470-42367-7

Yassine, A. Joglekar, N. Braha, D. Eppinger, S. and Whitney, D. (2003). Information hiding in product development: the design churn effect. Research in Engineering Design 14(3): 145–161.

Zhang, J., & Faerman, S. R. (2007). Distributed leadership in the development of a knowledge sharing system. European Journal of Information Systems, 16 (4), 479-494.

APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

Aug, 2015

Dear Madam/Sir,

RE: REQUEST FOR DATA COLLECTION

I am a post graduate student pursuing a Masters in Project Planning and Management. I am required to submit as part of my research work assessment, a project on "**FACTORS AFFECTING THE IMPLEMENTATION OF PROJECT MANAGEMENT IN PUBLIC FUNDED PROJECTS.** To achieve this, you have been selected to participate in the study. I kindly request you to fill the attached questionnaire to generate data required for this study. This information will be used purely for academic purposes and will be treated in confidence and will not be used for publicity. Neither your name nor the name of your institution will be mentioned in the report.

Your assistance and cooperation will be highly appreciated.

Thank you in advance.
Yours faithfully,

_____

Edwin Omolo

University of Nairobi.

APPENDIX II: QUESTIONNAIRES FOR STAFF

I am a Masters student at University of Nairobi carrying out a research on the factors affecting the implementation of project management in public funded projects. This questionnaire is designed to collect data that will help to achieve the objectives of this study. I would be most grateful if you would kindly participate in this interview by responding to all the questions in this questionnaire as candidly and precisely as possible. Your honesty and co-operation in responding to these questions will be highly appreciated. All information provided will be treated with utmost confidentiality.

Please fill in the required information in the spaces provided. Or tick (√) where necessary.

SECTION A: GENERAL INFORMATION OF THE RESPONDENTS

1. Gender Male [ ] Female [ ]

2. Age 19 – 30 years [ ] 31 – 40 years [ ]

41-50 years [ ] Above 50 Years [ ]

3. Level of education Primary education [ ] Secondary education [ ]

College [ ] University [ ]

4. Years of service in this Organization

Less than 3 years [ ] between 4 – 5 [ ]

6 – 10 years [ ] Over 10 years [ ]

SECTION B: THE INFLUENCE OF STAFF TECHNICAL SKILLS ON THE IMPLEMENTATION OF PROJECT MANAGEMENT

5. Do projects always start and end at the anticipated time?

Yes [ ] No [ ] Not sure [ ]

Explain your answer

_____

_____

_____

7. Do you have the technical skills required to implement project management?
Yes [ ] No [ ]

8. Do the technical skills of the staff influence the implementation of project management?

Yes [ ] No [ ] Not sure [ ]

Explain your answer

_____

_____

_____

9. Is the supply of human resource capacity adequate for the implementation & sustainability of the projects?

Yes [ ] No [ ] Not sure [ ]

10. The following are some statements on the influence of technical skills of on the implementation of Project management. Please indicate the level of your agreement with each statement.

1-Strongly agree **2-Agree** **3-Neither agree nor disagree**

4-Disagree **5-Strongly disagree**

Statement	1	2	3	4	5
Technical skill is critical determinant of how project activities are carried out.					
Project managers should have relevant experience or knowledge about the technology required by the project.					

Human resources on the project should be given clear job allocation and designation befitting their expertise.					
Human resource should be trained regularly on project management.					

11. Do you need to seminars on project management?

Very large extent [ ] Large extent [ ]

Small extent [ ] No extent at all[ ]

12. How effective are seminars to project management?

Very effective [ ] Effective [ ]

Less effective [ ] Not effective [ ]

13. What are other influences of staff technical skills of on the implementation of project management?

_____

_____

_____

SECTION C: THE INFLUENCE OF STAKEHOLDERS INVOLVEMENT ON THE IMPLEMENTATION OF PROJECT MANAGEMENT

14. Do stakeholders participate in project management?

Yes [ ] No [ ]

Explain your answer

_____

_____

_____

15. What is the level of stakeholders' participation?

Very large extent [ ] Large extent [ ]

Small extent [ ] No extent at all [ ]

16. The following are some statements on the effect stakeholders' participation on the implementation of project management. Please indicate the extent of your agreement with each statement.

1-Strongly agree **2-Agree** **3-Neither agree nor disagree**

4-Disagree **5-Strongly disagree**

Statement	**1**	**2**	**3**	**4**	**5**
Active planning for stakeholders' through consideration of communication channels help to build and control stakeholder relationships.					
Too much stakeholder involvement could lead to undue influence on the execution of project activities.					
Project managers work with local people to create opportunities for local people to participate meaningfully in project activities.					

17. What are other ways stakeholders involvement influences the implementation of project management?

_____

_____

_____

SECTION D: **THE INFLUENCE OF RESOURCE MOBILIZATION ON THE IMPLEMENTATION OF PROJECT MANAGEMENT.**

18. Is there funding to ensure the implementation of project activities?

Yes [ ] No [ ]

20. Are the resources adequate for the implementation of project management?

Yes [ ] No [ ]

21. The following are some statements on the effect Budgetary Allocation on the implementation of project management. Please indicate the extent of your agreement with each statement.

1-Very large extent **2-Large extent** **3-Neutral extent**

4-Small extent **5-No extent at all**

Statement	1	2	3	4	5
The project budget should provide a clear and adequate provision for various project activities.					
Mishandling of project cost management can lead the project into a complete failure.					
Project management can improve schedule performance by increasing the quantity of resources					
Project budget should certainly be more carefully estimated and actual expenditure on the project more carefully monitored.					

22. What are other effects resource mobilizations on the implementation of project management?

_____

_____

_____

SECTION E: INFLUENCE OF LEADERSHIP ON THE IMPLEMENTATION OF PROJECT MANAGEMENT

23. Does leadership influence the implementation of project management?

Yes [ ] No [ ]

Explain your answer

_____

_____

_____

24. Which leadership styles does your Project manager apply ?

Participative leadership [ ] Situational leadership [ ]

Transformational leadership [ ] Transactional leadership [ ]

25. The following are some statements on the effect Leadership on the implementation of project management. Please indicate the extent of your agreement with each statement

1-Very large extent **2-Large extent** **3-Neutral extent**

4-Small extent **5-No extent at all**

Statement	1	2	3	4	5
Leadership skills reflect teamwork and adequate communication in the implementation of project management.					
The leader serves by building the skills of followers, removing obstacles, encouraging innovation, and empowering creative problem solving					
Leadership training is essential to project managers in order to increase efficiency in project management.					

Variety of leadership styles should be applied in dealing with different challenges.					

26. What other ways does leadership influence the implementation of project management?

_____

_____

_____

27. What would you recommend to be done to improve the implementation of project management?

_____

_____

_____

_____

Thank you for your co-operation

APPENDIX III: INTERVIEW SCHEDULE FOR PROJECT MANAGERS

SECTION A: GENERAL INFORMATION OF THE RESPONDENTS

1. Gender Male [ ] Female [ ]

2. Age 19 – 30 years [ ] 31 – 40 years [ ]

41-50 years [ ] Above 50 Years [ ]

3. Level of education Primary education [ ] Secondary education [ ]

College [ ] University [ ]

4. Years of service in this Organization

Less than 3 years [ ] between 4 – 5 [ ]

6 – 10 years [ ] Over 10 years [ ]

5. What is project management according to your understanding?

_____

_____

_____

6. Do projects always start and end at the anticipated time?

Yes [ ] No [ ]

Explain your answer

_____

_____

_____

7. Do you give projects report to the government regularly?
Yes [ ] No [ ]

8. Do the technical skills of the staff influence the implementation of project management?

Yes [ ] No [ ]

Explain your answer

_____

_____

_____

9. What are other influences of staff technical skills of on the implementation of project management?

_____

_____

_____

10. Does stakeholder's participation influence of the implementation of project management?

Yes [ ] No [ ]

Explain your answer

_____

_____

_____

11. What are other ways stakeholders involvement influences the implementation of project management?

_____

_____

_____

12. Is there funding to ensure the implementation of project activities?

Yes [ ] No [ ]

13. What are other effects resource mobilization on the implementation of project management?

_____

_____

_____

14. Does leadership influence the implementation of project management?

Yes [ ] No [ ]

Explain your answer

_____

_____

_____

15. What are other ways leadership influences the implementation of project management?

_____

_____

_____

16. What would you recommend to be done to improve the implementation of project management?

_____

_____

_____

_____

Thank you for your co-operation

APPENDIX VI: KREJCIE AND MORGAN'S TABLE

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368

140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

APPENDIX VII: RESEARCH AUTHORIZATION LETTER