

Procurement Practices Affecting Effective Public Projects Implementation in Kenya: A Case Study of Kenya Civil Aviation Authority

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Abstract

The purpose of this study is to assess the state of public projects implementation in Kenya and to bring to the fore the key factors that underlie their successful implementation process. The principle question to be addressed by this study is ‘what procurement practices are responsible for projects failure in the Kenyan public sector?’

To answer this question and to achieve the primary objective of this study, the researcher focuses on the situation at Kenya Civil Aviation Authority (KCAA) as a case study. KCAA has been selected for this study because it is one of the major public institutions with a significant portfolio of public projects, some of which have succeeded whereas others have failed. The Corporation has a staff population of 650 personnel, out of which the researcher seeks to survey 10% through questionnaires, interviews and individual discussions, cutting across all the levels of management. A presentation of the analyzed data and the analysis techniques are also provided.

The researcher has also provided a literature review, under chapter two, of all the variables of interest which have been distinctly classified as either dependent or independent. These include such factors as: Procurement Planning, Contract Monitoring & Control, Choice of Procurement Procedure; and lastly but not least Communication. The study demonstrates whether these practices indeed affect public projects implementation at KCAA and therefore in Kenya at large. It is also a summarized presentation of the views and findings of other scholars and authors who have written on the subject and attempted to construct a framework of the interrelationship between the identified variables. To sum up, the study will present key findings and ultimately provide the necessary recommendations premised on the findings of the research study

Keywords: Project, Public Project, Project Implementation, Electronic Data Interchange, E- Commerce, E-Procurement

1. Introduction

1.1 Background

According to Chandra (2008), 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. 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.

Chandra (2008) cites examples of public projects such as; investment in a public transport system like construction of a new railway line or expansion of the existing railway infrastructure, development of public housing, research and development, training, and so on that are expected to generate benefits over a period of time. 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.

Chandra 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. Chandra 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 endeavor 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. Brown and Hyer cite examples of public projects as street repair, street lighting, public parking and services for homeless people, among other examples.

Brown and Hyer (2010) 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 endeavors. This is evidenced through the statistics on worldwide growth of the Project Management Institute (www.pmi.org). At the end of 2002, the organization had fewer than 100,000

members. Nearly 10 years later, the number had tripled to more than 300,000. These statistics serve to explain the growing interest in projects management and implementation because substantial amounts of the organizations' limited resources are channeled into projects. Organizations continue to view projects as vehicles to achieving their stipulated objectives and targets and thereby being able to effectively execute their legal mandates. In fact, in the words of Brown and Hyer (2010), projects are the wheels on which organizations run to attain their strategic goals.

From the foregoing, 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. But why do public organizations or Government institutions engage in project activities? To answer this question, we turn to Jonathan Murray's analysis of the United States experience. Jonathan states that the US Government involvement in public works projects was motivated by the need to create jobs while improving the nation's infrastructure. Established by Title II of the National Industrial Recovery Act (NIRA), the Public Works Administration (PWA) was an expansive, Depression-era Federal government spending programme that not only aimed to expand job opportunities but also enhance infrastructure which would ultimately stimulate economic growth. In recognizing the essence of having a structured administration of public works projects, the US Government in 1933 set up a state agency called Public Works Administration (PWA) to provide oversight and to coordinate all public works projects.

Equally, several other countries of the world, including France and Germany among others, have been driven by the motivation to address certain inadequacies, imbalances or gaps existing in the economy which the private sector alone could not otherwise effectively deal with. The way to attain this is by initiating relevant public projects.

Previous studies on public projects have demonstrated that there exist a myriad challenges that impede their successful implementation. According to Chandra (2008), 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 over-runs. The end result has been retarded economic development. This view is supported by Oladipo (2008) who evaluated local government projects in Nigeria where he identified key project impediments as poor project planning, inadequate quality manpower, inadequate finance and poor project monitoring.

On the local front, similar situations affecting successful project implementation within the public sector in Kenya obtain. The Kenya Civil Aviation Authority being a public institution is no exception to these challenges. According to Kenya National Audit Office (KENAO) (2010), the Authority failed to successfully implement the swimming pool project 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.

1.2 Problem Statement

As already pointed out above, projects are part and parcel of the normal operations of public sector organizations. The projects which are funded by public funds aim at achieving certain organizational objectives set by public sector organizations to facilitate fulfillment of their mission. In some instances these objectives are not achieved. From previous studies, the challenge of poor project implementation appears to be a replica across the board within the public sector environment globally as evidenced below.

Chandra (2008) asserts that time and cost over-runs 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. He identifies eight pre-requisites for successful project implementation, namely; adequate project formulation, sound project organization, proper implementation planning, advance action, timely availability of funds, judicious equipment tendering & procurement and effective monitoring. 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 planning and implementation, namely; inadequate quality manpower, paucity of data, inadequate finance and poor project monitoring. Brown and Hyer (2010) cite a Standish Group report which indicates that companies in the United States spend \$250 billion on information technology (IT) projects annually; and out of this nearly half of all IT projects end at nearly double their original budgets.

The consequences of gaps in implementation are obvious and unlimited ranging from wastage of the limited public resources, inadequate service delivery to the public to impeding economic development of the country with the ultimate result of perpetual high poverty levels among the world's majority populace (Chandra, 2008). Previous studies in Kenya have provided evidence of the existence of a serious problem of ineffective project implementation within the public domain. A case in point is the Kenya Civil Aviation Authority which failed to realize one of its key strategic objectives which was to be realized through the rehabilitation of a swimming pool within a certain timeline. The project was not achieved within the contractual period and the contractor blamed it on delayed payments and unforeseen but necessary works associated with the project, KENAO (2010). 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. In the same study, 35% of respondents held the view that there was no local participation in the CDF Projects. Again this was a pointer to ineffective project planning and communication process.

Further evidence of the problem in Kenya is exhibited by Kirungu (2011) in a study on factors influencing implementation of Donor Funded Projects. She observes that the Financial and Legal Sector Technical Assistance Project (FLSTAP) under the Ministry of Finance (The National Treasury) has faced challenges to do with implementation and therefore not able to achieve its goals within the stipulated timeframes. She further cites a World Bank Report (2009) which indicated that the current average project funds absorption rate was less than 10% per annum which was attributed to a constrained procurement process. On his part, Omanga (2010) 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 2007/08, Mutunga (2010).

Empirical data demonstrates that organizations which implement their projects effectively perform better with higher productivity levels. A case in point is the Indigenous Honeybees Project in the Himalayas by the Government of Nepal, Gurung et al (2002). Other scholars including Brown and Hyer (2010) also hold this view contending that organizations with systematic project management processes are more effective and successful than those on the lower Project Management Maturity scale giving the example of Quadrant Homes Company. The company ranks high in terms of project management maturity.

Arising from the foregoing, the current study seeks to identify factors that influence successful public sector project implementation and best practices in public project implementation. The findings of the study will go a long way in addressing the shortcomings and impediments that affect project implementation not only at the Kenya Civil Aviation Authority but also in the larger public sector in Kenya. It will also add to the already existing knowledge and findings established by other researchers on public sector projects implementation.

1.3 Study Objectives

1.3.1 General Objective

The aim of this study is to assess the procurement practices that affect effective implementation of projects within the public sector in Kenya.

1.3.2 Specific Objectives

1. To establish if procurement planning affects implementation of public projects.
2. To find out if choice of procurement procedures influences public projects implementation.
3. To evaluate if contract monitoring and control influence public projects
4. To determine if communication affects public sector project implementation

1.4 Research Questions

The principle research questions of the study will include:

1. How does procurement planning affect project implementation?
2. How does choice of a procurement procedure affect project implementation?
3. How does contract monitoring and control contribute to effective project implementation?
4. How does communication influence the success or failure of projects in the public sector?

1.5 Importance/significance of the study

The approved budget of the Kenya Civil Aviation Authority for the Financial Year 2012-2013 was approximately Ksh.6 Billion. Out of this, about Ksh.3.5 Billion was allocated for development projects. These are colossal amounts which need to be put to proper use to realize value for money. The Authority is charged with the responsibility to regulate the aviation industry including the role to ensure air safety and security for air transport users. In order to effectively fulfill this mandate, the Authority invests in the development and maintenance of relevant physical infrastructure and equipment for efficient provision of its regulatory services. One such area where a huge investment has been made is the Air Navigation Services Communication Equipment. Air transport plays a crucial role in so far as it facilitates international trade between Kenya and the rest of the world, and in return boosts Kenya's economic growth and development. The continued growth in the country's export sector and tourism is a testament to this fact. This study would therefore be of great importance not only to KCAA but also the Ministry of Transport under which the Authority operates, and the Government of Kenya at large.

Besides, the Public Procurement and Oversight Authority (PPOA) which is charged with the regulation of public procurement will benefit by understanding the challenges in implementation of public projects. The PPOA and the Ministry of Finance (National Treasury) will also understand how procurement system affects project implementation and what improvements are needed to achieve greater success. Every year huge sums of money are returned to the Treasury by public entities for their inability to spend. It has been argued that this is due to the lengthy procurement procedures. The PPOA and the Ministry of Finance may need to use the findings to review the current Procurement and Finance Regulations to enhance project implementation.

The findings will also bring to the fore new knowledge which policy makers, procurement practitioners and scholars will find useful in accelerating success in public projects implementation. It is also hoped that the research findings will be an eye opener to stimulate more research in the area of procurement practices vis-à-vis public projects.

1.6 Scope of the study

The study will focus on the Kenya Civil Aviation Authority (KCAA) which is one of the public sector organizations in Kenya and will cover the Head Office and all the major out-stations of the Authority across the country. These stations include; Jomo Kenyatta International Airport (JKIA), Moi International Airport Mombasa (MIA), Eldoret International Airport, Kisumu Airport and Wilson Airport Nairobi. The study confines itself to projects at KCAA due to constraints of both cost and time as it would not be practically feasible to study all public entities engaged in projects implementation.

1.7 Limitations of the study

The researcher encountered the following limitations while conducting the study: Some respondents were reluctant in giving information for fear of victimization. Also some respondents said they did not want to give their time to answer the questionnaire because they said they were busy with their office work. It took much persuasion to get them fill the study questionnaires. Some respondents also exhibited challenges with the use of computer and could not respond to the questionnaires sent to them via e-mail.

2. Literature Review

2.1 Introduction

This chapter will focus on the review of both the theoretical and empirical literature on public projects implementation, the concept of public projects, and will most importantly demonstrate how the various factors impact on effective public projects implementation. The chapter will also present the conceptual framework of the study.

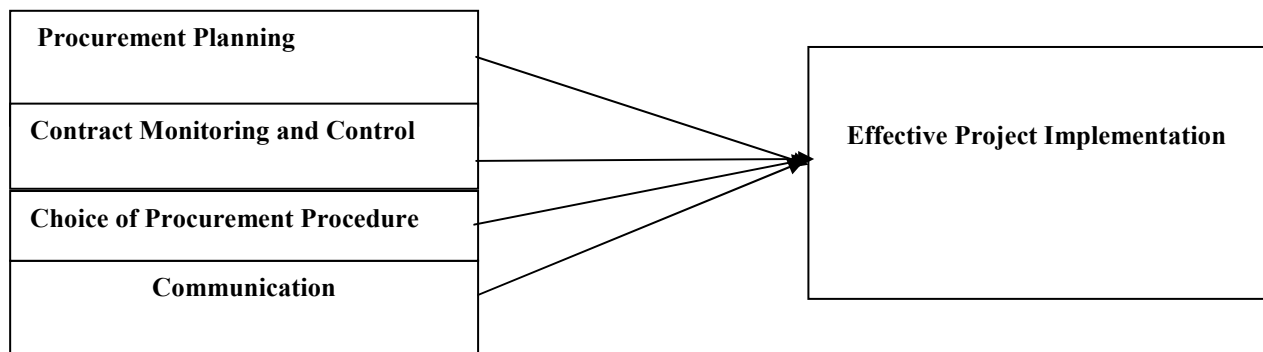
2.2 Conceptual Framework

Conceptual framework is defined as a presentation in graphical form of the linkage between the identified variables in the study. It comprises of the dependent and independent variables. For purposes of this study, the dependent variable is the effective implementation of public projects whereas the independent variables are project planning, procurement & finance systems, project monitoring and control, and communication.

The conceptual framework for this study is presented in the figure 2.1 below.

Independent Variables

Dependent Variables



2.3 Review of Variables

2.3.1 Procurement Planning

As a general planning principle, Chandra (2008) 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. Above all planning provides the basis for monitoring and control.

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 Disposal Act 2005 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.

Planning will also involve setting out goals, and also includes an outline of the time and cost. Well defined objectives and policies serve as the framework for the decisions to be made by the procurement manager.

Brown and Hyer (2010) have asserted that in general planning includes identifying the purpose, defining the scope, determining customer requirements (user needs), identifying tasks (key procurement activities), estimating time (delivery schedules for goods and services) and cost, assigning responsibilities and other activities. Planning answers the question: What does the organization hope to accomplish by successfully completing this project? What organizational result is expected?

In underscoring the critical role planning plays in successful project implementation, Frese et al (2003) contends that planning requires excellent forward planning, which includes detailed planning of the process implementation stages and milestones, task timeliness, fallback positions and re-planning. What this means is that initial planning is not enough. Projects often take wrong turns, or initial solutions prove unfounded thereby necessitating re-planning and going back to the drawing board. A procurement plan may thus be subjected to review from time to time as and when necessary. Frese emphasizes that planning requires an interactive process that requires agile re-thinking as the known environment shifts.

According to Saunders (1997), planning also encompasses the aspects of forecasting techniques to help in the process of predicting costs and cash flows (financial disbursements). The other critical element of procurement project planning is deciding on the organization structure. The structure will normally be affected by the strategic choices in relation to competitive advantage and the competitive scope. Aspects of functional specialization and the balance between centralization and decentralization of procurement activities need to be reflected in decisions. Attention may also be on the development of coordinating mechanisms such as matrix structures, multifunctional teams and committees. In some cases, procurement project teams or task forces may be formed for specific projects.

Lysons and Farrington (2006), on their part, have also underscored the relevance of resource allocation as an aspect of planning in the process of the project implementation strategy formulation. Resource allocation at this stage will normally assume the form of financial, physical, human and technological resources allocated to a function or activity. Such allocation is usually reduced to quantitative terms expressed in procurement budgets or financial statements of resources needed to achieve specific objectives or to implement a formulated strategy. Closely linked to procurement project planning, according to Lysons and Farrington, is the concept of policy formulation. Policies are instruments for strategy implementation. In this context, a policy is defined as a body of principles expressed or implied, laid down to direct an organization towards its objectives and guide executives in decision making. Such policies would therefore be critical in determining how decisions relating to the implementation of an organization's project for which the procurement is being undertaken would be taken and acted upon. From the perspective of public procurement, the general Government policy on procurement is competitive bidding. This is what constitutes the general framework within which decisions regarding the choice of a procurement method are made.

Essentially therefore the process of procurement planning is to serve as a safeguard against delayed implementation of public projects and to avoid situations of budgetary constraints which would hinder successful project execution and completion. Establishing whether these aspects of public procurement have had any bearing on the level of project implementation remains a significant focus for this current study.

2.3.2 Contract Monitoring and Control

According to Regulation 8 of the Public Procurement and Disposal Regulations 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 contract monitoring and control, section 47 (b) of the PPDA 2005 and Regulation 31 of the Procurement Regulations 2006 provide for contract variation shall be effective only if the price variation is based on the prevailing price index obtained from Central Bureau of Statistics or the monthly inflation rate issued by the Central Bank of Kenya; the quantity variation for goods and services does not exceed ten 10% of the original contract quantity; the quantity variation for works does not exceed fifteen per cent of the original contract quantity, and finally the price or quantity variation is to be executed within the period of the

contract. Further, Regulation 32 provides for project contract termination subject to approval by the tender committee which authorized the original contract.

On the other hand, the responsibility of the user department vis-à-vis project contract management include, among others; 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 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 and control 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 control 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.

According to Brown and Hyer (2010), monitoring refers to any tracking system from a simple checklist to sophisticated dashboard style approaches, for identifying variances from the original plan. They advance the argument that as part of the planning process, a project team should agree on the appropriate approach for monitoring key performance indicators (KPIs) during the life of the project.

On the other hand, Brown and Hyer (2010) define the concept of project control as the set of processes, decisions, and actions involved in responding to project variances. Project control thus portends a project change management process for deciding when changes are appropriate and when to stay the course.

Brown and Hyer (2010) have anchored their argument for monitoring and control on the fact that there are several phenomena which influence project execution and cause actual performance to depart from planned performance. These phenomena include: (i) Scope Creep; which describes the tendency for a project to grow beyond its initial size. It is caused by the team members' enthusiasm; unanticipated issues discovered mid-project and redefinition or clarification of customer needs; (ii) Murphy's Law; which espouses the principle that anything that can go wrong will go wrong. This means that not all risks can be accurately anticipated; (iii) Pareto's law; which postulates that 80% of project's problems and delays are caused by 20% of project activities. An effective project monitoring system should focus on activities that carry the highest risks for delay, cost overruns, or performance challenges; and lastly, (iv) Escalation of Commitment principle which states that human beings tend to continue pursuing failing courses of action, even when all signals point to the fallacy of the strategy. Thus a procurement project contract monitoring system can have a significant influence on people's decisions to escalate or de-escalate commitment.

In a nutshell, Brown and Hyer (2010) suggest six principle pre-requisites for a sound project contract monitoring and control system which are: (i) Ability to identify metrics relevant to the project, that is, a balanced set of performance indicators; (ii) The system should be in-built into the project plan right from the point of project planning stage; (iii) Capacity to generate accurate information (iv) Capacity to generate timely information for timely decision making and corrective action.; (iv) Visibility to team members to enable every individual player/stakeholder to know what is being measured and have ready access to the information; (v) Ability to provide a basis for problem discovery and solution; not a mere 'big brother is watching' kind of mechanism that strikes fear into the hearts of participants.

Chandra (2008) on his part avers that control is critical to implementation success in so far as it compels regular comparison of performance against targets, a search for the causes of deviation, a commitment to check adverse variances. Monitoring triggers off an effort to search for solutions to the identified threats to the project success. Chandra has identified one significant factor, among others, that undermines effective project monitoring and control which tends to ultimately impact on the level of implementation success. The key factor according to Chandra is project characteristics which encompass the project's large size, complex undertakings involving many organizations and people rendering it difficult to keep track of physical performance and expenditure on hundreds or even thousands of activities relating to the project. This also poses the challenge of coordination and communication difficulties where several organizations and people are involved in the same project.

This view is supported by Frese (2003) who hold that effective project implementation requires continual monitoring and measurement of time, milestones, people and equipment schedules. Properly done schedule control will give the first hint that initial planning may not be going according to schedule. Picking on these hints, one can have an early opportunity to implement a fallback position and/or replan to get back on track.

2.3.3 Choice of Procurement Procedure

Regulation 29 of the Public Procurement and Disposal Act 2005 sets out the procurement procedures to be

followed by a public procuring entity which include either Open Tendering or an alternative procurement procedure. Alternative procurement procedures provided include: Restricted Tendering, Direct Procurement, Request for Proposals, Request for Quotations, Procedure for Low-Value Procurements and Specially Permitted Procedure. The choice of a procurement method 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 the use of an alternative procurement procedure can only be adopted if a written approval of the tender committee of the procuring entity is obtained and the procuring entity records in writing the reasons for using the alternative procurement procedure.

For purposes of this study, the researcher shall discuss only four of the major procurement procedures provided in the procurement regulations as below:

2.3.3.1 Open Tendering

Part IV of the Public Procurement and Disposal Regulations 2006 states that a procuring entity that conducts procurement using the open tender method shall allow for a minimum period of time of 30 days between advertising and deadline for submission of international tenders, whereas the minimum period for national open tender shall be 21 days. Upon receipt of the tenders, the tenders are subjected to a three stage evaluation process, thus preliminary evaluation, technical evaluation and financial evaluation. The evaluation report will consist of, among other things, a summary of all tenders received and opened, results of the preliminary evaluation, results of the technical evaluation, reasons why any tenders were rejected, ranking of the tenders each according to its total evaluated price, the results of any confirmation of qualification conducted and a recommendation to award the contract to the lowest evaluated tender or any other recommendation as may be necessary.

2.3.3.2 Restricted Tendering

Section 73 of the Act provides that a procuring entity may engage in procurement by means of restricted tendering if the following conditions are satisfied: (a) competition for contract, because of the complex or specialized nature of the goods, works or services is limited to pre-qualified contractors; (b) the time and cost required to examine a large number of tenders would be disproportionate to the value of the goods, works or services to be procured; and (c) there is only a few known suppliers of the goods, works or services as may be prescribed in the regulations.

Additionally, the regulations further provide that the use of restricted tendering shall be subject to the procurement thresholds spelled out in the First Schedule of the Regulations. The Schedule provides the maximum procurement values for restricted tendering above which the procuring entity should resort to open tendering. The thresholds vary with the different classes of public procuring entities which are categorized either as Class A, Class B or Class C. For instance the maximum for Class A under section 73(2) (b) is Ksh.20, 000,000/- for goods, works and services whereas the minimum shall be Ksh.1, 000,000/-, below which the Request for Quotations may be used.

2.3.3.3 Direct Procurement

Under section 74 of the Act, a procuring entity may use direct procurement procedure if the following conditions are satisfied: (a) there is only one person who can supply the goods, works or services being procured; (b) there is no reasonable alternative or substitute for goods, works or services; (c) there is an urgent need for the goods, works or services being procured and because of the urgency the other available methods of procurement are impractical. Regulation 62 also requires a procuring entity to record the reasons for the choice of direct procurement. At the same time the procuring entity must engage in negotiations with the identified single source to ensure that the resulting contract meets the requirements of the procuring entity as specified and is at the prevailing real market price.

2.3.3.4 Request for Quotations

The use of Request for Quotations is governed by the provisions under Regulation 59 and the thresholds set out in the First Schedule of the Regulations. The procuring entity shall 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. The First Schedule of the Regulations also provides the maximum procurement values that can be conducted through Request for Quotations. For instance, for Class A entities the maximum provided is Ksh.1,000,000/- for goods and services while the maximum for works is Ksh.2,000,000/-

As a general rule for use of an alternative procurement procedure such as restricted tendering, direct procurement or request for quotations it is noteworthy that the procedure together with the proposed list of suppliers can only be adopted if a written approval of the tender committee of the procuring entity is obtained and the procuring entity records in writing the reasons for using the alternative procurement procedure; this notwithstanding the fact that the standing list of registered or pre-qualified suppliers would have already been approved by the tender committee under regulation 10(i) of the Regulations 2006.

2.3.4 Communication

Elenbaas (2000) 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 (1990) 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 2006 stipulates the following, among others, as the principle responsibilities of the user department : (a) initiation of the procurement and disposal requirements and forwarding them to the procurement unit; (b) reporting any departure from the terms and conditions of the contract to the procurement unit; (c) 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; (d) 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.

At the level of communication to bidders, section 34 of the Act requires public entities to develop technical specifications with respect to the goods, works or services being procured for any one particular public project being undertaken. The technical requirements are required to relate to performance rather than to design or descriptive characteristics and should be based on national or international standards. The specifications shall also not refer to any particular trademark, name, patent, design, type, producer or service provider or to any specific origin. The intension of these specification requirements is to ensure high project quality standards and to maximize competition among potential bidders.

Section 31 of the Public Procurement and Disposal Act (2005), on other hand, provides the criteria for qualification for award of contract to contractors to implement public projects. Among the criteria to be satisfied include: whether the person has the necessary qualifications, capability, experience, resources, equipment and facilities to provide what is being procured; whether the person has the legal capacity to enter into a contract for the procurement; whether the person is not insolvent, in receivership, bankrupt or in the process of being wound up and is not the subject of legal proceedings relating to the foregoing; among other qualification criteria. Whether these criteria are strictly adhered to during the procurement process for public projects is a subject of debate. Gaps in following these criteria have seen some contractors abandoning public projects due to their weak financial positions. In other cases, contractors have demonstrated a lack of technical capability in terms of manpower and equipment, a scenario that has had a devastating impact on the effectiveness of public projects implementation. Sub-section 7 emphatically provides that procurement entities shall use creative approaches such as design and build in order to enhance efficiency of the procurement process and project implementation. The technical specifications provided will constitute the basis upon which the evaluation of a bidder's qualifications is carried out and the subsequent selection of the successful tenderer is determined. Poor preparation and communication of the specification to bidders would have a negative impact on the matter in which potential bidders would prepare their bids and subsequently implement the project contract arising from the specifications provided.

To ensure that funding bottlenecks are eliminated, regulation 20 of the Public Procurement & Disposal Regulations (2006) stipulates that every procuring entity shall prepare a procurement plan for each financial year as part of the annual budget preparation process. The public procurement regulations also stipulate that there ought to be a confirmation of availability of funds for the intended project before commencement of any procurement process. This therefore calls for establishment of clear channels of communication between the user, finance and procurement departments on budgetary issues to avoid any financial lapses in respect of meeting financial obligations that would arise from a given project being implemented.

Wixom et al (2001) postulate that user participation and team skills are two of the seren 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 communication in project implementation, Brown and 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 and 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.

Saunders (1997) argues that some elements of the strategy may not be effectively carried out due to lack of awareness or a lack of resources or because of resistance by those expected to implement them. The problem is also compounded in part by the extent to which people have been involved in the formulation and selection of the strategy in the first place. These challenges point to a faulty communication mechanism which will in the final analysis affect the level of success in project implementation.

Another vitally important aspect of communication as espoused by Saunders (2010) is technology. Attention to the development of systems and procedures as an integral part of coordinating efforts to achieve key strategic purposes cannot be overstated. The integrating potential of computer systems provides opportunities for managing chains of project activities more effectively and coping with linkage problems. The need for realizing faster communication between various project stakeholders during implementation has seen the emergency of advanced communication technology systems. Modern business practices now include the use of e-commerce, e-procurement and the Electronic Data Interchange systems (EDI), among other techniques, which have brought about a drastic revolution in the manner in which communication is carried out (Lysons & Farrington 2006). In general terms, this revolutionized business communication strategy can have a profound impact on the manner in which projects are carried out, with obvious advantages. For instance, the benefit of savings on lead-times, costs, creation of transparency and accountability which are key ingredients in the conduct of business during public projects implementation as they facilitate efficiency, effectiveness and the creation of confidence and reduction of corruption among those charged with project implementation.

Reduction of costs is realized through employment of such strategies as Just in Time (JIT) which will enable project materials to be delivered just at the time they are required rather than holding large inventories at the site thereby causing the need for unnecessary attendant costs for storage space, security, lighting and deterioration of quality. Thus by implementing an effective communication strategy, the project team is likely to achieve higher success in project implementation as measured on the basis of the project objectives, which are: time, cost and quality or performance.

Meredith & Mantel (2012) equally contend that everyone concerned with the project should be appropriately tied into the project reporting system, including the different levels of management, with appropriate depths of detail varying with the different levels. The frequency of reporting should be great enough to allow control to be exerted during or before the period in which the task is scheduled for completion. Communication of reports can be passed on via electronic mechanisms using appropriate software. Communication should be timely in order to provide the following vital benefits to stakeholders: mutual understanding of the goals of the project; awareness of the progress of parallel activities; understanding of the relationships of individual tasks to one another and to the overall project; early warning signals of potential problems and delays in the project; and higher visibility to top management, among other benefits.

Similarly Reiss (1992) positions communication as being at the core of effective project implementation. He argues that the project plan should be agreed with the senior managers within the organization and explaining why activities develop in the way they do. Some changes may be suggested. He further states that reports should be disseminated and communicated to all interested parties/stakeholders in a customized manner to their individual needs and preferences and give sufficient details, not too little, not too much information.

2.3.5 Measurement of Effective 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). 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. This argument is anchored on the fact that the Project Management Institute (PMI) each year recognizes a Project of the Year where past winners have included the Saudi Aramco's Hawiya Gas Plant project, the Olympic Winter Games in Salt Lake City, and the US Department of Defense Fernald Closure Site project. These projects received PMI recognition because they had, first and foremost achieved their project outcome goals, but also because they had done so in a way that delivered results on time, within budget and to the satisfaction of customers and other key stakeholders. The PMI recognition criteria therefore clearly stipulates the parameters within which an effectively implemented public project can be measured; which are cost, time and performance as initially envisaged in the project plan.

According to Frese (2003), 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 and Farrington (2006) 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.

Implementation strategy for a project success, applying Lysons & Farrington's principles, is underpinned by the following primary factors: i) Communicating the strategic plans to all who have not been involved their formulation; ii) Obtaining commitment from those concerned. This involves the disclosure and discussion in consultative processes, such as meetings and team briefings; iii) Framing policies; iv) Setting operational targets and objectives and ensuring that these are related to corporate objectives; v) Assigning responsibilities and commensurate authority to individuals and teams for achievement of objectives; vi) Changing organizational structures where necessary; vii) Allocation of resources and agreeing on budgets; viii) Providing employees with required training; and finally, ix) Constantly monitoring the success or otherwise of strategies and making required revisions.

Critically, in a way, the foregoing nine pre-requisites prescribed by Lysons and Farrington present a summary of the factors that affect successful project implementation as proposed by the different authors on the subject as already reviewed in this study.

2.4 Critique of Literature Review

Whereas the Public Procurement and Disposal Act 2005 provides quite an elaborate procedure to be followed in applying open national and international tendering, it does not lay out a clear guideline to follow in a situation where only one bidder submits a tender after advertisement. The critical question to pose is what options are available for the procuring entity to proceed with the procurement process without having to re-advertise the tender being aware of the time and cost constraints. As the situation stands now, the procuring entity would have to retender on grounds of non-responsiveness and this at the expense of the objectives of time and cost. Secondly, the requirement for tender committee approval for the use of the restricted tendering and Request for Quotations methods coupled with the list of proposed firms as alternative procurement procedures is a double approval process that results in further wastage of time making the procurement and tendering process unnecessarily longer with very little value addition if any. It is a double approval process because the same tender committee that would approve the list of firms for restricted tendering or Request for Quotations would have already approved the list of pre-qualified firms under regulations 8 and 10 of the Regulations 2006 from which the proposed firms are drawn.

2.5 Empirical Review

According to Kirungu (2011), the implementation of the Financial and Legal Sector Technical Assistance Project (FLSTAP) under the Ministry of Finance has failed to achieve its goals within stipulated project timelines due to the challenges attributable to constrained both World Bank (WB) and Government of Kenya (GOK) procurement systems. The project aims to achieve a sound financial system and strengthen the legal framework and judicial capacity that would ensure broad access to financial related legal services. The achievement of this objective has been aided through procurement of goods & services, consultancy and training. According to World Bank Report (2009), the current average project funds absorption rate was less than 10% per annum. This scenario has been blamed on an inefficient and bureaucratic procurement system. The policies and guidelines governing the implementation of Donor Funded Projects are said to be too lengthy and subject to several steps of review by both the donor and the borrower. This applies especially in the guidelines governing the selection and employment of Consultants by World Bank Borrowers. Kirungu (2011) established that 11% of the respondents believed that the policies have a great effect on the implementation of the donor funded projects, 20% great effect while another 22% reported moderate effect. She concludes that the major implementation obstacles for donor funded projects implementation is procurement policies and donor guidelines due to bureaucracy which results in low disbursement of donor funds. The fact that both donor and GoK procurement policies and guidelines are applied concurrently only serves to compound an already worse implementation situation.

Rutere (2009) also seems to blame the procurement system as the main cause of stalled CDF Projects in North Imenti Constituency. On his part, Wambugu (2008) observes that implementation of CDF Projects in Dagoretti Constituency was greatly hampered by political interference. On the basis of these findings, Malala (2011) argues that the Government can only ignore the management of CDF Projects at its own peril. Not putting proper procurement processes for sourcing of CDF funded projects supplies and poor participation of local suppliers in available supply opportunities at constituency level means more than just delaying development processes but also has catastrophic impact on attainment of the Kenya Vision 2030. The ultimate effect of failed CDF Projects would therefore remain poor roads infrastructure, poor education, water and health care facilities and above all persistent high poverty levels for majority of the Kenyan populace, not mentioning the colossal taxi payers'

money put to waste as a result of failed public projects.

Indeed, Omanga (2010) observed that 21% of CDF Projects in Lari Constituency were either stalled or abandoned altogether. According to Mutunga (2010), public funds go to waste since CDF Projects stall. In a recent social accountability audit carried out by National Taxpayers Association (NTA) (2011) between January 2010 and January 2011, it was established that out of the funds investigated in 28 constituencies and 5 Local Authorities, over Ksh.444, 002,327/- million taxpayers' money was found to have been badly used or unaccounted for. For example, in Kanduyi Constituency of Bungoma County alone, Ksh.30, 588,859/- was wasted due to badly implemented projects. According to the NTA Report (2011), of the total CDF funds allocated, 25% of monitored projects in the Financial Year 2007/08 were on ineffective projects.

On the other hand, a significant number of respondents in Kikuyu Constituency argued that they were not involved in the projects set up, thereby pointing to a lack of effective communication to key stakeholders which in turn affects their participation in the entire CDF Projects implementation process and ownership (Malala 2011).

2.6 Critique of Empirical Review

Whereas the researcher takes cognizance of the efforts by previous researchers on the complex problem of poor implementation of public projects in Kenya, it should nevertheless be pointed out that the researches fell short of providing a holistic approach to addressing the problem. For instance, Kirungu (2011) only focuses on the general Procurement system as the sole factor affecting implementation of the Financial & Legal Sector Technical Assistance Project (FLSTAP) under the Ministry of Finance. The study did not dissect and break down the individual elements of the procurement system to provide a more clear understanding of their individual contribution to poor project implementation or otherwise of the project.

Secondly, the study confines itself only to donor funded projects implementation whereas the problem could be replicated across the board within the entire public sector affecting even the wholly GOK- funded projects.

Again whilst Malala (2011) and Rutere (2009) studies are laudable, they are only limited to the general effect of procurement on the performance of CDF Projects. The studies do not, however, seek to break down the particular elements of procurement that underpin effective projects implementation. Such a clear dissection would allow for a critical analysis of the contribution of these procurement practices to projects implementation. Only choosing to focus on procurement from a general perspective is tantamount to taking a very narrow view to studying the problem at hand and may elicit inadequate response in addressing the challenges of public projects implementation in Kenya.

2.7 Research Gaps

There are apparently significant gaps in the academic area of public projects implementation in Kenya leading to unwarranted loss and wastage of the scarce public resources. No conclusive study has been carried out to quantify the extent of public projects failure and the resultant wastage of resources. A previous study by Moraa (2011) appears only to focus on roads projects at the Ministry of Roads, yet the problem may be more widespread across the board within the entire public sector.

This study is an effort to plug this gap and to provoke more critical thinking and research in the area of public projects implementation. What is mostly available are audit reports on failed projects compiled by the office of the Auditor General. These reports mainly concentrate on pinpointing individuals liable for failure and the probable risks to the concerned organizations, but are generally short on details on what the exact causes of project failure are and on what exactly needs to be done to correct the situation and reverse the trend in Kenya. The study also seeks to generate interest among public policy makers to come up with a manual or revise existing policies on public projects implementation for all public officers, and more so those charged with the responsibility of implementing public projects to enhance successful implementation.

Moreover, not a lot has been researched in this area from a procurement standpoint, yet procurement has over the last one decade increasingly gained prominence within the public sector being at the core of the projects implementation process in Kenya. What has been lacking is providing the linkage between the public procurement system and the project implementation goals. As a result, procurement has in the past been relegated by researchers and project implementers to the periphery of public projects implementation process. Hence the high rate of public projects failure. Experience has demonstrated that it is only at the end of the process when the project fails that project implementers realize that they should have engaged with the procurement system, with a view to strengthening it, first and foremost, before embarking on the project itself.

Even though some researchers including Kirungu (2011), Malala (2011), Mutunga (2010) and Rutere (2009) have attempted to bring to the fore the relevance of procurement in public projects implementation, their effort has generally been rather too general and as such wanting in detail thereby failing to address the specific aspects of procurement that affect projects implementation. The researcher intends to bridge these glaring research gaps.

2.8 SUMMARY

In summary, there seems to exist a congruence of ideas on the whole phenomenon of public projects implementation in Kenya. As pointed out by Chandra (2008), Oladipo (2008), Gurung et al (2002), among other

scholars on the subject under study, the key factors that influence public projects implementation are planning, monitoring & control, choice of procurement procedure and communication. The Kenya Government public procurement legal framework speaks quite categorically to all these four factors. However, it may be noted that there could be other procurement practices other than these that also impact on project implementation. This provides a room for further research in this area to provide a comprehensive body of knowledge that can profoundly benefit public policy makers and academicians.

This chapter has focused on the four key procurement practices aforesaid and has demonstrated that the challenges of public project implementation are not only unique to Kenya but they are a universal phenomenon throughout the world. There have been reported cases of cost over-runs in India, Chandra (2008), poor planning and monitoring besides inadequacies in finance in the Nigerian situation, Oladipo (2008). The same situation is confirmed in Kenya (KENAO 2010).

All these factors have combined to undermine successful project implementation thereby culminating to loss of colossal amounts of public resources and ultimately denying the public the intended benefits that would have been derived from the project had it been successfully implemented. The end result has been perpetually low levels of socio-economic development and poor living conditions for the greater majority of the world's populace.

3. Research Methodology

3.1 Introduction

This chapter sets out the research methodology that was employed to the study objectives stated in chapter one of this study. It also sets out the research settings, the population of interest, the sample, data collection instruments and data analysis techniques used.

3.2 Research Design

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 (2004). 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 analyzed and in what style the report will be presented. A Research Design is important because it facilitates the sailing of the various research operations thereby making research as efficient as possible yielding maximal information with minimal expenditure of effort, time and money.

The researcher employed the questionnaire method of data collection where both structured and unstructured questions were used. Structured questions (closed-ended) are those accompanied by a list of all possible alternatives from respondents from which respondents select the answer that best describes their situation (Mugenga & Mugenda 2003). The researcher sought to use this approach because it was easier to analyze since they were in an immediate usable form. They were also economical to use in terms of time and cost.

There was also the use of unstructured questions (open-ended) to collect, evaluate and analyze data. These are questions that permit the respondent to respond in his/her own words. The researcher used this method because it produced more in-depth and comprehensive information. The researcher assumed a case study. The case study was chosen for the study because it enabled the researcher to get more detailed information about the experiences about project implementation at the Kenya Civil Aviation Authority.

3.3 Target Population

A target population is the specific population about which information is gathered. According to Kothari (2004), a population is a well-defined set of people, services, elements, events, group of things or households that are being investigated. The target population was composed of all public entities engaged in implementation of public projects in the pursuit of their statutory mandates in Kenya. The respondents were drawn from employees of the Kenya Civil Aviation Authority which according to the Human Resource Department of the Authority has 650 employees. Mugenda & Mugenda (2003) explain that the target population should have some observable characteristics, to which the researcher intends to generate the results of the study. This definition assumes that the population is not homogeneous. The population characteristics are summarized in table 3.1

Table 3.1: Target Population

Cadres of Staff	Population	Percentage
Top Level Management	30	4.62
Middle Level Management	150	20.00
Low Level Management	470	75.38
Total	650	100.00

Source: Kenya Civil Aviation Authority 2012

Sample Size & Sampling Technique

The Sampling Plan describes the sampling procedures and the sample size for the study. The sampling frame

describes the list of all population units from which the sample was selected, Kothari (2004). From the above target population of 650, proportional allocation method was used to calculate the sample size from each stratum using stratified random sampling which gives each item in the population an equal probability chance of being selected. Stratified random sampling method is used in a situation where the population being studied is heterogeneous and thus can be subdivided into groups or strata to obtain a representative sample. According to Kothari (2004), a representative sample is one which is at least 10% of the population, thus the choice of 10% of the 650 equal to 65 is considered as representative.

The selection was as follows:

Table 3.2: Sample Size

Staff Cadres	Population (Frequency)	Proportional Allocation	Sample
Top Level Management	30	$65 \times 30 / 650$	3
Middle Level Management	150	$65 \times 150 / 650$	15
Lower Level Management	470	$65 \times 470 / 650$	47
Total	650		65

3.5 Data Collection Methods

The study employed both primary and secondary data. Primary data was gathered through questionnaires, whereas secondary data will be obtained through reports obtained from the Authority and other Government reports. This supplemented the primary data received from questionnaires.

The researcher used questionnaires containing both structured and unstructured questions. Each item in the questionnaire is developed to address a specific objective or research question of the study. Structured questions were closed-ended questions with a predetermined set of responses from which the respondent would choose his or her response. This type of questions made it easy for the researcher to analyze the data and also save on time and cost of the study. Conversely, the researcher also used unstructured questions. These were open-ended questions which allowed the respondent to use his/her own words in answering the questions. The respondent was permitted to provide in-depth information to the greatest extent possible based on their knowledge about the issue being asked about (Mugenda & Mugenda 2003).

The questionnaires were self-administered whereby respondents were asked to complete the questionnaires themselves.

The questionnaires designed in this study comprised of two sections. The first part comprised of the demographic and operational characteristics designed to determine fundamental issues including the demographic characteristics of the respondent. The second part focused on the factors influencing effective implementation of public projects in Kenya where the variables of the study were put into perspective.

3.6 Data Analysis

The data was organized and cleaned of errors made during data collection. It was coded and keyed into the computer and analyzed using descriptive statistics with the aid of the Statistical Package of Social Sciences (SPSS), Microsoft Excel and Microsoft Access Computer Software. Descriptive statistics is the technique used to describe or summarize the data in a way that enables a researcher to meaningfully describe a distribution of measurements or values using a few indices or statistics. Frequency distributions and percentages were generated from the data collected. A frequency distribution table shows the distribution of scores in a sample for a specific variable. It thus gives a record of the number of times a score or a response occurs (Mugenda & Mugenda 2003). For each variable, the researcher tabulated the findings and calculated the frequencies and percentages, then made interpretations from the research findings. The information was then presented in form of frequency tables and percentages.

The researcher also used inferential statistics which is a technique which permits the use of inferences about the population based on results obtained from samples. This was necessary since the study was conducted on the basis of a sample. This technique is basically concerned with determining how likely it is for the results obtained from the sample to be similar to results from the entire population of the study.

3.7 Data Presentation

Tables were used to present responses and to facilitate comparison. Kothari (2004) argues that the use of percentage is important for two reasons; first they simplify data by reducing all the numbers to range between 0 and 100. Secondly, they translate the data into standard form with a base of 100 for relative comparisons. This served to generate quantitative reports through tabulations and percentages.

4. Data Analysis and Presentation of Findings

4.1 Introduction

This chapter contains presentation, analysis and discussion of the data collected by the researcher during the data collection. The data is analyzed using the Statistical package of Social Sciences (SPSS) and presented both in table and graphical forms. The frequency tables show the findings as derived from the responses by respondents to the various questions contained in the questionnaire followed by discussions.

4.2 Response Rate

No. of Questionnaires Distributed	No. of Questionnaires Returned	Percentage
65	62	98.58

The researcher distributed a total of 65 questionnaires to the staff of KCAA and 62 of them were filled and returned representing a response rate of 98.58%.

4.3 Quantitative & Qualitative Analysis

This section highlights the analysis of responses from the structured and unstructured questions in the questionnaires. The structured responses were those which the respondents were provided with choices from which to choose the appropriate answer. Unstructured questions, on the other hand, were open ended questions which allowed respondents to provide their own answers and opinions as adequately as they deemed fit.

Table 4.3.1: Analysis of Responses

Staff Cadre	No. Distributed	Frequency	Percentage
Top Level Management	3	0	0
Middle Level Management	21	21	100
Lower Level Management	44	44	100
Total	68	65	95.58

A total of sixty five questionnaires were distributed to the three different staff cadres of KCAA out of which sixty two were completed and returned representing a 95.38% response.

Table 4.3.2: No. of Years Worked For KCAA

No. of Years	Frequency	Percent	Cumulative Percent
1-5 years	15	23.1	23.1
6-10 years	23	35.4	58.5
11-15 years	17	26.2	84.6
16 and above	10	15.4	100.0
Total	65	100.0	

From the table above, fifty (50) respondents representing 77% of the total number of respondents have worked for KCAA for a period of more than six (6) years. The majority of the respondents therefore have a good understanding of the internal working systems of the Organization in respect of project implementation.

Table 4.3.3: Position held in the Organization

Staff Cadres	Frequency	Percent	Cumulative Percent
Middle level management	21	32.3	32.3
Low level management	44	67.7	100.0
Total	65	100.0	

Out of all the respondents, twenty one (21) representing 32.3% are at middle level management while forty four (44) representing 67.7% are in lower management.

Table 4.3.4: Whether Projects finished on time, within cost and expected quality

Question	No		Yes		Total	
	Frequency	%	Frequency	%	Frequency	%
Whether you know of any project your organization has undertaken in the recent past?	4	6.2	60	93.8	64	100.0
Whether the project finished on time?	41	64.1	23	35.9	64	100.0
Whether the project finished within the original cost of contract?	27	43.5	35	56.5	62	100.0
Whether the quality of project was satisfactory and does meet user expectations?	32	52.5	29	47.5	61	100.0
Whether procurement planning, contract monitoring & control, choice of procurement procedure and communication are important factors in project implementation?	6	9.4	58	90.6	64	100.0

Respondents were asked whether they knew of any project that KCAA had undertaken in the recent past. They were also asked whether the project sited had finished on time, within original contract cost and whether it met the desired quality to the satisfaction of the user expectations. 6.2% of the respondents said they did not know of

any project which KCAA had undertaken in the recent past while 93.8% were aware of the projects undertaken. 64.1% said the projects they knew as having been undertaken by KCAA did not finish on time while 35.9% said the projects finished on time. 43.5% said the projects did not finish within the original contract cost whereas 56.5% confirmed projects having finished within the original cost of the contract. Meanwhile, 52.5% of the respondents said the quality of the finished projects was not satisfactory and did not meet user expectations while 47.5% were of the view that the projects met user expectations. The respondents were also asked to indicate whether procurement planning, contract monitoring & control, choice of procurement procedure and communication are important factors in project implementation. 9.4% said they are not, whereas 90.6% held the view that they are important factors in project implementation.

Table 4.3.5: Procurement Practice affecting project implementation most significantly at KCAA

Procurement Practice		No	Yes	Total Percentage
A	Procurement Planning	78.1	21.9	100
B	Contract Monitoring & Control	64.1	35.9	100
C	Choice of Procurement Procedure	53.1	46.9	100
D	Communication	85.9	14.1	100

Asked to state which procurement practice affected project implementation most at KCAA, 35.9% of the respondents mentioned contract monitoring & control, 46.9% mentioned procurement whereas 21.9% did mention procurement planning. Only 14.1% did mention communication. Thus majority thought choice of procurement system was the most significant factor affecting project implementation at KCAA, followed by contract monitoring & control.

Table 4.3.6: Rating KCAA

Procurement Practice		Poor		Good		Total	
		Frequency	%	Frequency	%	Frequency	%
A	Procurement planning	33	53.2	29	46.8	62	100
B	Contract monitoring & control	41	65.1	22	34.9	63	100
C	Choice of Procurement Procedure	35	53.8	30	46.2	65	100
D	Communication	32	51.6	30	48.4	62	100

The respondents were asked to rate KCAA in respect of procurement planning, contract monitoring & control, Choice of procurement procedure and communication during project implementation. With Series (1) representing poor while (2) standing for good, 53.2% rated procurement planning as poor whilst 46.8% said it was good. 65.1% rated contract monitoring & control as poor whilst 34.9% said was good. With regard to choice of procurement procedure, 53.8% rated KCAA as poor whereas 46.2% approved it as good. Regarding communication, 51.6% of the respondents were of the opinion that KCAA was poor at communication during project implementation whereas 48.4% approved of it as good.

Table 4.3.7: Awareness on failed projects at KCAA

If aware of failed projects	Frequency	Percentage	Cumulative Percentage
No	10	15.6	15.6
Yes	54	84.4	100.00
Total	64	100.0	

The researcher asked respondents to indicate whether they knew of any projects that had failed at KCAA. As shown in table 4.2.7 above, 83.1% of the respondents said they were aware of projects that had failed at KCAA, while only a paltry 15.4% said they were not aware of any failed project at the Organization. Those who were aware of the failed projects cited the Lokichoggio Staff Housing Project, Swimming Pool Project at the East African School of Aviation, Mlolongo Fencing Works and the Wilson Airport Control Tower Construction Project, among others.

Table 4.3.8: Which factor could have caused the project failure?

Procurement Factor		Frequency	Percent
A	Poor procurement planning	23	35.4
B	Poor contract monitoring & control	23	35.4
C	Poor choice of procurement procedure	10	15.4
	Poor communication	5	7.7
Total		61	100.0

The researcher asked respondents to state which procurement practice they thought contributed most significantly to the failure of the cited projects. 35.4% of the respondents attributed the project failure to poor procurement planning and a similar percentage attributed the failure to poor contract monitoring. 15.4% thought the failure was due to poor choice of procurement procedure during project implementation, whereas only 7.7% attributed it to poor communication. Figure 4.3 below represents this finding graphically.

Table 4.3.9: Rate of success in project implementation at KCAA

Success Level	Frequency	Percent
Project success levels are low	40	67.8
Project success levels are high	19	32.2
Total	59	100.0

The respondents were asked to state their overall view on the success levels of projects implementation at KCAA. A whopping 67.8% held the view that the project success levels at the Organization were low whereas only 32.2% of the respondents were of the opinion that the success levels were high.

Table 4.3.10: Whether there is a clear procedure for procurement planning at KCAA

Is there a clear procurement planning procedure?	Frequency	Percent
No	28	43.75
Yes	20	31.25
I don't know	16	25.00
Total	64	100

From the table 4.2.10 above, when asked whether there was a clear procedure for procurement planning at KCAA, 43.75% of the respondents said there was no clear procurement planning procedure, whereas 31.25% said there existed a clear planning procedure. An equally significant 25% of the respondents said they did not know whether there was a clear procurement planning procedure followed at KCAA. The findings are graphically represented in figure 4.4 below

Asked to explain, in their view, how procurement planning affects project implementation at KCAA, the respondents provided varied shades of opinion with majority stating that procurement planning was key in ensuring prudent management of project resources including funds and also helps in setting timelines and delivery schedules for key project milestones. Some also mentioned the control of costs as an import value of procurement planning.

Table 4.3.11: Involvement of staff in Procurement Planning Process

	Whether involved in procurement planning	Frequency	Percent
	No	39	60.0
	Yes	26	40.0
	Total	65	100.0

Respondents were asked to state whether they had ever been involved in the procurement planning process. Out of the total number of respondents, 60% responded in the negative whereas 40% responded in the affirmative.

Table 4.3.12: Respondents aware of Contract Monitoring

Awareness of contract monitoring	No		Yes		I don't know	
	Frequency	%	Frequency	%	Frequency	%
If aware of the existence of an effective contract monitoring & control system at KCAA	49	75.4	16	24.6	0	0
If aware of any projects in KCAA which have been subjected to contract monitoring and control	48	73.8	17	26.2	0	0
If yes in Q2, was the project successfully implemented	10	22.2	10	22.2	25	55.6

The table above illustrates that 75.4% of the respondents were not aware of the existence of an effective contract monitoring & control system at KCAA while 24.6% said they knew of an existing contract monitoring & control system. At the same time, 73.8% confirmed to have been aware of projects that were subjected to contract monitoring & control. Out of the 73.8% who said projects were being subjected to contract monitoring & control, only 22.2% said the projects had succeeded, another 22.2% said the projects did not succeed whereas 25% did not know whether the projects succeeded or not even after being subjected to contract monitoring and control.

On how contract monitoring and control affects project implementation, the majority of respondents explained that it plays a significant role in ensuring effective performance of contract leading to projects finishing on time, quality is maintained and budgets are controlled to avoid project cost overruns. But more importantly, the respondents observed that contract monitoring and control helps corrective measures to be taken in a timely manner by project implementers and the top management to avoid any potential project failures.

Table 4.3.13: Contribution of Choice of Procurement Procedure to the success of projects at KCAA

Contribution of choice of procurement procedure to project implementation	No		Yes		Total	
	Frequency	%	Frequency	%	Frequency	%
Whether significant to success	1	1.8	56	98.2	57	100
Whether significant to failure	56	98.2	1	1.8	57	100
Not significant in implementation	57	100	0	0	57	100
Whether it plays any role in implementation	57	100	0	0	57	100

The majority of the respondents (98.2%) were of the view that the choice of procurement procedure contributes significantly to the success of projects at KCAA, while only 1.8% disputed this view

On how the choice of procurement procedure affects project implementation, most of the respondents explained that it plays a key role in determining the project cost and ensuring economy. But more importantly, some respondents mentioned the value of procurement in terms of facilitating speedy completion of projects by ensuring timely supply and delivery of the necessary project materials and services.

Table 4.3.14: Whether Communication is important in project implementation at KCAA

Is communication important in project implementation?	Frequency	Percentage
Yes	7	12.5
No	49	87.5
Total	56	100

There were 56 responses to this question in the questionnaire. The respondents were asked whether they thought communication was important in project implementation at KCAA. A majority responded in the affirmative at 87.5% saying communication was important in project implementation whereas a paltry 12.5% said it was not important. Figure 4.5 below represents this information in graphical form.

To explain why they regarded communication as an essential factor in project implementation, respondents provided varied explanations, key among them being the need to provide information to the procurement unit on the user specifications, for Finance to confirm availability of funds for the procurement process to commence and for payment to suppliers, information on the delivery of goods at the stores for the project, feedback on the project progress, communication of user expectations, providing information critical for decision making by the tender committee and top management, creation of teamwork among all concerned within the Organization and the need to enhance stakeholder support to guarantee success in implementation.

Table 4.3.15: Effect of communication on Project Implementation

Effect of Communication	Frequency	Percentage
Very high	3	4.6
High	24	36.9
Low	38	58.5
Total	65	100.0

Of the total number of responses on the question as to the effect of communication on project implementation at

KCAA, 58.5% said communication had low effect on project implementation, 36.9% said the effect was high while a small number representing 4.6% said the effect was very high.

5. Summary, Conclusions and Recommendations

5.1 Introduction

This chapter deals with the summaries, conclusions derived from the study findings and finally come up with recommendations based on the findings of the research study. The general objective of the study was to assess the procurement practices affecting effective implementation of public projects in Kenya.

5.2 Summary

In summary, the findings showed that the majority of the respondents held the view that most projects in KCAA did not finish on time and were completed at a cost higher than the originally envisaged contract cost. A high percentage indicated that procurement planning, contract monitoring & control, choice of procurement procedure and communication are important procurement practices in project implementation. Consequently, for public entities to achieve successful or effective implementation of projects, it is imperative for them to manage the processes of procurement planning, contract monitoring, choice of procurement procedure and communication more effectively.

5.3 Conclusions

5.3.1 Effect of Procurement Planning

In conclusion, given the high percentage of respondents who said procurement planning was most important and the explanations provided on the value of procurement planning, it is important to prioritize procurement planning for successful project implementation. Although other procurement practices played a key role, procurement planning came out as a major determinant of effective implementation of public projects.

5.3.2 Contract Monitoring and Control

Lack of an effective contract monitoring & control was blamed by a majority of respondents for failure of most projects. It is equally of paramount importance to prioritize contract monitoring and control in project implementation. It was interesting to note that majority of the respondents did not even know whether there existed an effective contract monitoring system within the Organization. The respondents tended to almost entirely blame the lack of an effective contract monitoring system for all project failure.

5.3.3 Effect of choice of procurement procedure on Projects Implementation

Having recorded an approval rating of 98.1% as contributing significantly to successful project implementation, choice of procurement procedure is undoubtedly the single most critical factor that should be put in focus while executing public projects. The study findings revealed that choice of procurement procedure would have a significant bearing on timely completion of projects.

5.3.4 Communication

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 communication system. Clear communication between Procurement, Finance, users, legal department, top management and external stakeholders, including suppliers, are of critical importance in project implementation. Communication is enhanced through participation of all stakeholders both internal and external. Many projects would suffer failure simply on account of lack of involvement of the organizational staff by offering them the opportunity to express their opinions and expectations of the project. The necessity to incorporate their views during the whole process of procurement cannot be overstated. Their participation at all the procurement stages including planning, choice of procurement method, preparation of materials specifications, evaluation of tenders, and inspection and acceptance of delivered goods and services is no doubt absolutely imperative.

5.4 Recommendations

Whereas public organizations should be commended for the efforts and mechanisms put in place to achieve effective implementation of projects in order to meet their strategic objectives and fulfill their legal mandates, it is clearly imperative to put in place the following measures to re-enforce the existing mechanisms and practices: Public organizations should strive to strengthen their procurement planning and contract monitoring & control systems so as to ensure successful projects implementation. This way, the project objectives of time, cost and quality will be realized.

The Public Procurement & Oversight Authority (PPOA) and the Ministry of Finance should re-look at the current Public Procurement & Disposal Act 2005 and the Regulations 2006 with a view to shortening the procurement process. The PPOA should address gaps such as those identified in the procurement procedures such as open tendering and restricted tendering procedures which end up making the procurement process too lengthy. A shortened procurement process will go a long way to contribute to timely completion of public projects.

Public entities should establish clear channels of communication during project implementation in order to enhance stakeholder acceptability. Public 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 project implementation.

5.5 Areas for further research

The researcher recommends further research in other procurement practices that have ramifications for project implementation such as pre-qualification of suppliers, evaluation of tenders, tender committee and procurement committee meetings, inspection & acceptance of goods, 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 sector in Kenya.

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