



EFFECTS OF PROCUREMENT PRACTICES ON IMPLEMENTATION OF PROJECTS IN KENYA PIPELINE COMPANY LIMITED

Okundi, K. L., & Kitheka, S.

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Okundi, K. L.,^{1*} & Kitheka, S.²

^{1*} Master Scholar, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Mombasa, Kenya

² Ph.D, Lecturer, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Mombasa, Kenya

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ABSTRACT

The general objective of this study was to assess the effects of procurement practices on implementation of projects in Kenya Pipeline Company. To achieve specific objectives of this study, Kenya Pipeline Company was selected as a case study because; it was one of the major parastatals in the Energy sector with a significant portfolio of projects. The Corporation had a staff population of 54 personnel in the Procurement Department, out of which 35 sampled respondents were surveyed using a questionnaire. A presentation of the analysed data and the analysis techniques were also provided using both descriptive statistics such as frequency distribution, mean, standard deviation and inferential statistics with the aid of SPSS Version 24. All the objectives include such practices as: Procurement Planning, Procurement Contract Management, Procurement Evaluation; and Procurement Communication. The study demonstrated these practices indeed affect projects implementation at Kenya Pipeline Company and therefore can be inferred on other sectors in Kenya at large. To sum up, the study findings presented procurement practices as one key improvement that can contribute substantially to project success as indicated by a correlation coefficient, r of 0.898 at p -value of .001. Likewise, the overall coefficient of determination, R^2 was 0.775 signifying that the procurement practices aforementioned collectively accounted for 77.5% of change in projects implementation at Kenya Pipeline Company. The other remaining percentage of 22.5%, being accounted for by other practices not considered in this study. Projects should therefore be demystified so that they are not made to look as if they are a preserve only of the top and middle level managers at the total exclusion of the lower staff. Paradoxically, these same lower level staffs are the ones expected to use the project once complete.

Key terms: Procurement, Procurement Communication, Procurement Contract Management, Procurement Evaluation, Procurement Planning, Project Implementation

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INTRODUCTION

Globally, organizations continue to view projects as vehicles to achieving their stipulated objectives and targets and thereby being able to effectively execute their legal mandates. A project is an investment activity that involves a current or future outlay of funds in the expectation of a stream of benefits extending far into the future (Chandra, 2014). A public project is therefore one where such an investment involves the use of public funds by a Government body mandated to carry out certain specific missions to achieve specific objectives for the benefit of the greater public majority. Project implementation on the other hand refers to the process of actualizing the investment plan by putting certain specific actions and structures in place in order to operationalize the investment dream and subsequently derive the targeted benefits from the project. He cites examples of public projects such as; investments in a public transport system like expansion of the existing railway infrastructure, research and development, training, and so on that are expected to generate benefits over a period of time.

According to Kendrick (2015), such public projects can be classified either as strategic investments to address long-term organizational goals with a significant impact on the overall direction of the concerned public entity, or tactical investments to implement a current strategy as efficiently or as profitably as possible. He further states that the importance of acquiring knowledge on implementation of public projects can be viewed from three dimensions: One, their long-term effects in so far as the future character of the public organization will largely be determined by the current projects being undertaken today; two, their irreversibility. This is because a wrong project decision often cannot be reversed without incurring a substantial loss; and three, their substantial financial outlays. He argues that capital projects usually involve enormous resource outlays, all pointing to the need for effective project implementation to avert the probable losses.

According to Brown and Hyer (2010), a project is a temporary endeavour intended to solve a problem, seize an opportunity, or respond to a mandate. All types of organizations engage in project activities: Families, Government agencies, small businesses and multinational corporations. They cite examples of public projects as street repair, street lighting, public parking and services for homeless people, among other examples. They further argue that the attention to the management of projects undoubtedly is growing because organizations, whether private or public, have up-scaled their project portfolios and consequently spend large sums of money on project endeavours. From the foregoing concerns, it is clear that project activities are part and parcel of the day-to-day operations of any organization, be it private or public which is the primary focus of this study. According to Chandra (2014), poor planning has been a major constraint in successful implementation of public projects in India culminating in projects becoming uneconomical as a result of time and cost overruns. The end result has been retarded economic development.

The Kenya Pipeline Company (KPC) Limited is a State Corporation 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 also governed by relevant legislations and regulations such as the Finance Act, the Public Procurement Regulations, and Performance Contracting. 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. The Company's mandate includes: Building a pipeline for the conveyance of petroleum or petroleum products

from Mombasa to Nairobi, Owning, managing or operating such pipelines and any other pipelines and associated ancillary facilities, Marketing, processing, treating, dealing in petroleum products and other products and goods and provide transport and other distributive facilities, outlets and services in connection therewith. The Company's current organization structure comprises Government appointed Board of Directors headed by a non-executive Chairman and a Management team under the Managing Director supported by three Chief Managers (Technical, Finance & Strategy and Human Resource & Administration) (KPC, 2018). There are also eleven departments namely, Engineering, Operations, Business Development, Corporate Planning, Finance, Human Resources, Internal Audit, Information Communication Technology, Secretarial, Administration and Procurement which are headed by Managers.

Statement of the Problem

According to Chandra (2014), time and cost overruns of projects are very common in India, particularly in the public sector, which often culminate in projects becoming uneconomical, resources not being available to support other projects and economic development is adversely affected. This view is supported by Oladipo (2008) in a study on local government projects in Nigeria, in which he identifies four key constraints to effective public projects implementation, namely; inadequate quality manpower, poor project planning, inadequate finance and poor project management.

Malala (2011), in his study on the effect of procurement on performance of Constituency Development Fund Projects (CDF) in Kenya (Case study of Kikuyu Constituency) found out that 88% of the projects were rated as being behind schedule, pointing to ineffective implementation process. Wambugu (2008) also, in his study found out that 35% of respondents held the view that there was no local participation in the CDF Projects in Dagoretti.

Again this was a pointer to ineffective project planning and communication process. Further evidence of the problem in Kenya is exhibited by Omanga (2010) who found out that 21% of CDF Projects in Lari Constituency had either stalled or abandoned altogether. This statistic closely tallies with the findings on CDF Projects in Kanduyi Constituency which recorded a 25% project implementation failure during the Financial Year 2008/09, (Mutunga, 2010). On the fore front, the Kenya Pipeline Company failed to successfully implement modernisation of Capacity Enhancement Projects within the stipulated contractual period and initial budget. The contractor blamed this failure on delayed payments and unforeseen but necessary works associated with the project. This clearly pointed to poor project planning and a challenged finance system (KENAO, 2018).

From the above studies it is evident that the challenge of poor project implementation appears to be a replica across the board within the public sector environment globally. This leaves a knowledge gap that has necessitated this study to counter some of the above mentioned challenges. This study therefore seeks to identify strategies that influence successful public sector project implementation and most importantly best procurement practices in public project implementation. It will also go a long way in addressing the shortcomings and impediments that affect project implementation not only at the Kenya Pipeline Company but also in the larger public sector in Kenya. Empirical data demonstrates that organizations which implement their projects effectively perform better with higher productivity levels.

Objectives of the Study

The general objective of this study was to assess the effects of procurement practices on implementation of projects in Kenya Pipeline Company. The specific objectives were:-

- To establish the effects of procurement planning on implementation of projects in Kenya Pipeline Company
- To find out the effects of procurement evaluation on projects implementation in Kenya Pipeline Company.
- To evaluate the effects of procurement contract management on projects implementation in Kenya Pipeline Company.
- To determine the effects of procurement communication on projects implementation in Kenya Pipeline Company.

Research Hypotheses

H₀₁: There is no significant effect of procurement planning on projects implementation in Kenya Pipeline Company.

H₀₂: Procurement contract management does not significantly affect projects implementation in Kenya Pipeline Company.

H₀₃: Procurement evaluation does not significantly affect projects implementation in Kenya Pipeline Company.

H₀₄: There is no significant effect of procurement communication on projects implementation in Kenya Pipeline Company.

LITERATURE REVIEW

Theoretical Framework

Scope Creep Theory

This theory describes the tendency for a project to grow beyond its initial size. Scope is the total amount of work done to accomplish a project management team's project. In other words, it is the sum total of all the products, requirements or services and outcome as one project. In terms of project management, scope is the process needed to make sure that the project is done. Since the project scope is often fluid in nature, it tends to morph as the project progresses, and can easily become disastrous if it's allowed to get out of control due to agile technological development based on subjective quantifications. According to the Six Sigma Project Charter (2014), the

uncontrolled change or continuous growth in a project's scope could occur when it is not properly defined, documented or controlled that is Defined, Measured, Analyzed, Improved, Controlled-DMAIC. It is caused by the team members' enthusiasm, lack of initial project versatility, poor communication between parties, unanticipated issues discovered mid- project execution and redefinition or clarification of customer needs. An effective project management system should focus on understanding the project vision and implementing change order forums early and educating project drivers on their processes. The system should focus also on breaking the approved deliverables into actual work requirements and ensure that the project remains within given budgetary constraints and develops within the appropriate time frame to counter the project probable performance challenges.

Pareto's Theory

This theory postulates that 80% of project's problems and delays are caused by 20% of project activities. According to Juran (2008), Pareto efficient situations are those in which it is impossible to make one project better off without necessarily making another one else worse off. Given a set of alternative allocations of outcomes for a set of projects, a change from one allocation to another that can make at least one project better off without making any other project worse off is called a Pareto improvement. The Pareto criteria assume that utility is a subjective concept, so that the utilities of projects cannot be compared because of the different customer needs discovered mid projects execution.

According to Becker (2012), there is only a small core of activities which account for about 20% that need to be done in project management. Therefore, need for a strategy for the evaluation and prioritization, collection of project proposals in a structured way, and prudent decision on projects to be accomplished. The results are communicated, and approved projects are controlled and executed.

He further advocates that it is imperative for the Project Manager to account for the 80-20 rule in the project plan, scheduling, team allocation, budgeting and the risk management plan. Failure to properly recognize the 80-20 rule may very well result in a project that is over-budget and behind schedule. On the other hand, properly accounting for the 80-20 rule is among the traits of an experienced Project Manager and usually results in both a maintainable schedule and an accurate budget for the project. An effective project management system should focus on activities that carry the highest risks for delay, cost overruns, or performance challenges.

Escalation of Commitment Theory

This theory states that human beings tend to continue pursuing failing courses of action, even when all signals point to the fallacy of the strategy. It is sometimes called sunk costs fallacy because the continuation is often based on the idea that one has already invested in this course of action. Why does escalation of commitment occur? There may be many reasons, but two are particularly important. First, decision makers may not want to admit that they were wrong. This may be because of personal pride or being afraid of the consequences of such an admission. Second, decision makers may incorrectly believe that spending more time and energy might somehow help them recover their losses. The need to escalate resources is linked to Expectancy Theory that postulates that additional resource allocations will lead to goal attainment as well as the value of goal attainment and thereby generate a subjective expected additional resource.

According to Self-Justification and Rationalization Thought Processes (2015), leaders must balance the costs and benefits of any project in order to come up with a final decision. Likewise, Prospect Theory is linked with the way people choose between probabilistic alternatives that involve risk, where the probabilities of outcomes are unknown. It espouses that people makes decisions based on the potential value of losses and gains rather than the

final outcome, and therefore the natural reactions and processes involved in a project decision making involve risk taking situations to any contingencies that could crop up during work on the project.

According to Wong and Kwong (2017), effective decision makers should avoid escalation of commitment by distinguishing between when persistence may actually pay off versus when persistence might mean escalation of commitment. They further avow that to avoid escalation of commitment, one might consider having strict turning back points. Project managers should have explicit definitions of what constitutes a new change or a new project by setting out boundaries. Thus a procurement project management system can have a significant influence on people’s decisions to escalate or de-escalate commitment.

Conceptual Framework

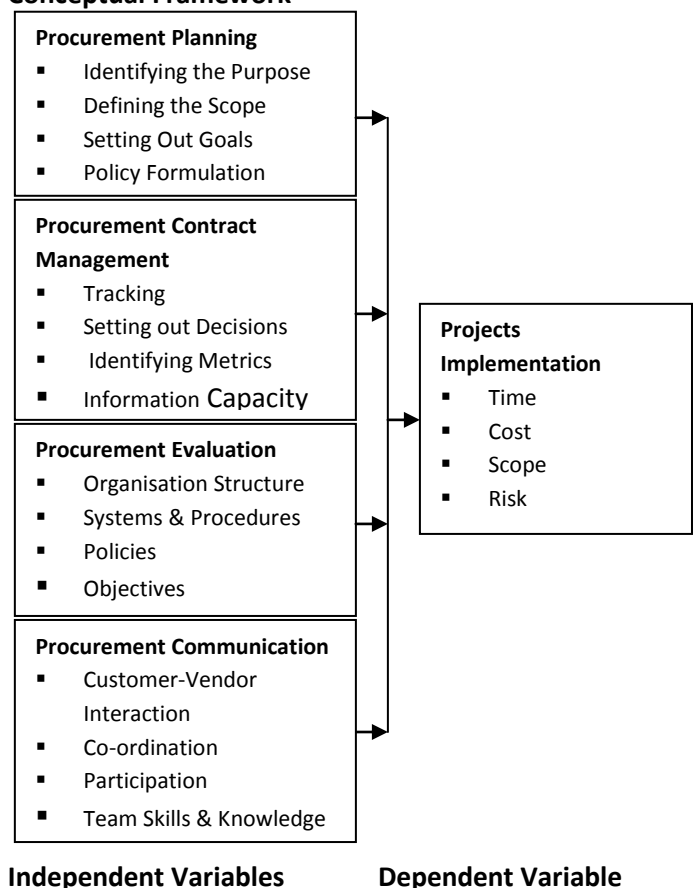


Figure 1: Conceptual Framework

Source: Author (2019)

Procurement Planning

As a general planning principle, Chandra (2014) asserts that unlike small projects that involve few activities, complex projects that go beyond a certain threshold level of magnitude should proceed on the basis of a sound formal planning platform without which there may be chaos. Sound formal planning provides the basis for organizing the work on the project and allocating responsibilities to individuals. It is not only a means of communication and coordination between all those involved in the procurement project but also induces people to look ahead besides instilling a sense of urgency and time consciousness.

According to Taylor (2008), planning entails defining the activities, scheduling and sequencing, planning the requisite manpower and staff required in sufficient quantities and quality, planning the money that should be spent in a time-phased manner and finally planning the information system necessary for effective communication to enhance project monitoring and control. Within the context of public procurement, section 26(3) of the Public Procurement and Asset Disposal Act, 2015 and Regulation 20 of the Public Procurement and Disposal Regulations, 2006 provide for an elaborate structured mechanism for procurement planning for public entities. Of major significance is the requirement for the procurement plan to contain, among other things, a detailed breakdown of goods, works, or services required; a schedule of the planned delivery, implementation or completion dates for all goods, works, or services required; an indication and justification for whether it shall be procurement within a single year period or under a multi-year arrangement, an estimate of the value of each package of goods, works or services required, an indication of the budget available, sources of funding and an indication of the appropriate procurement method for each procurement requirement.

Procurement Contract Management

According to Regulation 8 of the Public Procurement and Disposal Regulations (GOK, 2006), the procurement unit is charged with the responsibility to monitor contract management by user departments to ensure implementation of project contracts in accordance with the terms and conditions of the contracts. The unit is also required to report any significant departures from the terms and conditions of the contract to the Head of the Procuring Entity and to coordinate internal monitoring and evaluation of the supply chain function in respect of the projects being undertaken. Within the context of project procurement contract monitoring, section 47 (b) of the (GOK, 2006) and Regulation 31 of the Procurement Regulations (GOK, 2006) provide for contract variation by the user department vis-à-vis project procurement contract management including, reporting any departures from the terms and conditions of the contract to the procurement unit; forwarding details of any required variations to contracts to the procurement unit for consideration and action; and finally maintain and archive records of procurement contract management and undertaking conformity assessments of supplied goods, works and services with the specifications of the project contract documents. All these actions are important aspects of the procurement project monitoring process embedded in the procurement legal framework to aid effective project implementation.

According to Meredith and Mantel (2012), the key things to be planned, monitored and controlled are time (schedule), cost (budget) and scope (performance). The prescribed public sector procurement plan format as already discussed above exhibits the first two as very prominent features. It is useful to perceive the management process as a closed-loop system, with revised plans and schedules (if warranted) following corrective actions. The planning-monitoring-controlling cycle is continuously in process until the project is completed. This process should be constructed as

an integral part of the organizational structure of the project, not something external to and imposed on it, or worse, in conflict with it. It is important to first define the key factors to be monitored and controlled: Scope, cost and time and the boundaries within which they should be controlled (Larson & Gray, 2010).

Procurement Evaluation

Regulation 29 of the Public Procurement and Disposal Regulations (GOK, 2006) sets out the procurement evaluation procedures to be followed by all state organs and public entities including the national security as established under the Constitution and any other legislation which include either Open Tendering or an alternative procurement procedure. Regulation 62 of the (GOK, 2006) also requires a procuring entity to record the reasons for the choice of a procurement evaluation procedure which is usually dictated by various factors, chief among them being the estimated cost or value of the procurement under consideration, whether the procurement is for an emergency need, or the number of potential suppliers in the market.

It is noteworthy that under section 73 and 74 of the Public Procurement and Disposal Regulations (GOK, 2006) requires a procuring entity to engage in procurement by means of an alternative procurement evaluation procedure which can only be adopted if an accounting officer of a procuring entity where applicable, may conduct a pre-qualification evaluation procedure as a basic evaluation procedure prior to adopting an alternative procurement procedure other than open tender for the purpose of identifying the best few qualified firms for the subject procurement. The purpose of identifying and selecting an appropriate procurement procedure is to find the best way to obtain the solution-result to satisfy the needs of the end user for goods, works and services by obtaining the most advantageous pricing and contractual conditions through a competitive process that will best deliver what is required in a

timely manner while ensuring achievement of the organization guiding procurement principles (Lyson & Farrington, 2009). Regulation 59 and 10(i) of the Public Procurement and Disposal of Regulations (GOK, 2006) requires the procuring entity to invite quotations from persons in the list of prequalified suppliers maintained under regulation 8 of the Regulations and from its own knowledge of the market, and/or through an existing long term agreement (LTA), whether to conduct a new competitive solicitation process, which solicitation method to be used (RFQ, RFP), and which competition should be chosen (limited, open or waiver).

Procurement Communication

Elenbaas (2010) emphasizes the relevance of communication in project implementation by asserting that projects are about communication, communication, communication. He argues that the biggest and most costly problem in any company is lack of communication. In his view, a company may still succeed, but without good internal and external communication the cost of success will be much higher than necessary. Lack of good communication can easily turn a corporate strategy, or an information system project, into a modern day Tower of Babel. Kirksey (2009) re-enforces this position by asserting that one predator of project success is when communications are kept honest and open between customer and vendor. Communication as far as procurement is concerned entails a number of aspects chief of which is communication of the user specifications.

Regulation 9 of the Public Procurement and Disposal Regulations (GOK, 2006) stipulates the following, among others, as the principle responsibilities of the user department: initiation of the procurement and disposal requirements and forwarding them to the procurement unit; reporting any departure from the terms and conditions of the contract to the procurement unit; forwarding details of any required variations to the contract and preparing any reports required for

submission to the procurement unit, the procurement committee, the tender committee, Head of Procuring Entity or the accounting officer; preparing technical specifications and submit the same to the procurement unit and making clarifications on tender, requests for quotations and any other matter as may be required. Wixom et al (2011) postulates that user participation and team skills are two of the serene imperative implementation factors that determine project success or failure and that these two are essential communication skills. He argues that user participation occurs when users are assigned project roles and tasks, which lead to a better communication of their needs and helps to ensure that the system is implemented successfully. He further emphasizes that team skills are a critical factor in implementation success. Team skills are enhanced by interpersonal abilities which are in turn determined by good interpersonal communication skills. To further underscore the value of procurement communication in project implementation, Brown & Hyer (2010) hold the view that keeping key stakeholders (including the Procurement Manager) informed of the project's purpose, goals, progress and changes are key to successful project implementation. At the projects outset and as events unfold, key stakeholders must have the opportunity to comment and provide input. As a result, final project deliverables, and outcomes should not come as a surprise to anyone. To sum it up all, Brown & Hyer (2010) contend that projects run on communication, further noting that people, not plans and software, complete projects. Team members and other stakeholders need information as to what and when to contribute or how the project will affect them. These views by Brown and Hyer coincide with the provisions of the Government procurement regulations as already pointed out above.

Project Implementation

According to Brown and Hyer (2010), effective project implementation or simply put, project success can be measured on the basis of time, cost

and quality (performance), commonly known as the triple constraint. These three factors represent the Key Performance Indicators (KPIs) in relation to the risk involved in the project being implemented. To establish whether a project has been effectively implemented, or better still, if the project has been successful, one has to go back to the initial project goals of time, cost and quality (performance) and be able to measure the extent of their individual achievement.

Brown and Hyer's triple constraint model is premised on the principle of interdependency whereby each constraint affects the others. For example, if a project requires more time, the cost is likely to rise. Likewise, a higher performance may lead to increased project cost. They further argue that whereas there have been widespread project failures; the world has also witnessed remarkable project successes. According to Frese (2008), a successful project must be on time, on budget and deliver quality (features and functions). Anything less will be either a failed project or a challenged project. Thus the envisaged initial project cost, time and project quality (performance) are the three fundamental cornerstones for measuring the effectiveness of any public project. Lysons & Farrington (2009) espouse the view that implementation is about converting a strategic plan into action and doing what needs to be done to achieve the targeted strategic goals and objectives. In most cases, if not all, projects form the heart of those strategies and as such a successfully implemented project would determine the success of any given strategy for creating a competitive edge.

METHODOLOGY

A research design refers to the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Kothari, 2014). This study used a descriptive approach to obtain information from several respondents on the current status of the

phenomena under investigation. It constitutes the blueprint for collection, measurement and analysis of the following key questions about the study: What the study is about, why the study is being undertaken, where it will be carried out, what type of data is required, what will be the sample design, what techniques of data collection will be used, how will the data be analysed and in what style the report will be presented.

FINDINGS

Projects Implementation

The respondents were asked on their level of agreement on the indicators of projects implementation. Descriptive analysis was carried out for the dependent variable to compute the mean, standard deviation and coefficient of variation scores as shown in Table 1.

Table 1: Descriptive of Projects Implementation (N=30)

Statement	Mean	Std. Deviation	Coefficient of Variation (%)
Be finished within contract time schedule	4.60	.563	12.2
Cost optimization and balancing against risks	4.54	.571	12.6
Be finished within original contract cost	4.43	.728	16.4
Adherence to contract time table	4.07	.794	19.5
Meeting performance expectations	4.50	.682	15.2
Justifying incentives for the provider and the user	4.59	.675	14.7
Enhanced through robust procurement systems	4.63	.669	14.4
Matching trade-offs between the triple constraints	4.68	.654	14.0

In total, 8 factors were subjected to ranking and a 5-point Likert scale was used, with the strongest factor scoring five points, whereas the least scored one point. The mean and standard deviation scores were computed as shown in Table 1. Among the factors which resulted from projects implementation in Kenya Pipeline Company, matching trade-offs between the projects triple constraints was found to have the highest mean score of 4.68. The robust procurement systems followed with a mean score of 4.63. The next ranked component was finishing within contract time schedule resulting from projects implementation with a mean score of 4.60 followed by the justification of incentives for the provider and the user with a mean of 4.59. This was followed closely with cost optimization and balancing against

risks and meeting performance expectations with means of 4.54 and 4.50 respectively. The least ranked of the results of projects implementation were finishing projects within original contract cost and adherence to contract time table with mean scores of 4.43 and 4.07 respectively.

Procurement Planning

To analyse the first objective on the effects of procurement planning on projects implementation both descriptive and inferential statistics was carried out. In total, 6 factors were subjected to ranking and a 5-point Likert scale was used, with the strongest factor scoring five points, whereas the least scored one point. The mean and standard deviation scores were computed as shown in Table 2.

Table 2: Descriptive of Procurement Planning (N=30)

Statement	Mean	Std. Deviation
Basis for defining policies for decision making	4.57	.568
Basis for performance measurement	4.55	.572
Basis for justifying the need and procurement initiation purpose	4.70	.466
Basis for responsibilities allocation	4.60	.498
Basis for defining projects' scope	4.52	.505
Basis for preparing budgetary requirements	4.65	.484

Among the procurement planning factors which influenced projects implementation in Kenya Pipeline Company, need justification and procurement initiation purpose was found to have the highest mean score of 4.70. The aspect of basis for preparing budgetary requirements followed with a mean score of 4.65 which was also followed closely with the agreement that basis for responsibilities allocation was affecting projects implementation with a mean score of 4.60. The aspect of defined policies for decision making followed with mean of 4.57. The next ranked component was basis for performance

measurement which had mean score of 4.55. The least ranked of the result on the influence of procurement planning on projects implementation was defined projects' scope with mean value of 4.52. The relatively low standard deviations are indicators to the effect that there were less variations among the respondents' opinions to the questions at hand.

Procurement Contract Management

The second objective was to determine the effect of procurement contract management on projects implementation at KPC.

Table 3: Descriptive of Procurement Contract Management (N=30)

Statement	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree	Mean	Std. Deviation
Information Generation	0.0%	0.0%	10.0%	31.6%	58.4%	4.50	.572
Performance Improvement	0.0%	0.0%	12.6%	36.4%	51.0%	4.37	.615
Metrics Identification	0.0%	0.0%	12.2%	40.3%	47.5%	4.39	.610
Constructive Relationship	0.0%	18.6%	0.0%	47.0%	34.4%	4.07	.944
Project Variances	0.0%	17.6%	0.0%	50.4%	32.0%	4.12	.898
Administration	0.0%	15.4%	0.0%	40.2%	44.4%	4.23	.742

On the basis of the result in table 3; it was found that procurement contract management directly influence the success of a project in relation to information capacity generation. This was according to 58.4% and 31.6% who strongly agreed and agreed respectively. Of the sampled respondents, 10% were not sure and none disagreed to the research statement. There was a low variation in responses as indicated by the low standard deviation of 0.572 with the mean of 4.50. It was also found out that effective delivery management in procurement contract management provides a basis for obtaining high level of quality hence higher performance in project execution with the desired target achievements that satisfy customer needs economically. This is indicated by a total of 87.4% of the respondents who were in agreement. However, 12.6% were not sure and none disagreed. There was a general agreement on this statement as

indicated by the low standard deviation of 0.615 with the mean of 4.37.

It was further noted that identification of metrics relevant to project being implemented enhances innovativeness. This according to a total of 87.8% of the respondents who were in agreement. However, 12.2% disagreed with a mean of 4.39. A standard deviation of 0.610 indicated that there was a strong consensus on the response to this statement. In addition, it was determined that effective relationship management in procurement contract management seeks to keep the relationship between the economic operator and the contracting authority open and constructive. A total of 81.4% of the respondents agreed, and 18.6% disagreed as indicated by the mean of 4.07 and the relatively high standard deviation of 0.944.

Furthermore, it was found out that tracking in procurement contract management is the driving force in identifying project variances from the project's initiation to its closure. A total of 82.4% of the respondents were in agreement. However, 17.6% disagreed. There was moderate variation in responses as indicated by the relatively high standard deviation of 0.898 with a mean of 4.12. Moreover, it was established that good contract administration in procurement contract management ensures that the everyday aspects of making the contract run effectively and efficiently are taken care of. This according to a total of 84.6% of the respondents who agreed. However, 15.4% disagreed with the mean of 4.23. The low standard deviation of 0.742 indicated that there was a strong consensus on the response to this statement.

McChesney and Covey (2015) indicate that projects implementation should be based on disciplines that work, not practices, because practices can be situational, subjective, and always evolving while principles are timeless and self-evident and they

Table 4: Descriptive of Procurement Evaluation (N=30)

Statement	Mean	Std. Deviation	Variance
Indicating procurement organogram	4.47	.571	.326
Determining procurement specific objectives	4.49	.574	.329
Encompasses procurement environment	4.50	.509	.259
Guidelines in procurement sourcing policies	4.63	.490	.240
Enhances delegation of authority	4.60	.498	.248
Detecting procurement operations and transactions	4.75	.460	.212

Among the procurement evaluation sub variables which influence projects implementation in Kenya Pipeline Company, detecting procurement operations and transactions was found to have the highest mean score of 4.75. The aspect of having existing guidelines in procurement sourcing policies to support projects implementation followed with a mean score of 4.63 which was also followed closely with the enhancement of authority delegation for daily activities with a mean score of 4.60. The oil energy company having conducive procurement environment followed with a mean score of 4.50 while the procurement objectives and organogram was ranked last with mean scores of 4.49 and 4.47

apply everywhere just like laws of nature such as gravity. The principles of projects implementation are focus, leverage, engagement and accountability. The results agree with empirical studies by Li, and Eppler (2008) who assert that there is a need to develop commitment by the members of an organization to key projects implementation decisions. Here the assumption is that people are motivated more by their perceived self-interest than by the organizational interest unless these are congruent. They found out that if middle managers believe that their self-interest is being compromised they are likely to redirect, delay or totally sabotage the implementation. The descriptive results show that procurement contract management influences projects implementation greatly.

Procurement Evaluation

The third objective was to determine the effect of procurement evaluation on projects implementation. The descriptive statistics was performed and the result shown in table below.

respectively. The low variance generally is an indicator to the effect that there were low variations among the respondents' opinions to the questions. Beer and Eisenstat (2012) think managers can increase commitment with involvement and integration of employees from lower levels. The involvement will create a kind of ownership in the evaluation, which increases commitment enormously.

Procurement Communication

The study sought to find out whether procurement communication affects projects implementation. Data on procurement communication was analysed and presented in table 5.

Table 5: Descriptive of Procurement Communication (N=30)

Statement	Mean	Std. Deviation	Variance
Enhances customer-vendor interaction	4.53	.507	.257
Enhances accurate and timely information	4.64	.486	.236
Enhances buyer-supplier relationship	3.80	1.126	1.268
Enhances mutual trust and understanding	4.11	.975	.951
Enhances participation and team skills	4.23	.935	.874
Acts as a joint approach to delivery management	3.88	1.100	1.210

Among the procurement communication sub variables which influence projects implementation in Kenya Pipeline Company, the respondents confirmed that accurate and timely information was influencing projects implementation as it had the highest mean score of 4.64. The customer-vendor interaction in the oil company was found to have a mean score of 4.53. The culture of participation, team skills and knowledge followed both with a mean score of 4.23. Mutual understanding processes in the company scored a mean of 4.11. The least ranked components were the joint approach to delivery management and buyer-supplier relationship which had mean scores of 3.88

and 3.80 respectively. The relatively high standard deviation generally indicates that there were elicited more variations on the opinions of the respondents to these questions.

Correlation Results

Pearson Bivariate correlation coefficient was used to compute the correlation between the dependent variable (projects implementation) and the independent variables (procurement planning, procurement contract management, procurement evaluation and procurement communication).

Table 6: Correlation Matrix

		PI	PP	PCM	PE	PC
Projects Implementation	Pearson Correlation	1.				
	Sig.(2-tailed)					
	N	30				
Procurement Planning	Pearson Correlation	.327	1.			
	Sig.(2-tailed)	.002				
	N	30				
Procurement Contract Management	Pearson Correlation	.202	.797	1.		
	Sig.(2-tailed)	.005				
	N	30				
Procurement Evaluation	Pearson Correlation	.261	.037	.702	1.	
	Sig.(2-tailed)	.004				
	N	30				
Procurement Communication	Pearson Correlation	.210	.166	.298	.326	1.
	Sig.(2-tailed)	.004				
	N	30				

Regression Results

The study conducted a multiple regression analysis so as to determine the combined effect of all the independent variables on projects implementation at KPC. Multiple linear regression analysis is a general statistical technique used to model the

relationship between a single dependent variable and several independent variables (Anderson & Tatham, 2015). The main purpose of multiple regression is to learn more about the relationship between several independent or predictor variables and a dependent or criterion variable.

Table 7: Model Summary and Parameter Estimates

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	-.880	.101		-8.079	.000
Procurement Planning	1.015	.071	.305	18.445	.001
Procurement Contract Management	.776	.099	.211	8.463	.001
Procurement Evaluation	.952	.047	.247	14.574	.001
Procurement Communication	.881	.070	.237	12.899	.001

Table 8: Goodness of Fit Model

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.898 ^a	.806	.775	.032 ^b

Table 9: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	21.280	4	5.320	53.20	.002 ^b
Residual	2.500	25	.100		
Total	23.780	29			

Hypotheses Results

The study hypotheses were stated in the null form and the hypotheses testing and results were discussed as follows:

Hypothesis One

To determine the effect of procurement planning on projects implementation, the first hypothesis was stated as follows:

H₀₁: There was no significant effect of procurement planning on projects implementation at Kenya Pipeline Company. The Beta test was used to test hypothesis and the results shown indicated that Beta was 1.015 at p-value of 0.001. This therefore led to the rejection of null hypothesis one; meaning that there is a significant effect of procurement planning on projects implementation. The results were in congruence with the empirical study by Olsen, Slater and Hult (2015) in which they found out that projects implementation is strongly influenced by how well a firm's procurement planning is matched to its organizational procurement structure and best procurement practices. They saw many organizations adopted structures and encouraged best practices that

reinforce their planning and concluded that firms that match structure and practices to planning fare better than those that do not.

Hypothesis Two

To determine the effect of procurement contract management on projects implementation, the second hypothesis was stated as follows:

H₀₂: Procurement contract management does not significantly affect projects implementation at Kenya Pipeline Company. The Beta test was used to test hypothesis and the results shown indicated that Beta was 0.776 at p-value of 0.001. This therefore led to the rejection of null hypothesis two; meaning that there is a significant effect of procurement contract management on projects implementation. The results corroborate with a study by Speculand (2014), which found out that to conduct a successful projects implementation, leaders should focus on implementing effective and efficient contract administration, oversee and stay committed to the implementation, adapt and amend contract administration and implementation as required, create the right conditions for the implementation and carry out follow-up.

Hypothesis Three

To determine the effect of procurement evaluation on projects implementation, the third hypothesis was stated as follows:

H₀₃: Procurement evaluation does not significantly affect projects implementation at Kenya Pipeline Company. The Beta test was used to test hypothesis and the results shown indicated that Beta was 0.952 at p-value of 0.001. This therefore led to the rejection of null hypothesis three; meaning that there is a significant effect of procurement evaluation on projects implementation. The findings conform to Thompson *et al.* (2011) who observe that procurement evaluation is considered one of the success practices for projects implementation because it influences the organization's actions and approaches to implementing projects.

Hypothesis Four

To determine the effect of procurement communication on projects implementation, the fourth hypothesis was stated as follows:

H₀₄: There was no significant effect of procurement communication on projects implementation at Kenya Pipeline Company. The Beta test was used to test hypothesis and the results shown indicated that Beta was 0.881 at p-value of 0.001. This therefore led to the rejection of null hypothesis four meaning; that there is a significant effect of procurement communication on projects implementation. Beaudan (2012) supports that communication can promote projects implementation, when it is open, honest, its values and practices are projects' supportive, and add to the company's projects implementation efforts.

DISCUSSION

Procurement Planning

From the descriptive result, it was established that procurement planning had a great effect on projects implementation at Kenya Pipeline Company. The relatively low standard deviations were indicators to the effect that there were less

variations among the respondents' opinions to the procurement planning statements at hand. The correlation results also indicated that there was a positive and significant effect of procurement planning on projects implementation. This reveals that any positive change in procurement planning led to increased implementation of projects. The effect has been illustrated by the correlation coefficient of 0.327 at p-value of .002, implying a positive significant effect of procurement planning on projects implementation at Kenya Pipeline Company. An F statistic of 33.668 indicated that the overall model for procurement planning was significant as it was larger than the critical F value of 2.76 with (4, 25) degrees of freedom. The findings imply that procurement planning was statistically significant in explaining projects implementation in Kenya Pipeline Company.

Procurement Contract Management

On the basis of the descriptive result obtained, the low standard deviations indicated that there were strong consensus on the responses to the statements. The Pearson's correlation results for procurement contract management in this study was $r = 0.202$ at p-value of .005. These results indicated a weak and significant effect of procurement contract management on projects implementation in Kenya Pipeline Company. This means that contract administration in Kenya Pipeline Company does not significantly affect much on projects implementation and that an increase in procurement contract management in Kenya Pipeline Company will lead to a minimal increase in projects implementation. An F statistic of 11.799 that was obtained from the model is greater than F-critical value of 2.76 with (4, 25) degrees of freedom. The findings imply that procurement contract management was statistically significant in explaining projects implementation in Kenya Pipeline Company, albeit to a minimal extent.

Procurement Evaluation

The descriptive statistics result revealed that there was generally low variance among the respondents' opinions to the questions. The correlation results

indicated that there was a positive and significant effect of procurement evaluation on projects implementation. This revealed that any positive change in procurement evaluation led to increased implementation of projects activities. The effect has been illustrated by the correlation coefficient of 0.261 at p-value of .004, implying a positive significant effect of procurement evaluation on projects implementation in Kenya Pipeline Company. An F statistic of 24.892 that was obtained from the model is greater than F-critical value of 2.76 with (4, 25) degrees of freedom. The findings imply that procurement evaluation was statistically significant in explaining projects implementation in Kenya Pipeline Company.

Procurement Communication

The relatively high standard deviation from the descriptive result generally indicated that there were elicited more variations on the opinions of the respondents to the statements. The correlation results indicated that there was a positive and significant effect of procurement communication on projects implementation. This revealed that any positive change in procurement communication will lead to increased implementation of projects. The effect has been illustrated by the correlation coefficient of 0.210 at p-value of .004, implying a positive effect of procurement communication on projects implementation in Kenya Pipeline Company. An F statistic of 13.491 indicated that the overall model was significant as it was larger than the critical F value of 2.76 with (4, 25) degrees of freedom at the p-value of 0.05 level of significance. The findings implied that procurement communication was statistically significant in explaining projects implementation in Kenya Pipeline Company.

CONCLUSIONS

The study made several conclusions based on the findings. First, procurement practices were one of significant determinant of projects implementation in Kenya Pipeline Company. Accordingly, procurement planning was rated the most important and the explanations provided on the

value of procurement planning for successful projects implementation. It was therefore important to prioritize procurement planning for successful projects implementation. Procurement evaluation was also undoubtedly seen as the single most critical practice that should be put in focus while executing projects, and therefore would have a significant bearing on timely completion of projects.

Procurement communication within the context of procurement plays a critical role in effective projects implementation. Specifications have to be communicated to the procurement unit through an efficient procurement communication system. Clear communication between Procurement, Finance, Users, Legal Department, Top Management and External Stakeholders, including suppliers, are of critical importance in projects implementation. Furthermore, it was interesting to note that procurement contract management was equally of paramount importance to projects implementation in Kenya Pipeline Company as it ensures that the everyday aspects of making the contract run effectively and efficiently are taken care of.

RECOMMENDATIONS

From the going concerns, it is clearly imperative to put in place the following measures to re-enforce the existing mechanisms and practices: Organizations and policy makers should strive to strengthen their procurement planning, procurement evaluation, procurement communication and procurement contract management systems so as to ensure successful projects implementation. This way, the project objectives of time, cost and quality vis-a-viz risk will be realized. The Public Procurement Regulatory Authority and the National Treasury should re-look at the current Public Procurement & Asset Disposal Act 2015 and the Regulations 2006 with a view to shortening the procurement process. Projects should be demystified so that they are not made to look as if they are a preserve only of the top and middle level managers at the total exclusion of the

lower staff. Paradoxically, these same lower level staffs are the ones expected to use the project once complete. Further research should be carried out to establish whether and how other procurement practices other than those focused upon in this study as variables could be responsible for effective projects implementation.

Areas for Further Research

Further research has been recommended in other procurement practices that have ramifications for

projects implementation such as pre-qualification of suppliers, choice of procurement procedure, procurement committee meetings, inspection & acceptance of goods, procurement monitoring and control, storage of goods and supplier payment. This would enable a more adequate response in addressing the myriad procurement challenges affecting projects implementation in the public as well as the private sector in Kenya.

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