AN INVESTIGATION INTO THE GAP BETWEEN BUDGETS AND EXPERIENCE: THE CASE OF BAMBURI SPECIAL PRODUCTS LIMITED

BY
MBARU PETER SAWA
D61/7019/2001

A management research project submitted in partial fulfillment of the award of Master of Business Administration (MBA), University of Nairobi

OCTOBER 2005

DECLARATION

I, **Mbaru Peter Sawa**, hereby certify that this project is my original work and has not been previously submitted in whole or in part, to qualify for any other academic award.

Signed ..... Date 26-10-05

Mbaru Peter Sawa
D61/7019/2001

I, Mr. **Josphat Lisiolo Lishenga**, hereby certify that this project has been presented for examination with my approval as the University of Nairobi supervisor.

Signed ..... Date 26-10-05

Mr. J.L Lishenga
Lecturer, Faculty of Commerce,
University of Nairobi

DEDICATION

This project is dedicated to my loving parents – my father, Robert and mum Florence. May God rain blessings on you.

ACKNOWLEDGEMENT

I am greatly indebted to a number of persons, without whom, this project work would not have been completed. I wish to convey my sincere gratitude to my family for the patience and understanding during this period. I also thank the management and staff of the Faculty of Commerce, University of Nairobi, the management and staff of Bamburi Special Products Ltd for the support they accorded me.

I convey special thanks to my supervisor Mr. Lishenga whose guidance on development and organisation of my project helped me.

I also thank all those whose contribution to this work added value in one way or the other.

God Bless.

ABSTRACT

This study sought to compare the budgets and the expost results in a period of four years from 1998 to 2001. An analysis of variances between capital expenditure budgets and the four year performance budgets on one hand and the expost results on the other was done. The reasons for deviations and the remedial actions were sought.

The analysis of variances depicts a huge variation from the set targets. The performance in the four-year shows that only a small proportion of the expected profits was attained. The highest level of achievement accounts for only 7% of the budget. The capital expenditure was equally below.the budgeted.

Empirical evidence suggests that most budget targets are set to be 80% to 90% achievable (Merchant and Manzoni, 1989). This is in contrast to management accounting literature which suggests that for optimum motivation budget targets should be achievable 50 percent of the time. According to Marks (1966), there is a problem of planning ahead for expenditures to be incurred in two years time.

The variances observed in this study add to the already complex challenge of dealing with the future which is uncertain.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION

1.1 Background

Accounting, budgeting, and their interaction in a financial information system provide the basis for making many capital allocation decisions. (Wooldridge, Garvin and Miller, 2001). Accounting and budgeting convey different meanings among the managers, planners, and personnel who employ them. Both are critical components that must interact to achieve the goals and objectives of an organisation.

While all businesses engage in some degree of planning, the extent to which plans are formalised in written budget varies from one business to another. Large, well-managed companies generally have carefully developed budgets for every aspect of their operations. Inadequate or sloppy budgeting is a characteristic of companies with weak or inexperienced management. (Williams et al, 2001).

Drury (2000) distinguishes between short-term planning (budgeting) and long-range or corporate planning, which is strategic in nature. Long-range planning is the systematic and formalised process for purposely directing and controlling future operations towards desired objectives for periods extending beyond one year. Short term planning on the other hand, must accept the environment of today, and the physical, human and financial resources at present available to the firm. These are to a considerable extent determined by the quality of the firm's long range planning efforts.

Traditional budgeting is viewed as unsuitable for the organisation of the future and alternatives have been identified and evaluated to overcome the difficulties and inadequacies. (Fanning, 1999).

The objections to the traditional budgeting process usually fall into one of two categories: the process is inefficient and the process is ineffective. With the change in budgeting and strategic management within their organisations must address the key issues appropriate for the future, which is viewed as dynamic, and challenging.

Fanning (1999) looks at three trends appropriate for the 21st Century. First, developments in information technology will continue. Second, the demand for real-time information will accelerate the trend towards more regular forecasting. Third, companies will look to improve the effectiveness of the process.

Budgets are essentially forward looking-they provide yardsticks for purposes of comparison. (Drury 2000). A budget is a means to an end, not an end in itself. It covers the area of responsibility of one specified person, so that his performance can be measured at the end of a budget period. This calls for preparation of budgets in conjunction with those who are to be responsible for achieving the budgeted performance.

Budgets are not set and left without monitoring the progress of the proposed actions. The monitoring introduces the element of controls as a management function. Drucker (1964) distinguishes between "controls" and "control". He defines controls as measurement and information, whereas control means direction. This implies that controls are a means to an end, the end being control. Controls help to point out deviations from plans so that corrective action can be taken. Controlling assists the realisation of plans.

There are two prerequisites of a control system namely plans and a clear organisational structure. Controls must be based on plans. What needs to be done has to be clearly spelt out. Managers cannot determine what is to be achieved unless they know what is expected in the first place. Plans must be set which must become standards against which performance is measured. The essence of control is to take corrective action and to be able to do this the point of responsibility for deviations must be established. Organisational responsibilities must be clear and definite so that when something goes wrong one can tell at which position it did.

Bamburi Special Products Limited is a subsidiary of Bamburi Cement Ltd whose core activity is the manufacture and sell of concrete paving blocks used to pave ways, roads and parking lots. The blocks are made as per specification stipulated by the Kenya Bureau of Standards. The company also has taken a leading role in development of cement products innovations and houses a product development division, which is its research arm.

The production of paving blocks requires use of raw materials in large quantities in the form of sand, cement and ballast, which are also subjected to quality measures. The whole process of manufacture therefore is a closely controlled process, expensive, time consuming and labour intensive.

In order to achieve its aims and goals the company engages in detailed and extensive budgetary process as a tool for planning and control. The company makes long-term forecasts into the future – covering a period of four years.

The motivation for this paper is to ascertain how plans may be impacted upon by the uncertainties and vagaries of the operating environment. To measure how practical plans prove to be in implementation is the gap that will be filled.

The process of budgeting at Bamburi Special Products is one which is given a lot of weight and normally calls for discussions which can take up to three months. Operating in a competitive and challenging environment, the firm takes every necessary step to ensure it remains the market leader. The use of concrete products gets support from many sectors, as the durability effects are easily noticeable.

Having been set up in 1998, it will be of interest to know how the planning process was done and the continuous controls that have been put in place to propel it to the top.

1.2 Statement of the problem

Budgeting is a potentially significant tool when economic environment is unstable and unpredictable and the analysis of its development demonstrates that its use has dramatically expanded over the time as companies have been able to run forecasts (Berland 2001).

Available literature has shown studies detailing the relationship between budgeting and various human behavioural aspects. On politics and power Syakhroza (2002) shows the extent of political influence consideration in the budgeting process. Some discussion on budgetary motivation and participation has been reported in academic literature. (Merchant and Manzoni, 1989; Macintosh, 1983; Buckley and McKenna, 1972).

In making decisions, business executives are faced with challenges in selecting among alternative capital investment opportunities. What makes this kind of decision so demanding is not the problem of projecting return on investment under any given set of assumptions. The difficulty is in the assumptions and in their impact. Each assumption involves its own degree – often a high degree – of uncertainty; and, taken together, these combined uncertainties can multiply into a total uncertainty of critical proportions.

Recent studies in Kenya have been conducted by Muleri (2001) and Osoro (2001). Muleri (2001) seeks to find out the effectiveness of budgeting practice among British NGOs in Kenya. He looks at the concept from a number of angles. He finds that most organisations use modern budgeting approaches and philosophies to reduce financial mismanagement. He observes that there is a limitation on the budgeting process to achieve cost effectiveness due to lack of knowledge by concerned staff and there is wide and sufficient use of budget in planning operations. He notes that there is lack of a solid base to enforce budgetary controls and as a motivator; there is improper use of budget for performance evaluation. He concludes that budgeting is well accepted in evaluation and audits while generally well used to communicate plans and operations.

Osoro (2001) seeks to find out the significance of difference between level of budgeted expense error and budgeted income error, and relief and developmental profits in NGO's. He concludes that budgeting control practices in NGOs vary significantly between relief projects, which are governmental in nature, and development projects, which are private in nature with significant error rates in the latter. This implies that strict controls are required in developmental projects which are prone to budget errors and weaker controls.

Drury (2000) points out that the fact that a financial target represents a specific quantitative goal gives it a strong motivational potential, the targets set must be accepted if managers are to be motivated to achieve higher levels of performance. It is however not possible to specify exactly the optimal degree of difficulty for financial targets, since task uncertainty and cultural, organisational and personality factors all affect an individual manager's reaction to a financial target.

The above studies have not looked at the variances between budgets and actual performance for a manufacturing unit.

Given the above background, this study sought to carry out a detailed analysis of variances between capital expenditure and performance budgets vis a vis ex post results. The study also sought to establish the reasons for the deviations and the remedial measures taken.

The study looked at the planning process leading to set up of Bamburi Special Products Ltd against what has been achieved to date. The variances between the capital expenditure and performance budgets and the actual results were worked out and reasons for the variances sought.

1.3 Objectives

The study carried out an analysis of variances between capital expenditure budgets and four-year performance budgets on one hand and the ex post results on the other and established the reasons for the deviations and the steps taken to arrest and correct them.

1.4 Importance of the Study

The study will help management, as it will be able to gauge the extent to which budgeting process is borne by experience and aid in setting of objectives for future projects. It will aid scholars in analysing variances and enable them relate to happenings in other companies. It will assist investors by providing an insight into the basis on which they base where to invest. It should assist analysts in coming up with techniques of relating projections and the actual.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Morse and Roth (1986) define a budget as a formal plan of action expressed in monetary terms. Wald (1978) defines a budget as a financial and / or quantitative statement, prepared and approved prior to a defined period of time, of the policy to be pursued during that period for the purpose of attaining a given objective.

Pandey (1999) looks at a budget as a comprehensive and coordinated plan, expressed in financial terms, for the operations and resources of an enterprise for some specific period of time. Budgeting controls is a system of controlling costs, which includes the preparation of budgets, coordinating the departments and establishing responsibilities, comparing actual performance with that budgeted and acting upon results to achieve maximum profitability.
The fundamental principles in budgeting control are to establish a plan or target of performance which coordinates all activities of the firm and record the actual performance. It aims to compare the differences, or variances, and analyse the reasons for them and act immediately, if necessary, to remedy the situation.

The budgeting process entails the establishment of objectives, identification of potential strategies, evaluation of strategic options, selecting course of action, implementation of long-term plans, monitoring actual outcomes and responding to divergences from planned outcomes. (Drury 2000).

2.2 Purposes of budget

Drury (2000) observes the purposes of budget as planning annual operations, coordinating the activities of the various parts of the organisation and ensuring that the parts are in harmony with each other, communicating plans to the various responsibility centre managers, motivating managers to strive to achieve the organisation goals, controlling activities and evaluating the performance of managers.

2.3 Objectives of budgeting

Budgeting compels planning, promotes communication and coordination, provides a guide to action and provides a basis for performance evaluation (Morse and Roth 1986). People are compelled to think about the future.

The division of operation responsibilities makes it difficult for synchronising activities. Production must know what marketing intends to sell, purchasing and personnel must know the factory's material and labour requirements. The treasurer must plan to ensure the availability of the cash required to support receivables, inventories, and capital expenditures. Budgeting forces the managers of these diverse functions to communicate their plans and coordinate their activities. It helps ensure that plans are feasible and that they are synchronised.

Once a budget is approved, the various operating managers know what is expected of them and they can set about doing it. If employees do not have a guide to action, their efforts may be wasted on unproductive or ever counterproductive activities. If management expects nothing, it will get nothing.

Once employees know what the budget is and accept it as a guide to action, they should be held responsible for their portion of the budget. When results do not conform to plans, managers attempt to determine the cause of the divergence. Without the budget as a basis of performance evaluation, management may spend an inordinate amount of time seeking an explanation of past activities and telling employees what they should have done.

2.4 The Master Budget

A master budget is prepared for the entire organisation. It is more complex than budgets developed for business segments or specific activities because they must consider all interrelationships. The assembling of a master budget entails the development of the following: sales budget, production budget to meet the sales budget, manufacturing cost budget, purchases budget, selling and administration expense budget, income statement,

budgeted statement of changes in retained earnings, cash budget and statement of financial position as at the end of the budget period.

2.5 Stages in budgeting process

The budgeting process entails the following: communicating details of the budget policy, determining the factor that restricts performance, preparation of the sales budget, initial preparation of the budgets, negotiation of budgets, coordination and review, and acceptance and monitoring. (Drury 2000).

Policy effects of long-term plans must be communicated by top management to those responsible for preparing the current year's budgets. Policy effects might include planned changes in sales mix, or the expansion or contraction of certain activities. Operating guidelines are also to be specified such as the allowances that are to be made for price and usage variances, and the expected changes in productivity. Likewise, any expected changes in industry demand and output should be communicated by top management to the managers responsible for budget preparation.

Sales demand is the factor that restricts performance in many firms. This factor should be established before any budgeting process commences. The volume and the sales mix determine the level of a company's operations, when sales demand is the factor that restricts output. This makes the sales budget the most important plan in the annual budgeting process. It is the most difficult to produce as total sales revenues depends on the actions of the customers. Sales demand may also be influenced by the state of the economy or the actions of competitors.

The managers that are responsible for meeting the budgeted performance should prepare the budget for those for which they are responsible. This should be "bottom up" process. It enables the managers to participate in the preparation of their budget and strive to achieve the budget targets. Past data can be a starting point for producing the budget while changes in future conditions must be taken account of.

To implement a participative approach to budgeting, the budget should be originated at the lowest level of management. Budgets at this level are submitted to superiors for approval. The

manager who is the superior then becomes the budgetee at the next higher level. This process is described by Sizer (op cit) as a two-way process of a top-down statement of objectives and strategies, bottom-up budget preparation and top-down approval by senior management.

As budgets move up the organisational ladder, they must be examined against each other. This examination could indicate that some budgets are out of balance with the budgets and need modifying so that they are compatible with other conditions, constraints and plans that are beyond a manager's knowledge or control. Inconsistencies must be established and brought to the attention of the appropriate manager.

The final stage of budgeting involves final acceptance and monitoring on a regular basis.

2.6 Advantages of budgeting

Forced planning: budgeting compels management to plan for the future. Management is forced to look ahead and become more effective and efficient in administering business operations. It instils into managers the habit of evaluating carefully their problems and related variables before making any decisions.

Coordinated operations: budgeting helps to coordinate, integrate and balance the efforts of various departments in the light of the overall objectives of the enterprise. This results in goal congruency and harmony among the departments.

Performance evaluation and control: Budgeting facilitates control by providing definite expectations in the planning phase that can be used as a frame of reference for judging the subsequent performance. Budgeted performance is a more relevant standard for comparison than past performance as past performance is based on historical factors, which are constantly changing.

Effective communication: budgeting improves the quality of communication. The enterprise objectives, budget goals, plans, authority and responsibility and procedures to implement plans are clearly written and communicated through budgets to all individuals in the enterprise. This results in better understanding and harmonious relations among managers and subordinates.

Optimum utilisation of resources: budgeting helps to optimise the use of the firm's resources – capital and human; it aids in directing the total efforts of the firm into the most profitable channels.

Productivity improvement: budgeting increases the morale and thus, the productivity of the employees by seeking their meaningful participation in the formulation of plans and policies, bringing a harmony between individual goals and the enterprise objectives and by providing incentives to perform more effectively.

Management by exception: budgeting permits the focussing of management's attention on significant matters through budgetary reports. It facilitates management by exception and thereby saves management time and energy considerably.

Efficiency: budgeting measures efficiency permits management self-evaluation and indicates the progress in attaining the enterprise objectives.

2.7 Limitations of budgeting

Management judgement: reliance is laid on estimates to measure the success, since budgeting is not an exact science. Managerial judgement can suffer from subjectivism and personal biases. The adequacy of budgeting, thus, depends upon the adequacy of managerial judgement.

Continuous adaptation: the installation of a perfect system of budgeting is not possible in a short period. Business conditions change rapidly; therefore, budgeting programme should be continuously adapted. Budgeting has to be a continuous exercise; it is a dynamic process. Management should not lose patience; they should go on trying various techniques and procedures in developing and using the budgeting system. Ultimately, they will achieve the success and reap the benefits of budgeting.

Implementation: a skilfully prepare budgetary programme will not itself improve the management of an enterprise unless it is properly implemented. For the success of the budgetary programme it is essential that it is understood by all, and that the managers and

subordinates put concerted effort for accomplishing the budget goals. All persons in the enterprise must have full involvement in the preparation and execution of budgets, otherwise budgeting will not be effective.

Management complacency: budgeting is a management tool – a way of managing; not the management. The presence of the budgetary system should use budgeting with intelligence and foresight, along with other managerial techniques. Budgeting assists management; it cannot replace management.

2.8 Variances

The presentation of variances is perhaps the most valuable contribution a standard costing system makes to the principle of "management by exception". (Brown and Howard 1982). Variances highlight those situations where actual results are not as planned, whether better or worse. When actual results are better than expected a favourable variance arises; where they are not up to standard an adverse variance occurs.

Variances may be calculated in respect of the following:

1. Direct material
2. Direct labour
3. Variable overhead
4. Fixed overhead –based on units and standard hours
5. Sales – based on turnover and profit

Basically there are only two types of variances:

a) Price
b) Volume

The price variances relate to prices of materials, rates of labour, expenditure on overheads or selling prices of products. The variances here are: material price variance, labour rate, variable overhead, fixed overhead and sales price variances.

The volume variances relate to quantity of units in terms of raw materials consumed, number of hours worked, utilisation of plant and number of articles sold. The variances are: material usage, labour efficiency, fixed overhead and sales volume variances.

2.8.1Material Variances

The material price variances are the difference between the standard price and the actual price per unit of materials multiplied by the quantity of material purchased.
Material usage variance is the difference between the standard quantity required for actual production and the actual quantity used multiplied by the standard material price.

2.8.2Labour variances

There are two kinds of variances namely wage rate and labour efficiency variances. The wage rate variance is the difference between the standard wage rate per hour and the actual wage rate multiplied by the actual number of hours worked.

Labour efficiency is the difference between the standard labour hours for actual production and the actual labour hours worked during the period multiplied by the standard wage rate per hour.

2.8.3 Variable Overhead Variance

This is the price variance where the volume does not affect the cost per unit. It is equal to the difference between budgeted flexed variable overhead (BFVO) for the actual direct labour hours of input and the actual variable overhead costs incurred (AVO)

2.8.4 Fixed overhead variances

These depend on the amount of fixed overheads during the period and the output of products or standard hours during the period. Fixed overhead costs are highly significant in most firms as they are the largest single element of cost.

2.8.5 Sales variances

Can be used to analyse the performance of the sales function or revenue centres on broadly similar terms to those of manufacturing costs. The most significant feature of sales variance calculation is that they are calculated in terms of profit or contribution margin rather than sales values.

2.9 Causes of Variances

It cannot be assumed that material price variance will always indicate the efficiency of the purchasing department. (Morse and Roth 1986). Actual prices may exceed standard prices because of a change in market conditions that causes a general price increase for the type of material used. An adverse price variance may reflect a failure by the purchasing department to seek the most advantageous sources of supply. A favourable price variance might be due to purchase of inferior quality material, which may lead to inferior product quality or more wastage. It is also possible that another department may be responsible for all or part of the price variance. The supplier may incur additional handling and freight charges on special rush orders, and may therefore charge a higher price for the materials.

Material usage variances can be caused by careless handling of materials by production personnel, the purchase of inferior quality materials, pilferage, and changes in quality control requirement or changes in methods of production.

Wage rate variance may be due to a negotiated increase in wage rates not yet having being reflected in the standard wage rate. It may occur because a standard is used that represents a single average for a given operation performed by workers who are paid at several different rates. In this situation part of all of the variances may be due to the assignment of skilled labour to work that is normally performed by unskilled labour.

Labour efficiency variance may be due to use of inferior quality materials, different grades of labour, failure to maintain machinery in proper condition, the introduction of new equipment or tools and changes in the production processes.

Changes in production volume from the amount budgeted may be caused by shifts in demand for products, labour disputes, material shortages, poor production scheduling, machine breakdowns, labour efficiency and poor production quality.

2.10 Review of prior studies

Merchant and Manzoni (1989) undertake a field study to provide a better understanding of how and why managers of corporations with multiple divisions set the levels of achievability of annual profit centre budget targets. They gather data from 54 profit centres in 12 corporations and show that most budget targets are set to be achievable on average of eight or nine years out of ten. This is a sharp contrast from management accounting literature, which has suggested that for optimum motivation budget targets should be achievable less than 50 percent of the time. Managers, however, maintain that these highly achievable targets provide a considerable challenge, and the high achievability actually provides many advantages, including improved corporate reporting, resource planning, control, and, combined with other control system elements, even motivation.

The process of budgeting consists of planning, controlling, coordinating and motivating through money values, members, and departments within an organisation.
The control follows by means of comparing actual performance against the performance standard and taking corrective action where necessary. Key features of a budgetary control as observed by Buckley and McKenna, 1972, entails the system is a yardstick for comparison. This means the planned performance is meant to be perceived by management as a target that should motivate managers towards achievement of the goal implied by the budget. Information in quantitative terms is transferred and focus on variances helps isolate problems. It should identify and highlight performance items as opposed to non-performance items. It is a tool of management, not a policing mechanism and should be a formalised system culminating in management action

Buckley and McKenna (1972) introduce the element of behaviour in budgetary control. They trace the underlying rationale of most business control procedures to authoritative styles of management. The findings by the management experts can be placed within the framework of budget motivation. Maslow's motivational hypothesis would suggest the need to stress those factors near the apex of the hierarchy of basic needs. The implication of Herzberg's findings

is evidently the need to stress, in the budget system, the presence of motivating factors and an adequate level of hygiene factors. McClelland's approach is relevant as the budgeted manager seeks challenge from the setting of budget standards.

Macintosh (1983) observes the participative approach to setting targets for financial controls is naïve. He notes the overlook of financial people dealing with groups which may be protective or negative towards the company, and participative target setting can have either a positive or a negative effect on motivation. The way superiors use the budgets is of importance as they may use them in an overzealous and unquestioning way to pressure subordinates continually to meet short-run budget targets. Others attribute little validity to budgetary performance, thus losing the potential positive aspects of financial controls. The amount of environmental stress seems to have an important impact on the way budgets are used and the amount of job-related tension. Another critical aspect observed by Macintosh is the spirit with which managers play the budget game. When played in a high-spirited, competitive, and sportsmanlike way, it can result in involvement, co-operation, and excitement and so make a positive contribution towards the healthy functioning of the organisation.

Muleri (2001) seeks to find out the effectiveness of budgeting practice of British NGOs operating in Kenya. He looks at the concept from a number of angles. On approaches and philosophies to budgeting he finds most organisations using modern budgeting approaches and philosophies to reduce financial mismanagement. On use of budgets to achieve cost effectiveness, he finds a limitation in the budgeting process as he cites lack of knowledge by concerned staff. On use of budget in planning for operations, he finds its wide and sufficient use. On use of budget in coordinating activities he finds a perfect practice. On use of budget in controlling activities he finds lack of a solid base to enforce the controls. On use in motivating performance, he finds improper use of performance evaluation and thus does not reflect usefulness of budgeting. On use to communicate plans and operations, he finds it is generally well used. On use in evaluation and audits, he finds it as generally well accepted but not mandatory in most organisation.

Osoro (2001) seeks to find out the significance of difference between level of budgeted expense error and budgeted income error, and relief and developmental profits in NGO's. He

concludes that budgeting control practices in NGOs vary significantly between relief projects, which are governmental in nature, and development projects, which are private in nature with significant error rates in the latter. This implies that strict controls are required in developmental projects which are prone to budget errors and weaker controls.

Marks (1966) seeks to establish the administrative procedures of research laboratories in U.S.A, U.K and Denmark. On budgeting, he sees a problem of planning ahead for expenditures to be incurred in two years time.

Leo (1969) observes that the significance of variances of decomposition budgets for further analysis depends on the degree of interdependence within the decomposition. Information theory measures may be used to indicate the degree of interdependence within the decomposition and thus select variances for investigation. The informational analysis provides summarising measures for an overall evaluation of the budgeting process. The usefulness of the informational analysis increases with the size and complexity of the budgets.

Govindarajan and Shank (1989) observe variance analysis represents a key link in the management control process. It involves two steps. First, overall profit variance by key causal factors needs to be broken down. Second, one needs to put the pieces back together most meaningfully with a view to evaluating managerial performance. They argue that the link between a favourable or unfavourable variance, on one hand, and favourable and unfavourable performance, on the other, depends upon the strategic context of the business under evaluation.

Wooldridge et al (2001) look at alternative strategies for management of asset allocation, with an emphasis on condition assessment, alternative financing, and project delivery methods. They observe that accounting and budgeting data to be the most tangible of decision factors considered by decision makers. Their study concludes that cash –based accounting methods do not provide adequate financial data for comparing the sources and uses of funds for alternative operations and capital investments. Furthermore, cash based approaches do not account for the ongoing costs and depreciation expenses associated with long-term assets such as infrastructure.

Berland (2001) says budgeting is a potentially significant tool when economic environment is unstable and unpredictable and the analysis of its development demonstrates that its use has dramatically expanded over the time, as companies have been able to run forecasts. Development of budgetary control has been boosted by implementation of strategies to reduce risks while improving the ability to make accurate forecasts. Budgeting control can be used for various internal purposes where the environment is stable and limitation is not important. This implies that analysis of management of companies helps identify the purposes for which budgeting control is utilised. He finds that budgeting control allows for greater expansion opportunities and provides the means to strengthen the control of management within major companies. He observes that while budgeting control is relevant within an unstable environment, it performs best in an environment, which is highly managed.

Dunk and Lysons (1997), observe that complexity is the critical dimension of the environment. Complex environment require for effective decision making the use of participative processes to facilitate the quality required, the amount of information needed and importance of decision acceptance.

Syakhroza (2002), demonstrates the role of politics in budgetary control is significant and differs across sources of power. The study indicates that operational units are in a better position for bargaining in the budgetary control process than other units. It also indicates that individuals who have specific attributes such as education qualification held advantages over others. The result contain basic validation for viewing the budgeting process from a management accounting perspective, which may include consideration of political influence. This conceptual framework is in sharp contrast with the one viewing the budgeting process as purely technically or economically determined. The results support the perspective that a consideration of the social contingency variable of politics is essential in dealing with the process of budgetary control.

Wijewardena and De Zoysa (2001), show that both financial planning and control are important contributors to the sales performance in manufacturing small and medium enterprises. Findings suggest that greater the degree of financial planning and control then the higher is the sales growth.

2.11 BAMBURI SPECIAL PRODUCTS (BSP) LTD

Bamburi Special Products Ltd is a subsidiary of Bamburi Cement Ltd. The other subsidiaries are Hima Cement Ltd based in Uganda and Baobab firm based at Mombasa.

An offshoot of Simbarite Ltd, BSP was formed and started operations in 1998. The company manufactures concrete paving blocks amongst other cement product innovations. A member of Concrete Manufacturers Association of South Africa, BSP enjoys availability of vast information on concrete developments "free of charge". The company produces paving blocks under the brand name "bamburiblox".

The financial results of the company have continued to be impressive over the years while competitive pressures have increased as more people demand for the products.

Kenya Bureau of Standards has continued to assess the company's products and recently awarded it the Diamond Mark of Quality for the heavy-duty blocks, making them the only company in Kenya to have this mark for concrete paving blocks.

The company was initially located in Mombasa before moving to Nairobi to exploit the market, which was seen as fast growing.

BSP has also launched a wide range of landscaping products, which are both practical and decorative. The application has been observed on roads as well as for decorative purposes. Decorative products include the "lattice", "eclipse", and "Bamburi slates" brands. Industrial application has seen bamburiblox being laid on major highways such as Mombasa- Nairobi and the parking areas of shopping complexes.

This being one of the fastest growing subsidiaries of Bamburi cement ltd, this paper will seek to look at the capital budget targets that were set and the extent to which the targets have been borne by experience. The following section will detail the capital expenditure considerations that were put in place leading to its establishment.

2.11.1 Market Situation

The feasibility study considered both known and potential manufacturers of concrete paving blocks in Kenya. A total of 202,000 pavers were estimated to have been produced on a daily basis by the manufacturers who were in existence at that time.

A Strength, Weakness, Opportunities and Threat (SWOT) analysis was undertaken to determine the strengths and weakness of the competitors.

It was evident that the Nairobi area and upcountry regions had been undersupplied with blocks for a lot many years. An analysis into the long-term survival of the existing participants depicted a situation of financial difficulties arising from large investments of fixed assets such as land, expensive office building, underutilization of factory units, insufficient production plant, expensive plant and problems in managing working capital. This was seen to be eventually going to contribute to the eating away of the company capital and therefore the company was under threat. The alternatives, which were available to salvage the situation were not going to be easy to undertake given the foregoing facts. This was one of the aspects BSP saw as an opportunity given the good name that was attached to the parent company.

Financing difficulties were also observed in another manufacturer who was producing blocks for client companies. A sales force was not in place and chances of producing stocks for the wider market were low.

The capability of the existing manufacturers to produce higher volumes was also noted. Loyalty of a market sector made such firms be able to negotiate deals at better rates of return especially for residential applications. Mombasa producers were seen as not serious threats as it was easy to match them on prices as operations were to be moved out of Mombasa. Threats emerging in the Mombasa market were to be met by enhanced quality, good marketing and excellent customer service.

2.11.2 Marketing Strategy

Special advantages were in existence before the set up of BSP. A highest capacity paver unit was available with a dedicated sales team. Support was also envisaged from other experienced salesman within the group while developmental and formulations backing were to be available from the cement manufacturing parent company. The company was to be able to fight price wars.

Industrial customers were expected to form the largest buying group in the first two years and it was aimed that by years two, three, and four to have 10% of production going to decorative paving applications. Least exploited areas were seen to be residences, clubs, embassies and shopping mall/parking application. Multi stoned housing developments were seen to provide for little or no unpaved garden areas. The use of pavers increases the options for areas that might otherwise have been lawn and gardens. The company was to sell the triple messages of low maintenance, multiple use and easy demarcation of paved areas.

Four unique decorative pavers were to be introduced to the market. The competitive edge was further to be improved by being able to apply special coloured toppings or smoother/finer surface finishes. This was to reduce the cost of colouring the mass and enabling the company to offer the finest finishes of the then producers. There was seen to be an increasing demand for smoother pavers and varied colour blends, which the company was going to be able to satisfy.

For the first two years, production by the company was expected to increase from 23 million pavers to 33 million pavers. A market share of 31% was expected to be achieved initially.

Close contacts with major developers and international aid projects in neighbouring countries were to be maintained. It was conceivable that, in the long term, a complete plant could be considered a "mobile" unit capable of being moved at short notice to a new site whenever a sizeable contract was secured.

Becoming a member of the South African Concrete Manufacturers Association was to enable the access to Computer Aided Design (CAD) programmes for road designs, videos, ready-to-

use product literature, notice of new techniques and products being developed for an environment similar to that prevailing in Kenya.

2.11.3 Financial plan assumptions

The forecast sales volumes were split between industrial and residential applications on a 9 to 1 basis. A projected 45% share of the industrial sector business was forecasted after 3 years of operations. A sales split in favour of decorative pavers was going to be more profitable. A 75% share of the sales volume was expected to come from discounted "major contracts" prices.

The plan assumed selling prices were far below those commonly quoted by existing set-ups. A "NIL " discount on standard distributor prices for cement was assumed to exist in Mombasa and Nairobi. Annual inflation rates of 10% were projected on all costs. Sales prices were adjusted upwards at 7.5% p.a from year two onwards.

2.11.4 Prospects

Given the existing firms run down state of plants, extreme shortages of working capital and over investment in non-productive facilities, there was seen to be a great scope for the rapid expansion into the new field.

The rapid growth was however seen to be hampered by the firms' inability or unwillingness to give credit in most contract situations. In view of BSP being a new comer in the paving market and able to satisfy less than a third of market demand, this was not seen as a great disadvantage in the initial period.

The subsequent few years were expected to see the company grow to meet the demands of internationally funded development or rehabilitation projects by establishing an additional plant to meet the demand.

The budgets that were drawn for the four-year period (1998 to 2001) are summarised in the following section.

Table 1:FOUR-YEAR DRAFT PROFIT AND LOSS STATEMENTS (1998-2001)

Draft profit and loss statements

	1998	1999	2000	2001
Turnover				
Sales Income	**88,279,862.00**	**168,377,478.00**	**202,753,814.00**	**250,644,265.00**
Cost of sales				
Direct Production costs	43,256,047.00	77,873,068.00	95,705,206.00	121,046,351.00
Indirect production costs	5,349,000.00	7,413,960.00	9,733,952.00	12,097,506.00
Total cost of sales	**48,605,047.00**	**85,287,028.00**	**105,439,158.00**	**133,143,857.00**
Gross profit	**39,674,815.00**	**83,090,450.00**	**97,314,656.00**	**117,500,408.00**
Overheads				
Sales, commercial and Distribution costs	6,144,595.00	8,951,681.00	9,082,147.00	9,725,493.00
Administration and Management costs	2,081,800.00	1,724,080.00	1,901,788.00	2,119,967.00
Sub total overheads	**8,226,395.00**	**10,675,761.00**	**10,983,935.00**	**11,845,460.00**
Operating profit	**31,448,420.00**	**72,414,689.00**	**86,330,721.00**	**105,654,948.00**
Other overheads	**1,825,598.00**	**3,395,549.00**	**4,086,076.00**	**5,051,885.00**
Profit before tax	**29,622,822.00**	**69,019,140.00**	**82,244,645.00**	**100,603,063.00**

Source: Company records

Table 2: PLANNED CAPITAL EXPENDITURES 1998

Capital expenditure budget	**KSH. '000**
Buildings	22,205.00
Plant and Machinery	22,232.00
Mobile Plant and Vehicles	20,300.00
Office Machines	2,747.00
Furniture and Fittings	1,816.00
Workshop Equipment	2,399.00
TOTAL	**71,699.00**

Source: Company records

CHAPTER 3: RESEARCH METHODOLOGY

This is a case study of budgeting as a control function for Bamburi Special Products Ltd a subsidiary Bamburi Cement Ltd. It entailed the analysis of variances to establish the extent and reasons for variances and the remedial action that has been taken.

3.1 Data Collection

The study used both primary and secondary data. Primary data was obtained through personal interviews. The interviews will be administered to the General Manager, Plant Manager, Finance Manager and Sales Manager who are people of responsibility within the organisation. Sales manager was interviewed on the sales projections while plant manager will be interviewed on the production costs. The general manager was responsible for the capital expenditure while the sales and administration costs were handled by the finance manager. Secondary data was obtained through internal records and annual reports.

3.2 Data Specification

The data analysed was the line items per the individual line components of the performance budget and capital expenditure budget (Table 1 and 2), which were analysed per the variances below.

3.2.1 Material variances

Cost variance

Standard cost – Actual cost

Where: standard cost =actual production × standard rate

Standard rate=standard cost per tonne/standard output per tonne

Price variance

Actual quantity (Standard price – Actual price)

Usage variance

Standard price (Standard quantity – Actual quantity)

Standard quantity = Actual quantity/Standard output

The price variance eliminates any differences in price; therefore standard price must be used in the usage variance calculations.

Mix variance

Standard price (Revised standard quantity (RSQ) – Actual quantity)

Where RSQ =(standard quantity for each material/standard quantity total)*Actual quantity total

3.2.5 Fixed overhead variances

These depend on the amount of fixed overheads during the period and the output of products or standard hours during the period. Fixed overhead costs are highly significant in most firms as they are the largest single element of cost.

Variances based on units of output

Cost variance

Standard cost – Actual Cost

Expenditure variance

Budgeted cost-Actual cost

Volume variance

Standard rate (Actual quantity – Budgeted quantity)

Productivity variance

Standard rate (Actual quantity – Standard quantity)

Capacity variance

Standard rate(Standard quantity – Budgeted quantity)

3.2.6 Sales variances

Can be used to analyse the performance of the sales function or revenue centres on broadly similar terms to those of manufacturing costs. The most significant feature of sales variance calculation is that they are calculated in terms of profit or contribution margin rather than sales values.

a) Variances based on turnover

Value variance=Budgeted sales -Actual sales

Price variance = Standard sales – Actual sales

Volume variance=Budgeted sales – Standard sales

Quantity variance=Budgeted sales – Revised standard sales

Mix Variance=Revised standard sales – Standard sales

b) Variances based on margin

Operating profit variance due to sales=Budgeted profit – Actual profit

3.3 Data Analysis

Data based on ex post information was obtained and a variance analysis undertaken to gauge the extent to which planning and control processes at Bamburi is depicted by experience. The project under consideration is Bamburi Special Products, which has been in existence from 1998.

Performance reports for all the four years (1998 to 2001) for which the budgets were made were analysed. Variances were worked between the actual and the budgets as specified in the above section. The budget of reference was the Master budget. A line-by-line analysis was undertaken for the variance between the budget and the actual performance. All the six line items given by the capital expenditure budget (table 2) were compared with the actual expenditure to determine the variance and reasons for the variance sought. The projected profit and loss account was analysed by way of decomposing the items into constituent elements and applying the data specifications as given in the above section.

The first objective was achieved by way of analysis of variances.

The second objective was achieved by way of interviewing the management to establish the reasons for variances and remedies taken. An in-depth analysis of qualitative data was done using content analysis. Content analysis is a systematic, detailed qualitative description of the objectives of the study. This method was used by Mutua (2004) and Njoroge (2003).

CHAPTER 4: RESEARCH FINDINGS AND DISCUSSIONS

The variances which were worked out for the 4-year period are as follows.

Table 3: Variances

		Budget	Actual	Variance
Sales Variances				
1998	Value variance	88,279,862.00	15,848,210.00	- 72,431,652.00
	Price variance	90,586,977.00	15,848,210.00	- 74,738,767.00
	Volume variance	88,279,863.00	90,586,977.00	2,307,114.00
	Quantity variance	88,279,863.00	90,586,977.00	2,307,114.00
	Mix variance	90,586,977.00	90,586,977.00	-
1999	Value variance	168,377,478.00	127,301,000.00	- 41,076,478.00
	Price variance	167,396,190.00	127,301,000.00	- 40,095,190.00
	Volume variance	168,377,478.00	167,396,190.00	- 981,288.00
	Quantity variance	168,377,478.00	167,396,190.00	- 981,288.00
	Mix variance	167,396,190.00	167,396,190.00	-
2000	Value variance	202,753,814.00	142,831,000.00	- 59,922,814.00
	Price variance	201,574,800.00	142,831,000.00	- 58,743,800.00
	Volume variance	202,753,814.00	201,574,800.00	- 1,179,014.00
	Quantity variance	202,753,814.00	201,574,800.00	- 1,179,014.00
	Mix variance	201,574,800.00	201,574,800.00	-
2001	Value variance	250,644,265.00	136,573,000.00	-114,071,265.00
	Price variance	249,146,500.00	136,572,000.00	-112,574,500.00
	Volume variance	250,644,265.00	249,146,500.00	- 1,497,765.00
	Quantity variance	250,644,265.00	249,146,500.00	- 1,497,765.00
	Mix variance	249,146,500.00	249,146,500.00	-
Variance based on margin				
1998	Operating profit	29,622,822.00	- 142,000.00	29,764,822.00
1999	Operating profit	69,019,140.00	4,505,000.00	64,514,140.00
2000	Operating profit	82,244,645.00	- 1,678,000.00	83,922,645.00
2001	Operating profit	100,603,063.00	- 435,000.00	101,038,063.00

Fixed overhead variances				
1998	Cost variance	9,413,244.00	8,106,000.00	1,307,244.00
	Expenditure	5,647,291.00	1,638,367.00	4,008,924.00
	Volume	9,413,244.00	5,634,882.00	3,778,362.00
	Productivity	9,413,244.00	5,634,882.00	3,778,362.00
1999	Cost variance	68,698,332.00	97,639,599.00	- 28,941,267.00
	Expenditure	7,593,960.00	9,739,599.00	- 2,145,639.00
	Volume	68,698,332.00	7,589,184.00	61,109,148.00
	Productivity	68,698,332.00	7,589,184.00	61,109,148.00
2000	Cost variance	93,886,400.00	4,560,124.00	89,326,276.00
	Expenditure	9,793,952.00	4,560,124.00	5,233,828.00
	Volume	93,887,200.00	9,771,200.00	84,116,000.00
	Productivity	93,887,200.00	9,771,200.00	84,116,000.00
2001	Cost variance	86,877,792.00	3,381,929.00	83,495,863.00
	Expenditure	12,157,506.00	5,700,000.00	6,457,506.00
	Volume	86,877,792.00	12,135,312.00	74,742,480.00
	Productivity	86,877,792.00	12,135,312.00	74,742,480.00
Material Variance				
1998	Cost	7,014,000.00	5,674,200.00	1,339,800.00
	Price	37,860,000.00	48,000,000.00	- 10,140,000.00
	Usage	46,568,317.42	37,860,000.00	8,708,317.42
	Mix	46,568,317.42	37,860,000.00	8,708,317.42
1999	Cost	31,772.40	41,498.00	- 9,725.60
	Price	55,760,000.00	68,000,000.00	- 12,240,000.00
	Usage	76,001,444.57	55,760,000.00	20,241,444.57
	Mix	76,001,444.57	55,760,000.00	20,241,444.57
2000	Cost	59,725.80	68,118.00	- 8,392.20
	Price	64,428,000.00	70,560,000.00	- 6,132,000.00
	Usage	93,721,915.95	64,428,000.00	29,293,915.95
	Mix	93,721,915.95	64,428,000.00	29,293,915.95
2001	Cost	66,725.38	64,904.00	1,821.38

2001	Price	64,068,000.00	69,920,000.00	- 5,852,000.00
	Usage	118,407,097.17	64,068,000.00	54,339,097.17
	Mix	118,407,097.17	64,068,000.00	54,339,097.17

It came out that variances had resulted from both capital expenditure and performance. At the end of the 4 year period to 2001, about 56.6% of the capital expenditure previously budgeted for had been achieved.

The performance varied from the budgeted during the 4-year period. The profits were as follows:

1998 2.042m

1999 4.095m

2000 (2.154)m

2001 3.010m

4.1 Causal Analysis

Capital expenditure

Some of the assets were acquired from Simbarite ltd after its operations ceased. The cost of these items was therefore less than the budgeted cost since they were not new. The buildings were budgeted to encompass offices which were not put up safe for the two small offices to ensure the smooth running of the plant. The other office space is rented. The available space was seen to be adequate to carry out the operations effectively and with growth, there is no doubt the assets will be added.

Materials

Wastage out of mixing was cited as one of the reasons for variances. There is also inconsistency in weighing batches where a material could get into a mix at a higher or lesser proportion than required. Normally, this variation is within the stipulated range. The prices of raw materials and transportation keep on varying as well.

Overheads

These were said to change with changes in management policy such as in areas pertaining to safety. Overhead variances also arose in utility rate changes especially electricity.

Sales Variances

Arose as price change to correspond to increased production costs. The quantities also vary from one product to another. The price set has to be competitive as there are many players in the market. In striving to manufacture and market quality products, there is need to utilise quality material which is also priced highly.

4.2 Challenges and Remedies

Difficulty in estimating the externalities came out outstanding as a major challenge. Other challenges include increased competition, changing consumer demands, changing input costs and government policies.

Remedial actions include the review of budgets on a quarterly basis. The revised projections ensure that the budgeting process is put to a closer control. Experiences in one quarter make the projection of the next quarter to be as close to actual as possible.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

The objectives of this study were to carry out an annual analysis of variances over a 4 year period and to seek the reasons for variances and remedial actions taken. The variances between capital expenditure budgets and annual performance budgets for 4 years on one hand and the ex-post results on the other were carried out.

5.1 Conclusion

The findings of this study indicate that variances have occurred as a result of many factors. Although external factors are difficult to control, the environmental factors can only be addressed at the policy level. Being a large organisation the company has done well to respond to vagaries presented by the environment in monitoring the annual budgets. For the master budget, which was the focus of this study, a lot needs to be done.

5.2 Recommendations

Since decisions by management often have long-term effects, it is important that they should be based upon a true understanding of the past with a logical estimate of the future. In a large company, it is unlikely that detailed knowledge of the business and its environment is possessed by one individual, and thus there is need for a fact – finding process. It is likely that there will be a host of factors which could adversely affect the company's future or, alternatively, which could be exploited if the company were prepared in advance to take advantage of them.

There is need for more market research to establish the market demands. The dynamics of putting up such a project are to be looked at carefully to ensure as close to the estimated results are achieved.

5.3 Limitations of the study

The major limitation of this study was financial resources to carry out a rigorous study. The persons who were involved in setting up the budgets are not available and reliance was placed on the incumbent whose explanation could vary from the originators of the decisions. Some of the variances could not be obtained as the record keeping system has been changing. This implies that some of the information such as for labour could not be obtained to enable me calculate the labour variances.

There are difficulties in predicting the influence of various changes. Many external factors will affect the market for a company's products. These factors include political and economic changes, customer habits and opinions, competitors' actions, technological changes among others. Effect of changes in company policies need to be anticipated.

For a complete picture of all variances, more time could have been needed which was not available.

5.4 Areas for further study

1. A study should be carried out to establish how budgeting in other sectors of the economy borne by experience.
2. A study should be carried to determine the extent of variance based on the annual budget.

APPENDICES

APPENDIX I: DRAFT PROFIT AND LOSS STATEMENTS (1998-2001)

	Year 1	Year 2	Year 3	Year 4
Turnover				
Sales Income	**88,279,862.00**	**168,377,478.00**	**202,753,814.00**	**250,644,265.00**
Cost of sales				
Raw materials	41,998,569.00	76,006,767.00	93,652,271.00	118,465,438.00
Labour costs	1,257,478.00	1,866,300.00	2,052,934.00	2,354,053.00
Overtime				226,860.00
	43,256,047.00	**77,873,067.00**	**95,705,205.00**	**121,046,351.00**
Indirect Production Costs and				
Engineering Services				
Maintenance -consumables imported		204,960.00	245,952.00	1,249,006.00
Maintenance -consumables local	300,000.00	480,000.00	576,000.00	691,200.00
Maintenance -canvas covers	150,000.00	200,000.00	200,000.00	267,000.00
Wages	225,000.00	330,000.00	363,000.00	399,300.00
Sub total maintenance costs	**675,000.00**	**1,214,960.00**	**1,384,952.00**	**2,606,506.00**
Depreciation	2,635,000.00	2,635,000.00	2,635,000.00	2,635,000.00
Pallet replacement	1,997,000.00	3,564,000.00	5,714,000.00	6,856,000.00
Erection costs-Msa	42,000.00			
Research & Devt	298,291.00	180,000.00	60,000.00	60,000.00
Total indirect production costs	**5,647,291.00**	**7,593,960.00**	**9,793,952.00**	**12,157,506.00**
Cost of sales	**48,903,338.00**	**85,467,027.00**	**105,499,157.00**	**133,203,857.00**
Gross Profit	**39,376,524.00**	**82,910,451.00**	**97,254,657.00**	**117,440,408.00**
Overheads:				
Sales, Commercial and Distribution				
Payroll costs	871,595.00	3,304,681.00	3,635,147.00	4,094,493.00
Vehicle Running- Repairs	510,000.00	1,630,000.00	1,797,000.00	1,982,000.00
Vehicle Running- Depreciation	1,425,000.00	1,425,000.00	1,425,000.00	1,425,000.00
Travel and accommodation	283,000.00	194,000.00	214,000.00	284,000.00
Advertising and PR	3,055,000.00	2,398,000.00	2,011,000.00	1,940,000.00
Subscriptions and Licences	101,000.00	88,000.00	101,000.00	104,000.00
Total	**6,245,595.00**	**9,039,681.00**	**9,183,147.00**	**9,829,493.00**
Administration & Mgt costs				
Payroll costs	1,042,800.00	1,147,080.00	1,251,788.00	1,387,967.00
Vehicle Running	486,000.00	570,000.00	640,000.00	716,000.00
Travel and Accomodation	100,000.00			
Travel and Accomodation-External advisors	200,000.00			
Sundry costs	253,000.00	7,000.00		16,000.00
Total	**2,081,800.00**	**1,724,080.00**	**1,891,788.00**	**2,119,967.00**
Sub Total Overheads	**8,327,395.00**	**10,763,761.00**	**11,074,935.00**	**11,949,460.00**

Operating profits	**31,049,129.00**	**72,146,690.00**	**86,179,722.00**	**105,490,948.00**
Project Financing Costs:				
Bank Charges	60,000.00	28,000.00	31,000.00	39,000.00
Contingency	1,765,597.00	3,367,550.00	4,055,076.00	5,012,885.00
Sub total other overheads	1,825,597.00	3,395,550.00	4,086,076.00	5,051,885.00
Profit before taxation	**29,223,532.00**	**68,751,140.00**	**82,093,646.00**	**100,439,063.00**

Source: Company records

APPENDIX II: DETERMINATION OF SALES VALUES (1998-2001)

	YEAR 1		
	Qty	**SP**	**Value**
Industrial pavers	6121340	13.46	82,396,765.00
Decorative pavers	412160	14.27	5,883,098.00
Product totals	**6533500**		**88,279,863.00**
	YEAR 2		
	Qty	**SP**	**Value**
Industrial pavers	9674000	15.78	152,636,737.00
Decorative pavers	1012000	15.55	15,740,741.00
Product totals	**10686000**		**168,377,478.00**
	YEAR 3		
	Qty	**SP**	**Value**
Industrial pavers	10836000	16.96	183,792,579.00
Decorative pavers	1134000	16.72	18,961,235.00
Product totals	**11970000**		**202,753,814.00**
	YEAR 4		
	Qty	**SP**	**Value**
Industrial pavers	12461000	18.23	227,205,446.00
Decorative pavers	1304000	17.97	23,438,819.00
Product totals	**13765000**		**250,644,265.00**

Source: Company records

APPENDIX III: DETERMINATION OF PRODUCTION COSTS (1998-2001)

	YEAR 1		
	Qty	**SP**	**Value**
Industrial pavers	6951021	6.37	44,308,632.00
Decorative pavers	424653	5.18	2,199,703.00
Total and average unit costs	**7375674**	**6.31**	**46,508,335.00**
Bricks	4408	12.44	54,835.52
Totals	**7380082**	**6.31**	**46,563,150.00**
Adjustments - Trial items			88,291.00
Stocks			4,476,290.00
Totals			**4,564,581.00**
Net charge to profit and loss			**41,998,569.00**
	YEAR 2		
	Qty	**SP**	**Value**
Industrial pavers	9871428	7.10	70,122,710.00
Decorative pavers	1032653	5.70	5,884,057.00
Total and average unit costs	**10904081**	**6.97**	**76,006,767.00**
Bricks			
Totals			
Adjustments - Trial items			
Stocks			
Totals			
Net charge to profit and loss			**76,006,767.00**
	YEAR 3		
	Qty	**SP**	**Value**
Industrial pavers	11057143	7.81	86,399,532.00
Decorative pavers	1157142	6.27	7,252,740.00
Total and average unit costs	**12214285**	**7.67**	**93,652,272.00**
Bricks			
Totals			
Adjustments - Trial items			
Stocks			
Totals			
Net charge to profit and loss			**93,652,272.00**
	YEAR 4		
	Qty	**SP**	**Value**
Industrial pavers	12715307	8.60	109,291,425.00
Decorative pavers	1330612	6.89	9,174,012.00
Total and average unit costs	**14045919**	**8.43**	**118,465,437.00**
Bricks			

Totals			
Adjustments - Trial items			
Stocks			
Totals			
Net charge to profit and loss			**118,465,437.00**

Source: Company records

APPENDIX IV: CAPITAL EXPENDITURE BUDGET (1998)

	Quantity	Rate kshs '000	Budget
BUILDINGS			
Plant foundations and buildings	1	9,750.00	9,750.00
Perimeter gate	1	150.00	150.00
Office block	1	6,000.00	6,000.00
Control room and stores	1	1,750.00	1,750.00
Perimeter wall	150	3.00	450.00
Perimeter fencing	400	1.45	580.00
Power and distribution	1	1,000.00	1,000.00
Water supply	1	350.00	350.00
Water storage and piping	1	800.00	800.00
Control office	1	250.00	250.00
Civil works	1	1,125.00	1,125.00
Sub total			**22,205.00**
PLANT AND MACHINERY			
Main Plant	1	14,500.00	14,500.00
Preliminaries and plant move	1	3,000.00	3,000.00
Timber pallets	2000	1.76	3,520.00
Generator 100kva	1	1,100.00	1,100.00
Stacking tables	16	7.00	112.00
Sub total			**22,232.00**
MOBILE PLANT AND VEHICLES			
Small Shovel	1	1,200.00	1,200.00
Forklift	2	2,500.00	5,000.00
Truck with crane	1	4,600.00	4,600.00
Pool car	1	500.00	500.00
Trailer NBI	2	800.00	1,600.00
Trailer Coast	1	800.00	800.00
4WD	1	2,600.00	2,600.00
Saloon	1	1,600.00	1,600.00
Sales and marketing-saloon	1	1,600.00	1,600.00
Nairobi pool car	1	800.00	800.00
Sub total			**20,300.00**
OFFICE MACHINES			
Computer server	1	200.00	200.00
Computer terminal	4	60.00	240.00
Power back-ups	6	35.00	210.00
Printers	3	65.00	195.00
PCs	2	85.00	170.00
PABX Telephone System	1	300.00	300.00
Telephone heads	24	3.75	90.00
Network cables	1	100.00	100.00
Network software	1	50.00	50.00
Operating softwares	1	200.00	200.00
Calculator	6	1.00	6.00
Fax Machine	2	68.00	136.00
Air conditioners	4	30.00	120.00

Photocopier	1	150.00	150.00
Contingencies	1	30.00	30.00
Laptop	1	150.00	150.00
Mobile phone	2	80.00	160.00
Radio hand sets	6	40.00	240.00
Sub total			**2,747.00**
FURNITURE AND FITTINGS			
Office desks	20	15.00	300.00
Executive chair	2	20.00	40.00
Office chairs	38	10.00	380.00
Filing cabinets	20	7.00	140.00
Safe	1	88.00	88.00
Cabinet safe	1	128.00	128.00
Computer tables	5	10.00	50.00
Reception chairs,desk	3	30.00	90.00
Signage	1	600.00	600.00
Sub total			**1,816.00**
WORKSHOP EQUIPMENT			
Workshop tools	1	150.00	150.00
Protective gear	22	3.50	77.00
Vibro compactor machine	2	180.00	360.00
Strapping machine and seal	2	180.00	360.00
Hardness tester	2	145.00	290.00
Tarpaulin covers	20	15.00	300.00
Mobile test equipment	2	80.00	160.00
Levelling equipment	1	100.00	100.00
Paver cutter	2	15.00	30.00
Destructive test machine	1	200.00	200.00
Strap cutting machine	2	6.00	12.00
Poker vibrator	2	180.00	360.00
Sub total			**2,399.00**
GRAND TOTAL			**71,699.00**

Source: Company records

APPENDIX V: INTERVIEW CHECKLIST

The purpose of this checklist is to provide a guideline for determining the reasons for variances and the remedial actions that have been taken to correct the variances. It forms a part of the postgraduate management research project at the University of Nairobi.

The checklist is classified into four sections to be administered to the General manager, Plant manager, Finance manager and Sales manager.

General Manager:

1. To what extent has the capital expenditure budget for the following line items been achieved so far?

- Buildings
- Plant and machinery
- Mobile plant and vehicles
- Office machines
- Furniture and fittings
- Workshop equipment

2. What are the reasons for the variances if any?
3. What level of success would you attach to the budgeting process at Bamburi Special Products Ltd?
4. What limitations have you experienced in meeting the budgeted targets?
5. In setting up the budgets, what major challenges do you face?
6. What remedial actions have been put in place to arrest and correct the situation?

Plant Manager:

1. What are the reasons for material variances with respect to costs, prices, usage and mix?
2. What are the reasons for labour variances with respect to costs, rates, efficiency and idle time?
3. What are the reasons for fixed overhead variances based on units of outputs and standard hours with respect to costs, expenditure, volumes and capacity?
4. What is the most challenging aspect in setting up budgets for the plant?
5. What rate of success do you attach to the budgeting process for the plant?
6. What remedies have been put in place to correct the variances?

Finance Manager:

1. What are the reasons if any between the selling and general administration expenses budgets and the actual?
2. What is the most challenging part of the budgeting process?
3. What actions are in place to ensure the variances are minimized?
4. How would you rate the overall budgeting process at Bamburi Special Products Limited?
5. What measures are in place to rectify the variances that have been experienced?

Sales Manager:

1. Are there any variances between the budgeted sales and the actual sales?
2. What are the reasons for the variances between the budgeted sales and actual sales made in terms of volumes, prices, value, quantity and mixes?
3. What is the challenging aspect of setting up budgets with regards to sales?
4. What remedial actions are in place to ensure that variances are corrected?

REFERENCES

Balakrishnan R. (1989), "On the Decomposition of Direct Material Variances", *Issues in Accounting Education*, Vol. 4, No. 1, pp 193-202

Becker S. and Green D. (1962), "Budgeting and Employee Behaviour", *Journal of Business*, 35, No. 4, October pp 392-402

Becker E.A and Kim K.J (1988), "Direct Material Variances: Review of the Mix and Yield Variances", *Issues in Accounting Education*, Vol. 3, Issue 1, pp 1-16

Berland N. (2001), "Environmental Turbulence and, the Functions of Budgeting Control", *Accounting, Business and Financial History*, 11:1, March, pp 59-77

Brown J.L and Howard L.R (1982),"Managerial Accounting and Finance," MacDonald and Evans Ltd, 4th ED

Brownell P. (1981), "Participation in Budgeting, Locus of Control and Organisational Effectiveness", *Accounting Review*, 56, No. 4, Oct. pp 844-860

Brownell P. (1982), "The Role of Accounting Data in Performance Evaluation, Budgetary Participation, and Organisation Effectiveness," *Journal of Accounting Research* 20, No. 1, spring, pp 12-27

Bruns W.J and John H.W (1975), "Budgetary Control and Organisation Structure," *Journal of Accounting Research* 13, No. 2, pp 177-203

Buckley, A. and McKenna, E. (1972), "Budgetary Control and Human Behaviour", *Accounting and Business Research*, Spring, pp 137-150

Dunk and Lysons (1997), "An analysis of departmental effectiveness, participative budgetary control process and environment dimensionality within the competing values framework: A public Sector Study", *Financial Accountability and Managemnt*, 13(1), Feb

Drucker P.F. (1964), "Controls, Control and Management," in *Management Controls: New Directions in Basic Research*, McGraw Hill

Drucker P.F (1998), "The Information Executives Truly Need", in *Harvard Business Review on Measuring Corporate Performance*, Harvard Business School Press

Drury C. (2000), "Management and Cost Accounting", Thomson Learning, London, 5th ED

Fanning J. (1999), "Budgeting in the 21st Century," *Management Accounting*, Vol.77,No. 10, Nov, pp 24-25

Garrison R.H (1991), "Managerial Accounting: Concepts for Planning, Control, Decision Making," Irwin, 6th ED

Govindarajan and Shank (1989), "Profit Variance Analysis: A strategic Focus," *Issues in Accounting Education*, Vol.4, No. 2, Fall

Hampton J.J (2001), "Financial Decision Making-Concepts, Problems and Cases", Prentice – Hall of India PVT Ltd, 4th ED.

Horngren et al (1999), "Introduction to Management Accounting," Prentice Hall, NJ, 11th ED

Kren L. (1990), "Performance in a Budget –Based Control System: An Extended Expectancy Theory Model Approach", *Journal of Management Accounting Research*, Sep, Vol. 2, pp 100-112

Leo B. (1969), An Informational Theory Analysis of Budget Variances, *The Accounting Review*, October

Lioukas S.K and Chambers D.J (1981), "The Boundary Between Planning and Incremental Budgeting: Empirical Examination in a Publicly-Owned Corporation,"*Management Science*, Vol. 27, No. 12

Macintosh N. (1985), in *Readings in Accounting and Management Control*, Chapman and Hall, 5th ED

Marks B (1966), Some Observations on Research Institute Administration in the U.S.A, *Management Science*, Vol 12, No. 10, June

Merchant K.A and Manzoni J. (1989), "THE achievability of Budget Targets in Profit Centres: a field study", *The Accounting Review*, LXIV (3), PP 539-558

Merchant K.A (1981), "The Decision of Corporate Budgeting System: Influence on Managerial Behaviour and Performance", *Accounting Review* 56,No.4, pp 813-829

Morse W.J and Roth H.P (1986), "Cost Accounting: Processing, Evaluating, and Using Cost Data," Addison-Wesley, 3rd ED

Muleri A.M (2001), "A survey of Budgeting Practices Among the Major British NGOs in Kenya," Unpublished MBA Thesis, UoN

Mutua P.N (2004), "Responses to Changing Environmental Conditions – A Case of University of Nairobi", Unpublished MBA Thesis, UoN

Njoroge T. (2003), " Diversification Strategy: The Case of Nation Media Group", Unpublished MBA Thesis, UoN

Osoro M. (2001), "Budgetary Control in NGOs in Kenya", Unpublished MBA Thesis, UoN

Owens R.W (1980), "Cash Flow Analysis", *Accounting Review* 52, No.2, Jan, pp 111-116

Pandey I.M (1999), "Financial Management", Vikas Publishing Hse PVT Ltd, 8TH ED

Scheff M. and Lewin A.Y (1970), "The Impact of People on Budgets," *Accounting Review* 45, No. 2, April, pp 259-268

Syakhroza A. (2002), "The effect of politics on Budgetary Control: A Study of Fertilizer Industry in Indonesia," *International Journal of Business Studies*, Vol. 10,No.2, Dec, pp 75-96

Trapani C.S (1982), "Six Critical Areas in the Budgeting Process" *Management Accounting* 64, No. 5, November, pp 52-56

Wald J. (1978), "Brigg's Cost and Management Accounts", Macdonald and Evans Ltd, Estover, 10th Ed

Wolk H.I and Hilman D.A (1972), "Material Mix and Yield Variances; A suggested improvement," *Accounting Review* 47,No. 3, July, pp 549-555

Wooldridge et al (2001), "Effects of Accounting and Budgeting on Capital Allocation for Infrastructure Projects", *Journal of Management Engineering*, April

Wijewardena and De Zoysa (2001), "The impact of Financial Planning and Control on Performance of SMEs in Australia," *Journal of Enterprising Culture*, Vol. 9, No.4, Dec, pp 353-365

Williams et al (2001), "Financial and Management Accounting – The basis for Business Decisions", McGraw Hill, Irwin, 12th ED.