

**A SURVEY OF MANAGEMENT ACCOUNTING PRACTICES BY
PUBLICLY QUOTED COMPANIES IN KENYA.**

BY

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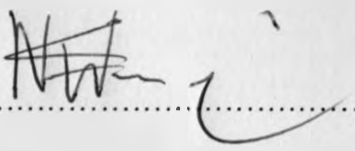
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DECLARATION

This project is my original work and has not been submitted for a degree in any other University.

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WAWERU N.M.

This project has been submitted for examination with my approval as the University Supervisor.

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Date 24th Nov, 99

DEDICATION

This project is dedicated to my loving parents;

Robert Maina Mugo
and
Joyce Njeri Maina

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ABSTRACT

The study reported here examined the management accounting practices, and management accounting techniques used by publicly quoted companies in Kenya and the type of management accounting reports produced and the frequency of their production. The study also explored the management accounting techniques used by these companies and the extent of their utilization. The basic premises of the study was that the success of any business in a competitive environment depend to a large extent, on the availability of timely and quality information for decision making.

The study was a census study of all the publicly quoted companies in Kenya. Data was collected using a semi-structured questionnaire and analysed using tables, proportions, averages and percentages. The chi-square and normal distribution tests were used to conduct pertinent statistical tests.

The findings from these analysis led to the following conclusions:

- (a) The most extensively used management accounting practice is budgeting. This was rated as the most important management accounting practice. The findings however revealed that there was no significant relationship between type and process of budgeting and the ownership and sector of the company.
- (b) The most important purpose of management accounting reports were planning and control. Most of the management accounting reports are produced monthly.
- (c) There does not exist a significant gap between management accounting theory and management accounting practice. However, there is limited application of quantitative management accounting techniques in Kenya.
- (d) There is preference of simple management accounting techniques to the complex techniques. This is probably due to the cost involved and the complexity of these elaborate techniques which may outweigh their benefits.

On the basis of these findings, the following managerial recommendations appear appropriate:

- (a) Companies in Kenya should move towards strategic management accounting. In this regard, management accounting information require to be sourced from both within and outside the organisation.

- (b) All staff in the organisation should be involved in management accounting.
- (c) Less preference should be given to variance analysis (investigation). In this respect a feed forward control approach is suggested.
- (d) Since management accounting has been seen to be deeply rooted in this country, there is need for a regulatory framework. In this regard the establishment of an Institute of Certified Management Accountants of Kenya body is suggested.

CHAPTER ONE

INTRODUCTION

1.1: Background

Accounting is a language that communicates economic information to people who have an interest in the organisation. This will include managers, shareholders, potential investors, employees, creditors and government. An examination of the various users of accounting information indicates that they may be divided into two broad categories;

1. Internal parties within the organisation.
2. External parties outside the organisation.

According to Drury (1996), management accounting is concerned with the provision of information to people within the organisation to help them make better decisions; whereas financial accounting is concerned with the provision of information to external parties outside the organisation.

1.11. Definition of terms:

A) Management Accounting Practice

The dictionary of contemporary English defines a practice as:

- a) Regular or repeated performance or exercise in order to learn to do something well.
- b) The actual doing of something rather than the idea of it.
- c) A repeated, habitual or standard act or course of action.

Management accounting practice may therefore be defined as all those activities undertaken by staff within the organisation to provide information for the purpose of better decision making. The most common management accounting practices are listed on page 7.

B) Management Accounting Techniques

A technique may be defined as a method of doing something that needs skill especially in art, music, literature etc. The most common techniques used in management accounting are listed on page 7.

C) Cost Accounting

This is the branch of accounting that is concerned with the calculation of product/ service costs for use in Financial Statements (Drury 1996).

1.2 Historical Development of Management Accounting

Johnson and Kaplan (1987) state that the origins of modern management accounting can be traced to the emergence of managed, hierarchical enterprises in the early nineteenth century. During this period, the need to gain more efficiency in production was realized. Factory owners started hiring workers on long term basis and hence the development of hierarchical organisations. Factories were frequently located a considerable distance from the Head Office of the owners, and an information system was required to increase and judge the efficiency of the managers and workers at the factory.

The emergence and rapid growth of railways in the mid nineteenth century was a major driving force in the development of management accounting systems. New measures such as cost per ton-mile, cost per passenger mile and ratio of operating expenses to revenue were created and reported on a segmented and regional basis. These measures were subsequently adopted and extended in other business sectors.

Johnson and Kaplan (1987) conclude that management accounting systems evolved to motivate and evaluate the efficiency of internal processes and not to measure the overall profits of the organisation. Hence a separate financial accounting system has to be operated to record transactions and process data for preparing annual financial statements for the owners and creditors of the firm. Management accounting and financial accounting therefore should operate independently of each other.

Further advances in management accounting were associated with the scientific management movement. Proponents of this movement concentrated on improving the efficiency of the production process by simplifying and standardizing the operations. In 1911, Charter Harrison published the first set of equations for the analysis of cost variances. By 1920, (Drury 1996), sophisticated systems to record and analyse variances from standards had been implemented and articulated in the literature.

Advances in management accounting may also be attributed to the growth of multi-activity, diversified organisations. Different managers run the firms divisions. The role of top management became that of co-ordinating the diverse activities, directing strategy and deciding on the most profitable allocation of capital to the variety of different activities. New

management accounting techniques were devised to support these activities. Budgetary planning and control systems were developed to ensure that the diverse activities of different divisions were in harmony with the overall corporate goals. In addition, a measure of return on investment (ROI) was devised to measure the success of each division and the entire organisation. Systems of transfer pricing were subsequently devised that sought to provide a fair basis for accounting profits between divisions.

Most of the management accounting practices used today had been developed by 1925, and for the next 60 years there was a slow down, or even a halt, in management accounting innovations (Johnson and Kaplan, 1987).

1.2.1 Criticism on current management accounting practices.

Johnson and Kaplan argue that sixty years of literature emerged advocating the separation of costs into fixed and variable components for making good product decisions and for controlling costs. However this literature never addressed the questions of whether fixed cost needed to be covered by each of the products in the corporations repertoire. The academic literature concentrated on elegant and sophisticated approaches to analysing costs for single product, single process firms while companies tried to manage with antiquated systems in settings that had little relationship to the simplified model assumed for analytical convenience by researchers. Johnson and Kaplan concluded that the lack of management accounting innovation in recent decades and failure to respond to its changing environment resulted in a situation in the mid 1980s where firms were using management accounting systems that were obsolete and no longer relevant to today's competitive manufacturing environment.

Drury (1996) summarises the principal criticisms of current management accounting practices into the following subheadings:

- Conventional management accounting does not meet the needs of today's manufacturing and competitive environment.
- Traditional product costing systems provide misleading information for decision-making purposes.
- Management accounting practices follow and have become subservient to financial accounting requirements.
- Management accounting focuses almost entirely on internal activities and relatively little attention is given to the external environment in which the business operates.

As a result of the various criticisms of management accounting practice, the Chartered Institute of Management Accountants commissioned an investigation to review the state of development of management accounting. In their findings Bromwich and Bhimani (1989) concluded that the evidence on arguments advanced by advocates of wholesale changes in management accounting are not yet sufficient to justify the wholesale revisions of management accounting.

1.2.2 Suggested way forward in management accounting practices.

In their later study Bromwich and Bhimani (1994) recommended a number of approaches and practices which seem to provide practical promise in helping management accountants respond to the challenges of the 1990s. In particular they recommended the adoption of activity based costing systems in place of the standard costing methods. Companies should also place greater emphasis on quality related costs so as to compete successfully in today's global competitive environment. In this regard a cost of quality report should be prepared to indicate the total cost to the organisation of producing products or services that do not conform with the quality requirements.

Strategic management accounting has also been suggested as a way forward in management accounting. Mike Porter (1985) suggests that a firm has a choice of three generic strategies in order to achieve sustainable competitive advantage:

- Cost leadership, where an enterprise aims to be the lowest cost producer within the industry.
- Differentiation, where the enterprise seeks to offer some unique dimension in its products/services that is valued by customers and which can command a premium price.
- Focus, which involves seeking advantage in a narrow segment in the market either by way of cost leadership or by product differentiation.

Bromwich (1994) sought to compare the relative cost of the product attributes or characteristics with what the customer is willing to pay for them. He argues that it is the product attributes, which need to be the subject of appropriate analysis. Bromwich (1994) concludes that information about a number of demand and cost factors appertaining to attribute possessed by firms' products and those of its rivals is needed for optimal decision

making. Management accountants can play an important role here in costing the characteristics provided and in monitoring and reporting on these costs regularly.

1.3 The Role of Management Accounting.

Drucker (1974) suggests that management consist of the following functions; planning, controlling, organising, communicating and motivating. The management accountant plays a major role in assisting managers in the performance of these functions.

1.3.1: Planning

In the planning process the management accountant helps to formulate future plans by providing information to assist in deciding what products to sell, in what markets and at what prices and in evaluating proposals for capital expenditure. This is mainly achieved through the budgeting process.

1.3 .2: Control

Management accounting aids the control process by producing performance reports to compare the actual outcomes with the planned outcomes for each responsibility centre. Management accounting draws managers attention to those specific activities that do not conform to the plans and recommends corrective action.

1.3.3: Organising

Belkaou (1980) suitably describes the interaction of management accounting and the organising process. He states:

'The identification of the elements of an organisational structure most prevalent and essential to a proper functioning of a management accounting system allows the tailoring of internal reporting system to that structure or the suggestion of a more appropriate organisational structure'.

Belkaou concludes that while organisational structure is concern with authority responsibility and specialisation so as to ensure effective performance, management accounting represents the design and implementation of the accounting system for better definition and consolidation of these relations.

1.3.4: Communication

Management accounting aids the communication process by installing and maintaining an effective communication and reporting system. For example budgets communicate plans to those managers who are responsible for carrying them out so that they are clearly aware of what is expected of them during the forthcoming budget period. Performance reports produced by the management accountant on the other hand communicate important information to a manager by indicating how well the latter is doing in managing his or her activities and highlighting those items that need detailed investigations.

1.3.5: Motivation

Budgets and performance reports that are produced by the management accountant also have an important influence on the motivation of the personnel of the organisation. Budgets represent targets that are intended to motivate managers to strive to achieve the organisation objectives.

However it is important to note that budgets and performance reports can cause serious behavioural problems and can be harmful to motivation if they are used and interpreted without specific knowledge of potential organisational problems.

1.4: Application of Mathematical Models in Management Accounting

Operations research seeks the determination of the best (optimum) course of action of a decision problem under the restriction of limited resources (Taha A: H. 1982). A first step of approaching a decision problem is to identify its two principal components- objectives; e.g. maximisation of profits or minimisation of costs and variables e.g. sales and costs.

A business manager wants to choose that course of action that will be most effective in attaining the goals of the organisation (Bierman, Jr. 1991). Real life problems tend to be enormously complex and there are literally an uncountable number of inherent 'facts' in any empirical situation (Bierman Jr., 1991).

A model may be defined as a simplified representation of an empirical situation. The simpler the model the better for the decision-maker, provided the model serves as a reasonably

reliable counterpart of the empirical problem. According to Bierman Jr. (1991) the following are the advantages of a simple model.

1. It is economical for time and thought.
2. It can be understood readily by the decision-maker.
3. If necessary the model can be modified quickly and effectively.

Bierman states:

“The object of the decision maker is not to construct a model that is as close as possible to reality in every respect. Such a model would require an excessive length of time to construct and then it might be beyond human comprehension. Rather, the decision maker wants the simplest model that predicts the outcomes reasonably well and is consistent with effective action”.

Management accounting is designed to help managers diagnose problems and identify priorities for further action. Linda (1994) states that management accounting makes use of mathematical techniques to reveal underlying issues and problems and to direct attention and resources to the most profitable uses. Some of the most common mathematical models used in management accounting and identified in this study include; linear programming, simplex method, transport model, decision theory, simulation, queuing method, economic order quantity, marginal analysis approach learning curves, regression analysis, net present value, Internal rate of return and the project evolution and review technique (P.E.R.T).

The above mathematical techniques are applied in some of the following areas of management accounting practices:

- Cost estimation/classification
- Inventory control
- Production planning
- Pricing decisions
- Budgeting
- Investment decisions.
- Profit planning.
- Divisional performance measurement

1.5: Statement of the Research Problem.

Management of any institution be it in the public sector or private sector has a responsibility of coming up with policies that minimise operating costs (Thomas, 1981). Such policies can make significant contribution to the efficiency of an organisation hence facilitating the attainment of a sustainable competitive advantage. This is critical in view of the current technology, thus the need to plan and utilise both physical and human resources more efficiently. It is due to this fact that various management accounting techniques have been developed to minimise cost, maximise profits or generally facilitate better management decisions.

Kaplan (1987) argues that management accounting reports are of little help to operating managers attempting to reduce costs and improve productivity. Kaplan and Johnson (1987) argue that the current management accounting systems fail to provide accurate product costs while managers' horizons contract to the short-term cycle of their monthly profit and loss statements. They concluded that management accounting has not changed over the last sixty years and has therefore lost relevance.

Despite the above argument, Burns et al(1998) in their study on the changing practices of management accounting in the U.K argued that there has been significant changes in management accounting practices in the U.K during the last decade. They argued that it is in the way management accounting is used and not necessarily in the introduction of new systems or techniques. They concluded that this is why surveys in management accounting practices continue to conclude that there has been little change.

Horngren (1982) cites the US Postal Services as being the best federal agencies that has successfully utilised discounted cash flow methods of capital budgeting.

Studies done in Kenya have concentrated on the measurement of divisional performances and management of inventory models; Minja (1995), Osewe (1998) and Gathumbi (1997). No study has been done in this country to establish the depth of management accounting practices in Kenya, the type of management accounting reports produced and the management accounting techniques used in Kenya. It is against this background that the following questions arise:

- What are the management accounting practices in Kenya?
- What reports do the management accountants produce and at what frequency?
- What management accounting techniques do Kenya companies apply?

1.6: Objectives of The Study

The study sets out to.

- 1) Determine the management accounting practices by publicly quoted companies in Kenya.
- 2) Identify the reports that are produced by management accountants and at what frequency.
- 3) Determine the extent to which publicly quoted in Kenyan companies apply quantitative management accounting techniques.

1.7: Significance of The Study.

1. The study seeks to popularise the management accounting methods to the management of organisations. This may enhance a better understanding of their operating environment and a better allocation of their resources.
2. The study is also expected to assist learning institutions on understanding user perception of the techniques they teach.
3. This study is also expected to stimulate interest among academicians and encourage further research in management accounting and hence provide a link between theory and practice.
4. The study is also aimed at sensitising practising accountants on the need to be actively involved in management accounting. In this regard there may be need to establish a regulatory framework for management accounting (Standards/guidelines) as in the case of UK, USA and Canada.

1.8: Organisation of the Study.

The research project will be organised in five chapters.

Chapter one consist of background, historical development of management accounting, application of mathematical models in management accounting, the statement of the problem, the objectives of the study and the significance of the study.

Chapter two consists of literature review. This has highlighted several studies that have been carried out on the application of management accounting theory in practice, the reasons advanced for their limited applications and changing practices in management accounting.

Chapter three deals with the aspects of research design. This defines the population as well as the sample of the study, data collection methods, instruments of data analysis and the validity of the research methodology.

Chapter four deals with data analysis and research finding while chapter five deals with summaries, conclusions and recommendations resulting from the study. It also deals with limitations experienced in the study and recommendations for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1: Introduction

The knowing or art of management accounting is understanding what tools should be used and why as well as being able to implement this knowledge, first hand or through others (John Denvey, 1997). Management accounting in the coming millennium will be embedded in the cycle to learning created by continuous improvement paradigm. This paradigm and the tools it has created or recreated are at the heart of the race to gain and sustain a global competitive advantage. What need to be known by management accountants who seek to participate in this cycle of learning includes;

- Business process analysis
- Business process redesign and improvement.
- Value profile.
- Strategic cost analysis
- Capacity analysis
- Advanced cost management techniques.
- Bench marking
- Value chain analysis
- Bottleneck and flow management.
- Competitive analysis
- Information system design.
- Activity profile
- Change management measure
- Cost analysis and development of cost tables.
- Operational process analysis and
- Target and life cycle costing.

In a competitive and changing environment what can management accountants do to assist their organisations? Pearson T. A. (1996) recognises that management accountants can provide vital information and implementation of corporate strategy in two ways.

- 1) By linking qualitative or perceptual product characteristic with their underlying costs (eg. quality)
- 2) By quantifying cost advantage that their companies have, relative to existing or potential competitors. These cost result in sustainable high returns to the company.

Additionally management accountants should be involved in the changes their companies are going through in the following ways.

- 1) Providing timely feed back on the performance and fiscal control over discrete projects, involving project lines or company acquisition (including work on integrating predecessors accounting systems to maintain reporting conformity).
- 2) Exert control over the day to day activities by providing benchmarks for measuring progress towards strategic objectives.
- 3) Emphasise the flexible basis for data to be able to provide forecasted or simulated results under various competitive strategies.
- 4) Provide oversight and advise on data reliability provided by other companies in strategic alliances or basis for contractual agreement.

Pearson (1996) states that strategic cost analysis can help identify strategies for four common types of mission; build, hold, harvest or direct. To be involved in the above, management accountants need to equip themselves fully with the already existing mathematical models.

2.2 Importance of management accounting techniques.

In organisations around the globe, management accountants are once again assuming the responsibility for relevance knowing what need to be known. And an opportunity to create a new and exciting finance function that will define their professional value in the new millennium (Mcnair, C. J. Feb 1997).

Gathumbi (1997) states that given the present challenges in this era of Structural Adjustment Programmes (SAPs) and increasing populations, operations research techniques come in handy to facilitate the allocation of the scarce resources.

Kariuki, J. T. (1983) states that inventory control techniques are not limited to manufacturing firms but can also be applied to the services industries.

Management accountants must be able to provide accurate and reliable feed back on the relative success or failure of their company's mission. This includes;

- 1) Accurate prime cost data since each strategic alliance or negotiation with purchasing group may result in different prices and different returns.
- 2) Cautious allocation of overheads since even activity based allocation can become distorted as underlying critical factors of success and cost driver may change quickly.
- 3) Sensitivity analysis on the impact of changes in sales mix so those capacity constraints and contract feasibility can be evaluated.

Gordon Sellers (1994) states that when selecting tools to support any business re-engineering exercise, it is important to find answers to the what, who, where, when and why question to ensure that the techniques that you are looking for will be useful in and used in the organisation. Hence;

- 1) Who is going to use this tool (training issues).
- 2) What are they going to use it for (right tool for the right job).
- 3) Where is it going to be used (configuration of hardware).
- 4) When will it be used (cycle within the project).
- 5) Why will this type of tool be used (analysis, storage, design implementation etc.).

A key role of management accountants today is to place financial numbers into a broader context and relate them to the key financial measures (Burns, J. 1998).

Glen Miller (March 1999) states;

“If you are able to go home each day and say we have done something useful for the organisation, something that will improve the bottom line performance and not just churned out more of the same, we have made a step in the right direction. Add to that quantitative objective -setting and the right enablers in terms of people and systems and you have at least a recipe for performance improvement”.

Hamish Mcrae (1994) states:

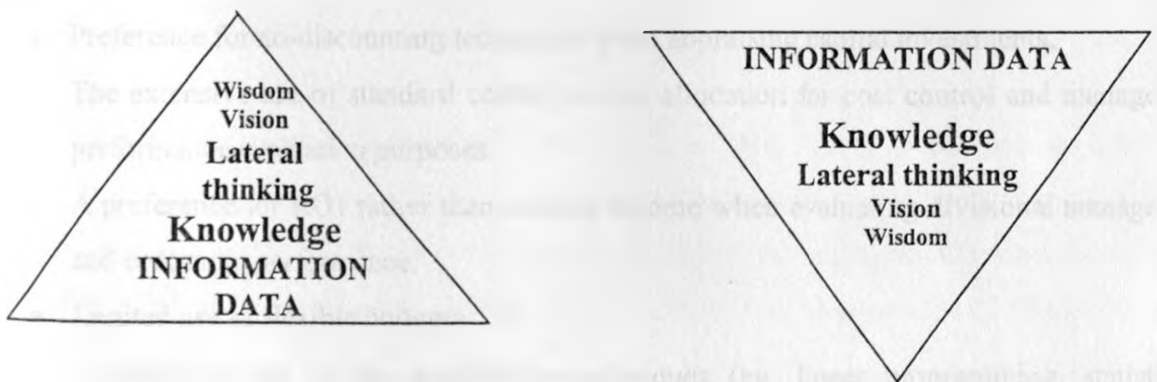
“As more nations embrace market capitalism, one can expect increasingly fierce economic competition. With all able to quickly initiate innovative actions against a competitor, the accent will be in quality, organisation motivation and self-discipline of people within the organisation. To survive firms will require creating a competitive advantage. Hence the need to utilise those quantitative techniques that will minimise costs without lowering the quality of the firms products”

It has been urged that analysis techniques by themselves do not create change; they diagnose problems and identify priorities for further actions. These techniques are information gathering, diagnostic and feedback tools for the organisation. They do not create change in operations or structures. The promise of these tools lie in their ability to reveal underlying issues and problems and to direct resources most profitably.

Peter Booth (1996) sees a change in management accounting to reflect a move away from a discipline based on set of data (currently mainly accounting based) to a discipline based on a set of analytical techniques and heavily information technology and business knowledge based (see below). Such a discipline is more value adding in its service, an important criteria to survive to become part of the ‘new age corporation’.

Figure 1

The knowledge pyramid



Source: IBIS Business Information 1994

As stated elsewhere in these paper (page 6) mathematical models seek the determination of the best (optimum) course of action of a decision-maker under the restriction of limited resources. A business manager would want to choose that course of action that will be most effective in attaining the goals of the organisation.

2.3 Previous Studies In Management Accounting Practice.

Since the early 1980's there has been an increasing emphasis by researchers in the study of management accounting practice. So far research carried out in the UK and the USA indicates that there is a significant gap between theory and practice of management accounting. According to Drury (1996), Scapens (1991), suggested that there is a considerable difference between the theory of management accounting as portrayed in textbooks and management accounting practices.

Edwards and Emmanuel (1990) have drawn attention to the fact that management accounting research has had very little impact on practice.

Surveys on management accounting in the UK and the USA have shown that the approaches outlined in textbooks are not widely used in practice. These surveys according to Drury (1996) indicate;

- The wide spread use of full product costs derived from traditional product cost systems, for decision making.
- Preference for no-discounting techniques when appraising capital investments.
- The extensive use of standard costing in cost allocation for cost control and managerial performance evaluation purposes.
- A preference for ROI rather than residual income when evaluating divisional managerial and economic performance.
- Limited use of flexible budgets
- Insignificant use of the quantitative techniques (eg. linear programming, statistical variance investigation models and regression techniques for estimating cost functions) advocated in textbooks.
- Widespread use of cost allocations for cost control and managerial performance evaluation purposes.

Studies done in Kenya have concentrated themselves to the management of inventory models and the measurement of divisional performances. Gathumbi S. N (1997) in his study on the application of inventory control methods in the health services offered by the Nairobi City Council found little application of the EOQ model. He identified frustration of the ordering system, lack of computers and lack of awareness to be the main factors hindering the usage of the model.

Other studies for example Kariuki J. T. (1993), who studied drug management in the University of Nairobi health services and Odeny W. A. (1987) who carried out a study on the inventory management of drugs at the Kenyatta National Hospital showed little application of the inventory control models advocated in the text books.

Minja (1995) tried to establish whether divisionalised companies do measure performance for their divisions, the objective of performance measurement and the performance measure indicators used. He concluded that the objective of performance measurement include; control, profitability, planning and strategy formulation, managerial performance, investment decisions and managerial remuneration. Accounting profit, return on investment, residual income and sales revenue were found to be the main measurement indicators.

Osewe (1998) studied the factors guiding the choice of performance measures in practice and the association between organisation characteristics and performance measurements. He concluded that most firms favoured financial measures to non-financial measures.

Evidence from the various empirical studies suggest that simple techniques are used in practice. Nevertheless, the use of simple techniques in practice may be quite rational and not an irrational rejection of complex techniques suggested in the academic literature. According to Drury (1996), Scapens (1991) justifies the use of simple techniques in the following ways.

“The insight into costs and benefits of accounting systems obtained through information economics has proved the basis for several researchers to compare simple and complex management accounting techniques. These researchers conclude that the use of simple techniques or rule of the thumb can represent ‘optimal’ responses to the cost and benefits of

information provision. This does not mean that complex models can be ignored; practitioners should consider them but choices must be made on a cost/benefit basis. The quest for complexity simply as a means for better representing reality will not necessarily provide 'ideal methods of management accounting. The conclusion that simple techniques can be optimal means that academic cannot criticise practitioners simply because the techniques described in the textbooks are not used. The text book theories require further consideration. Management accounting researchers are now more concerned with explaining existing practice than with promoting text book methods”.

Hogren (1986) also provides a similar justification for use of simpler techniques.

“The cost-benefit theme is the foundation for judging whether cost accounting systems should be revised. Many academicians seem frustrated that most organisations, including some successful giants, do not use multiple overhead rates, discounted cash flow, and regression analysis. In my opinion the cost/benefit rationale helps to explain why: there is a cost of keeping the costs. Many managers perceive, rightly or wrongly, that costs of more elaborate systems exceed prospective benefits. Moreover, the costs of implementing changes are seldom trivial”.

Some writers however, are very critical of the existing management accounting practice Kaplan(1984) has argued that most companies still use the same management accounting systems that were developed decades ago for an environment very different from that of today. Kaplan and Johnson (1987) argue that management accounting has not changed for the last sixty year and has therefore lost relevance. However, in the study sponsored by CIMA, Burns J.; Ezzamel M. and Scapens R. (1995-98) concluded that there has been significant management accounting change in the UK during the last decade. But it is in the way that management accounting is used and not necessarily in the introduction of new systems or techniques. They argue that this explains why surveys of management accounting practices continue to conclude that there has been little change.

Burns et al (1998), states that the key performance indicators are now driven by strategic consideration and may be expresses in non-financial terms.

A discovery of little innovation in contemporary accounting and control systems does not necessarily indicate that existing management accounting systems are absolute and need replacing (Drury et al, 1996).

In addition to the cost-benefit, theme; Drury (1996) Identifies the following reasons that also explain why the approaches advocated in textbooks are not widely used in practice.

- 1) A delay in the theoretical development being applied in practice.
- 2) A lack of understanding of theory by practitioners.
- 3) Theory fails to address the reality faced by the practitioners.

2.3.1: Decision Theory

Grinyer and Wooler (1975) in their study of major UK companies found out that only 25% of the large companies studied used probabilities, in their decision making models. The major argument against their use was that managers and the people providing the estimates found difficulties working with probabilities. Lack of understanding of statistics was also put forward.

In a recent study by Drury et al (1993) of 300 UK firms, it was reported that:

- 49% never used statistical probability analysis for decision making.
- 25% rarely used statistical probability analysis for decision making.
- 20% sometimes used statistical probability analysis for decision making.
- 6% often used statistical probability analysis for decision making.

None of the firms studied always used statistical probability for decision making.

2.3.2: Capital Investment decisions

A study carried out by Drury (1993) in the UK indicated that out of the 300 firms studied, 86 used the payback method, 78 used the accounting rate of return, 72 used the net present value (NPV) while 80 used the internal rate of return. (IRR)

Mclntyre and Coulthurst (1986) found out that only one method was used by 48% of firms while the rest used a combination of methods. Of these, 74% used payback. Most surveys have indicated that the payback and the IRR methods continue to be the methods that are

most frequently used in practice. This assertion has been supported by an exploratory research carried out by the researcher in Kenya in March 1999.

Lapsley (1986) carried out a study on the use of Discounted Cash Flow (DFC) techniques in the public sector. He found out that 69% of the public service organisations surveyed (local governments, water authorities and health authorities) used DCF techniques.

Woods et al (1985) found out that firms investing in new technology used the payback method more frequently than firms not investing in new technology.

Surveys conducted in the USA indicate a greater use of DCF techniques. Scapens and Sale (1981) found that 84% used DCF methods; 41% used accounting rate of return and 56% used the payback method.

Hendricks (1983) reported use of DCF methods to be as high as 94% with the vast of firms preferring IPR to NPV, in the UK.

The evidence from USA studies (Klammer and Walker; 1984) suggest that the payback method is of less importance among USA than UK firms.

2.3.3: Cost Estimation techniques.

Survey by Drury et al (1993) reported that statistical techniques are not widely used to separate fixed and variable costs. The following results were reported.

- 2% used statistical regression
- 59% classified costs in a subjective based on managerial experience.
- 28% classified all overheads as fixed while direct costs were classified as variable.
- 11% did not separate fixed and variable costs.

With regard to the use of learning curves and multi-regression techniques for costs and sales estimation the following results were reported.

Extent of usage	Learning Curves	Multi-regression techniques
	%	%
Never	35	64
Rarely	26	23
Sometimes	22	10
Often	14	2
Always	3	1

A survey by Dr. Isaac Mbeche (1996) on the application of forecasting methods in large manufacturing methods used in large manufacturing firms in Nairobi- Kenya reported the following on regression analysis.

No. of Respondents	Percentage	STATE
6	20.7%	Very familiar
5	17.2%	Vaguely familiar
18	62.8%	Completely unfamiliar

In my view however the survey could not capture the application of the technique since one could be very familiar with a technique but does not apply the same.

2.3.4 Linear Programming

Linear programming may be used by firms in the calculation of relevant costs which is essential for decision making particularly when a resource is scarce and alternative uses exist that provide a contribution.

A survey by Drury et al (1993) of UK manufacturing firms reported that linear programming was widely used by 5% of the respondents and occasionally used by a further 12%.

2.3.5. Activity Based Cost Application (ABC)

A survey by Innes and Mitchell (1995) reported that 20% of the responding organisations had implemented ABC. A further 27% of the respondents were considering adopting ABC. The survey also reported the following:

Application	Proportion of users (%)
Stock valuation	29
Product/Service	65
Output decisions	47
Cost reduction	88
Budgeting	59
New product/service design	31
Customer profitability analysis	51
Performance measurement/improvement	67
Cost modelling	61

2.3.6. Transfer Pricing

Anthony and Dearden (1984) suggest that a sound transfer pricing system should motivate the divisional manager to make sound decisions and it should communicate information that provides a reliable basis for such decisions.

Surveys done in the USA; Tung et al (1979), Australia; Joyce and Blayney (1991), Canada, Tung (1992) and Japan, Tung (1997) indicate that variable/marginal costs are not widely used in practice where as costs plus or full cost are used extensively.

2.4: Factors contributing to the limited use of management accounting techniques.

In his article Mylton (1986) advanced major reasons as to why there is little application of mathematical models in developing countries. First he sited lack of trained manpower in the field of operations research in developing countries.

Secondly he indicated that the models evolved in developed countries and are inappropriate in developing countries due to the differences in the historic background of the two worlds.

On his part Locket (1985) argued that it is lack of commitment, poor user understanding and high organisation resistance to change that hinders application of models in developing countries.

Gathumbi (1997) blames users for their tendency to rely too much on rational quantitative methods while addressing complex and urgent problems of management. He urges;

“We have tended to ignore or deny the thing we could not measure and to cling to almost as an act of blind faith to the rational hard headed scientific approaches epitomised in the increasing sophisticated techniques of the so called ‘managerial sciences’, which enjoy such a boom in the immediate post war period”.

Gathumbi (1997) identifies the following as the main factors limiting in the use of EOQ model in the drug management at NCC health services

- Lack of proper records to give data.
- Lack of computers.
- Lack of awareness in how best to implement the models.
- Frustration by ordering systems.

Bandyopadyay (1980) has established that private and family based industrial organisations use very little of operations research mainly due the feeling that the cost of their use would exceed the accruing benefits and that decisions need conform with the expectations of the managers/owners.

2.5. Changing Practices In Management Accounting

Asked to comment on one thing, an accountant should never be guilty of Peter Druker in March 1995 resorted:

“One of the weakness of your fraternity to date is that you have not made up your mind whether your job is control or your main job is information and I do not think the two things really go together”.

Druker thinks that the greatest obstacle/challenge is top management who looks at financial people in the organisation as the police force. Business schools have aggregated this issue because of the way they teach.

Burns J. (1999) argue that not only do management accountants need to be experts in financial matters but they also need a broad-based understanding of their business and an ability to work closely with others in the management team.

It is important to develop not only management accounting financial knowledge but also their broader personal skills and commercial capabilities.

One of the major developments in management accounting identified by Bromwich and Bhimani (1989) is strategic management accounting. There is a need for management accounting to adopt a more strategic perspective by reporting information relating to a firm's market and its competitors. The major feature of strategic management accounting is its external emphasis. Unlike traditional management accounting, strategic management accounting adopts an outward forward looking approach with a view to assist the organisation attain a sustainable competitive advantage.

Most practitioners are now dissatisfied with the traditional product costing systems (Drury, 1996). They have instead advocated the adoption of activity based cost accounting systems (ABC). ABC systems are clearly superior to traditional costing systems in terms of accuracy of cost measurement (Drury, 1996).

According to Berliner and Brimson (1988), companies operating in an advanced manufacturing environment are finding that about 90% of a product life cycle cost is determined by decisions made early in the cycle. Management accounting systems should therefore be developed to aid the planning and control of product life-cycle cost and monitor spending and commitments at the early stages of the product life cycle. Management accountants should therefore ensure that designers are made aware of the product characteristics that cause overhead costs through the cost driver rates applied in costing the product.

In the past, management accounting reports have tended to concentrate on analysing profits by products. Cooper and Kaplan (1991) however have drawn attention to the need to also analyse profits by customer using an activity-based costing approach. Customer-profitability analysis provides important information that can be used to determine which classes of customers should be emphasised or de-emphasised and the price to charge for customer services.

CHAPTER 3

RESEARCH METHODOLOGY

3.1: Research Design.

This is an exploratory research. It was aimed at finding out what management accountants in Kenya do. A survey research design was used.

3.2. Population of the Study.

The population of this study comprised of all the 54 publicly quoted companies as at 30.6.99. This population was chosen in view of the following:

- Information about these companies is readily available both at the registrar of companies and at the Nairobi Stock Exchange.
- Publicly quoted companies are also considered more open; that is; they release information more readily than non-quoted companies.
- Time and money factors are also scarce.
- The validity and reliability of information received from publicly quoted companies.
- Publicly quoted companies cover almost all sectors of the Kenyan economy.

Thirty-one (31) out of the 54 companies responded. The response rate of 58% was considered satisfactory. The other 23 (32%) failed to respond due to the following:

1. Outright refusal.
2. Some company respondents complained of lack of time.
3. Other companies advised of the need to maintain corporate confidentiality.

The respondents according to the sector are shown below:

Table 17: Classification of the Respondents

SECTOR	NO. OF COMPANIES	NO. OF RESPONDENTS	% OF RESPONSE
Agricultural	10	4	40%
Commercial & Services	13	10	77%
Finance & Investment	13	9	69%
Manufacturing & Assembly	18	8	45%
TOTAL	54	31	58%

Commercial and Services sector recorded the highest response rate (77%) followed by Finance & Investment (69%), followed by Manufacturing and Assembly (45%) while the Agricultural sector had the lowest response rate of 40%.

3.3 Sampling

No sampling will be done for this study since the population is not considered large. Moreover not all companies were expected to respond.

3.4 Data Collection

Primary data was used for this research since secondary data was not available. Even if secondary data were to be available it would have been appropriate since part of the study focuses on perception.

Data was collected through the help of a semi-structured questionnaire. The questionnaire had a total of 37 questions and was divided into four sections so as to capture the three objectives of the research and the general information relating to the company.

The companies physical locations and telephone numbers were established using the 1999 telephone directory and the information available at the Nairobi Stock Exchange. The questionnaires were then administered through the drop and pick method for those companies with their Head Office in Nairobi. For companies with Head offices outside Nairobi the questionnaire together with a self addressed stamped envelope was sent through the post. Telephone followups as well as personal visits were later made to explain or clarify issues relating to the questionnaire.

3.5 Data Analysis

The data was analysed using descriptive statistics, tables, percentages, proportions, means, total score and averages. The five point likert scale was used to convert qualitative data collected on the extent of usage of the management accounting techniques to quantitative data, while the four point likert scale was to convert data relating to the importance of management accounting practices.

Studies which have efficiently use this method of data analysis include Scapens and Sale (1985), Drury et al (1993), Lapsley (1986), Gringer and Wooler (1975) and Coulthurst and McIntyre (1986) in their study to establish the extent of management accounting use of quantitative techniques in UK and USA based firms..

Descriptive statistics have also been used successively by Muthamia (1990) Minja (1995) and Osewe (1998).

Chi-square was used to test whether there was significant relationship between several attributes of the respondents and the findings on the management accounting practices.

Further statistical tests using normal distribution were used to test whether the proportions calculated on the importance/use of the management accounting practices were statistically different.

3.6 Validity of Research Method.

An exploratory study allows for an in-depth understanding of observations and a greater involvement with the organisations under study (Coated and Colleagues; 1996). This enhances reliability and more scope of information is covered (Nzule, 1999).

While the approach is considered as a departure from classical research procedure it is becoming more acceptable and deemed necessary in accounting research. Govens and Tomkins (1994) assert that academics in the field of accounting need to place less emphasis on detached mathematical analysis and more into fieldwork where they can focus upon studying how practitioners perceive the world of accounting. This approach has widely been used by Drury et al (1993) in his studies of the application of accounting theory to practice. Burns Jr, Scapens; R and Turley; S (1996) also used the same approach in their study on some further thought on changing practice of management accounting in United Kingdom.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

This chapter is divided into three main sections which correspond to the three main objectives of the study as specified in chapter 1. The first section presents data findings on the management accounting practices by publicly quoted companies in Kenya. The second section presents findings on the type of reports produced by management accountants, the frequency at which they are produced and the purpose of these reports. The third section presents data findings on the extent to which publicly quoted companies in Kenya apply management accounting techniques.

4.1 Management Accounting Practices By Publicly Quoted Companies In Kenya

The research findings in the current study indicate that most of the management accounting practices taught in learning institutions are practised by publicly quoted companies in Kenya.

Tables 1 – 16 elaborate the importance and the extent to which various management accounting practices are used by publicly quoted company in Kenya.

4.11 Budgeting

Table 1 shows the importance of budgeting in the achievement of specified company's objectives.

Table 1: The Importance of Budgeting

MGT GOAL	VI		I		NI		IR		Total Score	Propo tion	Rank
	No	Score	No	Score	No	Score	No	Score			
Resource Allocation	23	92	6	18	2	4	0	0	114	15.4	2
Communication	6	24	22	66	2	4	1	1	95	12.8	6
Control	22	88	7	21	1	2	0	0	111	15	4
Performance Evaluation	22	88	7	21	2	4	0	0	113	15.2	3
Planning	26	104	5	15	0	0	0	0	119	16	1
Coordination	10	40	17	51	3	6	1	1	98	13.2	5
Motivation	6	24	20	60	4	8	1	1	92	12.4	7
TOTAL									742	100	

n = 31

KEY:	Scores
VI - Very Important	= 4
I - Important	= 3
NI - Not Important	= 2
IR - Irrelevant	= 1

The data in Table one show that planning is the most important purpose of budgeting. Planning scored 16% followed by resource allocation 15.4%, performance evaluation 15.2%, control 15%, coordination 13.2%, while communication scored 12.8%. Motivation was ranked last with a score of only 12.4%.

However a test to show whether there was any significance difference between the planning score of 16% and the resource allocation score of 15.4% (Appendix 3a). revealed a Z score of 0.012 against a critical value of - 1.64 at a level of significance of 5%. The computed value is within the critical area and we therefore fail to reject the null hypothesis and conclude that the two proportions are equal.

The findings indicate that the most common type of budget is the revolving master budget (Appendix 1a). This is used by 68% of the respondents while 42% use the fixed master budget.

In regard to the budgeting process, 55% of the respondents used the incremental method, 29% used the zero based budgeting method, while 16% used the activity-based method¹ (Appendix 1b).

Further tests using chi-square has shown that there is no significant association between the budgeting process and the sector in which the company is in. The calculated value of χ^2 is 5.667 against a critical value of 12.593 hence we fail to reject the null hypothesis and conclude that there is no significant relationship between the sector of the economy in which the company is based and the budgeting process used (Appendix 2a).

Further tests on the type of ownership reveal that there is no significant relationship between the budgeting process and the ownership of the company. The calculated value of the χ^2 is 0.6091 while the critical value is 9.488 and therefore we fail to reject the null hypothesis that there is no significant relationship between the budgeting process adopted and the ownership of the company (Appendix 2b).

The tests also reveal that there is no significant relationship between the type of budget used and the sectorial classification of the company. The calculated value of χ^2 is 3.4116 while the critical value is 5.991 hence we fail to reject the null hypothesis and conclude that there is no significant relationship between the company's sectorial classification and the type of budget used (Appendix 2c).

Although these tests reveal that there are no significant relationships, this lack of significant relationships may be partly due to the subjective categorisation and partly due to the smallness of the cell sizes.

¹ the activity based method refers to the budgeting process whether the previous year budget is used as a base and then the various activities are used to justify any increases/decreases of costs and revenues.

4.12 Costing

The findings indicate that 77% of the companies studied classify their costs into fixed and variable or direct and indirect while 22% do not differentiate their costs (Appendix 1c).

The companies that separate their costs indicate that direct costs/variable costs were very important in the valuation of stock, decision making and control. These findings agree with the literature in chapter two that fixed costs are sunk costs and are therefore irrelevant in decision making.

The findings indicate that most of the respondents use marginal costing to cost their products. Marginal cost was adopted by 54%, 10% used absorption costing, while the remaining 26% used both absorption costing and marginal costing (Appendix 1d).

Out of the 10 respondents who allocated overheads to their products, only 20% used standard costing. The remaining 80% used activity based costing (ABC). This supports the literature which gives prominence to ABC costing due to the present level of competition in the world market.

4.13 Inventory Management

The research shows a wide application of economic order quantity (EOQ) method of inventory management (Table 2).

Out of the 25 respondents 76% used E.O.Q to manage their inventory. Marginal analysis was used by only 8% while both ABC and just in time techniques were used by 4% of the respondents each. 8% respondents were governed by statue.

Table 2: The Usage of Inventory Control Methods

Method of Inventory Control	No. of Respondents	Proportion	Rank
EOQ	19	76%	1
JIT	1	4%	3
ABC	1	4%	3
Marginal Analysis Statute	2	8%	2
Statute	2	8%	2
TOTAL	25	100%	

Table 3 shows the importance attached to inventory control methods in the achievement of specified company objectives

Table 3: The Importance of Inventory Management

OBJECTIVE	VI		I		NI		IR		Total Score	Proportion	Rank
	No	Score	No	Score	No	Score	No	Score			
Minimize Holding Cost	12	48	10	30	1	2	0	0	80	17.1	2
Minimize Ordering cost	7	28	8	24	7	14	2	2	68	14.6	4
Customer Demand	15	67	4	12	2	4	3	3	79	16.9	3
Government Regulation	2	8	2	6	6	12	13	13	39	8.3	7
Avoid Shortages	18	72	5	15	2	4	1	1	92	19.3	1
Speculation	1	4	2	6	13	26	8	8	44	9.4	6
Minimize Transport Costs	4	16	13	39	3	6	4	4	65	13.9	5
TOTAL									467	100	

n = 24

The findings indicate that most of the respondents utilize the inventory control methods mainly to avoid shortages. This objective scored 19.3%, followed by minimization of holding costs 17.4%, minimization of ordering costs 14.6% and minimization of transport costs 13.9%. Government regulation was rated last with 8.5%.

4.14 Pricing

Table 4 below shows the extent of usage of the various management accounting pricing methods by the respondents.

Tale 4: The Usage of Pricing Methods

METHOD	NO. OF RESPONDENTS	PROPORTION %	RANK
Cost plus Profit	15	49	1
Marginal	6	19	3
Target	0	0	4
Market Prices of Competitors	10	32	2
TOTAL	31	100%	

The above findings indicate that the cost plus profit method is the most commonly used by publicly quoted companies to price their products/services (49%). Market prices of competitors rank second with 32% while marginal pricing was ranked third with 19%. None of the respondents used the target pricing method.

Table 5 below show the importance of pricing attributed by the respondents to the attainment of specified company objectives.

Table 5: Importance of Pricing

COMPANY'S OBJECTIVE	VI		I		NI		IR		Total Score	Propo tion	Rank
	No	Score	No	Score	No	Score	No	Score			
Maximize Sales	17	68	9	27	3	6	2	2	103	20	2
Maximise Profits	23	92	6	18	0		3	3	113	22	1
Increase Market Share	12	48	10	30	6	12	4	4	94	18.2	3
Serve a given Segment of Market	7	28	8	24	7	14	9	9	70	13.6	5
Market Penetration	4	16	11	33	8	16	8	8	73	14.2	4
Offer Lowest Price	2	8	2	6	19	38	10	10	62	12	6
									515	100	

n= 31

The findings indicate that maximization of profits was ranked first with a score of 22%. In fact, over 74% of the respondents felt that maximization of profits was a very important objective of pricing. Maximization of sales was ranked second with 20% of the total score while increase in market share was ranked third with a score of 18.2%. Offer the lowest price in the market was ranked lowest scoring 12%. It was rated not important by over 61% of the respondents.

However significant tests to show whether there is any significant difference between the proportions revealed none. For example a test to show whether there is any difference between maximization of sales objective score of 20% and offer lowest price score of 12% revealed a Z-score of -1.54 against a critical value of -1.64 at a level of significance of 5% (Appendix 3b). Since the calculated value is within the critical value, we conclude that there is insufficient evidence to reject the null hypothesis.

Chi-square test (Appendix 2d) was used to establish whether there is any significant relationship between the pricing method used and the volume of sales achieved by the company. The calculated value of χ^2 was 0.09755 against the critical value of 5.991 at 0.05 level of significance. We were therefore unable to reject the null hypothesis and concluded that there is no significant relationship between the volume of sales and the pricing method used.

Chi-square (Appendix 2e) was also used to establish whether there is any significant relationship between the ownership of the company and the pricing method used. The computed value of χ^2 was 2.83 against the critical value of 5.991 at 0.05 level of significance. We therefore fail to reject the null hypothesis and conclude that there is no significant relationship between the ownership of the company and the pricing method used.

Table 6 shows the methods used by the respondents in transfer pricing.

Table 6: Usage of Transfer Pricing Methods

METHOD	NO. OF RESPONDENTS	PROPORTION %	RANK
Market Prices	2	18	3
Cost plus Percent of Profit	2	18	3
Negotiated	4	37	1
Marginal Cost	3	27	2
TOTAL	11	100%	

The findings indicate that most of the respondents use negotiated market to set their transfer prices. Negotiated market was used by 37% of the respondents while marginal pricing ranked second with 27%. Market price and cost plus profit methods ranked last with 18% each.

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4.15 Investment appraisal methods

Table 7 below shows the importance attached by the respondents' to the various types of investment appraisal methods. Two methods, number of customers complaints and number of staff trained were introduced to check the validity of the information obtained, ie. if the two were ranked higher than the known investment evaluation methods, then the researcher would have concluded that the respondents were not truthful.

Table 7: Importance of Investment Appraisal Methods

INVERT METHOD	VI		I		NI		IR		Total Score	Propo tion	Rank
	No	Score	No	Score	No	Score	No	Score			
Accounting Profit	5	20	7	21	9	18	9	9	68	14.4	4
Pay Back	21	84	10	30	1	2	1	1	117	25	1
NPV	16	64	11	33	3	6	2	2	105	22.4	2
IRR	9	36	17	42	5	10	4	4	92	14.2	3
No. of Customer Complaints	0	0	4	12	5	10	21	21	43	9.1	6
No. of Staff Trained	2	8	3	9	4	8	22	22	47	9.9	5
TOTAL									472	100	

n = 31

The above data show that payback period (P.B.M) is rated highest with a score of 25%. This method scored over 71% as being very important. Payback method was also rated very important by over 68% of the respondents.

Net Present Value (NPV) was rated second scoring 22.4%, Internal Rate of Return (IRR) was rated third with a score of 19.2% while accounting profit ranked last with only 14.4 per cent. The three methods scored 60%, 39% and 29% as being very important to the respondents.

A hypothesis test (Appedix 3c) to show whether there is any significance difference between the proportionate ranking of the four methods as being very important unveiled that they were different. For example a test to show whether there is any significant difference between the payback method rating of 71% and that of accounting profit of 29% revealed a Z-score of -5.5 a against the critical value of - 1.64 at 5% level of significance. We therefore reject the null hypothesis and conclude that the two proportions are different.

The respondents were found to be truthful since both number of customer complaint and number of staff trained were ranked irrelevant by 49% and 47% respectively.

4.16 Divisional Performance Measurement

Table 8 shows the importance of the various measures of divisional performance to the respondents.

Table 8: Importance of Divisional Performance Measurement Methods

MEASURE	VI		I		NI		IR		Total Score	Propo tion	Rank
	No	Score	No	Score	No	Score	No	Score			
R.O.I.	20	80	6	18	2	4	2	2	104	21	2
Residual Income	11	44	11	33	4	8	3	3	88	17.8	3
Accounting Profit	18	72	12	36	1	2	1	1	111	22.4	1
Sales Revenue	14	56	12	36	1	2	3	3	97	19.6	4
Ability to stay in Budget	13	52	13	39	2	4	0	0	95	19.2	5
TOTAL									495	100%	

n = 30

The findings indicate that accounting profits is the most by important measure of divisional performance with a score of 22.4. However, ROI was rated very important by 77% of the respondents compared to 65% who rated accounting profit as a very important measure of divisional performance. Ability to stay within the budget ranked last by scoring 19.2% and with only 54% of the respondents ranking it as very important measure.

Tests of significance however revealed that there is no significant difference between the proportions (Appendix 3d). The computed value of $Z = -0.882$ which is within the critical value of -1.64 at 5% level of significance. Therefore there is no sufficient evidence to reject the null hypothesis.

Table 9 shows the importance attached to performance evaluation in the attainment of certain company goals.

Table 9: Important of Divisional Performance

COMPANY GOALS	VI		I		NI		IR		Total Score	Proportion	Rank
	No	Score	No	Score	No	Score	No	Score			
Rewarding/ Evaluating Managers	15	60	13	39	1	2	1	1	102	20.4	3
Control	14	56	11	33	0	0	0	0	89	17.9	4
Planning	17	68	16	48	0	0	0	0	116	23.3	1
Motivation	11	44	17	51	4	8	1	1	104	20.8	2
Training	5	20	19	57	4	8	2	2	87	17.6	5
TOTAL									498	100	

n = 31

The findings indicate that divisional performance measurement is considered very important for planning purposes. Planning scored 23.3% and was mentioned as being very important by 55% of the respondents. Motivation was ranked second with 20.8%, evaluation/rewarding managers was ranked third with 20.4, control was ranked fourth with 17.9% while training was ranked fifth scoring 17.6%. Training was ranked very important by only 16% of the respondents.

4.17 Variance Investigation

The findings indicate that all the respondents carry out variance investigation. Table 10 shows the relative importance of variance investigation in regard to the achievement of certain company objectives.

Table 10: Importance of Variance Investigation

OBJECTIVE	VI		I		NI		IR		Total Score	Proportion	Rank
	No	Score	No	Score	No	Score	No	Score			
Control	29	116	2	6	0	0	0	0	122	30.6	1
Performance Evaluation	4	16	20	60	7	14	0	0	90	21.2	4
Budget Preparation	13	52	16	48	2	4	0	0	104	24.5	2
Setting of Standards	12	48	15	45	3	6	1	1	100	23.6	3
									416	100	

n = 31

The findings indicate that variance investigation is mainly undertaken for control purposes. This was ranked first with a score of 30.6%. Performance evaluation was rated lowest with a score of 21.2%. Over 95% of the respondents ranked variance investigation as a very important tool for control and only 13% thought of variance investigation as a very importance tool for performance evaluation.

4.18 Profit Analysis

The findings indicate that 30 out of the 31 respondents (97%) carry out some form of profit analysis. Table 11 shows the method used by the companies to carry out their profit analysis.

Table 11: Methods of Profit Analysis

METHOD	NO. OF RESPONDENTS	PROPORTION %	RANK
Customer	3	10	3
Product	16	53.3	2
Department	11	36.7	2
TOTAL	30	100	

The data shows that most of the respondents carry out their profit analysis using products (53.3%) followed by departments (36.7%) while customer classification was ranked last with only 10%.

Table 12 shows the importance attached to profit analysis in the attainment of certain company's objectives.

Table 12: Importance of Profit Analysis

OBJECTIVE	VI		I		NI		IR		Total Score	Proportion	Rank
	No	Score	No	Score	No	Score	No	Score			
Credit Control	12	48	13	39	4	8	1	1	96	27.5	1
Customer Classification	5	20	14	42	8	16	3	3	81	23.2	4
Investment Decision	10	40	13	39	4	8	2	2	89	25.5	2
Production Planning	12	48	8	24	2	4	7	7	83	23.8	3
TOTAL									349	100	

n = 30

The finding indicate that profit analysis is mainly used for credit control purposes which scored 27% followed by investments decisions (25.5%) while production planning and was ranked third with 23.8%. Customer classification was ranked last with 23.3%. Only 25% of the respondents thought that profit analysis was very important for customer classification.

4.19 Management Accounting Information

The finding indicate that only nine (29%) out of the 31 respondents obtain their management accounting information from both within and outside the organisation. 22 respondents (71%) indicated that they obtain their management accounting information from within the organisation. No respondent obtained management information purely from external sources. These findings agree with the literature on chapter one which indicate that management accounting is the provision of information to management to assist in decision making.

4.2 Management Accounting Reports produced by Management Accountants

the Frequency at which they are produced and the purpose of the Reports

The findings of the current study indicate that all the reports produced by management accountants are used to assist management of the organisation to perform their role; mainly that of planning, control and decision making. These reports are either produced weekly monthly or yearly.

Table 13 shows the type of management accounting reports produced, the proportions of the total respondents producing them, the frequency at which they are produced and the purpose of these reports.

Table 13: Management Accounting Report Frequency

REPORT NAME	NO. OF RESPONDENTS	PROPORTION %	FREQUENCY		
			WEEK	MONTH	YEAR
Master Budget	31	100	0	0	31
Cash Budget	28	90	2	5	21
Direct Labour Budget	23	74	1	8	14
Sales Budget	23	74	0	4	19
Production Budget	22	71	1	9	12
Cost Analysis	30	97	2	22	6
Cash Flow Projection	25	81	1	12	17
Monthly Mgt Report	31	100		21	
Cost Schedules	16	52	4	12	
Sales Forecast	26	84		15	11
Competition Analysis	22	71		26	6
Profit Analysis	25	81		22	3
Deposit Analysis	8	25	2	6	
Market Survey	5	16			5
TOTAL			13	172	130

The findings indicate that the master budget is being prepared by all respondents and is being produced once annually. The monthly management report is also being produced by all respondents once monthly.

In addition to the above two reports, the cost analysis report is being produced by 97% of the respondents followed by the cash budget which is produced by 90% of the respondents. The other management accounting reports produced include sales forecast (84%), profit analysis (81%), cash flow projections (81%), direct labour budget (74%), sales budget (74%), production budget (71%), competition analysis (71%), cost schedules (52%), deposit analysis (25%) and market survey (16%).

In regard to the frequency of the reports, most of the management accounting reports are produced on a monthly basis followed by yearly and weekly respectively. This is supported by the literature in chapter one where the role of management accounting is said to be that of assisting management in the day to day running of the organisation (ie. planning, organising, control, communication and motivation). Weekly reports would be too costly while yearly reports would not be able to provide timely information for the purpose of quality decision making in the organisation.

4.3 The extent to which publicly quoted companies in Kenya use quantitative management accounting techniques

The findings of the study indicate that there was little application of quantitative management accounting techniques amongst publicly quoted companies in Kenya.

Table 15 shows the extent to which publicly quoted companies in Kenya use specific mathematical techniques borrowed from management science.

Table 15: Extent of Usage of Quantitative Management Accounting Techniques

TECHNIQUES	ALWAYS		OFTEN		SOMETIMES		RARELY		NEVER		PROPORTION %	RANK	
	Resp	Score	Resp	Score	Resp	Score	Resp	Score	Resp	Score			
Linear Programming	2	10	1	4	1	3	3	6	24	24	47	10.6	4
Simplex Method	0	0	1	4	1	3	2	4	27	27	38	8.6	6
Transportation Model	1	5	0	0	2	6	4	8	24	24	43	9.7	5
Decision Theory	2	10	0	0	2	6	7	14	20	20	50	11.2	3
Simulation	1	5	2	8	3	9	3	6	22	22	50	11.2	3
Queuing Theory	1	5	1	4	1	3	3	6	25	25	43	9.7	5
Regression	2	10	1	4	2	6	7	14	19	19	53	11.9	2
Learning Curves	0	0	3	12	2	6	2	4	24	24	47	10.6	4
PERT	4	20	5	20	4	12	2	4	16	16	72	16.3	1
TOTAL											443	100	

n = 31

The findings indicate limited application of quantitative management accounting techniques amongst publicly quoted companies in Kenya. For example only two out of the 31 respondents always used linear programming, none always used simplex method, only one always used transportation model, only two always used probability theory, only one always used queuing theory, only two always used regression analysis, none always used learning curves, only four always used PERT while only one always used simulation. On average 23 out of the 31 respondents never used these techniques.

Table 16 show the extent to which publicly quoted companies in Kenya use quantitative techniques in making investment decisions, inventory management decisions and in the measurement of divisional performance.

Table 16: Extent of Usage of Management Accounting Techniques

TECHNIQUES	ALWAYS		OFTEN		SOMETIMES		RARELY		NEVER		TOTAL	PROPORTION %	RANK
	Resp	Score	Resp	Score	Resp	Score	Resp	Score	Resp	Score			
Payback	7	35	10	40	7	21	0	0	7	7	103	38	1
N.P.V.	7	35	6	24	8	24	0	0	10	10	93	34	2
I.R.R.	2	10	6	24	10	30	5	10	8	8	74	28	3
TOTAL											270	100	
E.O.Q	4	20	8	32	7	21	0	0	12	12	85	56	1
Marginal Analysis	2	10	5	20	6	18	1	2	12	12	67	44	2
TOTAL											152	100	
R.O.I	8	40	13	52	4	12	0	0	6	6	110	58	1
R/Income	1	5	9	36	6	18	5	10	10	10	79	42	2
TOTAL											189	100	

n = 31

The findings indicate that payback method was the most commonly used in making investment decisions. Payback period scored 38% followed by NPV 34% and IRR 28%. Seven respondents always used payback method, seven always used NPV method, while only two always used IRR method.

In regard to inventory management, 56% of the respondents used EOQ while 44% used marginal analysis approach. Four respondents always used EOQ while only two respondents always used marginal analysis.

In regard to the techniques used to measure division performance, ROI was rated highest with 58% when compared to residual income which scored 42%. Out of the 31 respondents only 1 always used residual income while 8 always used ROI.

In regard to the benefits accruing from the use of the above techniques, most respondents mentioned both minimization of cost and better allocation of resources as the major benefits arising from the use of these techniques .

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND IMPLICATIONS

5.1 Summary

The three main objectives of the study were to determine the management accounting practices by publicly quoted companies in Kenya, to identify the reports that are produced by management accountants and their frequency and to determine the extent to which publicly quoted companies in Kenya use quantitative management accounting techniques.

A questionnaire based on available literature and discussions with management accounting academicians was used for collecting data. The data obtained from the responding companies was analysed using tables and proportions. Chi-square and normal distribution tests were used to conduct pertinent statistical tests.

5.2 Conclusions and Implications

5.21 Management Accounting Practices by publicly quoted company in Kenya.

The research findings on this objective indicate that publicly quoted companies in Kenya utilise the management accounting practices taught in learning institutions and advocated in text books. The ranking of the importance of budgeting reveal that planning is the most important purpose of budgeting. However significance test using normal distribution reveal that there are no significant difference between the proportions.

The findings indicate that most of the respondents used the revolving budget (68%) while the incremental budgeting process was more widely practised (55%). The study indicated that there is little application of the activity based budgeting which was only practised by 16% of the respondents.

The Chi-square test used to find out whether there was significant relationship between industrial sector and ownership of the respondents on one hand and the budgeting process on the other hand revealed that there was no significant relationship between them.

Further, χ^2 test on whether there is any significant relationship between industrial sector of the respondents and the type of budget used reveal that there is no significant relationship since the calculated value of χ^2 (3.416) falls below the critical value of 5.991 at 0.5 level of significance.

The findings indicated that 77% of the respondents classify their costs into fixed and variable classification. The variable/direct costs were more important costs for decision-making purposes. Marginal costing was adopted by 54% of the respondents. The findings show a wide application of ABC (80%) as compared to only 20% who used standard costing to allocate their overheads. This agree with the literature in Chapter two which support the use of ABC costing in view of its many advantages.

In the case of inventory management, EOQ was used by 76% of the respondents. The research show little application of JIT inventory management system. This little application may be attributed to the fact that most respondents are located far away from their suppliers. Poor infrastructure mentioned by the respondents as one of their major threats may also be attributed to this.

The research findings indicated that most of the respondents manage their inventory to avoid shortages. This was rated most important by 78% of the respondents. This is mainly attributed to the current level of competition, which was also cited by the respondents as one of the major threats facing them.

The research findings indicated that the cost plus profit pricing method was the most commonly used by the respondents. Over 49% of the respondents used this method. None of the respondents used target pricing while 32% of the respondents used market prices of the competitors. Marginal costing was used by only 16% of the respondents. The wide spread application of cost plus profit pricing method may be supported by the fact that a company has to charge all its cost plus some amount of profit if it expects to survive in the long term.

The research findings indicated that 22% of the respondents ranked profit maximization as the most important objective of pricing. Infact 81% of the respondents felt that his objective

was very important. Only 15% of the respondents felt that offering the lowest market price was an important objective of the company's pricing policy. However, test of significance using normal distribution reveal that the proportionate scores are not significantly different.

In regard to investment decisions the study indicated the payback period was the most important method. Over 71% of the respondents rated this method as very important, compared to the 29% who rated accounting profits as very important. Significant test using normal distribution reveal that, these proportion are significantly different. Studies done in the USA and the UK have shown wide application of none discounting methods.

The research findings indicate that accounting profit was used by most of the respondents to measure the performance of their divisions. However, ROI was rated very important by 77% of the respondents as compared to 65% in the case of accounting profits. These results show that accounting profit was being used by many companies since it serves other purposes, eg. Financial reporting and not because the respondents felt that it is superior to the other methods. Most of the respondents indicated that performance measure was mainly used for planning purposes.

In regard to variance investigation all the respondents indicated that this practice is common within their organisations. The finding indicate that this practice is mainly done for control purposes, ie. comparing actual with expected. Over 30% of the respondents felt that control was the most important objective of variance investigation. Only 21% reported variance investigation as an important tool for performance evaluation.

The findings indicate that over 96% of the respondents do analyse their profits. Out of these 54% analyse their profits using the product as a base with only 10% of the respondents using the customer. Credit control was ranked highest as the most important objective for profit analysis. This may be supported by the present high default rate particularly within the banking industry today. Only 25% of the respondents indicated that customer classification was the most important objective for profit analysis.

5.22 Management Accounting Reports, the Frequency and Purpose of the Reports

The findings of the research indicate that the reports produced by management accountants are used by management to assist in the process of managing the organisations; planning, control and hence decision making was mentioned by all the respondents as the purpose of management accounting reports.

The findings indicate that the master budget was the most important report being produced by all the respondents annually. Over 96% of the respondents produced the cost analysis report. Only 16% of the respondents produced a market survey report.

In regard to the frequency with which the reports were being produced, most of the reports were being produced on a monthly basis (55%) followed by yearly (41%). Only 7% of the reports were being produced weekly. These findings tally with the role of management accounting as indicated in Chapter One which is to provide timely and quality information for the purpose of decision making. Weekly reports would provide timely information but these would be too costly. On the other hand yearly reports would not provide timely information for the day to day management of the business.

5.23 The Extent to which Publicly Quoted Companies in Kenya use Quantitative Management Accounting Techniques

The findings indicate limited application of quantitative management accounting techniques amongst publicly quoted companies in Kenya. Infact most of the respondents never used these techniques. These findings agree with the literature in chapter two which indicate little application of quantitative techniques in both the U.K and the U.S.A.

The findings also indicate user preference of simple management accounting techniques as compared to the complex techniques .No respondent always used simulation, while 27 out of 31 respondents never used this technique. The study also show that, most respondents prefer the payback method when making investment decisions to the IRR method. This despite the many shortcoming that go with the payback method. These findings agree with the literature in chapter two on the studies carried out in the U.K and U.S.A. which also show preference of simpler techniques.

Despite the limited use however it was observed that most respondents still saw the management accounting techniques as a way of cutting down costs and also to assist in the allocation of their limited resources despite their limited application. The use of these techniques may be a way forward for Kenyan companies to gain the requisite competitive advantage in view of the current global competition.

In conclusion, the findings of this study indicate wide spread application of management accounting practices amongst publicly quoted companies in Kenya. The study has also indicated that management accountants in Kenya produce weekly, monthly and yearly management accounting reports which are used by management in decision making. However, the study has indicated that there is little application of the quantitative management accounting techniques amongst publicly quoted companies in Kenya.

5.3 Limitations of the Study

The study was constrained by several factors. These are:

- (a) The refusal by several companies to co-operate in the study. This reduced the sample from 54 to 31. However, there was no reason to believe that the 23 companies would have responded differently.
- (b) The time available to complete the study (two months) was also a constraint. For this reason the respondent was only able to self-administer the questionnaire to 18 respondents. The other 13 respondents were only contacted through telephone. However, there was no difference between those questionnaires that were self-administered and those that were completed by the respondents with the help of the telephone discussions with the researcher.
- (c) Lastly, conducting research on the management information of companies is made difficult by the art of confidentiality. For this reason, some respondents were not willing to have the names of their institutions written on the questionnaire although they co-operated with the study. It is difficult to know whether this phenomenon also made some respondents withhold some information or actually falsify it.

5.4 Suggestions for Further Research

Firstly, a study should be carried out to find out the management practices and management accounting techniques of non-quoted companies in Kenya. Secondly, an in depth study of each of the various management accounting practices both in the publicly quoted companies and in the non-quoted companies should be undertaken. This would lead to more conclusive results as to whether a significant gap exist between management accounting practice and management accounting theory.

In view of the current liberalisation of the Kenyan economy, a study may be carried out on the extent to which factors of liberalisation may have influenced the use of management accounting techniques in Kenya.

Lastly, a study may be carried out to test why public quoted companies in Kenya prefer the use of simple management accounting techniques as is indicated in this study.

Appendix 1 (a): Types of Budgets

TYPE	NO. OF RESPONDENTS	PROPORTION	RANK
Fixed	13	41%	2
Revolving	18	59%	1
TOTAL	31	100%	

Appendix 1 (b): Budgeting Process

TYPE	NO. OF RESPONDENTS	PROPORTION	RANK
Incremental	17	55%	1
Zero Based	9	29%	2
Activity based	5	16%	3
TOTAL	31	100%	

Appendix 1 (c): Classification of Costs

	FREQUENCY	PROPORTION
Classify Cost	24	77%
Does not Classify Costs	7	23%
	31	100%

Appendix 1 (d): Cost Allocation Methods

COSTING SYTEMS	FREQUENCY	PROPORTION	RANK
Full Costing	3	10%	3
Marginal Costing	15	54%	1
Both Methods	10	36%	2
	28	100%	

Appendix 2(a)

X^2 test of relationship between the budgeting processed adopted and the sectorial classification of the company.

Ho: There is no significant relationship between the budgeting process and the sectorial classification of the company.

SECTOR	ZERO BASED		INCREMEANTAL		ABC		TOTAL
	O	E	O	E	O	E	
Agricultural	2	1.29	2	2.19	0	0.64	4
Commercial & Services	3	3.23	6	5.48	1	1.6	10
Finance & Investment	3	2.9	3	4.9	3	1.45	9
Manufacturing & Assembly	1	2.58	6	4.4	1	1.29	8
	9		17		5		31

$X^2 = 5.667$

$df = (4-1) (3-1) = 6$

Level of significance = 0.05

Critical value = 12.592

Since the Computed value of X^2 is less than the critical value of 12.592, we fail to reject the null hypothesis and conclude that there is no significant relationship between the sector classification and the budgeting process.

Appendix 2 (b)

X^2 - Test of association between the type of budget adopted and the sectorial classification of the company.

Ho: There is no significant relationship between the type of budget adopted and the industrial classification of the company.

SECTOR	FIXED		REVOLVING		TOTAL
	O	E	O	E	
Agricultural	1	1.8	3	2.19	4
Commercial & Services	4	4.5	6	5.48	10
Finance & Investment	6	4.06	3	4.9	9
Manufacturing & Assembly	3	3.6	5	4.38	8
	14		17		31

$$X^2 = 3.4116$$

$$df = (4-1) (2-1) = 3$$

$$\text{Level of significance} = 0.05$$

$$\text{Critical value} = 5.991$$

Since the computed value of X^2 (3.4116) is less than the critical value of 5.9991 we fail to reject the null hypothesis and conclude that there is no significant relationship between the type of budget and the sectorial classification of the company.

Appendix (2c)

X^2 test of association between ownership of the company and the budgeting process used.

Ho: There is no significant relationship between the ownership of the company and the budgeting process used.

OWNERSHIP	ZERO BASED		INCREMEANTAL		ABC		TOTAL
	O	E	O	E	O	E	
Wholly Local	3	2.58	4	4.13	1	1.29	8
> 50% Local	3	3.87	7	6.19	2	1.94	12
< 50% Local	4	3.55	5	5.67	2	1.77	11
	10		16		5		31

$$X^2 = 0.60916$$

$$df = (3-1) (3-1) = 4$$

$$\text{Level of significance} = 0.05$$

$$\text{Critical value} = 9.488$$

Since the Computed value of $X^2 = 0.60916$ is less than the critical value of 9.488 we fail to reject the null hypothesis and conclude that there is no significant relationship between the ownership of the company and the budgeting process adopted.

Appendix 2 (d)

X^2 test of association between level of sales and the pricing method used.

Ho: There is no significant relationship between the company's sales revenue and the pricing method used.

SALES VOLUME	COST PLUS PROFIT		MARGINAL		MARKET PRICES		TOTAL
	O	E	O	E	O	E	
Less than 1 billion	4	4.35	2	1.742	3	2.9	9
More than 1 billion	11	10.64	4	4.25	7	7.1	22
	15		6		10		31

$$X^2 = 0.9755$$

$$df = (2-1) (3-1) = 2$$

$$\text{Level of significance} = 0.05$$

$$\text{Critical value} = 5.991$$

Since the Computer value of $X^2 = 0.9755$ is less than the critical value of 5.991 we fail to reject the null hypothesis and conclude that there is no significant relationship between the pricing method used and the sales revenue of the company.

Appendix 2(e)

X^2 test of association between the ownership of the company and the pricing method used.

H_0 : There is no significant relationship between the ownership of the company and the pricing method used.

OWNERSHIP	COST PLUS PROFIT		MARGINAL		MARKET PRICES		TOTAL
	O	E	O	E	O	E	
Wholly Local	7	4.8	1	1.94	2	3.2	10
Partially Local	8	10.2	5	4.06	8	6.77	21
	15		6		10		31

$X^2 = 2.83$

$df = (2-1) (3-1) = 2$

Level of significance = 0.05

Critical value = 5.991

Since the computed value of $X^2 = 2.83$ is less than the critical value of 5.991 we fail to reject the null hypothesis and conclude that there is no significant relationship between the ownership of the company and the pricing method used.

Appendix 3 (a)

Z – test to show whether there is significant difference between the proportion score of planning and the proportion score of resource allocation.

$$H_0 : \pi_1 = \pi_2$$

$$H_1 : \pi_1 > \pi_2$$

$$P_1 = 16 / 100 = 0.16 \quad P_2 = 15.4 / 100 = 0.154$$

$$\text{Pooled sample proportion (} p) = \frac{16 + 15.4}{200} = 0.157$$

$$q = 1 - 0.157 = 0.843$$

$$\text{hence } S(p_1 - p_2) = 0.5145$$

$$Z = \frac{0.16 - 0.154}{0.5145} = 0.012$$

The critical value of a one tailed test at 5% level of significance is - 1.64. Therefore the calculated value is within the critical value and therefore we conclude that there is insufficient evidence to reject the null hypothesis.

Appendix 3 (b)

Z – test to show whether there is significant difference between the proportion score of maximisation of sales and that of offer lowest price objective.

$$H_0 : \pi_1 = \pi_2$$

$$H_1 : \pi_1 > \pi_2$$

$$P_1 = 20 / 100 = 0.2 \qquad P_2 = 12 / 100 = 0.12$$

$$\text{Pooled sample proportion (p)} = \frac{20 + 12}{200} = 0.16$$

$$q = 1 - 0.16 = 0.84$$

$$\text{hence } S(p_1 - p_2) = 0.0518$$

$$Z = \frac{0.12 - 0.2}{0.0518} = -1.54$$

The critical value of a one tailed test at 5% level of significance is - 1.64. Therefore the calculated value is within the critical value and therefore we conclude that there is insufficient evidence to reject the null hypothesis.

Appendix 3 (c)

Z – test to show whether there is significant difference between the proportion that ranked the payback method as very important and the proportion that ranked the accounting profit as very important.

$$H_0 : \pi_1 = \pi_2$$

$$H_1 : \pi_1 > \pi_2$$

$$P_1 = 84 / 117 = 0.71 \quad P_2 = 20 / 68 = 0.29$$

$$\text{Pooled sample proportion (} p) = \frac{84 + 20}{185} = 0.562$$

$$q = 1 - 0.562 = 0.438$$

$$\text{hence } S(p_1 - p_2) = 0.0757$$

$$Z = \frac{0.29 - 0.71}{0.0757} = -5.4$$

The critical value of a one tailed test at 5% level of significance is - 1.64. The Calculated value is outside this value and we therefore reject the null hypothesis and conclude that there is significant difference between the proportions.

Appendix 3 (d)

Z – test to show whether there is significant difference between the proportion that ranked ROI as very important and the proportion that ranked accounting profit as very important.

$$H_0 : \pi_1 = \pi_2$$

$$H_1 : \pi_1 > \pi_2$$

$$P_1 = 80 / 104 = 0.77 \quad P_2 = 72 / 111 = 0.65$$

$$\text{Pooled sample proportion (} p) = \frac{80 + 72}{215} = 0.707$$

$$q = 1 - 0.707 = 0.293$$

$$\text{hence } S(p_1 - p_2) = 0.136$$

$$Z = \frac{0.77 - 0.65}{0.136} = -0.882$$

The critical value of a one tailed test at 5% level of significance is - 1.64. Therefore the calculated value is within the critical value and therefore we conclude that there is insufficient evidence to reject the null hypothesis.

Appendix 4 (a) Complimentary Letter to the Respondents.

University of Nairobi
Faculty of Commerce
Department of Accounting
P.O. Box 30197
Nairobi

10th September 1999

TO WHOM IT MAY CONCERN - WAWERU MAINA

Dear Sir/Madam

The above named is a graduate student in the Faculty of Commerce, University of Nairobi. He is currently carrying out a Management project research on "**Survey of Management Accounting Practices by Publicly Quoted Companies in Kenya**". This is in partial fulfilment of the requirements for the degree of Master of Business and Administration.

I wish to kindly request you to give him any assistance he may require during the conduct of the research project.

Thank you.

MOSES ANYANGU
CHAIRMAN, ACCOUNTING DEPT.

Appendix 4(b)

QUESTIONNAIRE

A) GENERAL INFORMATION

1. Name of the Company.....
2. What is the industry classification of your Company?
 - Finance and Investment ()
 - Manufacturing/Assembly ()
 - Agriculture ()
 - Commercial and Service ()
 - Other please specify.....
3. Describe the ownership of your Company?
 - Wholly local ()
 - Wholly Foreign ()
 - Partially Local ()
 - Subsidiary ()
 - Other please specify.....
4. If your Company is Partially local;
 - Local percentage ----%
 - Foreign percentage -----%
5. For about how long have you been in operation.
 - Less than one year ()
 - More than one year < five years ()
 - More than 5 years < ten years ()
 - Over ten years ()
6. About how many employees are there in your organization?
 - Less than 50 ()
 - More than 50 but <100 ()
 - More than 100 but < 1000 ()
 - More than 1000 ()

7. The Company's annual turn over is

Less than Ksh.100 million ()

Between Ksh. 100m and 500m ()

Between Ksh. 500m and Ksh. 1 billion ()

Above Ksh. 1 billion ()

8.Does your company operate a multi-product/service line? Yes No

9.If yes how many products and/or services?

10.Who are your main competitors?

New entrants ()

Existing big players ()

Substitute products ()

Second-hand products ()

Other please specify

.....

.....

.....

11.Rank in order of importance your major threats.

V.I I N.I I.R

Competition () () () ()

Lack of raw materials () () () ()

Lack of capital () () () ()

Lack of skilled manpower () () () ()

Changes in technology () () () ()

Poor infrastructure () () () ()

Insecurity () () () ()

Other please specify

.....

.....

.....

B) MANAGEMENT ACCOUNTING REPORTS:

12. Please fill in the details regarding the following reports.

REPORT NAME:	FREQUENCY; e.g Monthly; yearly; weekly etc. Indicate N/A where not applicable.	Purpose of the report.
Master budget		
Cash budget		
Direct Labour Budget		
Sales Budget		
Production Budget		
Cost Analysis		
Cash flow Projection		
Monthly Management report		
Investment proposals		
Cost Schedules		
Sales forecast		
Competition Analysis		
Profit Analysis		
Other please Specify		

C) MANAGEMENT ACCOUNTING PRACTICES.

Please use the following key to answer Question No.15,16,20,22,25,27,28,30&35.

KEY:

VI - Very important

I- Important

N- Not important

IR- Irrelevant

13. Describe your Company's budgeting process.

- a) The master budget is prepared to run for one year ()
- b) The master budget is prepared for twelve months but revised every quarter and adjusted for any anticipated changes. ()

Other please specify.....

14. To prepare your master budget you:

- a) Take the previous year budget as a base and increase/decrease the revenue and/or costs. ()
- b) Start from zero and justify all activities independently. ()
- c) Look on the different activities performed in the organization and then estimate cost/revenue for each activity. ()

Other please specify

.....

.....

15. Kindly rank the importance of budgeting in each of the following as applicable to your company.

	VI	I	N	IR
Allocation of resources	()	()	()	()
Communication	()	()	()	()
Control	()	()	()	()
Performance Evaluation	()	()	()	()
Planning	()	()	()	()
Coordination	()	()	()	()
Motivation	()	()	()	()

16. Listed below are types of costs that may be incurred in your Organization. Kindly tick the cost objective(s); e.g stock valuation (S.V), Decision making (DM) or control (C) for each cost. Also rank the importance attached to the cost objective.

CLASSIFICATIONS	COST OBJECTIVE/RANK IN IMPORTANCE.			
	S.V /RANK	DM/ RANK	C/ RANK	OTHERS
Fixed	()	()	()
Variable	()	()	()
Direct	()	()	()
Indirect	()	()	()
Relevant	()	()	()
Irrelevant	()	()	()
Overheads	()	()	()
Others please specify			
			
			

17. Describe your costing systems.

- 1) We allocate all costs of the organization to the product/service ()
- 2) We allocate only those costs that are directly related to the product ()
- 3) We allocate those cost directly related to the product and a proportion of the period/overhead costs to the product. ()

Other please specify.

18. If your answer to question No. 17 is (3). Which of the following methods do you use to allocate overhead to the costs of the products.

- 1) The number of Machine/labour hours used.
- 2) The cost of the activities performed to complete the product.

Other please specify.

19. To manage our inventory

- (a) We maintain a given stock level. ()
- (b) We have established how much to order when the stocks get to that level. ()
- © We do not maintain any stocks and only order when products are required. ()
- (d) We have classified our stock into various categories (A B C) and make orders depending on the categories. ()
- (e) We have used past experience and probability theory to determine how much to order. ()

Other please specify.

.....

20. Rank in order of importance the objectives of your inventory management systems:

	VI	I	NI	IR
Minimize holding Costs	()	()	()	()
Minimize ordering Costs	()	()	()	()
Meet Customer demand	()	()	()	()
Government regulations	()	()	()	()
Avoid shortages	()	()	()	()
Reduce transportation Cost	()	()	()	()
Speculation	()	()	()	()
Other please specify				
.....	()	()	()	()
.....	()	()	()	()
.....	()	()	()	()

21. One of the methods described below suits best the way our company prices its products.

- a) We estimate the unit cost of the product and then add a percentage mark up to this cost to provide for reasonable profit. ()

- b) We estimate the costs that are relevant (direct) to the production of one unit of the product. ()
- c) We establish the amount of money the target customer is willing to pay for the product prior to designing/introducing the product. ()
- d) Market prices of competitors ()

Other please specify

.....

22. Rank in order of Importance your pricing policy objectives.

	VI	I	NI	IR
Maximize sales	()	()	()	()
Maximize profits	()	()	()	()
Increase Market share	()	()	()	()
Offer lowest Market price	()	()	()	()
Serve a given market segment	()	()	()	()
Market penetration	()	()	()	()
Others please specify				
.....	()	()	()	()
.....	()	()	()	()
.....	()	()	()	()

23. Do your divisions sell products/services to other divisions?

Yes No

24. If yes which of the following is your company's policy on transfer pricing?

- a) Use of prices prevailing in the market. ()
- b) Use the total cost of Producing the unit plus a given percentage of profits. ()
- c) Use of the market price to negotiate the transfer price. ()
- d) Use the marginal cost/direct cost of producing the unit. ()

Other please specify.

.....

25. Does your company appraise capital investment projects?

Yes..... No.....

26. Rank in order of importance the method used by your company to appraise capital

Investment Projects.	VI	I	NI	IR
Accounting rate of return	()	()	()	()
Pay back period	()	()	()	()
Net present value	()	()	()	()
Internal rate of return	()	()	()	()
No. of customer complaints	()	()	()	()
No. of staff trained	()	()	()	()
Other please Specify				
.....	()	()	()	()

27. Does your organisation measure the performance of its divisions?

Yes No

28. If the answer to question No.26 is yes, rank in order of importance the following measures of performance of your divisions.

	VI	I	NI	IR
Return on Investment	()	()	()	()
Residual Income	()	()	()	()
Accounting Profit	()	()	()	()
Sales Volume	()	()	()	()
Ability to stay within budget	()	()	()	()
Other please specify.				
.....	()	()	()	()
.....	()	()	()	()
.....	()	()	()	()

29. Rank in order of importance the purpose of performance evaluation.

	VI	I	NI	IR
Rewarding/Evaluating Managers	()	()	()	()
Control	()	()	()	()
Planing	()	()	()	()

Motivation () () () ()

Training () () () ()

Other please specify

..... () () () ()

..... () () () ()

..... () () () ()

30. Are variances investigated in your organization? Yes.... No.....

31. If your answer to Question No 21 is yes rank in order of importance the purpose of variance Investigation.

	VI	I	NI	IR
Control	()	()	()	()

Evaluate managers () () () ()

Preparation of budgets () () () ()

Set standards () () () ()

Other please specify

..... () () () ()

..... () () () ()

..... () () () ()

32. If yes describe the source of your management accounting information.

Internal ()

External ()

Both internal and external ()

33. Are profits analyzed in your organization?

Yes No

34. Describe the manner in which profits are analyzed in your organization.

By customer ()

By Product ()

By department/unit ()

Other please specify.....

35. Rank in order of importance the objectives of profit analysis.

	VI	I	NI	IR
Credit control	()	()	()	()
Customer classification	()	()	()	()
Investment decisions	()	()	()	()
Production planning	()	()	()	()
Other please specify				
.....				
.....				

D. APPLICATION OF QUANTITATIVE MANAGEMENT ACCOUNTING TECHNIQUES.

36. Kindly tick below the quantitative management accounting techniques used in your company, indicating the extent of their usage.

(Always-5, Often-4, Sometimes-3, Rarely-2, Never - 1)

METHOD

EXTEND OF USAGE

1. Linear programming	
2. Simplex method	
3. Transportation model	
4. Decision theory	
5. Simulation	
6. Queuing theory	
7. Economic order quantity	
8. Marginal analysis	
9. Learning Curves	
10. Regression analysis	
11. Net present value	
12. Internal rate of return	
13. Pay back method	
14. Return on investment	
15. Residual income	

16. Project evaluation and review technique	
Other please specify	

37. Please list below the benefits accruing to your organization as a result of usage of management Accounting techniques.

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THANK YOU FOR YOUR COOPERATION.

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