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THE EFFECT OF CAPITAL BUDGETING INVESTMENT DECISION ON ORGANIZATIONAL PERFORMANCE IN RWANDA. A CASESTUDY OF BAHRESA GRAIN MILLING RWANDA LTD

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ABSTRACT: *The capital budgeting investment decision has been a very typical issue in the sustenance of a company. Several companies have lost their identity or liquidated due to wrong capital budgeting decision they made at a particular point of time. Rwanda particularly sets up capital budgeting decision in order to manage its limited resources effectively and efficiently. However, it does not develop an enduring technological base that can support the growth of its economy and Rwanda's capital budgeting on investment decision is not usually well articulated. For instance, Rwanda vision 2020 finds that the Rwanda companies do not derive high benefits from the budgeting and this leads to inefficient performance and loss. Based on these common problems in industries and the effect of globalization on industries, it is important to use effective method before making any investment decision. Capital budgeting is extremely important because the decision made directly affects the organization future growth. The traditional methods commonly used for capital investment appraisals by some Organizations is the Payback Method, Net present Value, Internal Rate of Return and discounted payback period. The wide acceptance of these methods has called for a discussion that why these Methods are still used in the organizations. The research was to examine the effect of Capital budgeting on investment decisions on the organizational performance. The method to use are the theories on the capital budgeting as it affects decision making in the organization and past research work methods which companies used in appraising investment, are used as Secondary Data in order to have a basic insight into the importance of the Capital budgeting on organizational performance .The theories helped us to look for the methods that are often used in the capital budgeting decision .The analysis was done on the basis of various research works that have been done on capital budgeting, and different data of the study of the research is being used as secondary data to obtain the result. Exploratory research was conducted and involved gathering qualitative data using questioners. The population size considered 70 employees working in finance and accounting units and senior manager. From the analysis, the trend show that the capital budgeting has been commonly used in improving the performance of various organizations. It is was clear that the research that the capital budgeting decision is often majorly used in the organizations all over the world despite its criticism by academicians, making inference from the analysis of companies as the expected results of this research.*

KEYWORDS*:* Capital Budgeting, Payback Period

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INTRODUCTION

Background

In 2010, Suk H. Kim and Edward J. Farragher surveyed the 2001 Fortune 100 Chief financial officers about their usage of techniques for evaluating capital budgeting projects. They found majority of firms relied on a discounted cash flow method, as the primary and the payback as the secondary method.

The capital budgeting on investment decision has been a very typical issue in the sustenance of a company. Several companies have lost their identity or liquidated due to wrong capital budgeting decision they made at a particular point of time. Based on these common problems in industries and the effect of globalization on industries, it is important to use effective method before making any investment decision.

Capital budgeting is a process in which a business determines whether projects such as building a new plant or investing in a long term venture are worth or not. Most of times, a prospective project's lifetime cash inflow and outflows are assessed in order to determine whether the return generated meet a sufficient target. Capital budgeting is also known as Investment Appraisal.

Capital budgeting is extremely important because the decision made directly affects the organization future growth. One of the traditional methods commonly used for capital investment appraisals by some Organizations is the Payback Method, although this method is criticized by academicians as it does not include the time value or future value of cash flow & do not measure profitability. The wide acceptance of this method has called for a discussion that why this method is still popularly used in the organizations.

Even if many companies are using the Payback Period, Net Present Value (NPV) Internal Rate of Return (IRR) as capital budgeting techniques to improve the organization's performance there is much inefficiency equivalence in capital budgeting and performance of the firm that affect its expansion . Here we will examine the effect of capital budgeting decision on organizational performance

Statement of the Problem

Pike (1986) denotes that resource-allocation efficiency is not merely a matter of adopting sophisticated, theoretically superior investment techniques and procedures But consideration must also be given to the fit between the corporate context and the design and operation of the capital budgeting system but in Rwanda capital budgeting decision has been a very typical issue in the sustenance of a company as a result several companies have lost their identity or liquidated due to wrong capital budgeting decision they made at a particular point of time.

Dayananda et al (2002), also considers that capital budgeting decisions are used to make investment decisions so as to increase shareholders value. But due to limited resources of the developing countries, Rwanda inclusive capital budgeting decisions are intended to manage the limited resources effectively and efficiently. It does not develop an enduring technological base that can support the growth of its economies. Their capital budgeting decision is not usually well articulated. For instance, Rwanda vision 2020 finds that the Rwanda companies do not derive high benefits from the budgeting and this leads to

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inefficient performance and loss. Based on these common problems in industries and the effect of globalization on industries, it is important to use effective method before making any investment decision.

The research looks out to investigate organisational problems caused by capital budgeting decisions in Rwanda.

Research Objectives

General Objectives

The aim of the study is to investigate the effects of capital budgeting decision on organizations' performance

Specific objectives

The study is set to achieve the following objectives:

1. To investigate how capital budgeting decision affects organisational investment growth rate.
2. To examine the contribution of capital budgeting decision on cash inflow and share price maximisation
3. To assess how capital budgeting decision influences the operational cost of an organisation.
4. To analyse the role of capital budgeting decision on cash outflow and financial deficit in an organisation.

Research Questions

1. How do capital budgeting decision affects organisational investment growth rate?
2. How does capital budgeting decision lead to cash inflow and share price maximisation in an organisation?
3. Does capital budgeting decision influences the operational cost of an organisation?
4. How does capital budgeting decision lead to cash outflow and financial deficit in an organisation?

LITERATURE REVIEW

Introduction

The chapter contains the review of the literature of ideas from different authors. These ideas are collected from published books, reports, journals and unpublished books like documents of firms.

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It begins by discussing and giving an overview of the**,** Capital Budget, Capital Budgeting Process, Strategic Planning, preliminary screening projects, Identification of Investment Opportunities, Net present Value, Payback Period

Theoretical Review

In order to effectively analyse the variables on capital budgeting decisions it is imperative to take a theoretical analysis of it. This part constitutes a theoretical framework for defining the variables and is based on underlying theories as well as definitions used in earlier studies. This study is based on five theories which are; contingency theory, garbage can theory, the incrementalism theory, the real options theory and the traditional normative view.

The Contingency Theory

Resource-allocation efficiency is not merely a matter of adopting sophisticated, theoretically superior investment techniques and procedures Pike (1986). But consideration must also be given to the fit between the corporate context and the design and operation of the capital budgeting system. Pike (1986) focuses on three aspects of the corporate context, which are assumed to be associated with the design and operation of a firm's capital budgeting system.

The first aspect is a firm's organizational characteristics. Decentralization and a more administratively oriented control strategy involving a higher degree of standardization are characteristics of large companies. Smaller, less complex organizations tend to adopt interpersonal, less sophisticated control systems. On the other hand however, Haka et al (1985) have an opposite opinion and argue that firms will experience more benefits from using sophisticated capital budgeting techniques, the more stable the environment. They base their argument on Schall&Sundem (1980) study, which shows that use of sophisticated capital budgeting techniques declines with an increase in environmental ambiguity.

The second aspect is environmental uncertainty. The more variable and unpredictable the context of operation is, the less appropriate are highly bureaucratic, mechanistic capital budgeting structures. Pike (1986) suggests that firms operating in highly uncertain environments are assumed to benefit from sophisticated investment methods, particularly in appraising risk.

The last aspect is behaviour characteristics. Pike (1986) identifies three characteristics, i.e. management style, degree of professionalism and the history of the organization. An administratively-oriented capital budgeting control strategy is assumed to be consistent with a critical style of management, a high degree of professionalism and a history of ordinary investment outcomes. The firm's financial status may manipulate the design and effort put on capital budgeting. Axelsson,et al.,(2002), notes that more effort will be devoted to budgeting in an adverse financial situation, since it will no longer be as simple to find an acceptable budget and there will a need for more frequent follow up. These arguments have been applied to capital budgeting by Haka et al. (1985). They argue that the implementation of sophisticated capital budgeting procedures is one of many means of coping with acute resource scarcity. Another argument is that since the main value of adequate investment rules is in distinguishing profitable from unprofitable projects, highly profitable firms are expected to derive less benefit from such techniques than would less successful firms with a history of marginal projects Axelsson,et al.,(2002).

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The Incrementalism Theory

Incrementalism incidentally is the main theory that influences capital budgeting decisions. It can also be noted that the literature on budgetary decisions has been dominated by the theory of incrementalism and its various meanings (Berry, 1990). The incrementalism theory suggests that policy makers use 'rules of thumb' in order to deal with the technical complexity of expenditure decisions. Wildavsky, the founder of this theory, suggests that the people who design the budget are concerned with relatively small increments to an existing base denoted as their fair share. It follows that budgeting is incremental to the extent that it results in marginal and regularity of changes in expenditure. Regularity embodies the idea of routine behaviour in expenditure decisions. This view of incrementalism opines that small changes in expenditure base may be seen as preserving constancy.

The Real Options Theory

Myers first coined the term real options in 1977 Myers (1984), and the subject has since generated a great deal of interest among finance, academics and practitioners. The real options theory deals with choices about the real investments such as capital budgeting projects, as opposed to financial investments. Thus, a real option is a right but not an obligation to undertake some business decision. Among the more common real options in capital budgeting are the option to invest or not, the option to abandon or continue a project, and the option to delay or carry on with an investment (Chance and Peterson, 2002). Real options theory offers a more efficient way for managers to allocate their firm's capital and maximize shareholder value by leveraging uncertainty and limiting downside risk. The theory additionally declares that the presence of real options can make an investment worth more than its conventional discounted cash flow value. Arnold, T. &Shockley,R (2003) attribute the wave of interest in real options to an increase in both supply and demand. The supply side reflects a growing body of literature pertaining to the real options approach. The demand side for real options reflects management's need to position the firm to benefit from uncertainty and to communicate the firm's strategic flexibility. Increasingly, managers in industries characterized by large capital investments and considerable uncertainty and flexibility, such as mining, oil and gas aerospace, pharmaceuticals, and biotechnology, are contemplating the use of real options. Real options hold a considerable promise because they recognize that managers can obtain valuable information after the acceptance of a project. Yet, real options are by no means a panacea or a silver bullet intended for all capital projects.

Traditional Normative View

According to the traditional normative view, the choice of capital budgeting techniques is a key and is also be assumed to influence the degree of complexity to a large extent. As described in the problem discussion, net present value (NPV), internal rate of return (IRR), accounting rate of return (ARR) and payback period (PB) are generally described as the most commonly used capital budgeting techniques. The two former techniques are based on the cash-flow concept and are usually categorized as sophisticated techniques. The two latter techniques can be described as rule-of-thumb approaches and are commonly categorized as naive techniques (Bierman&Smidt, 1993). Apart from these four techniques a number of varieties exist, discounted payback (DPB) is, for example, an elaboration of payback that takes the time value of money into account (Northcott, 1995; Bierman&Smidt, 1993).

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Further, real options and value added measures are rather new sophisticated approaches, which are applied to a very limited extent by Swedish firms (Sandahl&Sjögren, 2002).

When considering how the choice of capital budgeting technique may affect the firm's ability to maximize shareholders' wealth an even finer distinction can preferably be made. Copeland & Weston (1992) have formulated a number of criteria, which have to be fulfilled if a capital budgeting technique can be considered to maximize shareholders' wealth.

All cash flows should be considered.

The cash flows should be discounted at the market-determined opportunity cost of funds.

The technique should select from a set of mutually exclusive projects the one that maximizes shareholders' wealth.

Managers should be able to consider one project independently from all others (the value addictively principle7).

Copeland & Weston (1992), note that the two naive techniques fail to consider at least the first two criteria. PB only considers cash flows occurring during the payback period and fails to discount them. ARR uses accounting profits instead of cash flows and does not consider the time value of money. Despite taking into account the time value of money, DPB suffers from the same weaknesses as PB (Northcott, 1995). IRR assumes that funds invested in projects have opportunity costs equal to the IRR of the project (the reinvestment rate assumption), which violates the requirement that cash flows are to be discounted at the opportunity cost of funds (Bierman&Smidt, 1993). The IRR rule does also not obey the value-additivity principle, which implies that projects can be considered independently. (Copeland & Weston, 1992)

Further, IRR is difficult to interpret when cash flows are non-conventional (Bierman&Smidt, 1993). In contrast, the NPV rule fulfils the four criteria and is according to Copeland & Weston (1992) exactly the same as maximizing shareholders' wealth. In many situations both NPV and IRR do lead to investment decisions that maximize shareholders' wealth, but when the two methods lead to different decisions, the NPV rule tends to give better decisions.

Earlier studies treating the relationship in question employ different definitions of capital budgeting decisions (CBD). The definitions used by Christy (1966) and Klammer (1973) focus on which capital budgeting techniques are applied by the respondent firms. Christy (1966) measures sophistication by merely investigating which capital budgeting techniques the firms' use, while Klammer (1973) goes somewhat more into depth. In his study four factors are considered in order to determine the degree of capital budgeting sophistication.

Firstly, he considers whether the firms used a profit contribution analysis on more or less than 75 per cent of projects. This factor is included since it tended to separate those firms that are using the capital budgeting system for the majority of projects from those that use it only occasionally. The second factor is the capital budgeting techniques applied. The techniques were divided into three categories: payback, accounting rate of return, and discounting. Hence, Klammer (1973) does not distinguish between the use of NPV and IRR. The two last factors considered are the use of a formal method for considering risk and the use of one or more management science techniques. The definitions used in the articles written by Pike (1984) and Farragher et al (2001) also consider, which capital budgeting techniques are used,

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even though it is not the only criterion of their models. Pike (1984) accounts for the use of the four major techniques (NPV, IRR, ARR and PB), while Farragher et al (2001) only consider the use of discounted cash flow measures.

Empirical review

Empirical investigations by Don Dayananda et al 2002, Capital budgeting is primarily concerned with sizable investments in long term assets. These assets can either be tangible items such as property, plant & machinery or intangible ones such as new technology, patents or trademarks. Investments in processes such as research, design and development and testing-through which new products are created may also be viewed as investments in tangible assets.

Drury C. 2000 revealed that there is an Impact of capital budgeting decision on performance of organisations in various departments upon adoption. Therefore capital budgeting decision is created and is widely used by the management accounting to reflect the dynamic nature of budgeting practice in a firm towards the organizational performance.

Capital Budgeting Decision

According to Dayananda et al (2002), the capital budgeting decisions are used to make investment decisions so as to increase shareholders value. Capital budgeting is primarily concerned with sizable investments in long-term assets, Brealey& Myers (2003). These assets may be tangible items such as property, plant or equipment or intangible ones such as new technology, patents or trademarks.

Dayananda et al (2002) argued that irrespective of whether the investments are in tangible or intangible assets, a capital investment project can be distinguished from recurrent expenditures by two features. One is that such projects are significantly large. The other is that they are generally long-lived projects with their benefits or cash flows spreading over many years. Sizable, long-term investments in tangible or intangible assets have long-term consequences. This implies that today's investment will determine the overall corporate strategic position over many years. These capital investments also have a considerable impact on the future cash flows of the organization and the risk associated with those cash flows.

Capital budgeting decisions thus have a long-range impact on the strategic performance of the organization and are also critical to its success or failure.

Capital: The term capital has several meanings and it is used in many business contexts. In general, capital is accumulated assets or ownership. More specifically, capital is the amount of cash and other assets owned by a business.

Capital can also represent the accumulated wealth of a business, represented by its assets less liabilities. The term "capital budgeting" Is use to describe how managers plan significant outlays on projects that have long-term implications such as the purchase of new equipment and the introduction of new products.

Most companies have many more potential projects than can actually be funded. Hence, managers must carefully select those projects that promise the greatest future return. How well managers make these capital budgeting decisions is a critical factor in the long run profitability of the company. Brian Bushee, (2004)

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A budget: A budget is a financial document used to project future income and expenses. In business, a budget is a forecast or plan of an organization's income and/or expenses for a period of time. Budgets are used in many organizations: To support funding requests (by describing how funds were used). To control spending, to ensure that available funds are used according to plan and that spending stays within preset limited

These items define the tem budget, in context with closely related budgeting terms. In its simplest form a budget is just a list of spending items and/or incoming revenue items, with a budgeted figure for each item. As time passes, the actual spending or revenue may be entered into the budget to compare with the budgeted figure. The difference between the two figures is called a variance. Brian Bushee, (2004)

Capital Budgeting

Capital budgeting is a process in which a business determines whether projects such as building a new plant or investing in a long term venture are worth or not. Most of times, a prospective project's lifetime cash inflow and outflows are assessed in order to determine whether the return generated meet a sufficient target. Capital budgeting is also known as Investment Appraisal. Ideally, business should do all those projects and opportunities which enhance shareholders value. Generally, businesses prefer to study a project before taking it on, as it has a great impact on the company's financial performance. Capital budgeting is an important tool. One important duty of a financial manager is to choose investments with satisfactory cash inflows and rate of return. A financial manager should be able to decide if an investment is worth undertaking and should also have the ability to choose intelligently given other alternatives. Capital budgeting is primarily concerned with sizable investments in long term assets. These assets can either be tangible items such as property, plant & machinery or intangible ones such as new technology, patents or trademarks. Investments in processes such as research, design and development and testing- through which new products are created may also be viewed as investments in tangible assets. (Don Dayananda et al 2002)

Financial management largely concerns with financing, dividend and investment decisions of the firm. Corporate finance theory has developed around a goal of maximizing the market value of the firm to its shareholders, which is also known as shareholder wealth maximization.

Financial decision deal with the firm's optimal capital structure in terms of debt & equity Investment decisions deal with the funds raised in financial market are employed in productive activities to achieve the firm's overall goal, or we should say, how much should be invested and what assets should be invested in.(Don Dayananda et al 2002)

In reality, many firms have limited borrowing resources that should be allocated among the best investment alternatives. Many people would argue that a company can issue an almost unlimited amount of capital stock to raise capital. Increasing the number of shares of company stock will serve only to distribute the same amount of equity among a greater number of shareholders.

In other words, as the number of shares of a company increases, the company ownership of individual stockholder may proportionally decreases. The argument that capital is a limited resource is true of any form of capital, whether debt or equity or retained earnings, accounts payable or notes payable and so on. Even the best-known firm in an industry increases its

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borrowings up to a certain limit. Once this point has reached, the firm will either be denied more credit or be charged a higher interest rate. Faced with limited sources of capital, management should carefully decide whether a particular project is economically acceptable. In the case of more than one project, management must identify the projects that will contribute most to profits and to the value of the firm. This is the basis of Capital Budgeting.

Capital Budgeting Process

There are different sequential stages in the capital budgeting process. The capital budgeting process is a multi-faceted activity. The sequential stages of a capital budgeting process can be depicted in a simple flow chart below:

Figure 1 : Stages of a capital budgeting process

Source: Don Dayananda et al 2002

Organization: the act of organizing a business or an activity related to a business; "he was brought in to supervise the organization of a new department".

Performance: the act of performing; of doing something successfully; using knowledge as distinguished from merely possessing it; "they criticized his performance as mayor; experience generally improves performance" Organization performance refers to the effectiveness of the organization in fulfilling its purpose. Some organizations aim to trade successfully in order to return financial benefits to shareholders, while others have non-financial objectives (e.g. service to the community). For some organizations, the activity generates the finance, while for others the finance allows the activity. Some organizations was in a competitive environment which means that their performance was compared against others (especially buy investors), while others measure success in terms of usefulness and productivity.

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It follows that no one way to assess performance will address all situations. Further complication is introduced by time - indicators of past performance, current performance, and predictors of future performance. To add the mix, performance assessment must allow for organizational energy and resources deferred from current performance to preparing for future performance, and also account for relative emphasis between effectiveness and efficiency.Dagrou, E., Gauvin, L., &Halliwell, W. (1992).

Strategic Planning

It could be referred as the actual design of the organization which specifies the type of the business of the organization and where it intends to position itself in the future. It translates the organization's corporate goal into specific policies and directions, set priorities, specifies the structural, strategic and tactical areas of business development and guides the planning process. (Drury et al. 1993)

An organization's vision & mission is also embedded in its strategic planning. The feedback to strategic planning during project evaluation and decision stages is very critical as it affects

Financial Appraisal

Proposals which are through to the preliminary screening phase are subjected further to rigorous financial appraisal to ascertain if they add value to the organization. This stage is also called quantitative analysis, economic and financial appraisal, project evaluation or simply project analysis. It predicts the expected future cash flows of the project, analyze the risks associated with those cash flows, develop alternative cash flow forecast, examine the senility of the results, subject the cash flow to simulation and prepare alternative estimate of the project's net present value (Brian Baldwin 1997).

The basic concepts, principles and techniques of project evaluation are same for different projects while their application to particular types of projects needs special knowledge and expertise. For example: asset expansion projects, asset replacement, & international investment and so on .It should be noted that if the projects identified within the current strategic framework of the organization repeatedly produce negative NPVs in the analysis stage, these results send a warning signal to the management to review its strategic plan. Therefore the feedback from project analysis to strategic planning is important in the overall capital budgeting process.

Stage 1: Investment screening and selection Projects consistent with the corporate strategy are identified by production, marketing, and research and development management of the firm. Once identified, projects are evaluated and screened by estimating how they affect the future cash flows of the firm and, hence, the value of the firm.

Stage 2: Capital budget proposal A capital budget is proposed for the projects surviving the screening and selection process. The budget lists the recommended projects and the dollar amount of investment needed for each. This proposal may start as an estimate of expected revenues and costs, but as the project analysis is refined, data from marketing, purchasing, engineering, accounting, and finance functions are put together.

Stage 3: Budgeting approval and authorization Projects included in the capital budget are authorized, allowing further fact gathering and analysis, and approved, allowing expenditures for the projects. In some firms, the projects are authorized and approved at the same time. In

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others, a project must first be authorized, requiring more research before it can be formally approved. Formal authorization and approval procedures are typically used on larger expenditures; smaller expenditures are at the discretion of management.

Stage 4: Project tracking after a project is approved, work on it begins. The manager reports periodically on its expenditures, as well as on any revenues associated with it. This is referred to as project tracking, the communication link between the decision makers and the operating management of the firm. For example: tracking can identify cost over-runs and uncover the need for more marketing research.

Stage 5: Postcompletion audit following a period of time, perhaps two or three years after approval, projects are reviewed to see whether they should be continued. This revaluation is referred to as a postcompletion audit. Thorough post completion audits are typically performed on selected projects, usually the largest projects in a given year's budget for the firm or for each division. Postcompletion audits show the firm's management how well the cash flows realized correspond with the cash flows forecasted several years earlier.

Importance of Capital Budgeting

Capital budgeting decisions are extremely important and complex and have inspired many research studies in the past. For example: in an in-depth study of the capital budgeting projects of 12 large manufacturing firms (Ross 1972), that although techniques that incorporated discounted cash flow were used to some extent, firms relied so much on the simplistic payback model. Also, when discounted cash flow techniques were used, they were often simplified. Ex: some firms' simplifying assumptions include the use of the same economic life for all projects even though the actual life of individual projects might be different. (Ross 1986)

J. William Petty, David P. Scott, and Monroe M. Bird (1956) examined responses from 109 controllers of 1971 fortune 500 firms concerning the techniques their companies use to evaluate new and existing product lines. They found that internal rate of return was the method preferred for evaluating all the projects. (Petty 1975)

Laurence G. Gitman and John R. Forrester Jr. analyzed the responses from 110 firms who replied to their 1977 survey of the 6oo companies that Forbes reported as having a greatest stock price growth over the 1971-1979 period. The survey containing questions related to capital budgeting techniques, the division of responsibility, the cut-off rate and the methods used to assess risk. They found that the discounted cash flow techniques were the most popular methods forevaluating projects. However many firms still used the payback method as a backup.(Gitman1977)

In 1981, Suk H. Kim and Edward J. Farragher surveyed the 1979 Fortune 100 Chief financial officers about their usage of techniques for evaluating capital budgeting projects. They found majority of firms relied on a discounted cash flow method, as the primary and the payback as the secondary method.

Capital Budgeting Techniques

To assess investment projects and select the one that maximizes wealth, cash inflow and reduces cash outflows there are four techniques to be applied for relevant information and analysis of capital budgeting decisions has lined a series of models to assist the organization

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in to use their resources best. Popular methods are: The Payback Period, Net Present Value (NPV), and Internal Rate of Return (IRR) Discounted rate of return (DRR

The Payback Period

It is defined as the time required recovering the initial investment in a project from operations. This method is used to evaluate capital projects and to calculate the return per year from the start of the project until the accumulated returns are equal to the cost of the investment at which time the investment is said to have paid back and the time taken to achieve this payback is referred to as the payback period. Payback is said to emphasize the management's concern with liquidity and the need to minimize risk through a rapid recovery of the initial investment. (Cooper, William D. Morgan et al. 2001)

It should be noted that the required payback period sets the barrier for the project acceptance. It often appears that in many cases the determination of the required payback period is based on subjective assessment, taking into past account experiences and the level of project risk. The payback period has shown to be an important, popular, primary and traditional method in the developed nations like the UK and USA (Pike 1985)

Typically, the payback period expected by the managers appears to be in the range of 2 to 4years. This method by definition, only takes into account project returns up to the payback period. However, for certain projects which are long term by nature and whose benefits will accrue in the future and beyond the normal payback may not be accepted based on the calculation used by the payback method, although such projects may actually be vital for the long term success of the business. It is important to use the payback method more as a measure of project liquidity rather than project profitability.

The payback method is commonly used for appraisal of capital investments in companies despite of its deficiencies and in some it is used as a measure of attractiveness of capital investments. Although the use of this method as a single criterion has decreased over time, it is used as a secondary measure increased over time. (Segelod 1995) This method is commonly used in pure profit evaluations as a single criterion and also sometimes used when focusing on aspects such as liquidity and project time risk. The obvious case of profitable & unprofitable investments are sorted out, when the payback method is used as the first screening device, leaving only theinvestments that have survived the screening process in the middle group to be scrutinized by means of advanced and more time consuming calculation methods based on discounted cash flows (DCF), such as the internal rate of return (IRR) and net present value (NPV) methods. However, there are many companies where the payback period is used as a single criterion in investment evaluations. (Blatt 1979)

Most importantly the overall conclusion seems to reveal that the payback method is much in use by companies for investment appraisals and it is therefore necessary to reduce some of its deficiencies. The major deficiencies of the payback method are that it ignores cash flows after the payback period and it does not measure the time value of money in correct manner. To reduce these deficiencies the maximum acceptable payback period should be chosen as a fixed value, say 3yrs and in some cases the limit value of the payback period has been related to the economic life of the investment, for ex: a payback period that is shorter than half the economic life. When these two rules of thumb are combined, a more theoretically correct evaluation of investments can be achieved and such a combined payback method is based on assumption of constant yearly cash flows. The payback time limit has been criticized by

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theorists because it ignores profits which may accrue in the subsequent life of the project. The criticism is unjust, the practical men are completely right. In a riskless world future profits are certain. But in the real world, the imposition of payback time limit is a necessary protection for the survival of the planning manager. Infect payback time limit is used by every responsible manager.

Payback Method in Relation to the Goals of the Company

In the payback method companies went ahead with an investment if the return of the investment is higher or larger than the capital cost. Generally, most companies go ahead with an investment decision if the following conditions hold true.1)

This means that for a good investment decision to be made, the net present value must be greater than zero.2) (i.e. cost of capital) This says that the internal rate of return is expected to be greater than weighted average cost of capital for executing the capital budget under consideration.3) NPV+ Option value (Strategic NPV) >0This explains the net present value in addition to the option value must be greater than zero to make a good investment decision. The above conditions are used because they increase the principal's wealth (i.e. shareholder's wealth) and ultimately add value to the company as a whole. The goal function of the company is one of the major criteria in the investment decision of the company. Investment that will add value to the company is always chosen, and majorly the investment that maximizes the present future value of cash flow. To find out, if the goal function of the company is supported by the payback method, we have assumed the goal function of the company in the Research. In the research, the goal function of the company is focusing on maximizing the long run market value of the firm by maximizing the net benefits from activities such as investments with positive returns. (Numminen 2008) The goal function of the company is said to maximize the present value of future cash flow which is easily supported by the net present value method and the internal rate of return method. It is noted that the payback method is majorly used for appraising capital projects which have short-term such as 3 years. The development of the relationship between the internal rate of return and the payback method has shown that the payback method do measure profitability of investment. The literature has shown that the payback period is an approximation of internal rate of returns of infinite life and uniform cash flow. (Frank Lefely 1996)

According to studies, the payback method has been employed because some practicing manager believe that it is the approximation of internal rate of return and that it also support the goal function of the company.

Discounted Payback Period Method in Relation to the Goals of the Company

The payback method have gone through various development stages over the years, eliminatingsome of its disadvantages and at the same time keeping it as simple as possible. The payback method based on discounted cash flow figures were proposed by, Rappaport (1965)

This method attempted to overcome one of the drawbacks of the conventional payback calculation which failed to take into Account Company's cost of capital. Longmore (1989), proposed a generalized time-adjusted payback rule which states that "If the investment proposal's payback, adjusted for the timing of the net cash flows, is less than or equal to the present value of annuity factor at the firm's cost of capital for the life of the proposal, the

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

investment should be accepted." He argues that by adjusting the discount rate, the discounted payback decision rule can be modified to handle risky investments. In practice it appears that the standard payback DCF uses discounted figures in its calculation but allows managers todetermine the payback hurdle rate, which in many cases is based on the subjective judgment. It should however be noted that the payback period is determined from the present value annuity factors used and not predetermined by the managers.

In payback method, the projects with shorter payback periods rank higher than those with longer paybacks. The reason is that projects with shorter period are more liquid and thereby less riskier. They allow the organizations to recoup the investment sooner, so that the money can be invested elsewhere. Also in shorter period there is little or no chance that market conditions, interest rates, the economy, or other factors affecting the proposed project will drasticallychange.

Net Present Valuein Relation to the organization performance

The Net present value is defined as the different between the present value of the cost of inflows and the present value of cash outflows. In other words, a project's net present value is computed as the present value of cash flows from operations and disinvestments less the amount of the initial investment. (Stefan Yard 1999) In computation of NPV, the cash flows that occur at different point of time are adjusted for the time value of money using a discount rate that is the minimum rate of return required for the project to be acceptable. Project with positive NPV are acceptable and negative are unacceptable. NPV is used in capital budgeting to analyze the profitability of an investment and it is sensitive to the reliability of future cash flows that the investment will yield. For example: the NPV compares the value of rupee today of that same rupee in the future taking inflation and returns into account. The NPV is computed as follows:

N.P.V. = Present Value of Cash Inflows – Initial Investment

Internal Rate of Return (IRR)

The internal rate of return is the discount rate often used in capital budgeting that makes the net present value of all cash flows equal to zero. This means that IRR is the rate of return that makes the sum of present value of future cash flows and the final market value of project equal current market value. (Stefan Yard 1999)

The higher the project's internal rate of return, the more desirable it is to undertake. It is used to rank several prospective projects a firm is considering. The IRR provides a simple hurdle, whereby any project should be avoided if the cost of capital exceeds this rate. IRR is also referred as economic rate of return (ERR). So a simple criterion can be, accept a project if it's IRR exceeds the cost of capital and reject if IRR is less than cost of capital. Although the use of IRR could result in a number of complexities such as a project with multiple IRRs or no IRR Internal rate of return is the flip side of NPV, where NPV is discounted value of a stream of cash flows, generated from investment.

Critical review

According to Dayananda et al (2002), the capital budgeting decisions are used to make investment decisions so as to increase shareholders value. Capital budgeting is primarily concerned with sizable investments in long-term assets,

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

Brealey& Myers (2003). Also asset that the tangible items such as property, plant or equipment or intangible ones such as new technology, patents or trademarks may also be included in the capital budgeting decisions

Capital budgeting decisions are among the most important decisions the financial Manager of a company has to deal with. Capital budgeting refers to the process of determining which investment projects result in maximization of shareholder value.

Generally speaking, there are four main capital budgeting techniques the manager may use when evaluating an investment project. The Net Present Value (NPV) and Internal Rate of Return (IRR) methods are considered to be discounted cash flow (DCF) methods. The Payback Period (PB) and Average Accounting Rate of Return (ARR) methods are so-called non-DCF methods. From a pure theoretical point of view the NPV is considered to be the most accurate technique to evaluate projects. Yet, it is also the most sophisticated of the four, followed by the IRR method. Both Non-DCF methods are considered to be less accurate, of which the PB method is the least sophisticated.

In the past, several surveys of capital budgeting decisions have been carried out. Survey results of capital budgeting decisions have been reported in the literature since the late 1950s.

Summary

This chapter has generally explored the literature on capital budgeting decision theories and models towards the relationship of organization performance, from the above literature, the research can conclude that capital budgeting decisions can impact the organizations performance.

As was shown in the previous sections, over time, financial managers have applied various methods and procedures to determine which investments are beneficial to the firm. The choice of the evaluation method may therefore be determined by individual preferences of the manager and/or by the environment in which decisions have to be made. While in the literature several factors have been mentioned as determinants of the choice of capital budgeting decisions, in this paper we want to focus on the role that is played by the level of organization performance in this respect. The review of studies of capital budgeting decisions in the previous section showed that over time, the use of more sophisticated DCF methods has become more popular. This may be explained by various factors. First, financial markets have developed over time, making the use of DCF methods more applicable, convenient and necessary. Due to the development of financial markets (and especially stock markets) shareholder maximization has gained in importance, which has pressured CFOs of firms to use DCF methods over other, more simple, but also less accurate alternatives. Second, training of CFOs has improved over time, which may have enabled them to better understand and thus use more sophisticated techniques. Third, financial tools and programmer that help the CFO to determine which investments are beneficial to the firm have become increasingly sophisticated, which may also have stimulated the use of more sophisticated techniques. Finally, the increased use of computer technology and the related reduction in the cost of this technology may have stimulated the use of more sophisticated techniques.

The selected project(s) is (are) then implemented in terms of arranging of finance, purchasing of land, plant and machinery, etc., construction of buildings, hiring of labor and other staff etc. While implementing the project and after it is commissioned for commercial production,

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

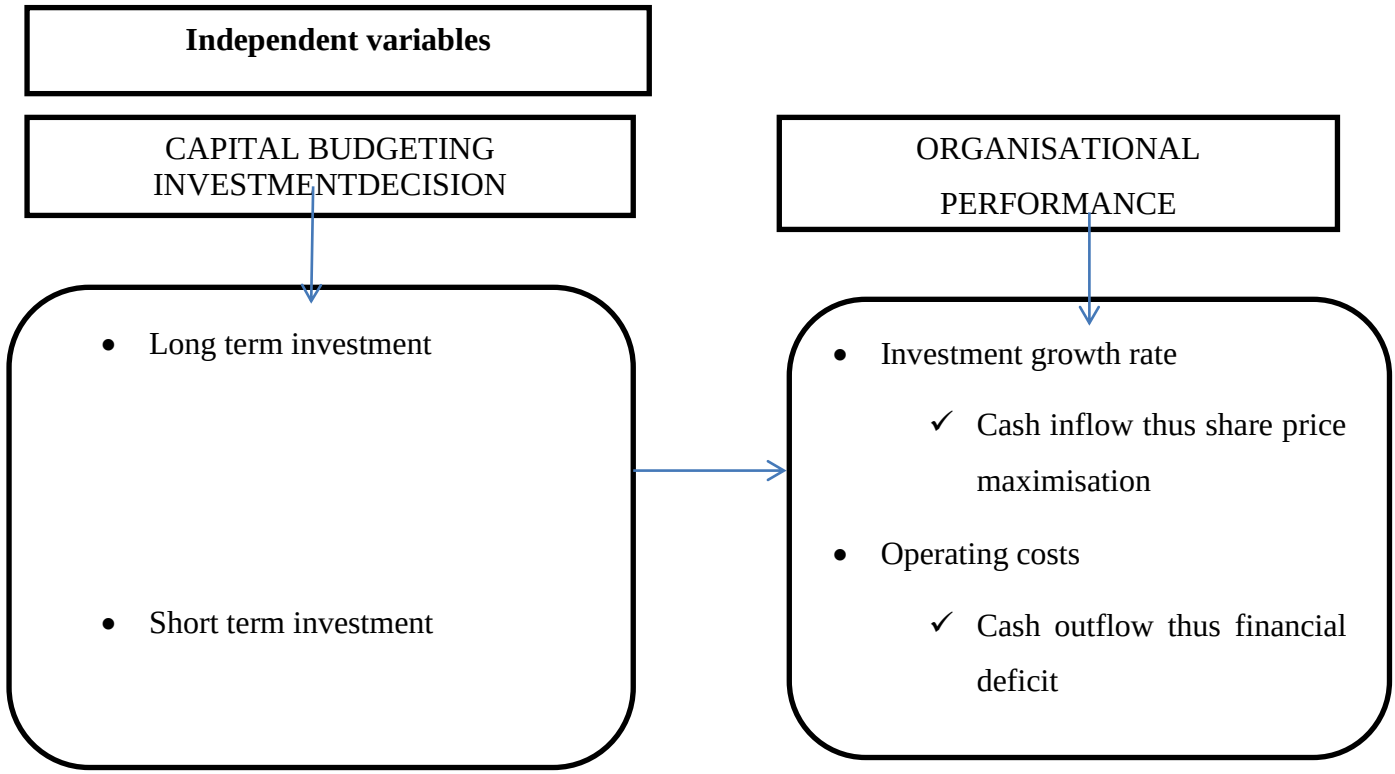
the investor must monitor the project on a regular basis. Under this activity, the investor would see to it that the project is commissioned as soon as possible, particularly within the stipulated time unless unwarranted by unforeseen and unavoidable circumstances. During the running period of the project there is ample need for close monitoring. This is with regard to the quality and quantity of production, development of the market for the product, repayments of loans, payments of reasonable dividends, maintenance of good industrial relations and customers' goodwill, etc.

However it can also be concluded that no scholar has come out to examine the relationship between capital budgeting decision and organization performance in Rwanda with specific focus on increased or reduced rate of investment, increased or reduced operating costs, increased or reduced cash outflow and deficit, increased or reduced cash inflow and share price maximisation.

Conceptual Framework

In this study, capital budgeting decision in form of: Investment decision, Long term Investment and Short term Investment is conceptualized to influence the performance of organisations with respect to: Rate of investment growth, Operating costs, Cash outflows thus financial deficits and Cash inflows thus share price maximisation.

Figure 2: Conceptual Framework



ISSN 2053-5821(Print), ISSN 2053-583X(Online)

RESEARCH METHODOLOGY

Introduction

This chapter presents the methodology that is be used during the study. It involves the Research design, study population, sample size and selection, sampling techniques, data collection methods, Data collection instruments, procedure of data collection and data analysis techniques as well as how to ensure validity and reliability.

Research design

Kombo (2006) asserts that a research design is an outline that is used to generate answers to research problems/questions. A research design is an arrangement of conditions of data collection and analysis. For this study the researcher embraced descriptive survey methodology designed to assess how capital budgeting affects the performance of organisations in Rwanda. According to Orodho (2003), descriptive design allows researchers to gather, present and interpret information for purposes of clarification. The design employed self-administration of questionnaires to a sample of individuals. The questionnaires aimed at finding peoples' attitudes, and opinion about how capital budgeting affects performance of organisations in Rwanda. The researcher l used both primary and secondary data. Primary data was obtained using questionnaires while secondary data was gathered from the documents available at the washing stations and journals. This design was chosen because the researcher seeks to find out the current state of affairs with regard to how organisational performance is influenced by capital budgeting decision.

Study population

The study focused on the management and senior finance staff of Bakhresa Grain Milling consisting of: Senior managers (20) and Finance and accounting department (50)

Sampling procedure

The study used both probability and non-probability modes of sampling. Senior Managers (20) were purposively selected using the non-probability mode while Finance and accounting department staff (50) will be randomly selected using the simple random sampling technique to participate in the study.

Sample size, Sample Selection and sampling technique

In this study, the number of individuals in their targeted population is known in advance as a list indicating the members is readily available at Bakhresa Grain Milling Rwanda Ltd office. The respondent categories comprised of both sexes but of different marital status and age group. The overall sample size was determined using slovins formula for sample size calculation while for specific categories of respondents purposive sampling techniques were used as the target was also specific. Using slovinsfomula a sample size of 57 was derived out of the total population of 70

n=N/(1+(N*e2) where:

n=number of samples

N=total population (N=70) e=margin of error (e=5% thus 5 / 100 = 0.05)

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

n=70/ (1+70 x 0.0025)

n= 70/ (1+0.1225)

n = 70/1.1225

n = 57

The 57 sampled elements were purposively selected among the senior managers and the finance and accounting department staff of Bakhresa Grain Milling.

Table 1: Sample size

Target population	**Total population**	**Sample size Determination =N/ 1+(N*e^2)**	**Sampling Technique**
Directors (Managing director, COO, Technical director	3	3	Since this targeted a specific category of the population the purposive sampling was used
Senior managers (CFO, strategic & planning manager, Head of Human resource, sells and marketing manager)	5	4	Since this targeted a specific category of the population the purposive sampling was used
Managers Includes managers/ supervisors of units in finance accounting, marketing, human resource	12	11	Since this targeted a specific category of the population the purposive sampling was used
Finance and accounting employees	50	39	Since this targeted a specific category of the population the purposive sampling was used
	70	**57**	

During the study, 57 questionnaires were dispatched, but only 50 were returned resulting into a response rate of 88%. Number of responses to survey was divided by the number of surveys dispatched divided by 100 to get the response rate of 88%.

Procedures for data collection

An introductory letter was collected from the JKUAT offices authorising the researcher to go for data collection. Self-administered questionnaires were delivered to the sampled elements for completion. Available documents were reviewed.

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

Source of data

Data was collected from primary and secondary sources. Primary data was derived from the questionnaires while secondary data was derived from available literature reviewed

Data Collection Methods

Data for the research was collected using two methods. These included self-administered questionnaires and document review. Self-administered questionnaires were used since it enables the researcher obtain first-hand information from the field. Self-administered questionnaires are appropriate for the target population since they can read and write effectively and they can still put the questionnaire aside and consult for information before completion. Data was obtained from respondent categories already indicated earlier (**Error! Reference source not found.Error! Reference source not found.**). The type of data includes social demographic characteristics of the respondents (age, gender, level of education etc), perceptions about the study variable etc. Document review enabled the researcher obtain information on already existing literature about how capital budgeting affects organizational performance.

Questionnaire survey

A self-administered questionnaire will be used in the study and will target all respondents. Mugenda and Mugenda (2003), states that questionnaires are used to obtain vital information about the population and ensure a wide coverage of the population in a short time. In addition Sekaran (2003) states that questionnaires are an efficient data collection mechanisms where the researcher knows exactly what is required and how to measure the variables of interest. He further asserts that administering questionnaires to number of interest simultaneously is less expensive and time consuming and does not require much skill to administer as compared to conducting interviews. Closed ended question were used with detailed guiding instructions as regards the manner in which respondents were required to fill them independently with minimal supervision. This was made possible due to the fact all the respondents are able to read and write. Closed ended questionnaire had pre-coded answers according to themes from which respondents were asked to choose the appropriate responses. Respondents were given ample time to fill and return questionnaires later when they are through.

RESEARCH RESULTS AND DISCUSSION

Introduction

This chapter brings out the research results and discussions. Data is hereby presented in line with the methodology of the study described in chapter three above while the discussions are guided by the results of the study in line with the study questions.

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

Presentation and Discussion of the Data

Demographic characteristics of respondents

Sex of respondents

The study considered both the male and female respondents. Males made up 68% while females made up 32%. The **Error! Reference source not found.** (**Error! Reference source not found.**) shows percentage distribution of respondents by sex.

Sex of respondents helps us to appreciate the gender component of the study and the involvement of all gender dimensions in capital budgeting decisions. We also appreciated that the recommendations have the gender perspective inbuilt.

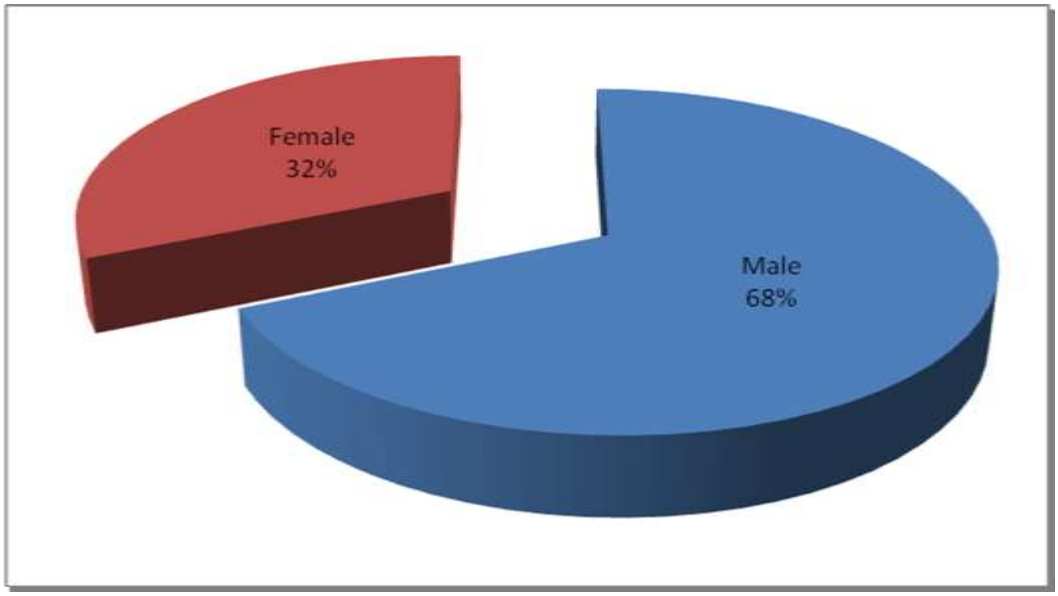


Figure 3: Sex of respondents

Age group of respondents

In analysing the age of respondents, the researcher categorised age in groups as follows; 30 years and below, 31-39, 40-49, 50-59, and 60 year +. Findings reveal that 60 percent of the respondents were aged between 31 and 39. Very few respondents were aged 40-49 represented by only 10 percent. There was also no employee aged 50 years and above.

This helped us to appreciate that opinions were sought from all age groups and thus the recommendations are not age specific and possible interventions will not be age specific.

This information has also been elaborated in **Error! Reference source not found.**(below)

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

Table 2: Age of respondents

Age group (years)	Number (no)	Percentage (%)
30 years and below	15	30
31-39	30	60
40-49	5	10
50-59	0	0
60+	0	0
Total	50	100

Level of education of respondents

The level of education of respondents was also analysed. The researcher considered diploma, bachelors, masters' levels as well as PhD education level.

Findings of the study show that 82 percent of respondents had attained university level education while 18 percent had attained a post graduate level education.

There is therefore no doubt that the study engaged educated people who were also able to correctly complete the questionnaires and give relevant recommendations in relation to capital budgeting decisions. **Error! Reference source not found.** below shows the percentage distribution of respondents by education level.

Table 3: Level of education

Level of Education	**Number (no)**	**Percentage (%)**
Diploma	00	00
Bachelors	41	82
Masters	9	18
PhD	00	00
Total	50	100

Marital status of respondents'

The researcher further considered the marital status of the respondents. With regard to marital status, the researcher considered four options which are: single, married, divorced, and widowed. Analysis shows that 58% of the respondents were married while 42% were single. There were no respondents that were neither divorced nor widowed.

belowillustrated the percentage distribution of respondents by the period of service in the respective work places.

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

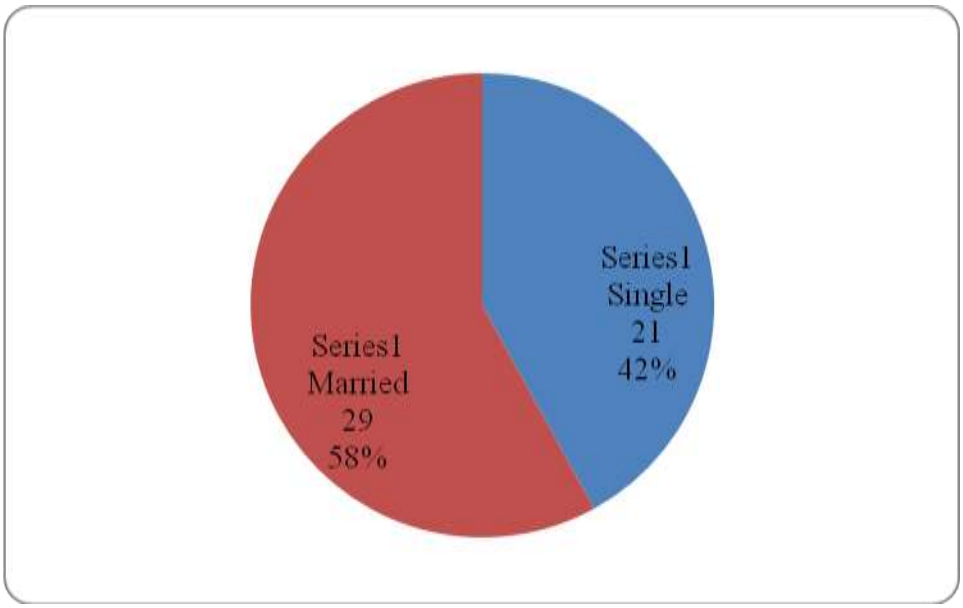


Figure 4 : Marital status of respondents

Length of service

The researcher further analysed the length of period respondents had served. The researcher categorised the period in terms of years as follows: 1 – 2 years, 3 – 4 years, 5 – 6 years, and 6 years+.

Findings show that a larger proportion of the respondents had worked between 3-4 years. This proportion was represented by 75 percent while no employee had worked more than 6 years of those sampled. **Error! Reference source not found.** : belowillustrated the percentage distribution of respondents by the period of service in the respective work places.

Table 4: Length of service

Length of service (years)	Number (no)	Percentage (%)
1-2	11	22
3-4	37	74
5-6	2	4
6 years +		
Total	50	100

Capital budgeting investment decision and organizational performance with regard to investment growth rate

Under organisational rate of growth, the researcher investigated whether the company is investment oriented, whether the board works towards investing, whether the investments are for the good of the company, whether employees are consulted about the investments, whether the board is mindful of customers and other stakeholders when making decision to invest, whether the company makes long term investments, whether the company makes short term investments, whether the company makes both short term and long term investments,

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

whether the company replaces its machinery at least every two years and whether the company is not investment oriented but just profit oriented.

Findings show the following:

The analysis points to a significant relationship between capital budgeting investment decision and organisational performance with regard to investment. This is mainly with regard to the fact that the rate of growth is higher, operating costs comes down; cash outflow is high at investment but reduces drastically after investment. In the long run there is cash inflow and thus share price maximisation

Table 5: Organisational performance and Investment rate of growth

Variables	Percentage distribution of responses									
	Strongly agree		Agree		Not sure		Disagree		Strongly disagree	
	Number	%	Number	%	Number	%	Number	%	Number	%
Company is investment oriented	13	33	5	13	0		0		0	
The board works towards investing	5	13	5	13	3	8	3	8	0	
investments are for the good of the company	8	20	7	18	2	5	0	0	0	
Employees are consulted about the investments	2	5	6	15	3	8	7	18	1	3
The board is mindful of customers and other stakeholders when making decision to invest	8	20	3	8	3	8	4	10	0	
The company makes long term investments	13	33	5	13	0		0		0	
The company makes short term investments	5	13	5	13	3	8	3	8	0	
The company makes both short term and long term investments	8	20	7	18	2	5	0	0	0	
The company replaces its machinery at least every two years	2	5	7	18	3	8	6	15	1	3
The company is not investment oriented but just profit oriented	8	20	3	8	3	8	4	10	0	

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

On whether the company is investment oriented, 33% strongly agree, 13% agree. This means that the company is actually investment oriented. With regards to whether the board works towards investing, 13% strongly agree while another 13% agree. Only 8% disagree with another 8% not sure. This reveals that the company board works towards investments. On whether the investments are for the good of the company, 20% strongly agree, 18% agree with only 5% not sure. We can authoritatively say that the investments are normally for the good of the company. With regards to employees and other stakeholder consultations about the investments, 18% disagree while 15% agree. We note here that employees are not generally consulted with regards to investment decisions. Only the higher level employees like the managers are often consulted. On whether the board is mindful of customers and other stakeholders when making decision to invest, 20% strongly agree while 10% disagree. Indeed the decision to invest is often for the satisfaction of the customers but sometimes it is driven by the demand of the products originating from the potential investment. With regard to whether the company makes long term investments, 33% strongly agree, while nobody disagreed. This implies that the company generally makes long term investments. On whether the company makes short term investments, 13% agree, 8% disagree. Probably the assertion of short term investment here refers to the shorter term investments but the company top decision making managers noted that they break their long term investment plans into shorter terms for proper implementation. Looking at whether the company makes both short term and long term investments, 20% strongly agreed with only 5% not sure. This analysis shows that actually the company makes both short and long term investments. On whether the company replaces its machinery at least every two years, 18% agreed while 15% disagreed. The agreements and disagreements with machine replacements seem to be close. This implies that replacements may never be known by other employees especially at the lower levels of management. With regards to whether the company is not investment oriented but just profit oriented, 20% strongly agree while 10% disagree. There is however a thin line between the desire to invest and to be profit oriented. Other respondents said that we invest so that we can maximise profits.

Test of Correlation for the relationship between capital budgeting decision and organization performance with regard to organizational investment growth rate

		Rate of growth
Capital budgeting decision	Pearson Correlation	0.324*
	Sig. (2-tailed)	0.002
	N	89
*Correlation is significant at the 0.01 level (2-tailed) this implies positive correlation		

Capital budgeting on investment decision and organization performance with regard to cash inflow/share price maximization

Here the researcher considered whether the company has a high cash inflow, whether the shareholders have had their dividends increased, whether they attribute the high cash inflow to investments made between 2011 and 2012 and whether there is sufficient cash at the company's disposal for investment.

As can be noted in **Error! Reference source not found.**below findings show that:

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

Table 6: cash inflow/share price maximization

Variables	Percentage distribution of responses									
	Strongly Agree		Agree		Not sure		Disagree		Strongly disagree	
	Number	%	Number	%	Number	%	Number	%	Number	%
company has a high cash inflow	0	0	2	10	8	42	7	27	1	5
shareholders have had their dividends increased	0	0	1	5	8	42	9	47	0	0
attribute the high cash inflow to investments made between 2011 and 2012	1	5	13	68	2	10	1	5	0	
whether there is a lot of cash at the company's disposal for investment	0		5	10	6	32	4	21	2	10

On whether the company has a high cash inflow, 42% were not sure as 27% disagree. This signifies the fact that the company does not have a high cash inflow at hand. With regard to whether shareholders have their dividends increased, 47% disagree and 42% not sure. This also seems to point out that shareholders have not had their dividends increased. As for whether is an attribution of the current increased cash flow to investments made between 2011 and 2012, 68% agree while 10% were not sure. We note here that investments lead to increased cash inflow in the long run. Also looking at whether there is sufficient cash at hand for investment, 32% were not sure, 21% disagreed and 10% strongly disagreed. Findings here still show that there is insufficient cash for possible investment.

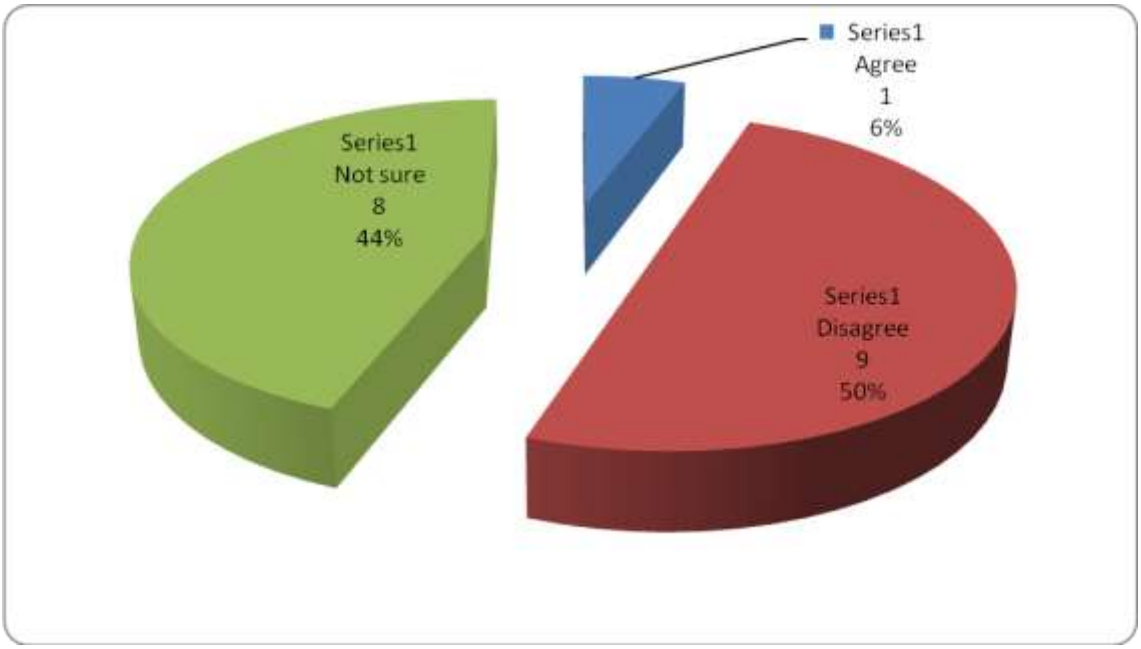


Figure 5 : shareholders have had their dividends increased

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

From the above **Error! Reference source not found.Error! Reference source not found.** we can say that with 50% disagreeing, then it is for sure that shareholders have not had their dividends increased.

Test of Correlation for the relationship between capital budgeting decision and organisation performance with regard to cash inflow/share price maximization

		Cash inflow/share price maximization
Capital budgeting decision	Pearson Correlation	-0.072
	Sig. (2-tailed)	0.5
	N	

Tests for the relationship between capital budgeting decision and cash inflow/share price maximisation revealed a negative correlation: (-0.072, p-value = 0.5),

Capital budgeting investment decision with regard to performance of the company with regard to operating costs

Here the researcher considered whether the operating costs for the company are high, whether the operating costs are normal, and whether investment helped reduce operating costs.

Findings reveal the following:

Taking a particular analysis of whether the respondents think their cash flow is normal, from Table 7 below ; we note that a major percentage of 49% were not sure. On the other hand 26% agreed, 13% disagreed, 4% strongly disagreed, while 8% strongly agreed. From this analysis we note that respondents were mostly not aware of the operating costs of the company.

Error! Reference source not found. **below illustrates the percentage operating costs.**

Table 7: operating costs

Variables	Percentage distribution of responses									
	Strongly agree		Agree		Not sure		Disagree		Strongly disagree	
	Number	%	Number	%	Number	%	Number	%	Number	%
operating costs for the company are high	0	0	0	0	10	53	9	47	0	
operating costs are normal	1	5	10	53	8	42	0		0	
investment helped reduce operating costs	0	0	6	32	12	63	0		0	

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

With regard to whether the operating costs for the company are high, 53% were not sure, while 47% disagreed. This analysis seems to give a trend that shows that the operating costs are generally low. On whether the operating costs are normal, 53% agreed and 42% were not sure. A sign that the operating costs are normal. However the high percentage that indicates not sure could be based on the respondents that are not in management and so may not have a clear idea on operating costs. Finally on whether investment helped reduce operating costs, 63% were not sure as 32% agreed. The respondents did not portray their position with regard to the relationship between investment and operating costs.

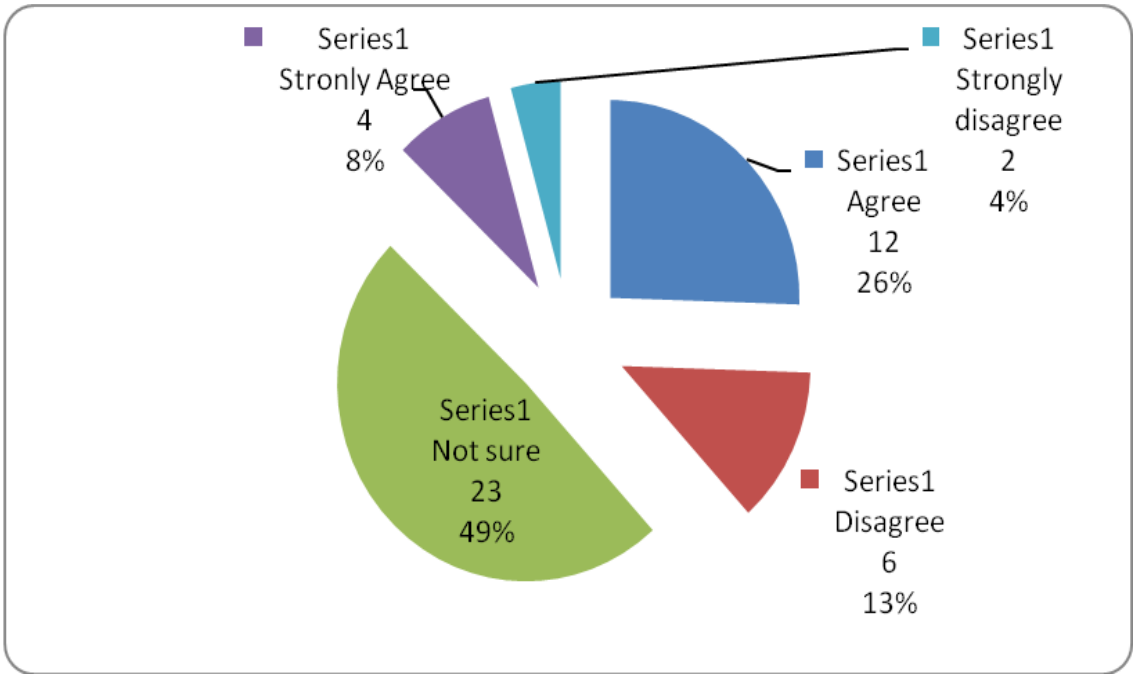


Figure 6 : Cash deficit chart – we have a normal cash flow

Taking a particular analysis of whether the respondents think their cash flow is normal, from figure 4.2 above; we note that a major percentage of 49% were not sure. On the other hand 26% agreed, 13% disagreed, 4% strongly disagreed, while 8% strongly agreed. From this analysis we note that respondents were mostly not aware of the operating costs of the company. **Test of Correlation for the relationship between capital budgeting decision and organisation performance with regard to cash outflow/financial deficit**

		Cash outflow
Capital budgeting decision	Pearson Correlation	0.467***
	Sig. (2-tailed)	0
	N	89
*** Correlation is significant at the 0.01 level (2-tailed) depicts positive relationship		

Tests for the relationship between capital budgeting decision and cash inflow/share price maximisation revealed a negative correlation: (-0.072, p-value = 0.5),

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

Summary of correlation of all variables

The correlation test for relationship between independent variables and dependent variable (capital budgeting decision and organizational performance):

Tests for the relationship between capital budgeting decision and organisational performance have revealed a positive correlation in all variables except one. The researcher related capital budgeting decision to rate of growth, operating costs, cash outflow and cash inflow. Rate of growth: (0.324, p-value = 0.002), operating costs (0.392, p-value = 0.000), cash outflow (0.467, p-value = 0.000). On the other hand however, tests for the relationship between capital budgeting decision and cash inflow/share price maximisation revealed a negative correlation: (-0.072, p-value = 0.5), Since the Pearson correlation coefficients are close to 0 (less than 0.1) and the probability values are greater than the significance level of 0.05, deductions can be made that these aspects do have a significant positive relationship with the adequacy of the performance of the company let alone for cash inflow/share price maximisation. One can authoritatively say that capital budgeting decision affects organisation performance with regards to rate of growth, operating costs, cash outflow but not cash inflow/share price maximisation.

Test of Correlation for the relationship between capital budgeting decision and organisation performance

		Rate of growth	Operating costs	Cash outflow	Cash inflow/share price maximization
Capital budgeting decision	Pearson Correlation	0.324**	0.392**	0.467**	-0.072
	Sig. (2-tailed)	0.002	0	0	0.5
	N	89	88	89	
**. Correlation is significant at the 0.01 level (2-tailed).					

This finding therefore implies that there are significant relationships between Administrative and management practices and processes with corporate performance.

SUMMARY, CONCLUSIONS & RECOMMENDATIONS

Introduction

This chapter brings out the research results and discussions. Data is hereby presented in line with the methodology of the study described in chapter three above while the discussions are guided by the study questions.

Conclusions

Capital budgeting on investment decision and organisation performance with regard to investment company growth

The company was investment oriented, with the company board working towards investments. The investments were normally for the good of the company with employees not generally consulted with regards to investment decisions. The decision to invest was often for the satisfaction of the customers but sometimes it is driven by the demand of the products

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originating from the potential investment. The company also generally made long term investments and the company was in the practice of breaking their long term investment plans into shorter terms for proper implementation. These decisions by the company led to increased growth of the company.

Capital budgeting on investment decision and organization performance with regard to operating costs

The company was generally referred to as a growing company, with the employees rejecting to call it a stagnant company. The growth of the company was attributed to investment in the company.

Capital budgeting investment decision and organisational performance with regard to company operating cost

The operating costs of the company were generally low. Findings here show that it is possible to have low operating costs even when there is capital budgeting decision in relation to operating costs. Indeed a company can still have a normal cash outflow and not experience financial deficits.

The correlation test for relationship between independent variables and dependent variable (capital budgeting decision and organizational performance):

Tests for the relationship between capital budgeting decision and organisational performance have revealed a positive correlation in all variables except one. The researcher related capital budgeting decision to;. Rate of growth: (0.324, p-value = 0.002), operating costs (0.392, p-value = 0.000), and cash outflow (0.467, p-value = 0.000) which showed a positive relationship. On the other hand however, tests for the relationship between capital budgeting decision and cash inflow/share price maximisation revealed a negative correlation: (-0.072, p-value = 0.5)

Since the Pearson correlation coefficients are close to 0 (less than 0.1) and the probability values are greater than the significance level of 0.05, deductions can be made that these aspects do have a significant positive relationship with the adequacy of the performance of the company let alone for cash inflow/share price maximisation.

One can authoritatively say that capital budgeting decision affects organisation performance with regards to rate of growth, operating costs, cash outflow but not cash inflow/share price maximisation.

Conclusions

Capital budgeting decisions positively affect companies by accelerating the rate of growth. Deliberate decisions by companies to invest often lead to increased growth of the company. The growth of the company for example was attributed to investments.

Operating cost initially go high during massive investments. But after the investments the costs begin to drastically come low as the company gains efficiency in its operations.

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It is possible to have low operating costs even when capital budgeting decisions are taken. Indeed a company can still have a normal cash outflow and not experience financial deficits during capital budgeting decisions

It is not always true that capital budgeting decisions may lead to increased finances and thus available cash for the shareholders. Sometimes investments may actually not lead to profitability. For example; The shareholders had not had their dividends increased despite the fact that the company invested massively between 2010 – 2012 period.

There is a significant positive relationship between capital budgeting decision and organisational performance with regard to the following indicators: Rate of growth, operating costs, and cash outflow.

There is a negative relationship between capital budgeting decision and cash inflow/share price maximisation revealed a negative correlation. It is not necessarily true that capital budgeting decisions will lead to cash inflow and share maximisation.

The researcher authoritatively concludes that capital budgeting decision affects organisation performance of organisations with regards to rate of growth, operating costs, cash outflow but not cash inflow/share price maximisation.

Recommendations for further research

If growth is to be achieved, more investments will need to be done. This is based on the fact that investments lead to growth of companies.

Companies need to plan ahead for investments. The period is a period of cash outflow and if not well planned can lead to zero cash flow and thus hampering operations.

Companies also need to do research on when to invest, in what to invest, and the projected revenue that the investments will generate. Otherwise companies may fail to make profits even after a mega investment.

Involvement of employees in the investment planning is vital as they will be the ones responsible for implementing the investments. Their participation creates ownership and responsibility.

The motivation for capital budgeting decision should be to accelerate the rate of growth and potential future profitability.

REFERENCES

Arnold, T. &Shockley,R(2003). Real Options, Corporate Finance, and the Foundations of Value Maximization, Journal of Applied Corporate Finance 15 (No. 2), 82-88.

Assessment of the Research Program, American Political Science Review, Vol. 95, pp. 169–90.

Axelsson, H,Jakovicka, J &Kheddache, M .(2002). Capital Budgeting Sophistication and Performsnce- A Puzzling Relationship; Unpublished Doctoral Thesis, Graduate Business School, Goteborg University.

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

B. Kalyebara and S.M.N. Islam, (2014) Corporate Governance, Capital Markets, and Capital Budgeting, Contributions to Management Science Springer-Verlag Berlin Heidelberg 2014
Bernstein, Leopold A. (1993) Analysis of Financial Statements, Homewood: Richard D. Irwin, Inc., 4th Edition.
Berry,W.D,(1990).The Confusing Case of Budgetary Incrementalism
Bierman, Harold & Seymour Smidt (1993) The Capital Budgeting Decision: Economic Analysis of Investment Projects, New York: MacMillan.
Blatt, J.M. (1979). Investment evaluation under uncertainty. Financial Mgmt, 8(2): 66681 [2]
Brealey, Richard A., Stewart C. Myers & Alan J. Marcus (2001) Fundamentals of Corporate Finance, Singapore: McGraw-Hill Irwin, Third Edition.

Brian Baldwin (1997). Economic justification of process improvement and automation
Brian Bushee, (2004) "Identifying and Attracting the 'Right' Investors: Evidence on the Behaviour of Institutional Investors," Journal of Applied Corporate Finance, vol. 16, no.4 (Fall 2004), p. 30-31.
Burns,R.(2000). Introduction to Research Methods (4th edition) French Forest NSW; Longman.
Chance, D. M. &Peterson,P.P (2002). Real Options and Investment Valuation, Charlottesville, VA, Research Foundation of AIMR.
Christy, George A. (1966) Capital Budgeting – Current Practices and their Efficiency, Bureau of Business and Economic Research, University of Oregon.
Cohen, M., J. March & J. Olsen. (1972). A Garbage Can Model of Organizational Choice, Administrative Science Quarterly, Vol. 17, pp. 1–25.
Cooper, William D. Morgan et al (2001), Margart Business Forum (online).
Copeland, Thomas E. & J. Fred Weston (1992) Financial Theory and Corporate Policy, Reading: Addison-Wesley Publishing Company Inc, Third Edition.
Copeland, Thomas E. (1979) Financial Theory and Corporate Policy, Reading: Addison-Wesley Publishing Company, Inc., 1st Edition.
Copeland, Thomas E. (1979). Financial Theory and Corporate Policy, Reading: Addison-Wesley Publishing Company, Inc., 1st Edition.
Dagrou, E., Gauvin, L., &Halliwell, W. (1992).
Don Dayananda et al. (2002). Capital Budgeting: Financial Appraisal of Investment Projects
Drury J. &Reicher S. (2000) 'Collective action and psychological change: The emergence of new social identities.' British Journal of Social Psychology 39: 579 -604.
Drury. C. Braund, S., Osborne. P. and Tayles, M. (1993). A Survey of Management
Farragher, Edward J., Robert T. Kleiman&Anandi P. Sahu (2001) "The Association Between the Use of Sophisticated Capital Budgeting Practices and Corporate Performance", The Engineering Economist, Vol. 46, No. 4, pp. 300- 311.
Farragher, Edward, Robert Kleiman, and Anandi, Sahu. (2001) "The Association between the use of Sophisticated Capital Budgeting Practices and Corporate Performance," The EngineeringEconomist, 46(4), 2001, pp. 300-311
Gitman and J. Forrester, Jr. (2002), "A Survey of Capital Budgeting Techniques Used by Major U.S. Firms," Financial Management.
Gitman, Lawrence J., and John R. Forrester Jr., (1977), "A survey of capital budgeting techniques used by major U.S. firms," Financial Management, Vol. 6, pp. 66-71.
Gitman, Lawrence J., and Vincent A. Mercurio, (1982), "Cost of capital techniques used by major
Gitman1977

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

GoR, (2014). Vision 2020
Haka, Susan F., Lawrence A. Gordon & George E. Pinches (1985) "Sophisticated Capital Budgeting Selection Techniques and Firm
Klammer, Thomas (1972) "Empirical Evidence of the Adoption of Sophisticated Capital Budgeting Techniques".
Klammer, Thomas (1973) "The Association of Capital Budgeting Techniques with Firm Performance", The Accounting Review, April, pp. 353-364.
Kombo, D. K. and Tromp, D. L. A. (2006)'. Proposal and Thesis Writing: An Introduction. Paulines Publications' Africa, Nairobi.
Kothari, C.R. (2004) Quantitative Techniques, 2nd ed., New Delhi: Vikas Publishing House Pvt. Ltd., 1984
Krejcie, R. V., & Morgan, D. W. (1970). Determining sample sizes for research activities. Educational and Psychological Measurement, 607-610
Lefley F. (1996). The payback method of investment appraisal: A review and synthesis, International Journal of Production Economics 44 (3) (1996) 207-224 and Northcott D. Northcott, Capital Investment Decision-Making, Academic Press, New York, 1992.

Longmore, D. (1989). The persistence of the payback method: a time-adjusted decision rule perspective. Eng. Economist, 34(3): 1855194 Management, winter 1986, pp. 15-22.
McGraw-Hill, 7 edition, 2003.Meanings for a Single Concept,Journal of Politics, Vol.52,pp.167-96. Copeland,
Mugenda, O. M. &Mugenda, A. G., (2003), Research Methods; Quantitative and Qualitative Approaches, Acts Press, Nairobi, Kenya.
Myers, S. (1984). Finance Theory and Financial Strategy, Interfaces 14 (No. 1), 126-137.
Myers,M.,Gordon, L.&Hamer, M. (1991). Post auditing Capital Assets and Firm Performance: An Empirical Investigation. Managerial and Decision Economics, Vol.12, No.4, pp. 317-327.
Northcott, Deryl (1995), Capital Investment Decision-Making, London: The Dryden Press.
Numminen Emil, (2008). Software Investments under Uncertainty, Pg 26 - 27
Nunally, C.J (1978).Psychometric Theory, New York, McGraw-Hill.
Orodho J.A. and Njeru H.E. (2003), Financing Education in Kenya: Secondary School Bursary School Implementation and Challenges, Discussion Paper 035/2003, Institute of Policy Analysis and Research
Petty J.W., Scott Jr., D.F. and Bird.M.M., (1975). The capital expenditure decision-making

Petty, J. William Petty, David P. Scott, and Monroe M. Bird, (1965) "The Capital Expenditure Decision-Making Process of Large Corporations, "The Engineering Economist, 159-171
Pike R.H (1986) .Sophisticated Capital Budgeting Systems and Their Association with Corporate Performance; Managerial and Decision Economics, Vol. 5, No.2, pp 91-97.
Pike, R.H. (1985). Disenchantment with DCF promotes IRR. Certified Accountant July: 14-17 process of large corporations Eng. Economist, 20(3): 159- 172.projects, ABB Industrial Systems Inc.
R. A. Brealey and S. C. Myers (2003).Principles of Corporate Finance.International Edition.
Rappaport.A. (1965).The discounted payback period. Mgmt. Services July/August: 30-36
Ross, Marc. (1986) "Capital Budgeting Practices of Twelve Large Manufacturers," Financial
S. A. Ross. (1972) the determination of financial structure: The incentive signaling approach.

ISSN 2053-5821(Print), ISSN 2053-583X(Online)

Sandahl, Gert& Stefan Sjögren (2002) "Capital Budgeting Methods among Sweden's Largest Groups of Companies – The State of the Art and a Comparison with Earlier Studies", Forthcoming in International Journal of Production Economics.
Schall, L &Sundem, G. (1980). Capital Budgeting Methods and Risk: A Further Analysis, Financial Management, Spring, pp. 7-11.
Segelod E. (1995), Resource Allocation in Divisionalized Groups, Ashgate, Avebury.

Sekaran (2003). Research method for business: A skill building approach, 4th edition, John Wiley & Sons inc.
Selltiz,C.,Wrightsman,L.S&Cook,W(1976). Research Methods in Social Relations
Stefan Yard (1999). Developments of the payback method Int. J. Production Economics 67
Stickney, Clyde P. & Paul R. Brown (1999) Financial Reporting and Statement Analysis – A Strategic Perspective, Fort Worth, Tex.: Dryden Press, Fourth Edition.
Thomas E. (1979). Financial Theory and Corporate Policy, Reading: Addison-Wesley Publishing Company, Inc., 1st Edition.
U.S. firms: Survey and analysis of Fortune's 1000," Financial Management, Vol. 11, pp. 21-29.

ISSN 2053-5821(Print), ISSN 2053-583X(Online)