

# **Influence of Economic Factors on Performance of Project Management among Petroleum Marketing Firms in Kenya**

**Charles Maina**

**Jane Gathenya**

Jomo Kenyatta University of Agriculture And Technology

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## **ABSTRACT**

The behavior by the oil marketing companies in Kenya has over the years generated a lot of public concerns on the overall economic efficiency and rationale of unfettered market mechanisms in the retail petroleum market in Kenya and literally re-kindled agitations for re-introduction of price controls. The purpose of this research was to identify success factors, required to address concerns on recurrent project cost escalation, schedule delays and customer satisfaction in the petroleum industry projects. The main purpose of this study was to investigate the influence of economic factors on performance of project management among petroleum marketing firms in Kenya.

This research was studied through the use of a descriptive research design. The target population composed of the 159 top, middle and low level management staffs working with the head offices of the major petroleum marketing firms in Nairobi. Stratified random sampling technique was used to select a sample of 30% (48 respondents) from within each group in proportions comprising of departmental heads, assistant departmental heads and lower cadre staffs like the supervisors, accounts and other officers since they are the ones conversant with the influence of economic factors on performance of project management among petroleum marketing firms in Kenya.

The study made use of a survey questionnaire administered through drop and pick later method. The questionnaire was pre-tested for validity and reliability with 10 management staff of petroleum marketing firms which ensured that the questionnaire is appropriate and the aspects investigated was generally understandable. Quantitative data collected was analyzed by the use of descriptive statistics using SPSS and presented through percentages, means, standard deviations and frequencies. The information was displayed by use of bar charts, graphs and pie charts and in prose-form.

The study findings show that project management among petroleum marketing firms is generally less successful which could be attributed to various economic factors that inhibit their success. Foreign currency exchange rate, funding, joint ventures and foreign investments affect the success of projects in the petroleum marketing firms. The study recommends that since economic factors contribute immensely to performance of petroleum marketing projects, petroleum infrastructural requirements as well as investment requirements and options for

financing petroleum promoting projects including public private partnerships, project financing and/or an appropriate throughput tariff structure that will spur investment in petroleum industry development.

**Keywords:** *Economic factors, funding, foreign currency exchange rate, foreign investments and joint venture.*

## **INTRODUCTION**

### **Background to the Study**

The petroleum industry is considered to be one of the largest and most powerful industries in the global market with its operations covering every corner of the globe and with the world's energy heavily dependent of oil and gas products (Amnesty International, 2004). Today, activities in the petroleum industry are composed of various procedures including exploring, extracting, refining, transportation and marketing of the petroleum product. Conceptually, therefore, marketing begins with an identification of an opportunity to provide a customer service or product for which a significantly large number of people are ready to a profitable price and the mobilization of resources to provide that services. Thus, a business starts with an awareness of customer needs, finding what those needs are, developing a product or service and informing the customers of the existence, price and place of availability of the products or services.

The future of project management involves an ever increasing number of projects that require the cooperation of geographically and culturally diverse teams. Leaders in the international project arena today are more aware of the challenges and more excited by the opportunities to work with international teams and partners (Lawther et al, 2000). As experience with these international project partnerships grows, the organizational competencies needed for success are emerging. Most prominent among them are the knowledge and skill to select the right projects and the right project partners for international efforts, as well as the ability to select, develop, and support leaders for projects and programs who have the skills and flexibility to make cross-border collaboration successful.

As corporations all over the world have found time and time again, international project success requires mastering numerous challenges in a complex context. According to Barccarini (2005) conducting projects in different countries, with their unique legal and political environment, security issues, economic factors, and infrastructure limitations and requirements, increases complexity far beyond that of projects executed in domestic settings. In addition, the geographic distances, language barriers, and cross-cultural gaps that are typical of an international project environment introduce further leadership challenges and additional risk. To achieve a set of organizational goals and objectives, companies conceptualize, design, and implement various strategies. Petroleum marketing companies are operated by regional management entrusted with ownership responsibilities.

Project management includes the planning, organizing, monitoring and controlling of all aspects of the project in a continuous process to achieve its objectives (Alam, 2009; Chan et al., 2009). American National Standard defines project as a temporary endeavour undertaken to create a

unique product or service or result. The discipline of project management is the art of directing and coordinating human and material resources throughout the life of a project by using modern management techniques to achieve predetermined objectives of scope, cost, time, and quality and participation satisfaction. The four phase model of the systems development cycle outlines the four phases of a project as Conception, Definition, Execution, and Operation. Nicholas (2004) posited that the execution phase is when the work specified in the project plan is put into action. Therefore, this is where most of the project effort is expended.

The execution phase is sometimes referred to as the “acquisition” phase because most system resources are acquired here and the user acquires the system at the end of it. Project management is the art and science of managing all aspects of the projects to achieve the project mission objective, within the specified time, budgeted cost, and pre-defined quality specification working efficiently, effectively, and ethically in the changing project environments (Alam and Khalifa, 2009; Chan et al., 2009). According to PMI [Project Management Institute] (2004) projects are a means of organizing. Activities that cannot be addressed within organizations normal operations .projects are utilized as a means of achieving an organisation’s strategic plan, whether the team is employed by the organization or is contracted to provide the service.

Irya Hyväri (2006) indicated that projects are undertaken as a result of various strategic considerations such as a market demand – for instance an oil company’s need to grow its market share may come up with a project of constructing depots in major towns, an organizational need where a company may introduce new product lines, a customer need where an oil company may come up with a project meet the customer’s needs by improving existing facilities, promotions and give aways, a technological advancement where the company may want to upgrade its existing equipment in line with the market trends, use of mobile phones money transfer services to pay for products and automated car wash machines etc and a legal requirement where the changes in legislation within the government may dictate changes in infrastructures and customer service.

Project management requires deliberate planning and action to create the conditions for success of a project and put in place the strategy, leadership, goals, process, skills, systems, issue resolution and structure to direct and exploit the dynamic nature of project work. If work today is done through projects, as is surely the case, then working smarter on project management will undoubtedly enable an organization to meet, head-on, whatever strategic and operational challenges may come its way (Lawther et al, 2000). Strategies are broad action plan statements that guide and direct the use of organisation’s resources to accomplish the mission and goals (White and Patton, 2002). Strategic management is geared towards achieving corporate objectives. It provides a guiding force that integrates the efforts of all levels of staff in an organisation.

Ofer and Shlomo (2005) explain critical success factors (CSF) for any business as consisting of a limited number of areas in which results, if satisfactory, will ensure the organization's successful competitive performance. McCoy (1996) points out that, “before attempting to categorize projects as a success or failure, it is necessary to determine the criteria upon which this evaluation will be made. According to Jeffrey and Dennis (1987 ) a project is generally considered to be successfully implemented if it comes in on-schedule (time criterion), comes in on-budget (monetary criterion), achieves basically all the goals originally set for it (effectiveness

criterion) and it is accepted and used by the clients for whom the project is intended (client satisfaction criterion). These criteria are derived from the basic definition of a project which comprises a defined time frame to completion, a limited budget, and a specified set of performance characteristics.

Projects in the petroleum industry in Kenya fall under three major categories; The upstream project involves the exploration and mining of oil and gas both onshore and offshore. Kenya has been divided into exploration blocks in the areas believed to have the potential for the existence of oil or gas in the earth's stratus. According to the Third Draft Of Energy Bill (2013) a person shall not engage in any petroleum upstream operations except under and in accordance with, a production sharing contract or licence issued under this Act. Any person who contravenes the above requirement commits an offence and is liable, on conviction, to a fine of not less than fifty million shillings or imprisonment for a term not less than three years or to both.

In Kenya's constitution article 71, the Government may conduct petroleum operations or projects either - through an oil company established by the Government to conduct those operations; through contractors in accordance with petroleum agreements; or in such other manner as may be necessary or appropriate. The projects in the midstream involve investments in the infrastructure projects such as the oil refining, pipelines and oil terminals with strategic reserves for the country. According to the Third Draft Of Energy Bill (2013) a person shall not conduct a business of importation, refining, exportation, wholesale, retail, storage or transportation of petroleum, except under and in accordance with the terms and conditions of a valid licence. The projects in the downstream are undertaken by the government, individuals, oil marketing companies which are either local or multinational companies or joint ventures.

The behaviour by the oil marketing companies in Kenya has over the years generated a lot of public concerns on the overall economic efficiency and rationale of unfettered market mechanisms in the retail petroleum market in Kenya and literally re-kindled agitations for re-introduction of price controls. Oil Industry statistics indicate that petroleum dealers are currently enjoying Retail Margins ranging from Ksh.2.30/Litre to Ksh.2.50/Litre for Premium Motor Gasoline (PMS) and Regular Motor Gasoline (RMS); and Ksh.2.15/Litre for Automotive Gas Oil (AGO) and Illuminating Kerosene (IK). The submissions made to the Commission by Station Dealers indicate these margins have been fixed by the suppliers for the last four years and therefore insufficient due to erosion by inflation. This information is also collaborated by the high turnover of Petrol Station Dealers in the country.

To ensure that the retail business is whole, it is proposed that ERC recommend a 20% escalation of the existing retail margin to a maximum Ksh.3.00/Litre for super and regular petrol and ksh 2.80per litre for kerosene and diesel. These retail margins will also include station operational losses of about 0.5%. According to Kieyah (2011), given that petroleum products have no close substitutes, their prices have a major feedback effect in the Kenyan economy. They permeate every aspect of production and distribution in the economy. According to Kieyah (2011), the institutional structures of petroleum industry comprises the Ministry of Energy, the Energy Regulatory Commission (ERC), Kenya pipeline Company (KPC), Kenya petroleum Refineries Limited (KPRL) and Multinational independent Oil marketing companies that include a state Oil Company, the National Oil Corporation of Kenya (NOCK). The Ministry of Energy provides the policy leadership, while ERC provides regulatory stewardship of the sub-sector.

The KPC is a state Corporation fully owned by government under the MOE. Its overall objective is to provide the economy with the most efficient, reliable and safe and least cost means of transporting petroleum products from Mombasa to the hinterland. Specifically, it runs a 450kms 14 inch pipeline from Mombasa to Nairobi and manages opens access Kipevu Oil storages facilities and other common storage depots in the inland. KRPL is limited company that runs a single skimming refinery in Mombasa. Seventy per cent of the imported products are conducted through OTS. The remaining 30 per cent is left to the discretion of licensed importers. Unlike OTS under the crude oil, cargo participation is based on the demand of licensed importers. The imports are stored at Kipevu Oil storage facility, which is operated and managed by the Kenya Pipeline Company (Energy Regulatory Authority, 2011).

There are currently about 9 companies active in the Kenyan market, although more than 50 have been licensed (Kieyah 2011). The main companies, which account for over 80% of the market, are Shell, Total, Oil Libya, and Kenol-kobil. Except for Kenol, which has a 100% Kenyan equity shareholding, all the other major companies are foreign owned. Local shareholding of Total Kenya is about 20%. Total-Kenya and Kenol are the only companies quoted on the Nairobi stock Exchange. Between 1992 and 1994, Kenol's total investment of Kshs 286.1 million. The other players are Hass Petroleum, Petro, Mamba petroleum, Hashi Energy and National Oil Corporation of Kenya (NOCK). This study concentrated on establishing the critical success factors in project management among petroleum marketing firms in Kenya.

### **Statement of the Problem**

The business environment within which the petroleum industry operates has been very volatile. The political anxiety, competition from the entrants, social reforms, technological advancement and global changes are some of the challenges that have greatly affected the growth of the industry. The dynamism of the petroleum firms' operating environment in the current times is posing a lot of challenges to all petroleum firms. Following the background of this study, it is only those petroleum firms that are able to adapt to the changing environment and adopt new ideas and ways of doing business that can be guaranteed of survival. A number of external environmental factors, such as political, economic, social, legal and those related to advances in technology or even factors related to nature, may affect project performance (Jin and Ling 2006). However, misdiagnosing the industry factors critical to long-term competitive success greatly raises the risk of misdirected marketing strategy.

Project management in the petroleum industry demand that petroleum firms should have effective systems in place to counter unpredictable events that can sustain their operations and minimize the risks involved. Truly great businesses are those which have pro-actively adapted to focusing on the critical success factors of the hostile industry for success. Some of the factors affect a project at all phases of the project life cycle, such as weather conditions or the social environment. Sometimes these factors are so influential that they cause a project to be terminated at the implementation stage. Therefore venturing in this area, it is hoped that, areas of interest for further research can be identified and further understanding of the concept of critical success factors (CSFs) particularly in the petroleum industry in Kenya was enhanced.

Despite the fact that critical success factors are well-known, the rate of failed projects in the petroleum industry still remains very high. For instance, heavy investment outlays and high skills requirement in the sector often pushes for acquisition and expansion of storage facilities to mitigate disruptions in the distribution system. The negative outcomes of the has operating environment has led to closing down of petrol stations among some firms like Total Kenya which closed 5 stations during year 2012. This may be due to the fact that current critical success factors are too general and do not contain specific enough know-how to better support project managers' decision-making (Ofer and Shlomo, 2005). Research done in the area of critical success factors has concentrated on mainly the infrastructure projects. This study focused more on the factors affecting projects in the petroleum industry projects. The purpose of this research was to identify project management success factors, required to address concerns on project cost, schedule and customer satisfaction in the petroleum marketing projects in Kenya.

### **Objectives of the Study**

The main purpose of this study was to investigate the critical success factors in project management among petroleum marketing firms in Kenya. Specifically, this study sought to assess the influence of economic factors on performance of project management among petroleum marketing projects in Kenya

### **Research Questions**

The study was guided by the following research question; how do economic factors influence the performance of project management in petroleum marketing projects in Kenya?

## **LITERATURE REVIEW**

### **Theoretical Framework**

Theories are formulated to explain, predict, and understand phenomena and, in many cases, to challenge and extend existing knowledge, within the limits of the critical bounding assumptions. The theoretical framework is the structure that can hold or support a theory of a research study. The theoretical framework introduces and describes the theory which explains why the research problem under study exists. A theoretical framework consists of concepts, together with their definitions, and existing theory/theories that are used for the particular study (Torraco, 2011). This study is grounded on the theory of constraints (TOC), bargaining theory of distribution channels, agency theory and the theory of resources and capabilities.

Eli Goldratt (Goldratt, 1984) started the Theory of Constraints (TOC), and based this management theory that every system has at least one constraint limiting it from getting more of what it strives for. If this were not true, then the system would produce infinite output. The TOC has been applied to production planning, production control, project management, supply chain management, accounting and performance measurement, and other areas of business as



well as such not-for-profit facilities as hospitals and military depots. These constraints determine the output of a system whether they are acknowledged or not. Therefore, it is in a manager's best interest to identify and reduce the system constraints within the organization. The TOC is both descriptive and prescriptive in nature; it not only describes the cause of system constraints, but also provides guidance on how to resolve them. This theory refers to systems in organizations as chains. A system is a collection of interrelated, independent processes that work together to turn inputs into outputs in the pursuit of some goal. The weakest link is the constraint that prevents the system from doing any better at achieving its goal. These constraints emanate from various aspects of economy that include foreign currency exchange rates and joint ventures. This theory can be applied to social- cultural and legal framework that contributes to the success of petroleum marketing projects. The presence of any one factor in the project will cause delays in projects implementation. Therefore it is the responsibility of the project teams to identify such factors and seek ways to avoid or minimize them for effective completion of projects.

As from the theory of resources and capacities it is habitual to consider that those resources are in internal and external factors of the enterprises. The entrepreneur, by means of the strategy combines these factors establishing his distinctive competencies. As from the theory of resources and capacities it is habitual to consider that those sources are in internal and external factors of the enterprises (Grant, 2001).

Brown's (1997) interpretation of multiple resources theory was that timing involves verbal resources at the perceptual/central stages, whereas search and tracking are 9 spatial tasks. This argument, though, still fails to explain the asymmetry. If anything, there should be minimal interference, as the tasks draw on separate resource pools. In the event of an interference effect, it should affect both tasks in a similar manner, rather than affecting one task while leaving the other untouched. On the other hand, working memory, with its central executive, can offer an explanation. The central executive controls attention and coordination functions, such as allocating attention between dual tasks. Mental arithmetic and timing both draw on the central executive, which is why bidirectional interference occurs between these two tasks (Grant, 2001).

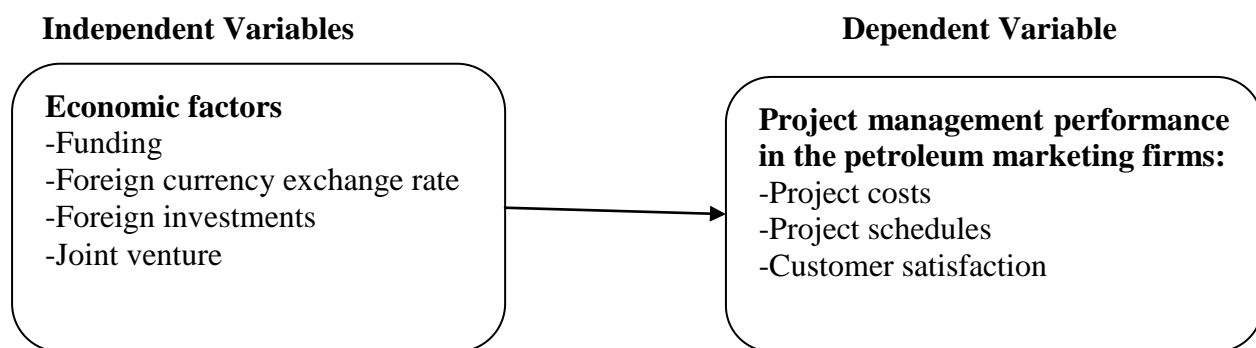
A critical factor in channel relationships between manufacturers and retailers is the relative bargaining power of both parties. In this article, the authors develop a framework to examine bargaining between channel members and demonstrate that the bargaining process actually affects the degree of coordination and that two-part tariffs will not be part of the market contract even in a simple one manufacturer–one retailer channel (Ganesh & Villas-Boas, 1964). To establish the institutional and theoretical bases for these results, the authors relax the conventional assumption that the product being exchanged is completely specifiable in a contract. They show that the institution of bargaining has force, and it affects channel coordination when the complexity of non specifiability of the product exchange is present. The authors find that greater retailer power promotes channel coordination (Ganesh & Villas-Boas, 1964). Thus, there are conditions in which the presence of a powerful retailer might actually be beneficial to all channel members. The authors recover the standard double-marginalization take-it-or-leave-it offer outcome as a particular case of the bargaining process.

Ganesh & Villas-Boas (1964) also examine the implications of relative bargaining powers for whether the product is delivered “early” (i.e., before demand is realized) or “late” (i.e., delivered to the retailer only if there is demand) (Ganesh & Villas Boas, 1964). The authors present the implications for returns policies as well as of renegotiation costs and retail competition. The cost entail writing detailed covenants into bond contracts which sharply constrain the ability of the borrowing firm’s managers to engage in expropriate behavior. The agency cost reduces the benefits of the debt interest tax shield. However an optimal (value maximizing) debt to equity ratio is reached at the point where the agency cost of debt equals agency cost of equity.

### Conceptual Framework

The independent variables in this study are funding, foreign currency exchange rate and foreign investments & joint venture, while the dependent variable is project success. Figure 2.1 below depicts the relationship between different constructs of various project management factors that are of paramount importance for achieving in success of projects of the petroleum marketing firms.

**Figure 1: Influence of Economic Factors in Project Management among Petroleum Firms**



### Empirical Review

Ramage and Armstrong (2005) posit that all businesses require success in the implementation of their project in order to grow and be assured of survival. The petroleum project endeavors in the country would be successful regardless the dynamics in the competitive market environment as long as the critical success factors are identified. The oil industry has attracted a number of operators engaged in importation, exportation, distribution and wholesaling of petroleum products whose contribution to the country’s GDP is invaluable. This study reviews the available literature on the economic factors influencing project management with regard to economic factors which include funding, foreign currency exchange rate, foreign investments and joint venture.



## **Economic factors**

Economic factors refer to the issues influencing the economic feasibility of the project including the changes in domestic economic conditions of the recipient country or inaccurate project development plan due to unpredictable economic conditions. According to Bhattacharyay (2008) project funding, foreign currency exchange rate as well as foreign investments and joint venture affect the success of projects in various ways. This may be caused by increased competition, decreased consumption, and regulatory changes requiring changes in selling price of the product or renegotiating concessions awarded to the project and would reduce the profit margin.

The availability of resources is considered to be a factor necessary for the successful completion of projects. The financing of a project involves the arrangement of adequate funds to pay for the development and operation of a clearly defined project. In some cases it is also necessary to raise finance to cover maintenance and operation. The structure and form of finance will be influenced by the nature of the project. For some projects, the majority of funding will come from local or central government sources; in other cases the project will be revenue-generating and this revenue will be used to pay back loans and pay for maintenance and operation. Financing problem has been known to contribute to delayed project completion (Leurs, 2005). Complaints have been raised that donors are generally very slow at delivering what they promised. Both the preparation and implementation stages were consequently seriously affected. Borrowers feel that donors are quick to make funding pledges, but as soon as one gets to the details of the intervention and the conditions for delivering the funds, serious delays built up. Some projects may also involve a private sector contribution in which the private sector aims to own and control some or all of the assets (Chan et al., 2009).

There is a lot of inconsistency among donors in the multiple and diverse requirements (Nick, 2002). Using donors' auditing procedures each donor demands a separate financial and technical reporting system which are adapted from their domestic procedures Barccarini (2005). The structure and timing of financial provision may impose certain constraints on the design and scheduling of the project. For some projects, very little detailed design work will have been undertaken prior to the award of grant. This may be simply because all the funding for the project is not yet in place and/or the risk is too great to commit even the design costs of a project that may not receive a grant.

Cost benefit analysis, whether formal or informal, will follow initial specification of a project. The purpose is to test whether the project as specified will be economically viable or whether it will generate good value for money. Leaving such feasibility studies until after a project has started, (which often happens in practice!), may mean that potential problems are not revealed in time to influence project planning. Although the economic and financial evaluation of the project is probably the most obvious element of the feasibility stage, external factors can play a major role in determining whether a project will proceed (Bhattacharyay, 2008).

The project's political context, its relationship with the local community, the general economic environment, its location and the physical conditions in which it will be built, are the most important external factors. Some of the components cannot be executed before others as indicated by Barccarini (2005). Delayed financing by one donor has affected the commencement of the other components leading to overall delay in the project. In addition,

due to the multiple procedures like the review of procurement documents, conditions may be different depending on the donor. This will definitely delay procurement which has an impact on the project schedule.

### **Project Management Performance**

According to Boyce and Haddad (2001), projects poses certain characteristics, one of which is that projects are temporary. This means that, any project will have a start date and end date, although this has nothing to do with duration. Another feature is that projects produce unique results. The product or service at the end of the project should be, in some way, different from the existing ones. It can be an invention or an innovation. The last characteristic is that projects have progressive elaboration due to their uniqueness. Because of uncertainty, projects cannot be understood entirely at or before the project starts, and therefore, planning and execution of projects happens many times in separate steps or phases.

As a project progresses, the project team understands the next steps, deliverables and way of execution much better. Projects differ from project operations, because project operations are continuous and repeating while projects are temporary (Lawther et al, 2000). Operations of projects deliver the same or almost the same results but in contrast, projects are unique. A project usually needs resources to deliver results. Project execution is based on a detailed plan, which also considers external factors and constraints. Planning, execution and controlling of projects is the primary field of project management. For major projects, it is necessary sometimes to set up a special temporary organization, consisting of a project team leader and one or more work teams (Flaman and Gallagher, 2001).

In addition, projects are often initiated in the context of a turbulent, unpredictable, and dynamic environment. Consequently, the project manager would be well served by more information about those specific factors critical to project success. The project manager requires the necessary tools to help him or her focus attention on important areas and set differential priorities across different project elements. A survey on information systems projects conducted by Jiang, Klein, and Balloun (1996) asked users and developers in 50 firms to rank 13 factors according to their importance in determining project success. The participants ranked the factors as follows: Support of top management, Competent project manager, Competent team members, Sufficient project resources, Client involvement in defining needs and requirement, Adequate communication channels, Involvement of all parties in project, Consulting with users and keeping them informed, Technology being implemented has been reviewed and critiqued, and works well, Clients understand the usefulness of the project, Control measures to keep project on track and Daily troubleshooting and resolution of problems. It can therefore be inferred that the absence of this factors will pause a challenge during project implementation.

Chan et al, (2004) postulate that there are a number of variables influencing the success of project implementation. These include human-related factors, project-related factors, project procedures, project management actions, and external environment. The term Critical success factors in the context of the implementation of projects were first used by Rockart in 1982 and are defined as those factors predicting success on projects. Cheng, Qiang & Wang, 2009 conducted a study in six construction firms. All the organizations studied revealed eleven (11)

key aspects to implementation: project management processes/procedures, senior management support, project manager role and responsibility definition, stakeholder management, resource planning and management, procurement/contract management, team building/cohesion, training software tools, governance processes/structure, and project manager competence.

According to Wee, (2000), delivering early measures of success focus on results and constant tracking of schedules and budgets against targets are important. Project sponsor commitment is critical to drive consensus and to oversee the entire life cycle of management (Rosario, 2000). Someone should be placed in charge and the project leader should "champion" the project throughout the organization (Sumner, 1999). Falkowski et al., 1998, there should be a high-level executive sponsor, who has the power to set goals and legitimize change. Sumner (1999), states that a projects leader should be in charge, so there is the project perspective. The leader must continually strive to resolve conflicts and manage resistance. Project implementation often constitutes the most important stage in project development (Wayne and Wittig, (2002). Depending on how it is managed, the project thus contributes to the economic development. Project implementation is the principal means through which government and private sector meet in order to focus on developmental needs such as the provision of physical infrastructure and the supply of essential health facilities. Because the deployment of the project implementation system to pursue these developmental goals, it therefore entails governmental exercise of enormous discretion. Project implementation is often an extremely controversial subject matter. This is especially the case where "the ability to exercise discretion in the award of government contracts has been a source of valued political patronage" and procurement has been "a means for the illicit transfer of funds from governmental responsibility to private hands".

## **Summary**

Project implementation should be established and controlled. The scope must be clearly defined and be limited. This includes the amount of the systems implemented and amount of projects process reengineering needed. Additionally, scope expansion requests need to be assessed in terms of the additional time and cost of proposed changes (Sumner, 1999). According to Holland et al., 1999, the project must be formally defined in terms of its milestones. The critical paths of the project should be determined. Timeliness of project and the forcing of timely decisions should be also be managed (Rosario, 2000). Deadlines should be met to help stay within the schedule and budget and to maintain credibility (Wee, 2000). There should also be planning of well-defined tasks and accurate estimation of required effort.

According to Wee, (2000), delivering early measures of success focus on results and constant tracking of schedules and budgets against targets are important. Project sponsor commitment is critical to drive consensus and to oversee the entire life cycle of management (Rosario, 2000). Someone should be placed in charge and the project leader should "champion" the project throughout the organization (Sumner, 1999). Falkowski et al., 1998, there should be a high-level executive sponsor, who has the power to set goals and legitimize change. Sumner (1999), states that a projects leader should be in charge, so there is the project perspective. The leader must continually strive to resolve conflicts and manage resistance. Project implementation often

constitutes the most important stage in project development (Wayne and Wittig, (2002). According to Jiang & Klien et al. (2002), there are ten ways to improve project performance if enterprises in general and project teams in particular implement them: Bypass an obstacle; Cause people to stretch, not break; focus on the goal; follow a standardized process; learn from the past; maintaining ongoing communications; record the work being done; Reuse previous work; Seek buy-in from all involved; seek simplicity, not complexity in goal and path. Murray (2001) describes the nine factors for IT project success that he thinks can make or break IT projects: appropriate senior management levels of commitment to the project; adequate project funding; a well-done set of project requirements and specifications; careful development of a comprehensive project plan that incorporates sufficient time and flexibility to anticipate and deal with unforeseen difficulties as they arise; an appropriate commitment of time and attention on the part of those outside the IT department who have requested the project, combined with a willingness to see it through to the end and candid, accurate reporting of the status of the project and of potential difficulties as they arise.

Others include a critical assessment of the risks inherent in the project, and potential harm associated with those risks, and the ability of the project team to manage those risks; the development of appropriate contingency plans that can be employed should the project run into problems ;an objective assessment of the ability and willingness of the organization to stay on the project course. The use of effective, regular and varied communication channels can facilitate collaborative and innovative behavior. Clear identification of risk allocation throughout the project is important to understand risk implications. In a comparative analysis, it reveals that clear understanding of risks, identification of roles and responsibilities, shared specific visions of each project, adequate resources to deal with unexpected problems are vital to project success (Nijkamp et al., 2002). This study therefore was committed to documenting the critical success factors in project management among petroleum marketing firms in Kenya.

## **Research Gaps**

Previous studies have not explained to what extent each independent variable mentioned above poses a challenge to the implementation of projects in the road sector in terms of ranking the factors in order of magnitude. In addition there is no quantification on how the independent variables interrelate with dependent variable. The literature review by Pinto and Slevin did not identify procurement as a factor to successful implementation Procurement selection criteria plays a great role in implementation since it is the mechanism by which contractors and suppliers are identified, evaluated, and developed. Poor selection of supplier may result in poor quality, late completion and termination of contracts hence delaying implementation (Jiang & Klien et al., 2002). The regulatory framework and procurement policies are there to ensure that the right contractor is awarded the contract. It would be counterproductive to have a competent project team with excellent relationship with the project stakeholders of this study and manage the procurement process wrongly.

Monitoring and controlling which is one of the project management factors consists of those processes performed to observe project execution so that potential problems can be identified in a timely manner and corrective action can be taken, when necessary, to control the execution of the project. The key benefit is that project performance is observed and measured

regularly to identify variances from the project management plan (Nicholas, 2004). This is a critical area which without top management support will not have a huge impact on project implementation. It should be given more prominence as it acts as check to project teams and stakeholders.

There has been limited research conducted in Kenya regarding the critical success factors in project management among petroleum marketing firms in Kenya. A previous study by Wasike (2001) for KIPPRA only dealt with Road Infrastructure Policies in Kenya and Historical Trends and didn't include implementation challenges. The Kenya roads board also conducted a study on road networks. However, these studies did not address critical success factors in project management among petroleum marketing firms in Kenya. Based on this therefore, there was need for a study to identify economic factors influencing project management with a focus on project management among petroleum marketing firms in Kenya.

## **RESEARCH METHODOLOGY**

### **Research Design**

Research design is the basic plan that indicates an overview of the activities that are necessary to execute the research project. This research problem was studied through the use of a descriptive research design. According to Cooper and Schindler (2003), a descriptive study is concerned with finding out the what, where and how of a phenomenon. This study therefore was able to generalize the findings to all the enterprises. The main focus of this study was quantitative. However some qualitative approach was used in order to gain a better understanding and possibly enable a better and more insightful interpretation of the results from the quantitative study. This method concerns the intense investigation of problem solving situations in which problems are relevant to the research problem.

The underlining concept was to select several targeted cases where an intensive analysis identified the possible alternatives for solving the research questions on the basis of the existing solution applied in the selected case study. The study attempted to describe and define a subject, often by creating a profile of group of problems (Cooper and Schindler, 2003). Thus, the major petroleum marketing firms in Kenya were the focus of the study which provided a natural setting on which data was collected.

### **The Population**

Cooper and Schindler (2001), define a population as the total collection of elements about which one make some inferences. The population of the study comprised of all the management staffs working with petroleum marketing firms in Kenya as per the Petroleum Institute of East Africa (PIEA) publication 3<sup>rd</sup> quarter, July – September 2012. The petroleum marketing firms and their corresponding market share are as listed in appendix 1.

## Target Population

Target population is the specific population about which information is desired. According to Ngechu (2004), a population is a well defined or set of people, services, elements, events, group of things or households that are being investigated. The population can be divided into sets, population or strata and which are mutually exclusive. The target population composed of all the management staffs working with the head offices of the major petroleum marketing firms in Nairobi. The major petroleum marketing firms are considered to be the firms with more than 1% market share. These are the firms considered to have ideal performance in petroleum marketing project management.

The target respondents included the 159 management staffs from the major petroleum marketing firms (Appendix II) with a market share of above 1%. For purpose of this study the target population was stratified through top level, middle level and low level management. Mugenda and Mugenda (1999) explain that the target population should have some observable characteristics, to which the study intends to generalize the results of the study. This definition assumes that the population was not homogeneous.

**Table 1: Target Population**

<b>Sections</b>	<b>Population (Frequency)</b>	<b>Percentage %</b>
Top management	16	10
Middle level management	23	14
Low level management	120	75
<b>Total</b>	<b>159</b>	<b>100</b>

## Sampling Procedure

Sampling techniques provide a range of methods that facilitate to reduce the amount of data need to collect by considering only data from a sub-group rather than all possible cases or elements. At the time of conducting research, it is often impossible, impractical, or too expensive to collect data from all the potential units of analysis included in the research problem. Sampling ensures that some elements of a population are selected as riding representative of the population this was according to Keya et al., (1989). Stratified random sampling technique was used to select the sample. According to Kerry and Bland (1998) the technique produce estimates of overall population parameters with greater precision and ensures a more representative sample is derived from a relatively homogeneous population. Stratification aims to reduce standard error by providing some control over variance. The study grouped the population into three strata i.e. low level, middle level and top level management. According to Cooper and Schindler (2003), random sampling frequently minimizes the sampling error in the population. This in turn increases the precision of any estimation methods used.



**Table 2: Sampling Frame**

<b>Sections</b>	<b>Population (Frequency)</b>	<b>Sample Ratio</b>	<b>Sample</b>
Top management	16	0.3	5
Middle level management	23	0.3	7
Low level management	120	0.3	36
<b>Total</b>	<b>159</b>	<b>0.3</b>	<b>48</b>

Stratified random sampling technique was used since population of interest is not homogeneous and could be subdivided into groups or strata to obtain a representative sample. The study selected a section and particularly the staffs who included departmental heads, assistant departmental heads and lower cadre staffs like the supervisors, accounts and other officers from the petroleum marketing firms since they are the ones conversant with the critical success factors in project implementation among petroleum marketing firms in Kenya. From the above population of one hundred and fifty nine, a sample of 30% was selected from within each group in proportions that each group bears to the study population. This sample was appropriate because the population was not homogeneous and the units are not uniformly distributed. Furthermore, owing to the big number of target population and given the time and resource constraints, the sampling at least 30 elements is recommended by Mugenda and Mugenda (1999). This generated a sample of 48 respondents which the study sought information from. This made it easier to get adequate and accurate information necessary for the research. The selection was as above.

### **Data Collection Methods and Instruments**

According to Ngechu (2004) there are many methods of data collection. The choice of a tool and instrument depends mainly on the attributes of the subjects, research topic, problem question, objectives, design, expected data and results. This was because each tool and instrument collects specific data. Also, Best and Kahn (2004) posit that data may be collected by a wide variety of methods. Primary data is gathered and generated for the project at hand. Primary data was information gathered directly from respondents and for this study the study used questionnaires. Secondary data is the data is gathered for other purposes and used in the recent project usually the secondary data are found inside the company, libraries, research centers, internet and etc. Secondary data involved the collection and analysis of published material and information from other sources such as annual reports, published data.

### **Data Collection Instruments**

The study used a survey questionnaire administered to each member of the sample population. The questionnaire had both open and close-ended questions. The close-ended questions provided more structured responses to facilitate tangible recommendations. A scale of 1 to 5 was provided where 1= no extent, 2= little extent, 3= moderate extent, 4= great extent and 5 is to a very great extent. The closed ended questions were used to test the rating of various attributes and this helps in reducing the number of related responses in order to obtain more varied responses. The open-ended questions provided additional information that may not

have been captured in the close-ended questions. The questionnaire was carefully designed and tested with a few members of the population for further improvements. This was done in order to enhance its validity and accuracy of data to be collected for the study.

Secondary data was also collected for this study. This data was useful for generating additional information for the study from already documented data or available reports. Cooper and Schindler (2003) further explain that secondary data is a useful quantitative technique for evaluating historical or contemporary confidential or public records, reports, government documents and opinions. Mugenda and Mugenda (2003) add that, numerical records can also be considered a sub category of documents and that such record include figures, reports and budgets. This basically implied the incorporation of valuable statistical data in the study.

### **Data Collection Procedure**

The study administered the questionnaire individually to all respondents of the study. The study exercised care and control to ensure all questionnaires issued to the respondents were received and to achieve this, the study maintained a register of questionnaires, which were sent, and which were received. The questionnaire was administered using a drop and pick later method.

### **Validity and Reliability**

To establish the validity of the research instrument the study sought opinions of experts in the field of study especially the study's supervisor and lecturers in the department of human resource and development. This facilitated the necessary revision and modification of the research instrument thereby enhancing validity. According to Shanghverzy (2003), reliability refers to the consistency of measurement and is frequently assessed using the test-retest reliability method. Reliability is increased by including many similar items on a measure, by testing a diverse sample of individuals and by using uniform testing procedures.

### **Reliability**

Reliability is concerned with the question of whether the results of a study are repeatable. The term is commonly used in relation to the question of whether the measures that are devised for concepts in business are consistent. One factor that might affect the reliability of the study is the respondents' lack of knowledge. It is further suggested that if a respondent at the moment is tired or stressed, or have attitudes toward the questionnaire / interview it can impact negatively on the reliability of the study (Eriksson and Wiedersheim-Paul, 2001). Moreover reliability is particularly an issue in connection with quantitative research. The quantitative study is likely to be concerned with the question of whether a measure is stable or not.

The main concern of the research was evaluating the critical success factors in project management among petroleum marketing firms in Kenya. After consulting with the study's supervisor and petroleum marketing firms' management staff and project planning and management experts, some modifications and adjustments were done. After the final confirmation, a pilot test was conducted by distributing the questionnaire among 10

management staff of petroleum marketing firms which ensured that the questionnaire was appropriate and the aspects investigated were generally understandable.

In order to check reliability of the results, study used Cronbach's alpha methodology, which was based on internal consistency. Cronbach's alpha measures the average of measurable items and its correlation. The current and desirable situation was tested for critical success factors in the performance of project management among petroleum marketing firms in Kenya. SPSS software was used to verify the reliability of collected data. Overall scales' reliability of the present situation and the desirable situation was tested by Cronbach's alpha, which should be above the acceptable level of 0.70 (Hair et al., 1998). Alpha above the value of 0.6 was considered acceptable (George, D., & Mallery, P. 2003)

### **Validity**

The most important criterion of research is validity. Validity is concerned with the integrity of the conclusions that are generated from a piece of research. Validity is concerned with whether or not the item actually elicits the intended information. Validity suggests fruitfulness and refers to the match between a construct, or the way a study conceptualizes the idea in a conceptual definition, and the data. It refers to how well an idea about reality "fits" in with actual reality. Actually, qualitative studies are more interested in giving a fair, honest, and balanced account of social life from the viewpoint of someone who lives it every day (Neuman, 2003).

In other words, validity is concerned with whether the findings are really about what they appear to be about. Validity defined as the extent to which data collection method or methods accurately measure what they are intended to measure (Saunders et al., 2003). Yin (2003) states, "no single source has a complete advantage over all others". The different sources are highly complementary, and a good case study should use as many sources as possible. The validity of a scientific study increases by using various sources of evidence (Yin, 2003).

The first phase of this research employed the econometric technique to investigate the relationship between various factors and success in project management among petroleum marketing firms. The data was collected from the organization's departments such as project management and planning. This issue confirmed the validity of the data and relevant results.

### **Data Processing and Analysis**

Before processing the responses, the completed questionnaires were edited for completeness and consistency. Quantitative data collected was analyzed by the use of descriptive statistics using SPSS version 21.0 and presented through percentages, means, standard deviations and frequencies. The information was displayed by use of bar charts, graphs and pie charts as well as in prose-form. This was done by tallying up responses, computing percentages of variations in response as well as describing and interpreting the data in line with the study objectives and assumptions through use of SPSS. Content analysis was used to test data that is qualitative in nature or aspect of the data collected from the open ended questions. According to Baulcomb, (2003), content analysis uses a set of categorization for making valid and replicable inferences from data to their context.

## RESEARCH FINDINGS AND DISCUSSION

### General Information

The study targeted a sample of 48 respondents drawn from the departmental heads, assistant departmental heads and lower cadre staffs like the supervisors, accounts and other officers from the petroleum marketing firms.

**Table 3: Response Rate**

Response	Frequency	Percentage
Responded	39	81
Not responded	9	19
<b>Total</b>	<b>48</b>	<b>100.0</b>

Table 4 illustrates that 39 out of 48 target respondents filled in and returned the questionnaire contributing to 81%.

**Table 4: Respondents' Departments and Gender**

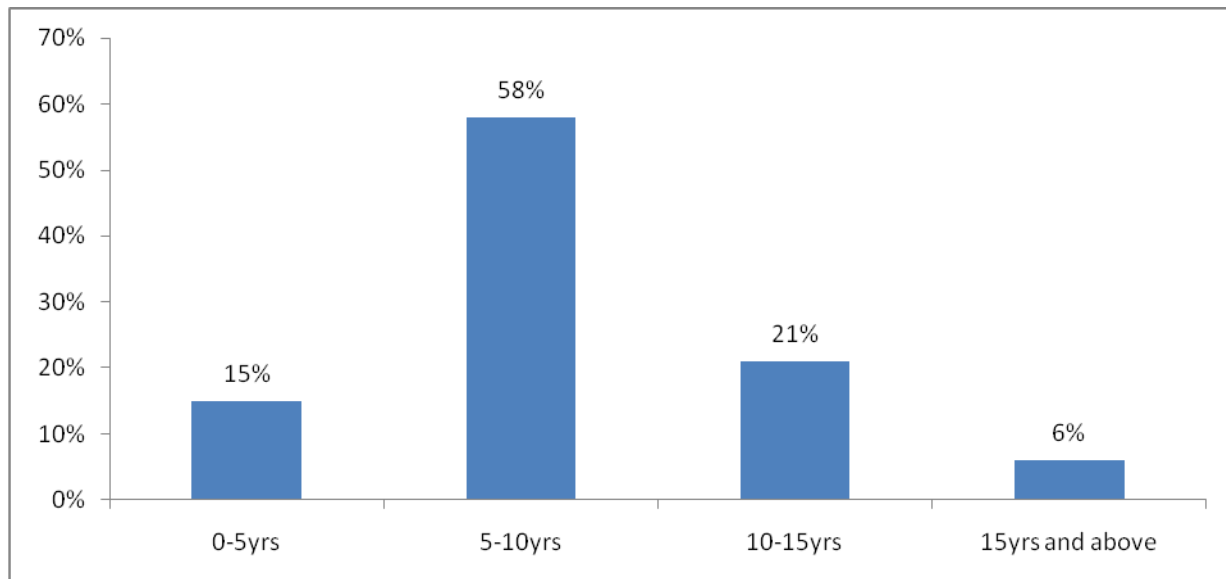
Department	Male	Female	Frequency	Percentage
Human resource	4	2	6	15.4
Finance	3	7	10	25.6
Procurement	1	1	2	5.1
Operations	3	1	4	10.3
Marketing	5	6	11	28.2
Other	4	2	6	15.4
<b>Total</b>	<b>20</b>	<b>19</b>	<b>39</b>	<b>100.0</b>

From the results shown in table 5, 28.2% of the respondents were working in the marketing departments, 25.6% of them were working in the finance departments, 15.4% worked in Human resource department and another 15.4% of them worked in other departments like supply planning, legal and exploration departments. In addition, 10.3% of the respondents indicated that they worked in the operations department, while 5.1% worked in the procurement departments. Majority of the staffs working in the departments are mainly male staffs with an exception of marketing and finance departments where the female staffs were more than the male staffs. The results further imply that all departments that were targeted by the study were involved and that the findings are not biased. From the study, 51.4% of the respondents were males while 48.6% of the respondents are females.

**Table 5: Designation of the Respondents**

<b>Category</b>	<b>Frequency</b>
Managers	4
Assistant managers	13
Supervisors	10
General staffs	9
Others	3
<b>Total</b>	<b>39</b>

According to Table 5, 33.3% of the respondents indicated that they were assistant managers, 25.63% of them were supervisors, 23.1% of them indicated that they were general staffs, 10.3% of the respondents comprised of managers while 7.7% of them were other staffs like administration assistant and middle level management.



**Figure 2: Duration Worked in Petroleum Marketing Firms in Kenya**

The study results depicted in figure 1 reveal that 58% of the respondents indicated that they had an experience of 6-10 years in the Petroleum marketing firms, 21% of them had worked in the organizations for a period of 11-15 years, 15% of them had a working experience of less than 5 years, while 6% of the respondents indicated that they had an experience of over 15 years. This shows that majority respondents had enough work experience in the petroleum marketing firms.

**Table 6: Respondents' Level of Education**

Level of Education	Frequency	Percent
Certificate/Diploma	13	34.4
Undergraduate	17	43.8
Post Graduate	9	21.8
<b>Total</b>	<b>39</b>	<b>100.0</b>

The study results reveal that 43.8% of the respondents had acquired a Bachelor's or undergraduate degrees level of education, 34.4% of the respondents indicated that they had acquired college diplomas, while 21.8% had acquired post graduate level of education as their highest level of education.

### Project Management Performance Factors in Project Success

The main purpose of this study was to investigate the critical success factors in project management among petroleum marketing firms in Kenya.

**Table 7: Rating the Success of Project Management among Petroleum Marketing Firms**

Rate of Success	Frequency	Percent
Very successful	2	4.9
Successful	12	29.4
Less successful	22	56.9
Not successful	3	8.8
<b>Total</b>	<b>39</b>	<b>100.0</b>

From the study, 56.9% of the respondents indicated that project management among petroleum marketing firms is less successful, 29.4% of the respondents project management among petroleum marketing firms to be successful, 8.8% of the respondents indicated that project management among petroleum marketing firms is not successful, while 4.9% of the respondents indicated that project management among petroleum marketing firms is very successful.

**Table 8: Characteristics of Project Management Performance Factors**

Statement	No extent	Little extent	Moderate Extent	Great extent	Very great extent	Mean	Std. Dev.
Project costs	5.4	23.2	17.9	42.9	10.8	3.30	1.11
Project schedules	3.6	33.9	16.1	37.5	8.9	3.14	1.10
Customer satisfaction	8.9	16.1	26.8	32.1	16.1	3.30	1.19

According to the results, majority of the respondents indicated that project costs, customer satisfaction and project schedules affect the success of projects in the petroleum firms to moderate extents as shown by mean scores of 3.30, 3.30 and 3.14 respectively. Project cost has the greatest effect on project success with 53.7 percent above the moderate extent while



project schedule has the lowest effect on project success with 46.4 percent. Customer satisfaction effect on project success was 48.2 percent above the moderate extent.

**Influence of Economic Factors on Performance of Project Management**  
**Influence of Economic Factors**

In order for the study to achieve its purpose the second specific objective of the study was to assess the influence of economic factors on performance of project management among petroleum marketing projects in Kenya. As such the study sought to establish how the respondents would rate the influence of economic factors on the success of projects in the petroleum marketing firms.

**Table 9: Extent to which Economic Factors Affect Success of Petrol Marketing Projects**

Extent	Frequency	Percentage
Very great extent	11	28
Great extent	26	67
Moderate extent	2	5
<b>Total</b>	<b>39</b>	<b>100</b>

Majority of the respondents indicated that economic factors affects the success of projects in the petroleum marketing firms to a great extent as shown by 67%, 28% of the respondents said to a very great extent, while only a small proportion of the respondents as shown by 5% of the respondents said that economic factors on the success of projects in the petroleum marketing firms to a moderate extent. These results are an indication that economic factors play a major role on the success of projects in the petroleum marketing firms.

The study further sought to establish the extent to which various aspects of economic factors experienced affect the success of projects in the petroleum marketing firms.

**Table 10: Extent to which Economic Factors affect Success of Petrol Marketing Projects**

Aspects of economic factors	No extent	Little extent	Moderate Extent	Great extent	Very great extent	Mean	Std. Dev.
Funding	18.8	18.8	18.8	18.8	24.8	3.69	1.35
Foreign currency exchange rate	10.5	0	14.3	51.9	23.3	3.77	1.13
Foreign investments	12.5	12.5	25.0	25.0	25.0	3.38	1.36
Joint venture	4.2	8.1	29.3	54.3	4.1	3.46	1.26

From the study results depicted in table 10, majority of the respondents indicated that foreign currency exchange rate affect the success of projects in the petroleum marketing firms to a great extent as shown by a mean score of 3.77 as well as funding as shown by a mean score of 3.69, while joint ventures and foreign investments affect the success of projects in the petroleum marketing firms to moderate extent as shown by mean scores of 3.46 and 3.38 respectively.

The respondents were further requested to rate the extents to which various aspects of economic factors affect the success of projects in the oil marketing companies in Kenya. The results are shown in Table 11.

**Table 11: Extent to which Economic Factors Affect Success of Oil Marketing Projects**

<b>Economic Factors</b>	<b>No extent</b>	<b>Little extent</b>	<b>Moderate Extent</b>	<b>Great extent</b>	<b>Very great extent</b>	<b>Mean</b>	<b>Std. Dev.</b>
Provision of sufficient resources as and when required	0	23.1	46.2	30.7	0	4.59	0.97
Good Project resource planning and controlling	0	23.1	69.2	7.7	0	4.67	0.52
Use of efficient project-specific technology	38.5	61.5	0	0	0	4.31	0.65
Good financial accountability and management	0	7.7	15.4	53.8	23.1	4.45	0.82
Effects of the exchange rate on acquisition of resources	0	18.8	24.9	43.8	12.5	3.56	1.30
Efficient/timely procurement of materials and equipments	2.3	27.1	6.8	41.3	22.5	4.54	1.05
Good forecasting of work plan/ estimation project duration	0	12.5	18.8	43.7	25	4.59	0.75
Monitoring and Evaluation can lead to timely implementation of projects	0	20.4	24.6	25.8	29.2	4.74	0.55
The right project organization structure	0	14.5	23.6	29.7	32.2	4.26	0.94

According to the study monitoring and evaluation can lead to timely implementation of projects affects the success of projects in the oil marketing companies to a very great extent as shown by a mean score of 4.74, good project resource planning and controlling affects the success of projects in the oil marketing companies to a very great extent as shown by a mean score of 4.67, provision of sufficient resources as and when required affects the success of projects in the oil marketing companies to a very great extent as shown by a mean score of 4.59 as well as good forecasting of work plan/ estimation project duration shown by a mean score of 4.59 and efficient/timely procurement of materials and equipments affects the success of projects in the oil marketing companies to a great extent as shown by a mean score of 4.54. In addition, good financial accountability and management affects the success of projects in the oil marketing companies to a great extent as shown by a mean score of 4.44, use of efficient project-specific technology affects the success of projects in the oil marketing companies to a great extent as shown by a mean score of 4.31, the right project organization structure affects the success of projects in the oil marketing companies to a great extent as shown by a mean score of 4.26 and effects of the exchange rate on acquisition of resources affects the success of projects in the oil marketing companies to a great extent as shown by a mean score of 3.56. These findings imply

that various economic aspects have an effect on the success of projects in the oil marketing companies.

### **Discussion on the Influence of Economic Factors**

The foregoing results show that economic factors play a major role on the success of projects in the petroleum marketing firms. Accordingly foreign currency exchange rate, funding, joint ventures and foreign investments affect the success of projects in the petroleum marketing firms. monitoring and evaluation can lead to timely implementation of projects, good project resource planning and controlling, provision of sufficient resources as well as good forecasting of work plan/ estimation project duration and efficient/timely procurement of materials and equipments affects the success of projects in the oil marketing companies. The findings concur to the findings by Bhattacharyay (2008) who posited that project funding, foreign currency exchange rate as well as foreign investments and joint venture affect the success of projects in various ways. Financing problem has been known to contribute to delayed project completion (Leurs, 2005). This may be caused by increased competition, decreased consumption, and regulatory changes requiring changes in selling price of the product or renegotiating concessions awarded to the project and would reduce the profit margin.

## **SUMMARY, DISCUSIONS, CONCLUSION AND RECOMMENDATIONS**

### **Summary of Findings**

This study found that the project management among petroleum marketing firms is less successful due to various factors that inhibit their success. From the results, project costs, customer satisfaction and project schedules affect the success of projects in the petroleum firms to moderate extents.

The study found that economic factors affect the success of projects in the petroleum marketing firms to a great extent. The results from the study further indicate that foreign currency exchange rate as well as funding affects the success of projects in the petroleum marketing firms to great extents as compared to joint ventures and foreign investments which affect the success of projects in the petroleum marketing firms to moderate extents. According to the study use of efficient project-specific technology, good forecasting of work plan/ estimation of project duration, efficient/timely procurement of materials and equipments and exchange rate on acquisition of resources affect the success of projects in the oil marketing companies to great extents. On the other hand, monitoring and evaluation can lead to timely implementation of projects to a moderate extent, the right project organization structure affects the success of projects in the oil marketing companies to a moderate extent as well as good financial accountability and management, provision of sufficient resources as and when required and good project resource planning and controlling.

## **Conclusions**

The study concludes that project management among petroleum marketing firms is less successful due to various economic factors that inhibit their success. The study also deduces that economic factors affect the success of projects in the petroleum marketing firms to a great extent. In addition, foreign currency exchanges rate, joint ventures and foreign investments as well as funding affects the success of projects in the petroleum marketing firms to a great extent. The results of the study infer that use of efficient project-specific technology, good forecasting of work plan/ estimation of project duration, efficient/timely procurement of materials and equipments and exchange rate on acquisition of resources affect the success of projects in the oil marketing companies to a great extent. Furthermore, monitoring and evaluation can lead to timely implementation of projects the right project organization structure as well as good financial accountability and management, provision of sufficient resources as and when required and good project resource planning and controlling.

## **Recommendations of the Study**

The study recommends that since economic factors contribute immensely to performance of petroleum marketing projects, petroleum infrastructural requirements as well as investment requirements and options for financing petroleum promoting projects including public private partnerships, project financing and/or an appropriate throughput tariff structure that will spur investment in petroleum industry development. This will be a major boost to the industry since petroleum is a key component of the energy sector in Kenya.

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**APPENDIX: RESEARCH QUESTIONNAIRE**

**INFLUENCE OF ECONOMIC FACTORS ON PERFORMANCE OF PROJECT MANAGEMENT AMONG PETROLEUM MARKETING FIRMS IN KENYA**

**Instructions**

This questionnaire consists of two major parts; Part A on general information and Part B on factors impacting the success of project management in petroleum marketing. Kindly answer all the questions to the best of your ability. Indicate with a tick or filling in the space(s) provided. In case there is need for clarification, please do not hesitate to get in touch with me as soon as possible. I confirm that the information you give will be solely for the academic purposes only and will be strictly confidential.

**SECTION A: INSTITUTION DETAILS AND BIO DATA**

1. Please indicate your gender  

Male	[ ]	Female	[ ]
------	-----	--------	-----
2. Your department:

Human resource	[ ]	Finance	[ ]
Procurement	[ ]	Operations	[ ]
Marketing	[ ]	Other (Specify.....)	[ ]
3. What is your designation?



- Manager                       Assistant manager   
 Supervisor                       General staff   
 Other (Specify.....)

4. How long have you worked in this Firm?

- 0-5 yrs                       5-10 yrs   
 10-15                       Over 15 yrs

5. To date, what has been your highest formal qualification?

- Secondary School Level       Certificate/ Diploma   
 Undergraduate               Post graduate level   
 Other (Specify.....)

**PROJECT MANAGEMENT PERFORMANACE FACTORS IN PROJECT SUCCESS**

6. How would you rate the success of project management among petroleum marketing firms in Kenya?

- Very successful                       Successful   
 Less successful                       Not successful   
 Not sure

7. What are the projects that this firm involves in regarding petroleum marketing in Kenya?

.....  
 .....  
 .....

8. To what extent do the following characteristics of project management performance factors affect the success of projects in this Firm? Use a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate extent, 4= great extent and 5 is to a very great extent.

Statement	1	2	3	4	5
Project costs					
Project schedules					
Customer satisfaction					
Others (Specify.....)					

9. How would you rate the influence of economic factors on the success of projects in this Firm?

- To a very great extent                       To a great extent   
 To a moderate extent                       To a little extent   
 To a very little extent

10. To what extent are the following aspects of economic factors experienced that affect the success of projects in this Firm? Use a scale of 1 to 5 where 1= no extent, 2= little extent, 3= moderate extent, 4= large extent and 5 is to a very large extent.

Aspects of economic factors	1	2	3	4	5
Funding					
Foreign currency exchange rate					
Foreign investments					
Joint venture					
Other (Specify.....)					

11. Rate the extent to which the following aspects of economic factors affect the success of projects in this Oil Company? Rate on a scale of 1-5 where 5= very great extent and 1 = not at all.

<b>Economic Factors</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Provision of sufficient resources as and when required					
Good Project resource planning and controlling					
Use of efficient project-specific technology					
Good financial accountability and management					
Effects of the exchange rate on acquisition of resources					
Efficient/timely procurement of materials and equipments					
Good forecasting of work plan/ estimation project duration					
Monitoring and Evaluation can lead to timely implementation of projects					
The right project organization structure					
Other (Specify.....)					

12. What other factors do you think affect the success of projects in the Oil Company?

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 .....  
 .....

13. In your opinion, what do you think should be done to enhance success of projects in the Oil marketing firms in Kenya?

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 .....