

# **Capital Budgeting Strategy and Performance of Projects in Kenya Rural Roads Authority**

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## **Abstract**

The study aimed at analyzing capital budgeting as a strategy for project performance in Kenya Rural Roads Authority (KeRRA). It was guided by the following objectives: to establish the effects of policy on project performance, to find out the extent to which expertise affect project performance, and to establish the extent to which financial resources affect project performance. The target population was 15 project managers and 15 financial managers of Kenya Rural Roads Authority (KeRRA). Purposive sampling technique was used to select the project managers and financial managers to participate in the study. A structured questionnaire was developed and utilized in this study. Questionnaires were given to project managers and financial managers. The researcher conducted a multiple regression analysis so as to determine the relationship between the project management and variables of the study.

The study found that Policy on Budgeting, Expertise, Financial Resources, Accountability and Re-Training measures affected the performance of project to a great extent. The study concluded that the decision of whether to accept or deny an investment project as part of a company's growth initiatives, involves determining the investment rate of return that such a project will generate. Based on the findings the study recommended that effective budget implementation at the KeRRA should be facilitated through capacity building, robust systems and processes, prioritization close monitoring and evaluation. All stakeholders should get involved in budget execution in enhancing the overall budget implementation.

**1.1 Key words:** Internal rate of return, Net Present Value, Accounting Rate of Return, Capital Budgeting

## **1.2 Introduction**

According to Dayananda (2011), capital budgeting is defined as a process in which a business determines whether projects such as building a new plant or investing in a long-term venture are worth pursuing. Most times, a prospective project's lifetime cash inflow and outflows are assessed in order to determine whether the returns generated meet a sufficient target benchmark. Capital budgeting is an essential managerial tool. Capital budgeting is primarily concerned with sizable investments in long-term assets. These assets can either be tangible items such as property, plant or equipment or intangible ones such as new technology, patents or trademarks. Investments in processes such as research, design and development and testing through which new technology and new products are created may also be viewed as investments in tangible assets. Sizable, long-term investments in tangible or intangible have long-term consequences (Anderson & Jessen, 2010).

Many formal methods are used in capital budgeting, including the techniques as follows: Net Present Value (NPV) is used to estimate each potential project's value by using a discounted cash flow valuation. This valuation requires estimating the size and timing of all the incremental cash flows from the project (Dayananda, 2011). The NPV is greatly affected by the discount rate, so selecting the proper rate sometimes called the hurdle rate—is critical to making the right decision, The Internal Rate of Return (IRR) is defined as the discount rate that gives a net present value (NPV) of zero. It is a commonly used measure of investment efficiency. The IRR method will result in the same decision as the NPV method for non-mutually exclusive projects in an unconstrained environment, in the usual cases where a negative cash flow occurs at the start of the project, followed by all positive cash flows.

Performance is the concept of measuring the output of a particular process or procedure, then modifying the process or procedure to increase the output, increase efficiency, or increase the effectiveness of the process or procedure. The concept of organizational performance can be applied to either individual performance such as an athlete or organizational performance such as a racing team or a commercial enterprise or even a farm or livestock production (Dayananda, 2011). Most of the projects fail and sponsor organisations continue to needlessly lose their investments when there are techniques, tools and strategies to help them. Improving Project Performance increases the project success by stepping out of the theoretical and into a bold new arena of advanced practical experiences and lessons in project management.

Capital budgeting and firm performance have to be defined and quantified. In capital budgeting, two main approaches defining capital budgeting can be distinguished: the normative approach and the process approach (Kersyte, 2011). The normative approach, which represents traditional capital budgeting theory, presents rules for how firms should treat investment decisions. The main emphasis is generally put on the financial evaluation and selection of proposed investments in long-term assets. The development of advanced capital budgeting techniques and their application in various situations are hence key issues. Capital budgeting techniques are generally categorized as either sophisticated or naïve.

### **1.3 Statement of the Problem**

The capital budgeting decision has been a very typical issue in the sustenance of KeRRA. Several companies have lost their identity or liquidated due to wrong capital budgeting decision they made at one particular time or the other. Based on these prevalent problems in industries and the effect of globalization on industries, it is important to use effective method to analyses investment before decision is made. Capital budgeting is extremely important because the decision made involve the direction and opportunity for future growth of the organisation. One of the traditional methods commonly used for capital investment appraisal by some organizations is the payback method, although this method has been criticized by academicians that it does not include the future cash flow and also does measure profitability (Anderson & Jessen, 2010). The wide acceptance of this method by practicing managers has raised questions as to why it is still popularly used in organizations.

Kadondi, (2011), studied capital budgeting practices of companies quoted at the Nairobi Stock Exchange, taking into account all the necessary steps /phases in the capital budgeting process. The study surveyed 33 companies quoted at the Nairobi stock exchange. It revealed that except the appraisal techniques, other stages of capital budgeting process are rarely considered. In his study of Kenya Power and Lighting Company Limited on the effects of capital budgets on cash flows, Momanyi (2014) concluded that cash flow mismatch, foreign exchange rates, inflation and government interventions affect cash flows at The Kenya Power and Lighting Company Limited. The researcher recommends that the Company should aspire to match the inflows to outflows, thorough education of budget holders on the need to be committed to budgets and the adoption of zero based budgets for non-key projects, evaluation of projects to determine cost versus benefits and monitor project implementation schedule to ensure no budget over-runs. From the above studies it is evident that little research has been done on capital budgeting and project performance; therefore, the study seeks to answer the question; what is the the relationship between capital budgeting strategy and performance of projects in Kenya Rural Roads Authority?

### **1.4 Literature Review**

#### **Policy**

A policy is a deliberate system of principles to guide decisions and achieve rational outcomes (Chan, 2012). A policy is a statement of intent, and is implemented as a procedure or protocol. Policies are generally adopted by the Board of or senior governance body within an organization whereas procedures or protocols would be developed and adopted by senior executive officers. Policies can assist in both subjective and objective decision making. The purpose of policy is to provide a forecast of revenues and expenditures. That is, to construct a model of how a business might perform financially if certain strategies, events, and plans are carried out (Chan, 2012).

According Faraj, (2011), the policy provides an environment where all employees understand the impact their contributions have on the achievement of Institute goals and are provided the opportunity for ongoing personal growth. One way we can accomplish this goal is through a strong performance based management program that culminates in an annual performance review. The performance management process is continuous as we plan, manage, review, and reward performance. Policy activism replaced policy passivity as the dominant ethos within most countries government, at both ministerial and bureaucratic levels; new policy and planning units proliferated in central agencies and line departments. New policy proposals are generated and rolled forward into the decision-making system at an accelerating rate. That decision-making system is itself, however, in a state of flux. The cabinet committee system and parts of its support structure were extensively re-engineered, to put a greater focus on collective ministerial responsibility for policy (Faraj, 2011).

### **Expertise**

Every success of a company is conditioned by a particular expert team of people. It is the strength, coherence and expertise of this executive team that in a great deal determine the overall outcome of every action the company makes. To be successful the project management approach have to take these facts into consideration to leverage the full potential the team has to be thoroughly analyzed, properly motivated and the performance have to be measured carefully. These teams experts are created by joining employees of approximately same hierarchical level, but across different company departments and from various areas of expertise (Lefley, 2014).

Cross-function teams are an effective means of allowing employees to exchange critical information, exchange ideas, share information and create opportunities of synergic collaboration. These teams are often empowered to bring important decision without the approval of high management. Faraj and Sproull (2011), measure of coordination of expertise is a broader measure. Faraj and Sproul's measure of coordination of expertise incorporates whether and where expertise is located within the team, if the team recognizes any need for expertise, and if expertise within the team is brought to bear. Therefore, this measure covers both the factor of coordination and balance of member contributions.

### **Financial Resources**

Financial resources, it is a term which refers to financial funds of the organization. Financial resources are from an economic perspective part of the assets (property) of the organization (Dutta, 2013). According to Gilman (2012), financial resources are the money available to a business for spending in the form of cash, liquid securities and credit lines. Before going into business, an entrepreneur needs to secure sufficient financial resources in order to be able to operate efficiently and sufficiently well to promote success. The function of management is to plan, organize, staff, lead, and control. Every one of these functions is influenced to a great degree by how much money is available. Managers and programme staff simply cannot carry out their assigned responsibilities effectively without understanding their financial constraints.

Managers need to have some means for knowing what is happening with respect to their financial resources if they are to make informed management decisions. The notion that leaders of extension organizations are accountable to funding partners is one of the reasons managers need to keep track of how money is spent. The organization will be expected to report how much money there was, how much was spent, what it was spent for, and how much is left. This responsibility is carried out by installing and managing a financial accounting system (Hoskins, 2013).

The primary goal of financial resources is to maximize shareholder value. Maximizing shareholder value can be done over the long-term or the short-term, so the job of the finance department is to determine how best to do both (Pike, 2010). Sometimes, the goals may appear to be in competition with one another. For example, a company can choose to pay dividends (a small payment to each person who owns a stock of a company), which increases short-term shareholder wealth. However, paying dividends means that the money is not being invested in long-term investments, which may cause the stock price to increase more in the future, and thereby increasing long-term shareholder wealth.

### **Project performance**

Project performance has been considered to be tied to project success and this is also tied to project objectives (Chan & Chan, 2012). Project success has been measured based on different dimensions. Dayananda, (2011), measured project success based on the following five dimensions: Meeting design goals, Benefit to end users, Benefit to the developing organisation, Benefit to the defense and national infrastructure, Overall success (a combined measure for project success), project success is divided into four dimensions: Project efficiency, Impact on customer, Business success and preparing for the future. Chan & Chan (2012) developed a consolidated framework for measuring project success. The framework is comprised of the following eight project success dimensions: Cost, Environmental performance, Quality, User expectation/satisfaction, Time, Commercial/Profitable Value, Health and Safety.

In measuring performance, organization gathers information to help them make management decisions to affect change that, hopefully, will improve that performance. For example, project performance measures are undertaken to provide information to managers in order to exert control over the project. Those measures must be appropriate to the organizational level that can immediately effect change based on information it learns in order to control the performance of the project at hand (measuring the earned value of the project will provide information on the performance of the project to allow managers to make critical decisions to bring the project to closure successfully) (Dayananda, 2011).

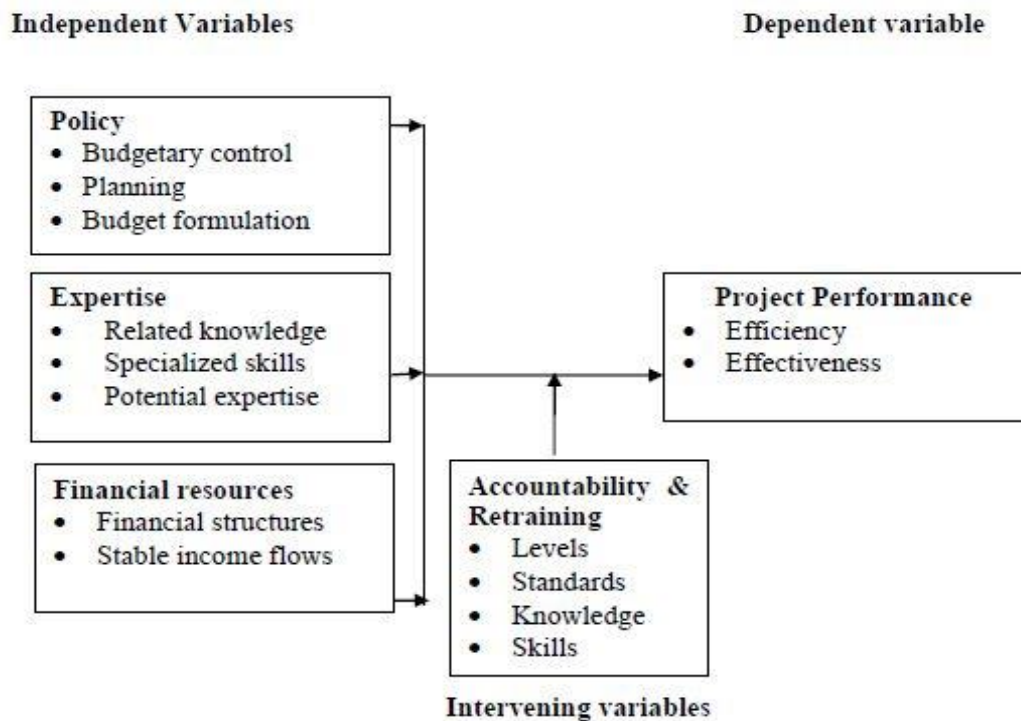
### **Accountability and Retraining**

Williams (2012) notes that accountability is closely associated with fairness and ethics: in evaluating the submitted account, the account holder may treat it as being either fair or unfair. Williams also suggests that the account holder should take an impartial position in assessing the account. Williams thus relates accountability to the good conduct of the actors involved in the accountability process and this idea. Accountability presents a major challenge to the

development and performance of projects. If the demands of accountability are neglected in ‘open’ decision-making processes, the risk looms large that the evaluation either be judged as irrelevant or unwarranted interpretation of results occurs.

Mulgan (2011) argued that accountability is a situational concept, in that its arrangement depends on the particular context where the accountability operates. Sinclair (2010) added that these differences take place because accountability has a multi-discipline meaning. Sinclair then provided some instances: auditors view accountability from financial and numerical perspectives, while political researchers look at accountability from a political-science perspective. Legal experts approach accountability from a legal viewpoint, while philosophers stress the ethics of actors’ behaviour. Thus, the concept of accountability is contested and contestable among scholars. In relation to accounting practice, Sinclair (2010) observed that the development of accounting and management information systems within public organisations lags behind that in private organisations. This factor might have prompted public organisations to adopt private sector-inspired accounting technology such as accrual based accounting, as a manifestation of the myth perspective intended to help them to be perceived as “modern” organisations.

### 1.5 Conceptual Framework



The dependent variable in this study is project performance. Project performance is affected by several determinants that constitute the independent variables. Based on the literature review the determinants that influence project performance are policy on budgeting, expertise and financial resources. There also exist intervening (moderating) variables which are accountability and re-training.

#### **1.4 Research Methods**

This study adopted a descriptive survey research design. This is because the descriptive survey research design is appropriate where the study seeks to describe the characteristics of certain groups, estimate the proportion of people who have certain characteristics and make predictions (Cooper & Schindler, 2012). The primary purpose of the study was to establish the effectiveness of capital budgeting as a strategy for project management; a case of Kenya Rural Roads Authority.

The study sample consisted of all 15 project managers and 15 financial managers drawn from Kenya Rural Roads Authority (KeRRA). Purposive sampling procedure was used to select the project managers and financial managers to participate in the study. According to Denscombe (2008), purposive sampling starts with a purpose in mind and the sample is thus selected to include people of interest and exclude those who do not suit the purpose. Denscombe (2008) also posited that, purposeful sampling is useful when one wants to access a particular subset of people.

A structured questionnaire was developed and utilized in this study. The questionnaire had both open and close ended items for collection of primary data. The preference for a questionnaire for use is based on the fact that respondents are able to complete them without help, anonymously, and it is cheaper and quicker than other methods while reaching out to larger sample (Dooley, 2010). A request to answer all questions was made then the completed questionnaires were collected immediately.

#### **1.5 Findings**

Quantitative data collected using questionnaires was analysed by the use of descriptive statistics using SPSS (Statistical Package for Social Sciences) and was presented through percentages, means and frequencies. On this the study established that respondents were fairly distributed in terms of their gender, majority of the respondents had served the corporation for a considerable period of time and thus they were in a position to give credible information rating to this research, respondents were well educated and therefore they were in position to respond to the research questions with ease and respondents were fairly distributed in terms of their management levels. The study also established that Policy on Budgeting, Expertise, Financial Resources, Accountability and Re-Training measures affected the performance of project to a great extent.

In addition, the researcher conducted a multiple regression analysis so as to determine the relationship between the project management and the variables of the study. From the model summary  $R = 0.643$  having a positive value above 0.5 indicated that all independent variables

are strongly positively correlated with the dependent variable. R-Square=0.413 value indicates that 41.3% of the variance in science scores can be predicted from the variables Policy on Budgeting, Expertise, Financial Resources, Accountability and Re-Training. From ANOVA results, the F-value was greater than the tabulated value ( $2.818 > 2.109$ ) an indication that Policy on Budgeting, Expertise, Financial Resources, Accountability and Re-Training, all have a significant effect on project performance.

The significance value was less than 0.05 indicating that the model was significant. On the coefficients it was noted that Policy on Budgeting had the highest influence on Project Performance (p - value .000). T-Test: Tests results for significance are calculated by the SPSS and this is represented by two columns under t and Sig. These columns provide the t-value and 2 tailed p-value used in testing the null hypothesis that the coefficient  $H_0: \beta_j \neq 0$ ;  $H_0: = \beta_j 0$ . The analysis was undertaken at 5% significance level. The criteria for comparing whether the predictor variables were significant in the model was through comparing the obtained probability value and  $\alpha = 0.05$ . If the probability value was less than  $\alpha$ , then the predictor variable was significant otherwise it wasn't. As observed all the predictor variables were significant in the model as their probability values were less than  $\alpha = 0.05$ .

The study established that KeRRA had adopted capital budgeting strategic and had realized high performance. The study further reveals that strategic management provides an objective view of management problems whilst also allowing major decisions to better support the established KeRRA objectives and provides a framework for improved coordination and control of the activities. Also, for the identification, prioritization and exploitation of opportunities, and for the effective allocation of time and resources to the identified opportunities and minimizes the resources and time to be spent correcting erroneous or ad hoc decisions identify and understanding the factors that contribute to its ability to develop effective strategies as well as achieve its objectives efficiently and effectively.

From the findings, the study found that KeRRA was using strategic management to improve its service delivery offering intangible benefits among others. It was also focusing on how to use an enhanced awareness of external threats and how to use opportunities which were available to counter the threats. The study found that strategic management assists KeRRA in formulating better strategies through using a more systematic, logical, and rational approach to strategic choice. It also allows KeRRA to be more proactive than reactive in shaping its own future as it allows authorities to initiate and influence road activities.

## **1.6 Conclusion**

One management practice that has been widely adopted by corporations is capital budgeting. The study concluded that Policy on Budgeting, Expertise, Financial Resources, Accountability and Re-Training are major determinants of performance of project in Kenya Rural Roads Authority. Budgeting is one of the fundamental decision-making processes in organizations. During budget formulation, officials determine the portion of the organization's resources that the manager of each unit will be authorized to spend.



The study concludes that strategic management improves service delivery offering intangible benefits among others. It helps KeRRA use enhanced awareness of external threats and opportunities which are available to counter the threats. Strategic management assists the roads authority in formulating better strategies through using a more systematic, logical, and rational approach to strategic choice. It also allows it to be more proactive than reactive in shaping its own future as it allows authorities to initiate and influence road activities.

The study also concludes that financial resource planning practices influenced the project performance. Practices such as budgeting, forecasting and having plans for money generation existed in the project. A positive and significant relationship between financial resource practices including budgeting, forecasting and having plans for money generation and project performance existed.

Finally, the study recommends that effective budget implementation at the KeRRA should be facilitated through capacity building, robust systems and processes, prioritization close monitoring and evaluation. All stakeholders should get involved in budget execution in enhancing the overall budget implementation. The study further recommends that management should ensure that operational action plans are in line with the overall strategies and are communicated to all staff in good time to facilitate operationalization of the strategies for smooth and successful implementation. This will ultimately translate to improved organizational performance.

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