THE IMPACT OF MANAGERIAL ACCOUNTING PRACTICES ON FINANCIAL PERFORMANCE IN SMALL AND MEDIUM ENTERPRISES IN UGANDA: A CASE OF BRITANIA ALLIED INDUSTRIES NAKAWA DIVISION

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DECLARATION

I **Logose Annet Mary** declare that this was my original work and has never been submitted to any university or institution of higher learning for award of a degree or diploma.

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APPROVAL

This dissertation entitled "*The impact of managerial accounting practices on financial performance in small and medium enterprises in Uganda: A Case of Nakawa Division*" was an original work of Annet Mary Logose. It was produced under my supervision and has been submitted for examination with my approval as supervisor.

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Date: 3/07/2017

DEDICATION

I dedicate this dissertation to my beloved parents Mr. Kanumi Steven and Ms. Baluka Christine.

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ACCRONYMS

ABC	Activity-based Costing
ABCMA	Activity-based Costing and Management
ABMA	Activity-based Management Accounting
AIS	Accounting Information System
AMT	Advanced Manufacturing Technology
ARR	Accounting Rate of Return
BBRT	Beyond Budgeting Round Table
BSC	Balanced Scorecard
CAM-I	Consortium for Advanced Manufacturing International
CBM	Central Bank of Nakawa Division
CIMA	The Chartered Institute of Management Accountants
CSFs	Critical Success Factors
CVP	Cost-Volume-Profit
DOS	The Department of Statistics
DSS	Decision Support System
FDI	Foreign Direct Investment
FMAC	Financial Management and Management Accounting Committee
GDP	Gross Domestic Product
IRR	Internal Rate of Return
IFAC	International Federation of Accountants
IMA	Institute of Management Accountants
IMP	Industrial Master Plan
IT	Information Technology
JIT	Just-In-Time
KM	Knowledge Management
KPIs	Key Performance Indicators
MA	Management Accounting
MAP	Management Accounting Practice
MAS	Management Accounting Systems
MAT	Management Accounting Technique
MCS	Management Control System
MOA	Ministry of Agriculture and Agro-based Industries
MP	Nakawa Division Plan
NPC	National Productivity Corporation (Nakawa Division)
NPV	Net Present Value

NSDC	Nakawa Division National SMEs Development Council
NZ	New Zealand
OC	Organizational Controls
PMS	Performance Measurement System
ROI	Return on Investment
ROE	Return on Equity
ROA	Return on Asset
ROS	Return on Sales
SMEs	Small and Medium sized Enterprises
SMIDEC	Small and Medium Industries Development Corporation
SMA	Strategic Management Accounting
TQC	Total Quality Control
TPM	Total Productive Maintenance
TQM	Total Quality Management
UNDP	The United Nations Development Program
UK	United Kingdom
US	United States
VBM	Value-based Management
VE	Value Engineering

ABSTRACT

The purpose of this study was to examine the impact of MAPs on financial performance among SMEs in Uganda with reference to Britania Allied Industries Nakawa Division. Specific objectives included: investigating the extent to which MAPs were employed by Nakawa Division SMEs, identifying the roles played by MAPs in Nakawa Division SMEs' management, determining the factors that affect the extent of use of MAPs among Nakawa Division SMEs and establishing the relationship between MAP and financial performance of SMEs.

The research design adopted was descriptive cross–sectional survey design using quantitative approach. An accessible population of 10,000 respondents was identified, from which a sample size of 142 respondents was drawn. The overall response was 81%.

The key findings were: Costing, Budgeting and Performance evaluation were significantly positively related to financial performance of SMEs.

The study concluded and it was learnt that: Budgeting and Performance evaluation domains of MAPs were significantly positively related to financial performance of SMEs.

The study recommended: use of Budgeting and Performance evaluation domains of MAPs to attain financial performance of SMEs.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

According to Mitchell and Reid (2000), part of the reason for stressing the importance of small firms or SMEs was that their flexibility makes them well suited to the niche opportunities which were so characteristic of the 'New' economy. This chapter was organized into five sections. The first section describes briefly the background to small and medium sized enterprises (SMEs) and the role of management accounting practices (MAPs) in the management of all organizations. Section two discusses the problem statement followed by the identification of research objectives, research questions, and hypotheses. Next the rationale and importance of this study was explained. The section ends with the development of a methodology and the specification of the organization of the thesis.

1.1. Background to the Study

1.1.1. Historical Background

Globally, small and medium-sized enterprises (SMEs) make up the vast majority of the business population in most countries in the world therefore they constitute a vital force in modern information-based economies (Mitchell & Reid, 2000). In Nakawa Division the SMEs population comprises approximately 99 per cent of all Nakawa businesses (The Department of Statistics, 2005). Therefore this sector plays a crucial role in the economy as an engine to generate economic growth in Nakawa Division. SMEs also contribute to the economy in other ways. Cook (2001) highlighted some of those which includes: (1) The encouragement of entrepreneurship; (2) The greater likelihood that SMEs utilize labor intensive technologies and thus have immediate impact on employment generation; (3) The fact that they can usually be established rapidly and put into operation to produce quick returns; (4) The ability of SME development to encourage the process of both inter-and intraregional decentralization; and (5) The notion that they may become a countervailing force against the economic power of larger enterprises. More generally, the development of SMEs was seen as accelerating the achievement of wider economic and socio-objectives, including poverty alleviation.

In addition to the advantages stated above, Mitchell and Reid (2000) argued that part of the reason for stressing the importance of small firms or SMEs was that their flexibility makes them well suited to the niche opportunities which were so characteristic of the 'New'

economy. Thus SMEs play a key role in stimulating economic expansion. In light of both their significant contributions and potentials, there was a growing focus on this sector by policy makers in most countries. In Nakawa Division, the role of SMEs became more important after the 1990s especially after the Asian Crisis in 1997-1998. The country learnt not to be overly dependent on foreign direct investment (FDI) in stimulating its economy and used SMEs as a new mechanism for generating the growth of its economy (Aris, 2007). The government has been called upon to put up clear policies, strategies and implementation matrixes to develop this sector through an integrated approach (Aris, 2007), the principal SMEs policy strives for the development of a competitive, innovative and technologically strong SME sector, capable of meeting the increasing demands of globalization and intensifying competition (NSDC, 2007). In consequence various initiatives have been set in motion to build the capacity and capability of SMEs. For example, there have been efforts to improve the management and business methods in production, quality improvement, marketing and accounting skill (SME Annual Report, 2007). However there was concern about a lack of exposure to management accounting among Nakawa Division SMEs since there was no specific reference to the use of MAPs.

Previous research has suggested that MAPs were an important tool through which management can promote efficiently, and potentially have an important influence on performance (Ghosh and Chan, 1997; Lybaert, 1998; and Mitchell and Reid, 2000). In particular, within small firms, MAPs act as the key information system that plays a vital role as an efficient information-processing (Reid and Smith, 2002). Apart from that, the availability of financial and non-financial information provided by MAPs permits firms to effectively face competitions.

1.1.2. Theoretical Background:

Since "theory provides the foundation on which quality research was built" (Hair, Celsi, Money, Samouel, & Page, 2011, p.88) this study was based on a contingency theory approach (Chapman, 1997; Chenhall, 2003; Scapens, 2006) which was derived from organizational studies and says that the successful implementation and use of management accounting practices depends upon particular factors, so-called contingencies. These typically include the environment, technology, size and structure of an organization, but recently strategy and national culture have been added (Chenhall, 2003). Contingency theory was typically used in positivistic studies (Malmi & Granlund, 2009) as cited in Khaldoon Al-Htaybat et al (2013), where pre-determined hypotheses were delineated and then tested in the empirical part of the

investigation, although this does not have to be the case (Chapman, 1997). Uncertainty drive, however, the adoption of information processing requirements (Chapman, 1997). Contingency theory was still one of the most popular research approaches in management accounting (Chenhall, 2006, Khaldoon Al-Htaybat et al 2013).

Moving along from the economics-based domain to focus on organizational and social theories, institutional theory has now an established tradition in management accounting research investigating change in management accounting practices, with the earlier studies adopting New Institutional Economics (NIE), Old Institutional Economics (OIE) and New Institutional Sociology (NIS) (Burns and Scapens, 2000; Scapens, 2006) and recent studies having developed the concept further to institutional logics (Rautiainen & Jarvenpaa, 2012; Bogt & Scapens, 2009). Meyer and Rowan (1977) found that OIE and NIS support the idea of homogeneity, that was everyone signs up to the same belief system within the organization, for instance budgeting takes place because external forces, be they coercive, mimetic or normative, force the organization to do so in order to gain legitimacy (Ma and Tayles, 2009; Moll and Hoque, 2011). In general, NIE focusses on the structures that govern economic transactions, OIE was concerned with institutions that impact upon thought structures of individual human agents, and NIS deals with the institutions that shape organizational structures in the organizational environment (Scapens, 2006). Institutional logics was a recent development of institutional theory, which reflects the idea of heterogeneity. Heterogeneity occurs because individuals act on the basis of their habitus (Bourdieu, 1977; Bogt & Scapens, 2009) but also on the basis of detailed deliberation. Contrary to prior forms of institutional theory, institutional logics suggest that an individual can make their own choices, although their internalized habits and routines guide such choices (Bogt & Scapens, 2009) as cited in Khaldoon Al-Htaybat et al (2013).

As cited in Khaldoon Al-Htaybat et al 2013, Interventionist research suggests that researchers actively instigate change in the field, examples being innovative action research (Malmi & Granlund, 2009; Joensson & Lukka, 2006). Importantly, the study should be academically sound, and should have an impact on the practice of accounting where the study takes place.

1.1.3. Conceptual Background:

This study was guided by this study conceptualize on MAPs as (independent variable) basing on costing, budgeting, performance evaluation, and decision support system. Financial

performance was examined as (dependent variables) to measure the growth of sales revenue, growth of profits, returns on investments.

1.1.3 Contextual Background

Empirical research by Alain, The research was conducted in Britannia Allied Industries was located in Ntida industrial area, retail shops, saloons, wholesale shops in Nakawa division, Kampala Uganda. The study was majorly on MAPs and financial performance in small and medium enterprises in Nakawa. The research was completed in two months due to the crash programme. Four weeks for data collection, four weeks for analysis and report presentation.

1.2. Statement of the Problem

Much has been written about small business and in particular about small business failure rates (Watson and Everett, 1996). Richard (2000) stated that there were many reasons for the failure rate of start-up businesses, including lack of adequate working capital, poor market selection, and rapidly changing external market conditions. However, the most significant reason for this high failure rate was the inability of SMEs to make adequate use of essential business and management practices. Many small firms fail to develop an initial plan, and those that do establish a plan fail to continually adjust and use it as a benchmarking tool. Similarly, Wichmann (1983) argued that one of the reasons for business failure was poor management ability which includes accounting problem-solving. Further, Hopper et al. (1999) using data based on the results from Japanese companies concluded that a failure to adopt MAPs (i.e. cost management systems) in a similar way to their larger counterparts and, at the margins, to experiment with new forms of control that were more profit oriented may be a factor in the currently high failure rate of SMEs. Based on these argument it can be suggested that MAPs were important for SMEs if they were to avoid failing.

Another driver of this thesis was the paucity of research into the use of MAPs among SMEs. Despite the increasing amount of research in management accounting in the past decade, little was known of its form and effectiveness within SMEs (McChlery et al., 2004). This lack of research based knowledge may have been based on a belief that the discipline in management accounting was best served by studying the most innovative and successful examples of practice that can be found in the leading western and Japanese firms (Mitchell et al., 1998).Consequently larger enterprises have been preferred for empirical management accounting research as expertise and a capacity to innovate and develop management accounting was more likely to exist in such enterprises (Mitchell and Reid, 2000). This

situation creates a challenge into the study of MAPs in SMEs. However, Mitchell et al. (1998) contended that research into management accounting in SMEs provides possibilities of a different type which were nonetheless of great importance to the fundamental explanation and understanding of the discipline. Indeed, many of the research opportunities inherent in SMEs derive directly from the contrasts which they provide with large organizations.

1.3. Purpose of the Study

This study has useful implications for theory and practice. Regarding the potential implications for theory, the study is expanded the existing management accounting literature in two main ways. First the study provided new empirical evidence on the use of MAPs. Second, the study contributed an additional study in the new context of Nakawa Division SMEs regarding what contingent factors affect the extent of MAP use. Furthermore, the research created awareness among SME managers of the importance of management accounting practices as a means of improving financial performance and maintaining competitiveness in the marketplace. Finally, the study provided results that may assist policymakers, on the level of use of MAPs among SMEs and factors that affect the use of MAPs, that may ensure that future policy decisions made by the Nakawa Division government, financial institutions, and other groups with an interest in SMEs were evidence based.

1.4. Objectives of the Study

Based on the issues and problems discussed above, this study identified four main objectives

1. To investigate the extent to which MAPs were employed by Nakawa Division SMEs.
2. To identify the roles played by MAPs in Nakawa Division SMEs' management.
3. To determine the factors that affect the extent of use of MAPs among Nakawa Division SMEs.
4. To establish the relationship between MAP and financial performance of SMEs.

1.5. Research Questions

1. To what extent were MAPs employed by SMEs in Nakawa Division?
2. What roles were played by MAPs in SMEs' management in Nakawa Division?
3. What factors affect the extent of use of MAPs among SMEs in Nakawa Division?
4. What was the relationship between MAP and financial performance of SMEs in Nakawa Division?

1.6. Hypotheses of the Study

Research questions 3 and 4 can be expressed in terms of the following two general hypotheses for empirical testing:

H_1: There were significant and positive relationships between selected contingent factors and the use of MAPs.

H_2: There was a significant and positive relationship between the use of MAPs and financial performance.

1.7. Significance of the Study

The results from the study firstly shall contribute to the existing body of knowledge that has been carried out globally and regionally about the impact of MAPs on financial performance. Secondly, the results shall enable universities and higher education institutions improve their entrepreneurship curriculum. Furthermore, they shall enable parents and or students aspiring to join universities and institutions of higher learning make informed decisions on program/course selections both at undergraduate and graduate levels. Lastly, they enhance formulation or reformulation of new policies on entrepreneurship by government.

1.8. Justification of the Study

The concept of the impact of MAPs on financial performance has been of much concern to researchers and business students for quite some time. However, not much attention has been given to these baseline phenomena's impact on financial performance among SMEs in Uganda, a country with a rapid increasing population of unemployed SMEs. Therefore, this information gap precipitated the need for a research report of this type at this time in Uganda.

1.9. Scope of the Study:

This subsection presents the geographical, time and content scope of the study.

1.9.1 Geographical scope:

Geographically, the study was carried out in Britania Allied Industries Nakawa Division in Kampala Capital City. This was because Nakawa Division was business center, one of the five divisions comprising Kampala Capital City, the major economic engine of Uganda in terms of SMEs. Nakawa Division was located on the Eastern part of the City, commencing from 3 kilometers from the City centre towards Jinja Municipality.

1.9.2 Time scope

The study covered the period 2011–2016 because MAPs were popularized in SMEs in Uganda in those years in order to take advantage of the related benefits. Further to that, it was presumed that there was an explosion in SMEs during that period after the President argued the business community to increase job creation through new business creation or existing business expansion.

1.9.3 Content scope

The following principle themes were investigated: the impact of MAPs on financial performance among SMEs in Uganda. MAPs were studied it terms of costing, budgeting, performance evaluation and decision support systems. Financial performance was looked at in terms of Growth of sales revenue, Growth of profits and Returns on investments.

1.10. Operational Definitions:

MAPs: Management accounting practices which enhance financial performance.

Performance evaluation: Assessing the financial performance of a firm.

Budgeting: The process of quantifying an organization's requirements and financial implications for planning and informed decision making.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

A number of researchers have investigated matters concerning the impact of MAPs on financial performance of SMEs. There was however still a lot lacking as regards to the impact of MAPs on financial performance among SMEs in a developing country like Uganda. This chapter presents a review of the literature surrounding the objectives of the research and the research questions posed. In particular, the literature review looks at current state of knowledge related to the following four research questions in general.

2.1. Theoretical Review

2.1.1. Research into management accounting practices

A substantial body of research emerged, especially after 1990s, investigating current MAPs in organizations. These studies were driven mainly by assertions about the irrelevance of management accounting to current managerial needs, especially in modern manufacturing, and claims that there was a gap between management accounting theory as portrayed in textbooks, and management accounting in practice (Drury et al., 1993). An additional driver was uncertainty over the level of use of newly developed MAPs. The research was reviewed by distinguishing between findings in developed and developing countries.

2.1.2. Management accounting practices in developed countries

Research in developed countries has been carried out in Europe, the US and the Asia Pacific region. Examples of literature in each country were reviewed in the following subsections:

2.1.2.1 European research

In the UK, Drury et al. (1993) reported on MAPs in 303 UK manufacturing organizations and found out that a variety of different practices were used. Although many appeared to correspond closely with theory, there was also evidence of considerable gulf between some aspects of theory and practice for some respondents. Abdel-Kader and Luther, (2006) conducted a survey on MAPs in the UK food and drinks industry. They concluded that traditional management accounting was —alive and well‖ but there were indications of an increased use of: information concerning the cost of quality; non-financial measures relating to employees; and analyses of competitors' strengths and weaknesses. Again, there was also evidence of a gap between current textbook practices and actual practices.

In other European companies, studies in management accounting were conducted by various researchers. For example, Anderson and Rohde (1994); Laitinen, (1995); Israelsen et al. (1996), Bruggeman et al. (1996); Pierce and O'Dea, (1998); Szychta, (2004); and Hyvonen, (2005).These studies covered a variety of different MAPs such as costing, planning and control, performance measurement and evaluation and decision support system. For example, Bruggeman et al. (1996) examined the use of MAPs within Belgian companies. They found that traditional approaches were still in use although companies had started to adopt new techniques such as ABC. Pierce and O'Dea (1998) investigated MAPs among Irish management accountants and reported that traditional techniques continued to dominate management accounting systems (financial measures of control and performance evaluation); and that the update of more modern techniques low (ABC and target costing) was generally. This suggests that the main contribution of newer techniques may be in supplementing, as opposed to replacing, traditional techniques. In another recent study, Hyvo¨ nen (2005) provided empirical evidence on MAPs in Finnish manufacturing companies. The study recorded the extent of adoption of the MAPs, the perceived benefits from their use and ascertained intentions for future developments in these practices. The results indicated that financial measures like product profitability analysis and budgeting for controlling costs continue to be important in the future, but noted that greater emphasis was placed on newer non-financial practices like customer satisfaction surveys and employee attitude surveys in the future.

2.1.2.2 United States of American research

In the U.S, Chow et al. (1988) reviewed previous studies on MAPs. The survey covered the following topics: cost accounting system design, decision making, planning, control, and the use of quantitative methods. The researchers concluded that while many common approaches were identified, there were areas where practices diverge. Shields et al. (1991), who summarized the MAPs literature in U.S and Japan, discovered that there were many similarities as well as differences in the use of management accounting between Japanese and U.S companies. For example, they found that: there was about the same use of direct (variable) costing and full (absorption) costing in both countries though the Japanese firms report more frequent use of process costing to accumulate product costs and a higher percentage of U.S. firms do not use any form of CVP modeling. One of the biggest reported differences between Japanese and U.S. firms was in the use of capital budgeting decision models. Discounted cash flow models such as net present value and internal rate of return

were commonly used by U.S. firms. In contrast, Japanese firms more frequently used pay back as the primary model.

2.1.2.3 Asia-Pacific research

In Japan, Scarbrough et al. (1991) identified several important Japanese MAPs used in advanced Factory Automation (FA) manufacturing environments. The survey revealed that Japanese management accounting systems for product costing and inventory valuation did not employ newer or more innovative methods than Western manufacturers used. Instead, the firms appear to have put their innovating effort into cost analysis for decision-making and cost control through unique management 'accounting' techniques such as target costing and engineering performance enhancement methods (for example, total quality control (TQC), total productive maintenance (TPM), just-in-time (JIT), value engineering (VE) and return on sales (ROS)). The developments in these areas seem to be carefully integrated with and supportive of a wider array of strategic actions or systems (e.g investment in plant and equipment). The researchers found that the focus of management effort becomes describing and communicating the organization's goals and strategies and not designing complex systems that reflect the idiosyncrasies of markets and production processes. Later, Yoshikawa (1994) highlighted a number of important aspects of Japanese MAPs that differ from those found in the West. The differences tend to reflect the traditional Japanese culture. In Japan, where possible, management accounting was used in a way which fosters staff involvement through consultation. Management accounting was to improve employees _visibility', to educate and remind employees of the strategic aims and the intended direction of their company so that they can contribute as much as possible to the company. Next, McMann and Nanni (1995) reviewed the literature on Japanese management accounting. They discussed the extant literature by reference to the following five themes: examining work using the _eyes' of the market; focusing on the quality of work; employing _waste' as the measure of cost; continually improving the way work was done and sharing knowledge through vertical and horizontal communication. Most evidence shows that Japanese and Western management accounting techniques and methodology were quite similar. What does vary between the two countries were the way these techniques were applied and the context in which they were used. The five recurring research themes (as mentioned before) provide a framework for Japanese firms to use management accounting techniques in order to create competitive advantage.

In Australia, Smyth (1960) compared management accounting techniques in Australia with those in the U.S and Canada. He found that Australian management made less use of the

management accounting techniques than managers do in the U.S and Canada. For example; Australian companies were less likely to employ long-range sales plans, longrange plans for capital expenditure, cash, and profits, and budgeting techniques than companies in the US and Canada. A more recent study by Chenhall and Langfield Smith (1998) found that Australian companies have a relatively high level of adoption of management accounting techniques compared to other countries. On average, the rates of adoption of traditional MAPs were higher than the adoption of current techniques. There were higher adoption levels on budgeting, planning and performance evaluation; and somewhat lower adoption levels for target costing, value chain analysis and ABC. Wijewardena and De Zoysa (1999) looked at MAPs in large manufacturing firms in Australia and Japan. The results of the survey found a number of important differences between the two countries. The most striking difference was that while MAPs in Australian companies placed an emphasis on cost control tools such as budgeting, standard costing and variance analysis at the manufacturing stage, those of Japanese companies devoted much greater attention to cost planning and cost reduction tools based on target costing at the product planning and design stage. Further, the Japanese companies seem to have introduced more frequent changes to MAPs than their Australian counterparts.

2.1.3. Management accounting practices in developing countries

Research in developing countries has been carried out in China, India, the Middle East and South East Asia. The examples of literature in each country were reviewed in the following subsections:

2.1.3.1 China

Firth (1996); Islam and Kantor (2005); and Wu et al. (2007) focused on MAPs in Chinese companies. Firth (1996) conducted a MAPs survey in local public companies (PRCs) and foreign partnered joint ventures. Survey results show that those Chinese enterprises who participated in foreign partnered joint ventures made more changes to their management accounting system when compared to similar PRCs who had no collaborative venture operations with foreign firms. Islam and Kantor (2005), who evaluated the development of quality MAPs, found that national culture and values practised for centuries by Chinese businesses influenced the outcomes of efforts for greater information dissemination and the development of MAPs. They argued that a lack understanding of Western MAPs had slowed the pace of development of Chinese MAPs. Wu et al. (2007) found that the level of adoption MAPs was most influenced by ownership type of the enterprise, joint venture (JV) or state

owned enterprise (SOE), rather than the nature of the management accounting techniques to be adopted. Techniques such as budgeting and target costing were perceived to be more beneficial for SOEs than JVs. However, responsibility accounting and accounting for decision making was perceived to be less beneficial to SOEs than JVs.

2.1.3.2 Middle East

Alnamri (1993) who conducted a comparative analysis of Saudi and western approaches found that the western joint venture companies have a more sophisticated management accounting system and their accountants have a greater role to play in decision making and control. In addition the managers of the joint venture companies rely more on accounting information in decision making and control compared to their Saudi counterparts.

El-Ebaishi et al. (2003) found that, traditional management accounting techniques were perceived by Saudi manufacturing firms to be important and heavily used by responding firms. On the other hand, new management accounting techniques such as ABC and JIT were used by only a limited number of respondents. El-Ebaishi et al. (2003) concluded that this result was in line with outcomes from studies in developed countries.

Hutaibat (2005) investigated the state of MAPs within Jordan's industrial companies. The study found that the Jordan firms were still using traditional MAPs rather than newly-developed MAPs. In a more recent study Leftesi (2008) explored the state of traditional and advanced MAPs in Libyan medium and large manufacturing firms. The study reported that the adoption rates of MAPs in Libyan firms were noticeably lower than the adoption rates of MAPs currently described in the management accounting literature. However, the results were consistent with findings from the previous studies regarding the relatively high use of traditional MAPs as opposed to modern MAPs.

2.1.3.3 South East Asia

Ghosh and Kai Chan (1997) examined MAPs in Singaporean large companies operating in the manufacturing and services sectors. The results revealed a high level of adoption of budgeting and capital budgeting (more than 80 per cent), moderate use, ranging from 56 per cent to 80 per cent of long-range planning, breakeven point analysis, return on investment and standard costing; and a very low uptake (11 per cent) of ABC.

Phadoongsitthi (2003) found similar results in Thailand to those established in Singapore and India (see Joshi, 2001). The study reported that for Thai companies in the manufacturing and services sectors the adoption of budgeting, planning and performance evaluation practices was

high but the adoption of contemporary approaches such as target costing, product life cycle analysis and zero-based budgeting (ZBB) was low.

Sulaiman et al. (2004) summarized the previous findings on MAPs in developing countries. These findings were that while the use of contemporary management accounting tools was lacking in the four countries under examination (China, Singapore, India and Nakawa Division), the use of traditional management accounting techniques remains strong. The probable reasons for this were suggested to be: a lack of awareness of new techniques; a lack of expertise; and perhaps more importantly a lack of top management support.

In a more recent study, Nimtrakoon (2009) conducted a study of MAPs in Thailand. The findings confirm the popularity of the use of, and high perceived benefit from, traditional MAPs and reveal disappointing adoption rates of, and relatively low perceived benefit from, contemporary MAPs.

2.1.4. Other developing countries

In India, Joshi (2001) explored MAPs in the Indian manufacturing and services sectors. The study indicated that the uptake of traditional MAPs, such as budgeting and performance evaluation, was higher than for contemporary techniques. Waweru et al. (2004) analyzed management accounting change over time within four African retail companies and found considerable changes in management accounting systems within the four cases. Such changes include increased use of contemporary MAPs notably activity-based cost allocation systems and the balanced scorecard (BSC) for performance measurement. Lastly Frezatti (2007) surveyed MAPs in Brazilian medium and large companies operating in manufacturing and non-manufacturing sectors. The results showed that adoption was lower for recent management-accounting practices (e.g. ABC, BSC, in full and EVA) than for more traditional practices such as budgeting.

Overall based on research in developed and developing countries, it may be concluded that, traditional MAPs were widely employed but new more sophisticated practices were not yet widely adopted despite their claimed relevancy.

2.2. The conceptual frame work

The conceptual frame work on MAPs and financial performance of small and medium enterprises in Nakawa division in Kampala.

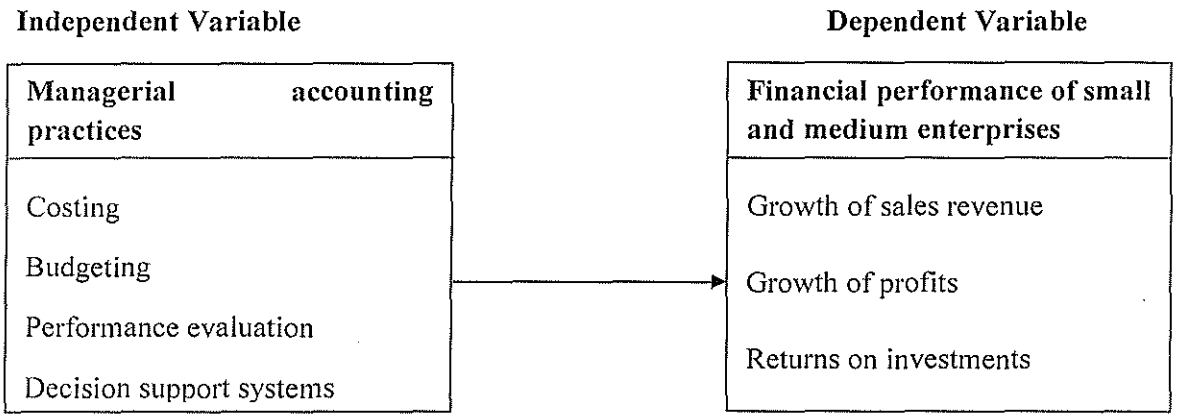

Figure 1: Conceptual Framework showing the relationship between MAPs and financial performance among SMEs.

Source: Adopted and modified from (Chapman, 1997; Chenhall, 2003; & Scapens, 2006).

2.3. Research into specific areas of management accounting practices

The studies discussed above only cover MAPs at an overview level. However this section reviews research into specific MAPs and techniques with focus on the impact of managerial accounting practices as the independent variable on the financial performance as the dependent variable of the small and medium enterprises.

2.3.1. Costing

Research indicates that the information on product costs generated by costing systems has a wide number of uses. These uses include, for example, pricing decisions; cost control, (Yoshikawa et al., 1989; Bright et al., 1992; Lukka and Granlund, 1996; Cinquini et al. 1999; Van Triest and Elshahat, 2007); an evaluation of production processes; and transfer pricing (Bjornenak, 1997). However research has focused on which costing systems were used by firms. The following discussion reviews evidence on the level of uptake of costing systems from previous studies.

The two main costing methods adopted were absorption costing and direct (variable) costing. Absorption costing system was general preferred globally. For example Drury et al. (1993) observed that 58 per cent of U.K firms often or always used absorption costing and Scherrer (1996) found that around half of German firms applied this technique. Meanwhile, Shields et al. (1991), who made a comparison between Japan and the U.S reported that Japanese companies indicated about 59 to 67 per cent usage against a slightly higher uptake at 65 to 75 per cent by U.S companies. More recently, Szychta (2002) found that 90 per cent of Polish firms adopted this technique. In developing countries uptake rates were similar. For example

in India, Joshi (2001) reported half of Indian firms adopted this technique and Firth (1996) revealed 66 per cent of Chinese foreign-based companies applied this technique.

The use of direct (variable) costing was also widespread. Lukka and Granlund (1995) showed that 42 per cent of Finnish firms applied variable costing. Similarly, AbdelKader and Luther (2006) indicated just over 50 per cent of British firms implemented this technique. In contrast in developing countries, Firth (1996) reported an adoption rate of 76 per cent by locally based Chinese companies in China. Joshi (2001) and Phadoongsitthi (2003) in India and Thailand respectively reported a similar rate of use to developed countries which was in excess of half of the surveyed firms. A considerable amount of research has focused on activity-based costing (ABC) despite the survey evidence generally indicating that with the exception of the U.S and Australia, it was only used in a small minority of companies surveyed. In the UK uptake has been consistently poor (see for example, Drury and Tayles, 2000; or Abdel-Kader and Luther 2006); and in other European countries the position was similar at just below or just over 10 per cent (see for example, Israelsen et al., 1996; Cinquini et al., 1999 or Szychta, 2002). In New Zealand Lamminmaki and Drury (2001) found that NZ manufacturers appear to be more advanced in terms of ABC adoption than UK companies as a greater proportion of manufacturers had held discussions on ABC and a greater proportion indicated an intention to use ABC. A similar but slightly stronger uptake of ABC was shown by research in developing countries. For example, Ghosh and Chan, (1997) found a 13 per cent uptake in Singapore and Joshi (2001) reported a 20 per cent uptake in India. Interestingly, Van Triest and Elshahat (2007) found none of a sample of Egyptian companies adopted this method.

Contrary to the results in European countries and developing countries, U.S and Australia, results reveal a much higher uptake of ABC systems. Hrisak (1996) and Krumwiede (1998) indicated that ABC was adopted by just over half over U.S firms although later study by Ittner et al. (2002) reported uptake at just over a quarter of companies. Similarly, Chenhall and Langfield-Smith (1998) found that 56 per cent of Australian firms adopted ABC.

The extent of use of other costing techniques such as process costing and job costing has also been widely researched. For example, Shields et al. (1991) noted that Japanese firms report more a frequent use of process costing (55 per cent to 61 per cent) compared to U.S companies (24 per cent to 36 per cent). Meanwhile in Sweden, Lukka and Granlund (1995) indicated that 41 per cent of Swedish companies implement process costing compared to 38 per cent using job order costing. Lastly Wijewardena and De Zoysa (1999) discovered that more than half of the Australian companies used process costing (52 percent) or job-order costing (30 percent) as the main product costing method - which was a not dissimilar to the findings of Lukka and

Grandlund (1995). The results probably reflect the mix of industries in the samples as the choice between job costing and process costing probably depends on the suitability of the method to production processes behind products and services.

2.3.2. Budgeting

Budgeting was perceived as an important control system in almost all organizations (Hansen and Van der Stede, 2004). The main focus on budgeting has been on uptake rates and the purposes underlying its use.

Previous research indicates that the main purposes of budgeting were planning future performance; planning the future financial position; planning future cash flows; planning future day to day operations; and controlling costs (see for example, Lyne, 1988; Amstrong et al., 1996; Chenhall and Langfield-Smith, 1998; Sulaiman et al., 2004; Fruitticher et al., 2005; Abdel-Kader and Luther, 2006). Budgeting was also used for performance evaluation, communication of goals and strategy formation (Briers and Hirst 1990; Guilding et al., 1998; Hansen and Van der Stede, 2004; Sulaiman et al.,2004; Fruitticher et al., 2005), to coordinate activities across business units (Chenhall and Langfield-Smith, 1998); and for timely recognition of problems and to improve the next period's budget (Joshi et al., 2003).

The use of specific types budgeting technique such as flexible budgets, rolling budgets, ZBB and operational budgets has been researched. Nik Ahmad et al. (2003) found that the uptake of flexible budgets in Nakawa Division was higher compared to those in UK and New Zealand. The relatively low results also were by few studies (see Pierce and O'Dea, 1998; Szychta, 2002; and Abdel-Kader and Luther, 2006). Szychta (2002) suggested that the reasons of low adoption include: generally no major change in activity within a year'; volumes do not move significantly and too difficult to report to nonfinancial departments. The adoption rate of ZBB was on average less than 20 per cent. For example, Abdel-Kader and Luther (2006) reported a 16 per cent uptake in the UK; Szychta (2002) found 17 per cent in Poland and a study by Joshi (2001) showed only 5 per cent adoption in India. Evidence on rolling budgeting was limited to Hansen and Van der Stede (2004) who found that 23 per cent of U.S companies were using rolling budgets.

With respect to control aspects of budgeting, Puxty and Lyall (1989) found that majority of UK industrial companies were using both standard costing and budgeting system in their firms. Similarly Guilding et al. (1998) found that standard costing systems continue to be popular and that the majority of accountants surveyed did not envisage abandoning standard costing and variance analysis in advanced manufacturing technology environments. Their

comparisons between budgeting and standard costing practices used in NZ and the UK revealed a high degree of consistency. De Zoysa and Kanthi Herath (2007) who conducted a study in Japan found that standard costing was still being used by a large number of firms both in developing and developed countries which was consistent with Guilding et al. (1998). The research suggests that the importance of standard costing has not significantly declined despite technological changes. Sulaiman et al. (2005) found that standard costing was still being used by a large majority of firms in Nakawa Division. Thus, Nakawa Division companies (both Japanese and local) held that the basic principles of standard costing remain sound.
Dugdale and Lyne (2004) investigated the current use of budgets in forty UK medium and large companies. This research found that all respondents confirmed that their companies set budgets, typically starting the process four to six months before the start of the financial year. Some 80 per cent agreed that there were frequent revisions to the budget during the budgeting process. Szychta (2002) who conducted a study in Polish firms, found that annual operating financial budgets were prepared by a significant proportion of the companies studied, mainly large manufacturing and service enterprises (80% of the respondents). However, a complete or nearly complete master budget was prepared by a much smaller proportion of enterprises (17%). The remaining enterprises prepare varying numbers of component budgets, mainly sales, production and cost budgets. Joshi et al. (2003) revealed that most of the Bahrain companies surveyed prepared long-range plans and operating budgets.

Despite its widespread use, budgeting has over the years, been criticised on a number of grounds. Hansen et al. (2003) stated that the practitioners argue that budgets impede the allocation of organizational resources to their best uses and encourage myopic decision making and other dysfunctional budget *games*. They attributed these problems, in part, to traditional budgeting's financial, top-down, command and control orientation as embedded in annual budget planning and performance evaluation processes. Bourne (2004) undertook a worldwide review of budgeting. The study results showed a widespread dissatisfaction with the budgeting process. The catalogue of complaints was consistent with previous research: the process was too time consuming, too costly, too distorted by gaming, too focused on cost control and so on. Most significantly, budgeting often seemed to be almost totally divorced from the company's overall strategic direction.

A new approach aimed at solving problems associated with traditional budgeting; the beyond budgeting round table (BBRT) aims to manage the company without a traditional budget. This

approach was established to research the problems of budgeting and why it has become such a major barrier to improving organizational performance and to change (CAM-I[1], 2002). Cassel (2003) reported evidence that private sector organizations that have adopted BBRT have performed better than their conventionally budgeting peers.

However as noted above, despite all the weaknesses in traditional budgeting, the majority of researchers have found that the use of traditional budgeting was still prevalent. For example Hansen et al. (2003) claimed that the vast majority of U.S. firms retain a formal budgeting process despite long list of problems and many calls for improvement in budgeting. Similarly Dugdale and Lyne (2004) found that budgeting was alive and well. They concluded that while traditional budgeting was now more likely to be combined with increased use of non-financial indicators, its demise seems unlikely.

2.3.3. Performance evaluation

Emmanuel et al. (1990) noted that performance evaluation is an important function of management accounting. Performance evaluation provides information for managers to support the achievement of their organization's strategic objectives (Jusoh and Parnell, 2008). Hall (2008) argued that in recent years organizations have sought to develop more comprehensive performance measurement systems (PMS) to provide managers and employees with information to assist in managing their operations. He added that comprehensive PMS include a more diverse set of performance measures, and performance measures that were linked to the strategy of the firm. Hall (2008) also stated the examples of the popular techniques for delivering a wider set of performance measures were the balanced scorecard (Kaplan and Norton, 1996), tableau de bord (Epstein and Manzoni, 1998) and performance hierarchies (Lynch and Cross, 1992). However the choice of measures to guide and evaluate the performance of business units was one of the most critical challenges facing organizations (Ittner and Larcker, 1998a). CIMA (2002) highlighted the frameworks for performance measurement and management which were the value-based management (VBM); ABC and activity-based management; balanced scorecard; European Foundation for Quality Management (EFQM) excellence model; benchmarking; strategic enterprise management (SEM); and six sigma. However the literature indicates that in general both financial and nonfinancial measures were used to measure performance (Gomes et al.2004 and Demirbag et al., 2006). Financial measures such as return on investment (ROI) and profit measures were extensively used in most countries: Research demonstrating this includes in the U.K Abdel-

Kader and Luther (2006); in Japan Abdel-Maksoud et al.(2008); in Portugal Gomes et al. (2004); in Singapore Ghosh and Kai-Chan (1997); in India Joshi, (2001); in Egypt Ismail (2007) and in Nakawa Division Jusoh and Parnell (2008). For example, Gomes et al. (2004) argued that the high acceptance of financial measures may be attributed to the fact that information on these measures was the more readily available. Jusoh and Parnell (2008) stated that relatively new financial measures, such as economic valueadded (EVA), have been applied to some studies. However, earlier studies suggested that the use of EVA was not that popular because it was too complex for managers to understand and use (Ittner and Larcker, 1998a).

Newer performance measures based on non-financial measures have been more widely applied by organizations over time (Drury and Tayles, 1993; Gomes et al., 2004; Ismail, 2007). Banker et al. (2000) argued that the primary reasons suggested for the use of nonfinancial performance measures were that these measures were better indicators of future financial performance than accounting measures, and they were valuable in evaluating and motivating managerial performance. This development was in response to the considerable criticisms of excessive emphasis and concern on the targeting of financial indicators. For example critics argued that stressing financial indicators may lead to short-term thinking (Gomes et al., 2004). Within the family of non-financial performance measures, those related to customers have a higher adoption rate compared to the other non-financial measures. Drury and Tayles (1993) surveyed MAPs in 260 UK SMEs and the results supported the importance of non-financial measures, especially measures of customer satisfaction, product quality, delivery and supplier reliability.

Abdel-Maksoud et al. (2008) found that customer related measures were widely reported and were perceived to be crucial- a number of other measures related to quality, timeliness and efficiency and utilisation were also widely monitored and considered very important. Other studies have focused on the BSC. Speckbacher (2003) showed that only a minority of German firms in his sample (26%) used BSCs and most of these appeared to use only a limited or incomplete version. Ismail (2007) reported that the BSC has wide spread use in the Egyptian companies surveyed, but the extent of use of multi-dimensional indicators was low. The survey provided a number of insights into obstacles inhibiting the adoption of the BSC in a developing country - the most significant obstacle being the inadequacy of existing information systems.

2.3.4. Decision support system

Wu et al. (2007), hold that effective decision making was the most important key factor in today's rapid and changing competitive environment. The decision support analysis can be divided into short term and long term analysis. Abdel-Kader and Luther (2006) argued that for regular or short-term decisions management accountants can use cost volume-profit (CVP) analysis, product profitability analysis, customer profitability analysis, and stock control models. For longer-term capital investment decisions management accountants can produce and review accounting rates of return and payback periods as well as complex signals based on discounted cash flow. Capital budgeting techniques capture both non-discounted and discounted approaches. Klammer et al. (1991) argued that the superiority of internal rate of return (IRR) and net present value (NPV) analysis has been repeatedly demonstrated under conditions of certainty.

Under uncertainty, the techniques used were sensitivity analysis, increased required rates of return, game theory, and Monte Carlo computer based simulation.

The payback period method for investment evaluation was popular in most countries (see for example, Shields et al., 1991; Yoshikawa, 1994; Lazaridis, 2004; Abdel-Kader and Luther, 2006; and Hermes et al. 2007). A 41 per cent adoption rate was reported in the U.K by Abdel-Kader and Luther (2006) which was much lower than the 84 per cent in Japan (Shields et al., 1991) and 84 per cent in China (Hermes et al., 2007). This acceptance may be because of the simplicity of this method makes it easier to evaluate projects. In contrast, techniques such as NPV and IRR/ROR have been adopted at relatively low rates; for example 19 per cent in the UK (Abdel-Kader and Luther, 2006) and around 15 per cent in Japan (Shields et al., 1991). However Hermes et al. (2007) found that NPV method was the most popular method (89 per cent) in the Dutch companies they surveyed.

Techniques for dealing with uncertainty have also been researched (see for example Shields et al., 1991; Lazaridis, 2004; Abdel-Kader and Luther, 2006). Abdel-Kader and Luther indicated that the U.K companies used computer simulation (6 per cent); and what if analysis (22 per cent). Shields et al. (1991) found that only 19 per cent of Japanese firms were explicitly considering risk. In contrast, higher rates ranging from 48 per cent to 93 per cent were reported in the U.S. Another decision support technique; breakeven analysis had a relatively moderate adoption rate. For example, in the U.K the adoption rate was 38 per cent (Abdel-

Kader and Luther 2006); and in Poland 47 per cent (Szychta, 2002). In contrast, Chenhall and Langfield-Smith (1998) found an 86 per cent adoption of breakeven analysis in Australia. Product profitability analysis has been adopted to a significant extent in both developed and developing countries. For example, in U.K 69 per cent of respondents reported its use (Abdel-Kader and Luther, 2006); in Australia 89 per cent (Chenhall and Langfield Smith, 1998); and in India 82 per cent (Joshi, 2001).

2.3.5. Performance of small and medium enterprises

Some writers believe that the performance of Small and medium Enterprises was measured by many factors such a internal and external to the Small and medium Enterprises themselves (Kotey and Meredith, 1997; Pearce and Robinson, 2000). They cited sales turnover, caliber of management and ability to meet daily obligations of the business. However, there were few studies on performance measurement of the SMEs and there was only small number of researches in developing countries (Bjerke, 2000). In the last two decades. It seems that researchers on Small and medium Enterprises focus on government role and policy in developing SMEs (Ainuddin and Saodah, 2001). (In Year 2000, Hashim) used strategic model approach to explain the financial performance measurement of Small and medium Enterprises. According to this model there were three strategic measurements which determine business performance; they were profitability, sales turnover and solvency. The integration of three measurements mentioned here significantly measure business performance. Craig and King (1988) formulated a model to find out about Small and medium Enterprises was influenced by management practice as internal measurement and returns to the shareholders as external measurement, both these variables was also influenced by characteristic of manager as antecedent variable.

Financial measures were typically derived from or directly related to the chart of accounts and found in a company's profits and loss statement or balance sheet, such as inventory levels or cash on hand financial performance measurement systems go back a long way in their origin and applications. It was thought, for instance, that double entry bookkeeping was first around the fourteenth century. Kaplan & Norton (1996) remarked that historically, the measurement system for business has been financial. Indeed, accounting has been called the 'language of businesses'. Bookkeeping records of financial transactions can be traced back thousands of years, which had been by Egyptians, Phoenicians and Sumerians to facilitate commercial transactions. A few centuries later, during the age of exploration, the activities of global

trading companies were measured and monitored by accountants; double entry books of accounts (Kaplan & Norton, 1996).

The industrial revolution in the nineteenth century led to the creation of more comprehensive financial measurement systems to meet the requirement of enterprises. Moreover, in the information age environment, the early twentieth century. Enterprises understood the importance of reporting and evaluating of business unit performances, in order to find new capabilities for competitive success (Olve, et al. 2014). In the last decade there has been a growing criticism of traditional measurements control systems as being too narrowly focused on financial measures. The reason was that conditions today were no longer the same as 'hen traditional measurement systems emerged. In addition, markets fluctuate, customers appear ever more demanding, and in sectors were requiring more transparent reporting (Ashton, 2015). Performance measurement has become the topical since the 1980s. The increasing interest has been driven by the increased rate of change in the business environment in both the private and public sectors. This rapid change has led to general dissatisfaction with traditional issues of performance measurement systems.

Identifying their shortcoming and arguing for change (Neely, 2009). According to Zairi (2015) "today's' management accounting information, driven to procedures and cycles of the organizations financial reporting system, was too late, too aggregated and too distorted to be relevant for mangers planning and control decision. Managers need clear, timely and relevant signals from their internal information stems to understand root causes or problems to initiate corrective action and to support decisions at all levels of the organizations". Financial measurement showed the effect of decisions already taken (Olve, et al. 2013). Therefore, management control must take account of non-financial factors and be broadened to include strategic information, which indicate whether or not the business continue to be competitive.

Mohinder & Anastasia (2007) also qualify multiple organizational financial performances like profit cash flow and assets. Furthermore, Fabbri and Klapper (2008), profitability has been most widely used measure of financial performance of SMEs. Profitability was the excess revenue over expenses, which can be seen by the ratios like gross profit margin and pre-tax profit margin. Therefore, profits have got a lot of shortcomings as a measure of performance.
Some economist and accountants view profitability differently and it has received a lot of criticism from nay studies as the reasons were given below. Form all the above definitions, it

can be said that performance was the ability of the firm to meet both its long term arid short term goals efficiently and effectively. The understanding of the important performance measurements of Small and medium Enterprises help toward better planning to cater for the needs of the Small and medium Enterprises. Irwin (2014) cited that many people find it difficult to look at a profit and loss statement or a balance sheet and derive a full picture.

As result, ratios were often used to interpret accounts. They indicate how a business was performing and provide indications of trends and patterns. It can be compared to the same ratios in previous years' accounts and the accounts of other business operating in a similar environment. It can be noted that therefore, due to the nature of SMEs, it's difficult to measure the levels of profitability as they rarely keep proper books of accounts. Seasonality of business operations, sensitivity of business information, and analysis and valuation problems Barrow (1997), Lisa (1999), Liedholm (2008) and Blank (2002). Measurement of financial performance by ratio analysis helps to identify enterprises strength and weaknesses by detecting financial anomalies and focusing attention on issues of enterprise importance. Ratio analysis was a well-established too to evaluate an enterprises' profitability, liquidity and financial stability (Glynn et al, 2011).

Financial ratios were normally used in interpreting financial statements and comparison of other company's results in the similar industries or different industries in order to gauge the performance of the companies sector over a given period of analysis. It can provide a predictive past and present performance of the company and able to point out the weak areas of the company (Dobbins et al, 2002). Financial performance can be measured using return on equity, solvency, sales growth, liquidity and profitability (Lavasseur 2002). According to Blank (2002) sales growth was the good measure of the SMEs financial performance because we were able to look at the sales turnover and the market share in the market, increase in profit and customer base maintained for a company to breakeven. He further agrees that the ability of the SMEs to meet all their financial obligations, asset accumulation and number of years in business was the good measure of financial performance. Repayment capacity measurers show the degree to which cash generated from the enterprise and other sources was sufficient to pay principal and interest payments as the y come due.

(i) Liquidity

According to Richard Rosenberg (2008) liquidity of the Small and Medium Enterprises should be able to meet short-term obligations of the business or a company's ability to pay current

liabilities. Its ability of a business to meet financial obligations as they come due in the short term, without disrupting the normal operations of the business and its measured by current ratio which shows basic indicator of short-term debt servicing and/or cash flow capacity and the extent to which current assets. When liquidated, cover current obligations (Boehlje et al, 1999).

Most Small and medium Enterprises face financial constraints due to insufficient cash flows to settle off the debts incurred. MFIs amount of loans in default as a percentage of the total loan portfolio increased by four percent to 12 percent in the first six months of 2009, according to the central bank report. The National Bank of Uganda (NBU) said that increase in the delinquency rate was due to the failure of loan holders especially Small and Medium Enterprises to honor their debt obligations, hence a significant loss to MFIs. It can be measured by current ratio by dividing current assets over current liabilities and quick ratio by dividing Cash plus debtors over current liabilities. According to Kalema (2008) Small and Medium Enterprises do not have the quality of the asset that makes it easily convertible into cash with little or no risk of loss and failure to meet the desirable liquidity range acceptable worldwide.

(ii) Financial efficiency

According to Dobbins et al, 2000, it measures the intensity with which a business uses its assets to generate grows revenues and the effectiveness of production, purchasing, product pricing, financing decisions. The management of asset and liabilities was particularly important in the case of small and medium – sized companies. Most of these companies' assets were in the form of current assets. Also, current liabilities were one of their main sources of external.

2.4. Financial performance measures

Measures of corporate performance were numerous. Traditional common measures include; sustainability, Return on Investments (ROI), Return on Assets (ROA), Return on Capital Employed (ROCE), Cost Benefit Analysis (CBA) and Economic Value Added (EVA). In this study all these measurements were discussed.

2.4.1. Return on Investments

This was a performance measure used to evaluate the efficiency of an investment or to compare the efficiency of different investments. To calculate ROI, the benefit (return) of an

investments was divided by the cost of the investment; the result was expressed as a percentage or a ratio.

ROI = Gain from investment – Cost of investment

Cost of investment

In the formula above, 'gains from investment' refers to the proceeds obtained from selling the investment or interest. Return on investment was a very popular measure because of its versatility and simplicity. If an investment does not have a positive ROI, or if there were other opportunities with a higher ROI, then the investment should not be undertaken.

2.4.2. Return on Assets

This was an indicator of how profitable a company was relative to its total assets. ROA gives an idea as to how efficient management was at using its assets to generate earnings. It was calculated by dividing a company's annual earnings by its total assets. It computed as follows:

ROA = Net income (EBIT) / Total assets (expressed as a percentage)

ROA tells us what earnings were generated from invested capital (assets). ROA from public companies can vary substantially and was highly dependent on the industry.

2.4.3. Return on Capital Employed

ROCE indicates the efficiency and profitability of a company's capital investment. It was one of the most important operating ratios that can be used to assess corporate profitability. It was expressed as a percentage and can be very revealing about the industry in which a company operates in, the skills of management and occasionally the general business climate. As a general rule, a firm with a high return on capital employed is probably a very profitable business.

ROCE was calculated as follows:

ROCE = PBIT (Net Income) / Capital Employed

Where Capital Employed = Total Assets – Current Liabilities = Equity + Non-current Liabilities.

2.5. Research gaps

Different researchers have reviewed literature on managerial accounting practices and financial performance among schools, hospitals, banks, public sector but none has conducted a study relating the variables in small and medium Enterprises in Nakawa division. Most of the scholars studies the variables in western setting which call for a study in the Nakawa division context.

Studies have shown that most of the financial management has been carried out using western countries sample (Suran, 2009) and emerging economies in Asia such as China and South Korea (Martins and Coetzee, 2007). However, very few studies have used samples from Uganda and Nakawa division in particular, thus challenging the generalizability of these studies to a non-Uganda context.

2.6. Empirical review of related studies

This section reviews the extent to which MAPs have been undertaken in SMEs which were the intended population for this thesis. Despite the economic and social importance of SMEs, there was a lack of research initiatives studying the provision for management accounting information and use of management accounting techniques by SMEs (Nandan, 2010). Kaplan (1994) suggests that this may be because research into MAPs was predicated in the belief that the discipline of management accounting was best served by studying (and so eventually facilitating the emulation of) the most innovative and successful practitioners. This position inevitably skews research towards larger entities.

As Mitchell and Reid (2000) observed, this belief has led to empirical management accounting research designed to investigate technical innovation and development being concentrated on larger enterprises to the exclusion of smaller firms where the expertise and capacity to innovate in management accounting was less likely to exist. Therefore this situation leaves a significant gap into the study of MAPs in SMEs. However, limited examples of research into MAPs in SMEs in developed countries exist. For example, Drury et al. (1993) found that small businesses generally reported using more simplistic techniques, and the use of techniques such as ABC, sensitivity analysis, market research and advanced quantitative techniques tended to be limited to the larger business units. This suggests that the gap between management accounting theory and practice may be particularly wide for small businesses. Similarly, Gunasekaran et al. (1999) in the U.K found that ABC has received little attention from SMEs in spite of the fact that it may have an important role to play in improving the competitiveness of SMEs.

Later, Reid and Smith (2002) in a study of UK SMEs found that only a minority of small firms, typically around a third, set budgets; that payback was the most frequently applied investment appraisal technique and that the management accounting system (MAS) in a small firm has a significant effect on the operation and performance of the business. The impact of the MAS was greatest in those firms which were struggling to survive, where it can be used to

monitor finances daily and can help to identify trends in key variables. Firms where financial performance was satisfactory, but static, tend to place less importance on the provision of management accounting information. Jarvis et al. (2000) stated that research has shown that small firms in the UK pursue a range of goals. It was, therefore, not surprising to find that owner-managers of small firms used a variety of measures and indicators to assess business performance. While cash flow indicators were considered to be critical, profit measures were found to be less important than conventional views suggest.

McChlery et al. (2004) investigated the scope of the financial management systems (including MAPs) operating within small firms. They found that management accounting systems did not have the same level of use as financial accounting overall with the former having a reduced uptake compared to the latter. They also found that smaller businesses were most likely to be dissatisfied with their management accounting systems. In a later study, Sousa et al. (2006) determined the current state of knowledge related to performance measures and their degree of implementation in SMEs in the U.K. Overall, financial measures were the most widely used, while innovation and learning measures were rated less important and were less used. The most important performance measures were not consistent with criteria to win new orders. However, the low response rate of the survey precludes generalisation of the findings.

In Europe, Kraus et al. (2006), who examined strategic planning and performance in Austrian smaller enterprises, found that planning formalization has a positive and highly significant impact on the probability of belonging to a group of growth firms, whereas other aspects of strategic planning (time horizon, strategic instruments, and control) did not contribute to performance.

In U.S Demong and Croll (1981) concluded that although most U.S small businesses started without a cost accounting system, its usefulness became quickly apparent to the owner/managers. A well-designed cost accounting system with its budgets, standard costs and break-even analyses enable managers to make better decisions. Demong and Croll (1981) suggested that all firms within the same industry not require the same things from a cost accounting system. The larger firms need a more sophisticated system to enable them to make frequent decisions on the prices and costs of their products. A smaller firm may only need a basic budget and some standard cost figures for their more infrequent pricing and cost decisions. In any case, all firms should have basic cost accounting systems with budgets and standard costs which can be used for planning and control. This or any system should be easy

to use, understand, and maintain. In addition, it should be flexible and cost effective. Mcintyre and Icerman (1985) studied the use of the accounting rate of return (ARR) by U.S small businesses and provided evidence of the nature and magnitude of errors that result from using the ARR for investment decisions. The results show that the ARR often produces substantial errors, and its use may be misleading. Small businesses were encouraged to take advantage of recent advances in technology which place IRR calculations within reach of any business involved in investment analysis.

In Japan a survey of cost accounting in SMEs was undertaken by Hopper et al. (1999). The results indicate that costing systems in Japanese SMEs were similar to those of larger Japanese firms. Costing systems and cost management practices though not uniform, emphasized simple routine accounting. They were not used extensively for decision-making or performance evaluation. However, sophisticated detailed processes of cost management, which often centered on engineering and quality control, were the norm.

In developing countries research into MAPs in SMEs was still lacking. In Nakawa Division for example, as discussed in Chapter 3 section 3.6, studies of MAPs in SMEs were nonexistent. This situation may be due to several factors. Sulaiman and Hashim (1999) observed that research into Nakawa Division SME was limited and not integrated in nature and an earlier study by Boocock and Wahad (1997) indicated that information on SMEs in Nakawa Division was inadequate, inconsistent and not easily available. Thus it can be concluded that research into MAPs in SMEs was limited and primarily relates to developed countries.

2.7. Summary

This section has explored research into the use of MAPs in developed and developing countries. It also looked at a research into specific areas of MAPs such as costing, budgeting, performance evaluation system, decision support system and SMA. The literature review revealed the following main points.

Firstly, the main body of research in broad area of MAPs initially commenced in developed countries in the 1990s. In developing countries, the majority of extant empirical evidence on this subject has been obtained in the twenty first century.

Secondly, there was a substantially body of research that focuses on specific MAPs and techniques: costing systems; budgeting and performance evaluation systems have been the

most popular areas for study. Decision support systems and SMA have been less commonly studied.

Thirdly, the literature suggests that the uptake of traditional MAPs and techniques was perhaps not surprisingly higher for traditional management accounting techniques than for contemporary MAPs and techniques in both developed and developing countries. However, there were indications in recent studies, of an increasing use of more contemporary practices.

Fourthly, the literature indicates there was very little evidence on the uptake of MAPs among SMEs. Extant literature on this subject was very largely confined to developed countries.

The review has therefore identified a significant gap in research about MAPs among SMEs as there were very few studies related to developing countries. Addressing the first research question of the thesis endeavored to close this gap and add to existing knowledge about the adoption of MAPs by providing information on the use of MAPs by SMEs in a developing county, Nakawa Division. The next section reviewed literature on the roles of management accounting.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter describes the research design and methodology that was used to collect and analyse the data required to address the research questions posed in this study. The quantitative data for descriptive purposes and empirical testing was collected by an online and/or postal questionnaire. The questionnaire examined and explored the state of MAPs within Nakawa Division SMEs in the manufacturing sector. The research concentrated only on one sector in order to avoid inappropriate distractions arising out of variations between sectors. Besides that the manufacturing sector in Britania Allied Industries plays a significant role in the Nakawa Division economy and therefore it was worthwhile to focus on this sector as a target population for this study. In addition the questionnaire also explored the roles of MAPs as well as the factors that influence their use among SMEs. Lastly questions on the level of performance of SMEs and details of the profile of the firms were also included. A postal questionnaire approach has been widely used in management accounting research (Drury et al., 1993; Firth, 1996; Chenhall and Langfield-Smith, 1998; Haldma and Laats, 2002; and Al-Omiri, 2003).

The information on the membership of the population was derived from the directory of the Federation of Nakawa Divisions Manufacturers (FNM). This source, although not comprehensive, provides detailed information about SMEs in the manufacturing sector. This directory consists of comprehensive profiles of over 2,200 manufacturers from SMEs to large enterprises. For the sampling purposes, this research focus on the small and medium category as the sampling unit. Thus in order to ensure every subsample gets an appropriate representation, a stratified random sampling procedure was used. This research expect to receive between 90 to 100 responses from the 200 sample.

This chapter is organized into five sections. First, the choice of research design was explained. The second section discusses the population from which data was collected and the approach to sample selection. The third section covers the data collection method, which focuses primarily on a postal survey. In the fourth section, data measurements and scaling were discussed. Finally, the choice of methods of data analysis was considered in terms of the research objectives and hypotheses.

3.1 Research design

Research design refers to the plan for carrying out a research project (Amin, 2005; Saunders, Lewis & Thornhill, 2012). A research design was quantitative approach because data collection involved a large scale survey questionnaire rather than. In particular, a research design should provide relevant information that will most efficiently and effectively address the research questions or hypotheses ((Hair, Celsi, Money, Samouel, & Page, 2011, 2007). Hair *et. al.* suggested that there were three distinct research designs: exploratory; descriptive; and causal. Of these three, descriptive and causal research designs match the need to provide the relevant information for the above research questions and hypotheses. Descriptive data were needed to answer the first two research questions concerning the extent of the use of MAPs in Nakawa Division SMEs and the roles fulfilled by MAPs in the management of SMEs. Descriptive data also provide information on contingent factors that affect the extent of the use of MAPs and the relationship between the extent of use of MAPs and firm performance for the causal research stage. Causal research which can also be termed as explanatory research (Saunders et al., 2009) test whether one variable (the independent variable) was responsible for changes in another variable (the dependent variable) (Emory and Cooper, 1991).

3.2 Sample selection method

According to Hair et al. (2007) representative samples were generally obtained by following a set of well-defined procedures, which are: defining the target population; selecting a sampling method; and determining a sample size. Therefore as been recommended by Hair et al. (2007), this section briefly explain the study's approach to these three main procedures for selecting the representative sample.

3.3 Target population

The research questions in this study concern the use of MAPs among Nakawa Division SMEs. The target population identified for gathering information regarding this concern was Nakawa Division SMEs from among the firms in the various industries that comprise the manufacturing sector. The research concentrates only on manufacturing sector in order to avoid irrelevant distractions arising from variations between sectors. The SME manufacturing sector in Nakawa Division was responsible for an increase in Nakawa Division exports, contributes substantially to the economy in terms of employment and has been a key factor in sustained rapid economic growth. In recognition of this contribution, the Nakawa Division government was aggressively supporting this sector in various ways such as offering finance

and business advice to boost its performance. Besides its importance to the Nakawa Division economy, this sector was suitable for research into MAPs as manufacturing SMEs have a higher proportion of medium sized firms who were most likely to use MAPs.

The target population can be divided into three possible sampling units. This was based on the three different sizes of enterprises that comprise Nakawa Division SMEs (micro, small and medium). The definition of these enterprises has been described earlier in Chapter 3. In deciding whether or not to include all SMEs in the sector as sampling units, the matter of suitability was the root of selection. Management accounting was only likely to be found in larger enterprises and therefore it was decided to exclude micro-sized firms as they have either a turnover of less than UGX 250,000,000 or fewer than five employees and were therefore likely to be too small to have management systems that rely on MAPs. For example, Hoque (2004) argued that a very small enterprise was less likely to have a real need for complex management systems, and Nayak and Greenfield (1994) stated that companies in the micro category almost certainly have no qualified internal accounting capability and also lack the resources to employ these systems. The research therefore only focused on the small and medium enterprises within the Nakawa Division SME definition.

Members of the population were derived from the directory of the Federation of Nakawa Division Manufacturers (FNM). This source, although not comprehensive, provides detailed information about SMEs in the manufacturing sector. The FNM directory consists of comprehensive profiles of over 2,200 manufacturers from SMEs to large enterprises. This database, which was available on CD-ROM and as a hardcopy, was frequently used in survey research, which involves the manufacturing sector (see for example; Ahmed et al., 2004; Ismail and King, 2006; Jusoh and Parnell, 2008; and Jusoh et al., 2008). One main advantage of this directory was that it specifies the number of employees and average annual turnover, which allows users to classify the size of the firms. This source therefore provides sufficient information for categorizing each member of the population into a sampling unit (subgroup). The directory was not always up-to-date in terms of email addresses, telephone numbers and postal addresses. In order to reduce the effect of this shortcoming, the data in this directory was crosschecked with official websites or by making an initial call to the firms to confirm that the details, such as address and email address were correct.

3.4 Sampling method

The target sample of this study comprises of two subgroups: medium sized enterprises and small enterprises, it was important to ensure that cases from each group were adequately

represented in the full sample. To control the relative size of each subsample, a stratified random sampling procedure was used. In this procedure, a simple random sample was taken from each stratum and the subsamples were then joined to form the total sample (Judd et al., 1991). The idea of stratified random sampling was to ensure that every stratum gets an appropriate representation (Ghauri, Gronhaug, and Kristianslund, 1995) through the stratification process. This method can also allow the results from subgroups to be compared to ascertain whether or not size difference affects the use of MAPs.

In order to determine the due proportion between the two subgroups, the stratification process can be done either by using proportionate or disproportionate stratified sampling. According to Hair et al. (2007), in a proportionate stratified sampling, the number of elements chosen from each stratum was proportionate to the size of particular strata, relative to the overall population size. On the other hand, disproportionate stratified sampling independently determines the sample size from each stratum without considering the size of the stratum relative to the overall sample size. In this procedure, the sample elements were chosen either according to another factor, such as their relative economic importance, or the variability of the data within each stratum (Hair et al., 2007). The variability among small and medium enterprises here relates to how the use of MAPs varies between small and medium-sized enterprises. However the information on this variability was unknown since no research has been done in this topic on these particular groups.

To determine the appropriate procedure, a comparison of sample sizes between a proportionate and a disproportionate stratified sampling approach was made. For disproportionate sampling, was based on economic importance of the subgroups since the information of the variability of the use of MAPs in both subgroups was unknown. Accordingly, Table 5.1 shows the effect of proportionate stratified sampling based on the number of establishments and Table 5.2 shows the effect of disproportionate stratified sampling based on economic contribution. The economic contribution uses contribution in economic value-added, output and employment and salaries as the bases for the economic contribution. These bases were used because they were the only current and available data revealed in the SMEs' annual report.

Table 3.1: The proportion of establishments in the small and medium category based on number of establishments.

Subgroup	% of number of establishments
Small	88.5
Medium	11.5
Total	**100**

Source: Primary Data, 2017

Table 3.2: The proportion of establishments in the small and medium category based on contribution in economic value-added, output and employment and salaries.

Subgroup	% of contribution in employment and salaries	% of contribution in economic value added	% of contribution in output
Small	62	48	44
Medium	38	52	56
Total	**100**	**100**	**100**

Source: Primary Data, 2017

Data in Table 3.2 shows that any sample based on number of establishments would be heavily skewed towards the small category. Unless the sample size was almost the whole population, this imbalance caused the sample size for the medium category to be insufficient to provide meaningful information for answering the research questions. This was an unsatisfactory position because a very large sample would be prohibitively expensive and would provide an excessive number of small SMEs for analysis. Further, it was important to have a significant sample from the medium SMEs because it was probable that this group made greater use of MAPs than small enterprises. So on this ground, a proportionate approach was disregarded.

In contrast, disproportionate stratified sampling on each of the three bases gives a more equal proportion of sample size between the two subgroups. Data in Table 3.2 above, shows that almost equal numbers of the small and medium group was sampled, if it was based on percentage of contribution in economic value-added as both categories make an almost equal contribution to the total economic value-added. The basis of percentage of contribution in employment and salaries was skewed to the small category whereas the proportion, based on contribution in output was slightly skewed towards medium enterprises. Overall, the most reasonable basis for a disproportionate stratification process was based on using the percentage of contribution in economic value-added as this base allows a sufficient representativeness of both medium and small SMEs.

Sampling biasness was minimized by securing all the email addresses and or telephone contacts of the SMEs, lecturers and graduate business practicing target population and contacting all of them (Sekaran, 2004). The sampling techniques and procedure enabled the researcher to obtain accurate and reliable data on the impact of MAPs on financial performance among SMEs in Uganda, guided by social cognitive theory and Budgeting theory as supported by (Sekaran, 2004; Amin, 2005; Gravetter & Forzanno, 2009 and Saunders, Lewis & Thornhill, 2012).

3.5 Sample size

The determination of sample size was influenced by many factors that need to be taken into account simultaneously. The factors include the cost and time constraints, variability of elements in the target population, required estimation precision and whether the findings were to be generalized and, if so, to what degree of confidence (Hair et al., 2007). In deciding the sample size, there was often a trade-off between the cost and time and large sample size. A larger sample size obviously requires more expenditure on collecting and analyzing data (Henry, 1990). Thus this research must balance the trade-offs of obtaining a sufficient sample size within budget and time constraints. To know whether the sample size can work within these constraints, it was essential to discuss aspects in determining the sample size.

There were number of statistical formulas available to calculate an appropriate sample size but these manually require data on variability (standard deviation), estimation precision and degree of confidence. However, information on variability was unavailable since the variability of the use of MAPs between small and medium SMEs has not yet been assessed in any of the previous research.

Other guides include references to consistent rules of thumb provided by statisticians to help in determining sample size. Roscoe (1975) proposed that sample sizes larger than 30 and less than 500 were appropriate for most research. This was supported by Stutely (2003) who advises a minimum number of 30 for statistical analyses. The minimum sample size arises because statisticians have proved that a sample size of 30 or more usually result in a sampling distribution for the mean that was very close to a normal distribution; a position which was important to ensure that spurious results do not occur (Saunders, Lewis, & Thornhill, 2009, 2012). Thus with the larger absolute size of a sample, the more closely its distribution was to the normal distribution and thus the more robust it was (Saunders, Lewis, & Thornhill, 2009,

2012). From another point of view, Kent (2001) suggested that for any kind of quantitative analysis, a minimum of 100 cases was needed. This would help to get a more sensible statistical analysis and more meaningful result. On the other hand, Sekaran (2004) noted that for multivariate research (including multiple regression analyses), the sample size should be several times (preferably 10 times or more) larger than the number of variables in the study. In addition to the above guidelines, Oppenheim (1997) and Sekaran (2004) advise a minimum sample size for research that has a number of subsamples. According to Oppenheim (1992), the more subgroups, the larger the sample needed. As this study involves multivariate regression analysis, it was sensible to aim to have at least 100 cases to ensure successful quantitative analysis...

Boocock and Shariff (2005) explained that there could be low response rate in a survey involving SMEs associated with a degree of suspicion concerning these documents. Boocock and Shariff's observations were consistent with research by Jusoh et al. (2008), who stated that a low response rate was not unusual for postal questionnaires because managers were typically reluctant to participate in mail surveys and the sensitive and confidential nature of the information requested may contribute to low response rates.

To overcome the perceived low response explained above, a large enough sample to ensure that sufficient useable responses were determined. Given an average response rate of between 12% and 15% response rate (as discussed above), 1,000 were sent to provide a margin of safety, in case the response rate was even lower. Table 3.4 shows the allocation of this sample size to each subgroups based on disproportionate stratified random sampling with two possible responses rates; worst and best.

Table 3.3: Sample size for each subgroup and the target number of responses

Subgroups	% of contribution in economic value-added	Sample size	Estimated responses	
			Worst (12%)	Best (15%)
Small	48.0	480	58	72
Medium	52.0	520	62	78
Total	**100.0**	**1,000**	**120**	**150**

Economic value added; the basis for stratification chosen in section 3.3.2, gives almost equal numbers in each subgroup. The last two columns shows the estimated responses for each

subgroup based on worst and best average response rates from past studies. The expectation was for between 120 to 150 responses from the 1,000 sample.

3.6 Data collection method

3.6.1 Questionnaire method

This research employed an online and postal questionnaire survey method to collect data. This was because, an online survey was advantageous when responses to many questions have to be obtained from a sample that was geographically dispersed and it was best suited (and perhaps the only alternative open to the researcher) when information was to be obtained on a substantial scale through structured questions (Sekaran, 2004). It involved the use of a set of questions printed in a defined order (Kothari, 2004). The postal questionnaire was chosen because it was a popular instrument for eliciting opinions in empirical accounting research (Collier and Wallace, 1992). This approach permits data to be collected from a representative sample across many industries and geographical regions where companies have activities. In addition, this method was generally the least expensive means of collecting survey data (Groebner et al., 2008). In seeking for quantitative data, closed ended questionnaires with matrix questions on a scale (five Likert) form were used. These questions were set with five options for the respondents to select from.

To ensure honesty in answering, the researcher informed the respondents that their responses were purely for academic purposes and questionnaires provided for anonymity and confidentiality of the responses as supported by (Mugenda & Mugenda, 2003). The wording of the questions, how the variables were categorized, scaled, coded and general appearance of the questionnaire design minimized: biasness (Sekaran, 2004; Barifaijo, Basheka & Oonyu, 2010), nonresponse (Gravetter & Forzanno, 2009), motivated the respondents to give accurate and complete information, as such, provided reliable and relevant data in return (Barifaijo, et. al, 2010).

Pilot testing, an important to collect feedback about the questionnaire, the response rate and the timing of responses was conducted. Moreover, a pilot test allowed an examination of patterns of respondents' answers and thus their understanding of the questionnaire (Dillman, 1978).

Accordingly, the questionnaire developed in this study was administered after pre-testing among fellow academics at Kampala International University. The pretesting aimed to clarify the wording of both the questionnaire instructions and questions. No significant issues were

raised. After this pre-testing, a pilot test was run on 100 employees for SMEs. A response rate of 13% was achieved, which was in line with expectations. It was also noted that completion of the questionnaire did not appear to present problems for the target audience. Therefore it was decided to proceed with the main mailing.

The survey package included a covering email and/or letter explaining the purpose of the survey, a copy of the questionnaire, and a prepaid envelope for returning the questionnaire (these documents were in the Appendix). The letter was addressed to the member of the accounting personnel in the firm who was the most eligible person to complete the questionnaire. In order to increase the response rate follow-ups were planned at three intervals:

i. One weeks after the initial mailing, a follow-up email;
ii. Two weeks after the initial mailing, a new covering letter and questionnaire; and
iii. Four weeks after the initial mailing, a follow-up call, follow-up email and a third covering letter and questionnaire.

This lengthy process was designed to maximize the response rate.

3.6.2 Documentary review method

Documentary review method was used in sourcing secondary data from relevant documents from Nakawa Division about initial post office box contacts and/or email addresses to triangulate the questionnaire method above as supported by Saunders, Lewis & Thornhill, (2012). (Appendix E, p.xii).

3.6.3 Data Collection Instruments

Self-administered questionnaires, documentary review and observation instruments were used to contact respondents. The three instruments enabled the researcher to provide a richer and more comprehensive response to the research questions (Saunders, Lewis & Thornhill, 2012).

3.6.4 Self-administered Questionnaire (SAQ)

Questionnaires were both email and posted. They were standard questionnaires which contained majority pre-coded matrix questions with a list of possible alternatives from which the respondents selected the answer that best suited the situation (Mugenda and Mugenda, 1999). They also contained un-structured (open ended) questions.

They elicited information about demographic factors of respondents (mostly from management and finance and accounts department), costing, budgeting, performance evaluation, and decision support systems. (See Appendices B and C, pages ii to vii).

3.6.5 Documentary Review Checklist

Documentary review guide was used in sourcing secondary data from relevant documents from Nakawa Division about initial post office box contacts and/or email addresses as supported by Saunders, Lewis & Thornhill, (2012). (Appendix E, p.xii).

3.7 Quality Control

To ensure data quality control of the instruments used in this study, validity and reliability techniques were used. The research instrument was pre-tested on 35 respondents (9%) from all over Uganda in order to refine the questionnaire so that respondents would not have problems in answering the questions. Pre-testing also helped eliminate problems in recording the data and in obtaining assessment of the data validity and reliability as supported by (Mugenda & Mugenda, 2003; Sekaran, 2004; Amin, 2005) as detailed below.

3.7.1 Validity

Validity is the accuracy and meaningfulness of inferences, which were based on the research results or the degree to which results from the analysis of the data actually represent the phenomenon under study (Mugenda & Mugenda, 2003; Sekaran, 2004; Amin, 2005).

Content validity of the instruments was determined by sending the constructed instruments to the two practicing Accountants for their personal opinion and to give the necessary guidelines on the scale of relevant or irrelevant. The expert judgment of the two practicing Accountants helped measure and attest to the content validity of the instruments as supported by (Mugenda & Mugenda, 2003; Sekaran, 2004; Amin, 2005). The instrument was revised until the content validity index of at least 0.9167 was obtained. This was above the least content validity index of 0.7 recommended in survey studies (Amin, 2005). After judgment, the researcher computed the content validity index as shown using the formula below:

Content Validity Index (CVI) formula:

$$\text{Content Validity Index (CVI)} = \frac{\text{Number of items declared valid}}{\text{Total number of items}}$$

Source: Amin, (2005).

CVI = 22/24

CVI = 0.9167 (91.7%).

As can be observed from the result, the final revision resulted into the tool's Content Validity Index of 0.9167 (91.7.0%). Since the tool has a CVI above 91.7 was above the minimum acceptable for social sciences, it was inferred that the instrument was relevant in measuring the impact of MAPs on financial performance among SMEs in Uganda with regard to the contingency theory and therefore, declared valid as suggested by (Mugenda & Mugenda, 2003; Sekaran, 2004; Amin, 2005).

3.7.2 Reliability

Reliability indicates the extent to which a measure was without bias (error free) and hence ensures consistent measurement across time and across the various items in the instrument (Mugenda & Mugenda, 2003; Sekaran, 2004; Barifaijo, Basheka & Oonyu, 2010, Saunders, Lewis & Thornhill, 2012, p.430; Weathington, Cunningham, & Pettenger, 2012, p.57). In this study, the researcher obtained (estimated) internal consistency of data collected (Barifaijo, et. al., 2010; Saunders, Lewis & Thornhill, 2012, p.430) by computing the Cronbach's Coefficient Alpha test embedded in SPSS computer program as shown in table 3.2 below:

Table 3.2: Reliability Indices for key variables

Variable:	Total No. of items:	Cronbach's Alpha:
Costing	7	.941
Budgeting	5	.628
Performance evaluation	6	.774
Decision support systems	5	.817
Financial Performance	3	.682
Overall Total:	**24**	**0.7684 (3.842/5)**

Source: Expert Judgment, 2017

Table 3.2 above comprised of the key variables in the study, Cronbach alpha and the number of items (questions). Reliability scores fall between zero (0) and positive one (1). The closer the results were to one, the more reliable an instrument is.

The formula involved summing up the Cronbach alpha results obtained per variable ($\sum$ alpha = 3.842) and dividing the overall result with the number of study variables (n = 5). Thus 3.842/5 = 0.7684. Based on this, it was concluded that the instrument was reliable as it would yield similar results when administered to different groups, hence dependable in measuring the impact of MAPs on Financial performance among SMEs in Uganda with regard to contingency theory as supported by Amin, (2005); Barifaijo, Basheka & Oonyu, (2010); Saunders, Lewis & Thornhill, (2012).

3.8 Procedure of Data Collection

After approving the research proposal, a field attachment letter was released.

3.8.1 Questionnaire

The researcher, upon approval of the research proposal obtained a letter of request from Kampala International University for authorization to conduct a study from SMEs in Nakawa Division. Upon presentation of the field attachment letter and the researcher's own application, to the Nakawa Division authorities gave the available information and referred the researcher to the SMEs themselves. With the help of three research assistants, the researcher was able to collect the required data using online and posted self-administered questionnaires accompanied with a paraphrased letter of transmittal.

The entire exercise lasted two months as it the time frame had to be cut short following the University's directive of concluding the research process by the of June.

3.8.2 Documentary Review

Documents from Nakawa Division were reviewed about SMEs contacts with emphasis on classifications i.e. small, medium. Documents from SMEs were reviewed on the use of types of MAPs as supported by Saunders, Lewis & Thornhill, (2012). (Appendix E, p.xii).

3.9 Data Analysis

Data analysis and management was handled both quantitatively and qualitatively as detailed below.

3.9.1 Quantitative Data Analysis

Quantitative data was collected from the field of study with the aid of self-administered questionnaires. These were filled in appropriately, sent back through either emails for those who responded to the email questionnaires or post office for those who answered the hard copies. The exercise involved sorting them out, coding them, data entry, cleaning for errors using SPSS. The extraction of information was done both descriptively and inferentially. Descriptively, information generated was presented in tabular formats as frequencies, percentages, mean and standard deviation scores as supported by Saunders, Lewis, & Thornhill, (2012).

Inferential statistics supported by the Pearson's correlation technique was used to help in determining impact and direction (negative or positive) existed between the variables. Correlation results lie between -1 and + 1. The negative values reveal a negative relationship while the positive values reveal positive relationship. The closer the correlation value was to positive one, the stronger the relationship whereas the more the value was closer to negative one, the weaker the relationship. Correspondingly, the significance level was set at the 99% (confidence level). On the other hand, the regression analysis technique was used and presented in form of ANOVA statistics comprising of the R value (beta value), R–Square, adjusted R^2 values. These were used to determine the magnitude of the variation of the independent variable on the dependent variable (Amin, 2005), to determine the extent to which that data can be said to indicate any conclusions (Kothari, 2004; Saunders, Lewis, & Thornhill, 2012).

3.9.2 Qualitative Data Analysis

Qualitative data was analyzed and interpreted using the content analysis technique as the researcher undertook each observation during data collection (Saunders, Lewis, & Thornhill, 2012). It followed a deductive approach i.e. use of existing theory to shape the approach because according to Saunders, Lewis, & Thornhill, (2012), it links the research into existing body of knowledge in the researcher's subject area, helps the researcher to get started and provides the researcher with an initial analytical framework.

The useful information gained through the observation was arranged in major themes of costing, budgeting, performance evaluation and decision support system. The analysis then involved identifying the implications, conclusions and inferences of qualitative information. Effort was also directed to cross examine the qualitative findings on their level of agreement or disagreement with quantitative data.

3.10 Measurements of Variables

This refers to the assignment of numbers to objects, events or characteristics according to rules (Amin, 2005). The coding system was used whereby numbers was assigned to characteristics or events in order to operationally define the variables. The nominal scale for demographic characteristics for instance sex, marital status, employment status and work setting while ordinal scale types of measurement was used on the main variables since they contained matrix questions (Mugenda & Mugenda, 2003; Amin, 2005).

The variables were measured operationally defining Costing, Budgeting and financial performance. These were channeled into observable and measurable elements to enable the development of an index of the concepts using a five point Likert scale was used to measure both the independent and the dependent variables.

3.11 Research Ethics

Ethics are sets of principles or norms that are used to guide moral choices of behavior and relationships with others (Blumberg et. al., 2005 cited in Gary, 2000). Put simply, Homan, (1991) cited in Gary, (2009) referred to ethics as the science of morality. Research ethics were defined by the Economic Social Research Council (ESRC, 2004) cited in Gary, (2009) as refers to the moral principles guiding research.

Throughout this research project, the researcher considered all the four research ethical principles identified by Gary (2009) which include avoiding harm to participants, ensuring informed consent of participants, respecting the privacy of the participants and avoiding the use of deception.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS

4.0 Introduction

This chapter presents analyses and then interprets the study findings based on the questionnaires, documentary survey and observation from the field. It specifically presents the response rate, background information about the respondents and a presentation of the study findings in relation to the specific objectives.

4.1 Response rate

Focus in this section, was on the response rate that was obtained from the field study. Questionnaires totaling (1,000) were issued with the help of three research assistants. Out of these, 142 questionnaires were returned fully completed, constituting 90% of expectation of 150. These included 135 questionnaires. On the other hand, all planned observation sessions of the 7 key informants, were conducted obtaining 100% response rate. (See table 4.1 for results).

Table 4.1: Response rate

Instrument	Planned/Administered	Returned/Conducted	Percentage
Questionnaire	973	135	90.% of expectation of 150
Observation	7	7	100%
Overall Total:	**1,000**	**142**	**95%**

Source: Primary data, 2017

As it can be observed from the table 4.1, an overall response rate of 95% (142) was obtained for both questionnaires and observation sessions held. This response rate was above 50.0% and according to Amin (2005), the response rate equal to 50.0% was good enough to explain a problem under investigation, however, that above 95% was excellent. In addition, the high response rate reduced the risk of non-response bias and ensured representativeness of the sample to the study population (Groves & Peytcheva, (2008) cited Saunders, Lewis & Thornhill, 2012).

4.2 Background Information about the respondents

The researcher collected information assumed to be valuable to the study on the background of the respondents. This section therefore, presents the study findings on gender, age, current level of education, employment status, monthly house hold income and work setting of the respondents. The demographic information given below relates to the 142 SMEs and postgraduate respondents.

4.2.1 Gender of the Respondents

In terms of gender, the respondents in this study comprised of both the female and male respondents. See results obtained in the table 4.2.

Table 4.2: Distribution of Respondents by Gender

Gender of Respondent	Frequency	Percentage
Male	88	62%
Female	54	38%
Total	**142**	**100**

Source: Primary data, 2017

Table 4.2 comprises of the Gender of respondents, frequencies and percentages. From the table 4.2, it can be said that the male formed the majority of respondents (62.0%, n=88) as compared to their female counterparts, (38.0%, n=54) meaning that the researcher obtained gender balanced views from the respondents who participated in the study about MAPs and financial performance among SMEs in Uganda. In addition to the above, the findings reveal that MAPs are deployed by both females and males.

4.2.2 Respondents by Age

In terms of age, respondents had attained varied ages. See results obtained in the table 4.3.

Table 4.3: Respondents by Age

Age of Respondent	Frequency	Percentage
58 years and above	5	4
50–57 years	14	10
42–49 years	71	50
34–39 years	38	27
26–33 years	12	8
18–25 years	2	1
Total	**142**	**100**

Source: Primary data, 2017

The results presented in table 4.3 reveal that respondents constituting (1.0%, n=2) fell between 18–25 years of age, this was followed by (8.0%, n=12) that formed the age bracket of 34–39 years, respondents constituting (27.0%, n=38) fell between 34–39 years of age, respondents constituting (50.0%, n=71) fell between 42–49 years of age, respondents constituting (10.0%, n=14) fell between 50–57 years of age, and respondents of 58 years and above were (4.0%, n=5) meaning that the respondents involved in the study included the youth, middle and advanced aged staffs that had significant knowledge about MAPs.

The presence of such statistics shows that SMEs employed mainly a workforce above 42 years who had interfaced with MAPs for longer periods in their careers.

4.2.3 Description of respondents by current Level of Education

As for current level of education, the respondents had attained in various levels. This was intended to find out whether it were the SMEs with only bachelor's degree or those with postgraduate qualifications that engaged in Decision support systems. See results obtained in the table 4.4.

Table 4.4: Description of current Level of Education

Current Level of Education of respondent	Frequency	Percentage
Ordinary Level (UCE)	0	0
Advanced Level (UACE)	0	0
Diploma	40	27
Bachelors	86	61
Master's Degree	15	11
Degree of Philosophy (PhD)	1	1
Total:	**142**	**100**

Source: Primary data, 2017

As shown in table 4.4 findings reveal that there were no respondents with below diploma level of education. Respondents with bachelors' degree were the dominant, (61.0%, n=86), these were followed by (27.0%, n=40) with Diplomas, (11.0%, n=15) respondents had obtained Masters' degree qualifications and the PhD holder forming the least with only (1.0%, n=1). This was to the advantage of the researcher as the respondents were literate and therefore, able to read through the questionnaire and answer the questions that were set with ease. In addition, as they continued to realize the MAPs deployment need, they enhanced themselves through obtaining Masters' degrees and other post graduate qualifications.

4.2.4 Description of respondents by length of service in the organization.

The literate respondents in this study had obtained special skills that had been derived from the different specialization during their time at the university. These were reflected in Table 4.5.

Table 4.5: Description of respondents by length of service in the organization

Length of service in the organisation	Frequency	Percentage
Less than 1 year	13	9
1–3 years	15	11
4–6 years	50	35
7 years and above	64	45
Total:	**142**	**100%**

Source: Primary data,2017

As observed from table 4.5, statistics presented show that majority of respondents (45.0%, n=64) had served their organizations for more than seven years, these were followed by (35.0%, n=50), who had served for 4–6 years,, 1–3 years, constituted (11.0%, n=15), while (9.0%, n=13) has served for less than one year.

The revelations above clearly show that over 80 per cent of respondents had served their organizations for four years or more. The long length of employment meant that they had interfaced with the organisation's MAPs for quite some time and were therefore able to give valid and relevant information to answer the research objectives.

4.2.5 Description of respondents' organisations by Years of operations/business

Respondents in terms their organisation's years of operation. See results obtained in the table 4.6.

Table 4.6: Description of respondents' organisations by Years of operations/business

Years of operations/business	Frequency	Percentage
1–3 years	18	13
4–10 years	70	49
More than 10 years	54	38
Total:	**142**	**100**

Source: Primary data, 2017

As observed from table 4.6, statistics presented show that majority of respondents organizations (49.0%, n=70) had been in operation for 4–10 years. These were followed by (38.0%, n=54), which had been in operation for more than 10 years, 1–3 years, constituted (13.0%, n=18). The revelations above show that longer the organization stays in operation, the more it employees MAPs into its financial accounting and management operations.

4.2.6 Description of respondents' organizations by sector

Details about respondents' organizations by sector were obtained during the course of the study. They fell in numerous categories as shown in the table 4.8 below.

Table 4.7: Description of respondents' organizations by sector

Manufacturing activities	Frequency	Percentage
Furniture	2	1
Rubber and plastic	32	23
Food, and beverage	44	31
Chemicals & chemical Products	36	25
Basic Metals	28	20
Total:	**142**	**100**

Source: Primary data, 2017

As shown in Table 4.7, a portion of respondents (31.0%, n=44) representing the majority reveal that most of the respondents were from the food and beverages subsector, this was closely followed by (25.0%, n=36) of the respondents who were from the Chemicals & chemical Products subsector, (20.0%, n=28) were from the rubber and plastic subsector, , (23.0%, n=32) were from the basic metals subsector while (1.0%, n=2) were from the furniture subsector. This implies that Nakawa Division SMEs comprise of nearly all the subsectors in the manufacturing industry.

4.2.7 Description of respondents by number of employees in their organisations

Respondents in terms of number of employees in their organisations. See results obtained in the table 4.8.

Table 4.8: Description of respondents by number of employees in their organizations

Number of employees in their organizations	Frequency	Percentage
0 – 4	0	0
5 – 50	15	11
51 –150	83	58
More than 150	44	31
Total:	**142**	**100**

Source: Primary data, 2017

Table 4.8 shows the majority of respondents' organizations, 83 (almost 58%) employ between 51 –150 employees, 44 (almost 31%) employ more than 150 employees, while 15 (almost 11%) employ between 5 –50. No respondent reported their organisation employing less than five employees. The above results imply that the larger the manpower base, the more likely it is for the organisation to employ MAPs in its operations.

4.2.8 Description of respondents by their organisation's annual sales turnover

In terms of annual sales turnover, the results obtained were as in the table 4.9.

Table 4.9: Description of respondents by number of employees in their organizations

Annual sales turnover	Frequency	Percentage
Below 25 million	0	0
25 – 50 million	15	11
51 – 100 million	83	58
More than 100 million	44	31
Total:	**142**	**100**

Source: Primary data, 2017

Table 4.9 shows the majority of respondents' organizations, 83 (almost 58%) employ between 51 –150 employees, 44 (almost 31%) employ more than 150 employees, while 15 (almost 11%) employ between 5 –50. No respondent reported their organisation employing less than five employees. The above results imply that the larger the manpower base, the more likely it is for the organisation to employ MAPs in its operations.

4.3 Empirical findings

This section presents the descriptive and inferential findings that were obtained from the field of study based on the specific objectives of the study. These included finding out the impact of MAPs domains of Costing, Budgeting, Performance evaluation and Decision support systems on financial performance among SMEs from Nakawa Division.

4.3.1 Research Question Number One:– Employment of MAPs by SMEs in Nakawa Division

The first objective of the study was to find out to what extent MAPs were employed by SMEs in Nakawa Division. As a result, numerous questions posed ranged from questions about costing, budgeting, performance evaluation and Decision support systems the emerging results presented in the Table 4.10.

Table 4.10: Showing the Descriptive Statements on use of a costing system

Use of a costing system in the firm	Frequency	Percentage
Yes	140	99
No	2	1
Total:	**142**	**100**

Source: Primary data, 2017

Table 4.10 shows the majority of respondents' organizations, 100 (almost 99%) reporting their organizations employing MAPs while 2 (almost 1%) reporting otherwise. The above results imply that approximately 100% SMEs in Nakawa Division employ MAPs in its operations.

Table 4.11: Showing the Descriptive statements on extent of employment of MAPs

Statements on extent of extent of employment of MAPs	N	RO	FVF
Job Costing	0.0% (0)	26.0% (37)	74.0% (105)
Batch Costing	0.0% (0)	22.0% (30)	78.0% (112)
Contract Costing	0.0% (0)	44.0% (62)	56.0% (80)
Process Costing	0.0% (0)	32.0% (46)	68.0% (96)
Absorption Costing	0.0% (0)	23.0% (33)	77.0% (109)
Variable Costing	0.0% (0)	34.0% (48)	66.0% (94)
Variable & Absorption Costing	0.0% (0)	20.0% (28)	80.0% (114)
Activity based costing	0.0% (0)	26.0% (37)	74.0% (105)

Source: Primary data, 2017

Key: N = Never, RO = Rarely and Occasionally FVF = Frequently and Very Frequently

For purposes of interpretation the researcher combined both frequently and very frequently to represent respondents that reported frequently while both rarely and occasionally were

combined to represent respondents that rarely and occasionally. The mean score above three reveal agreement while those below three reveal disagreement and the standard deviation scores above one reveal divergences in views while those below one reveal communalities in responses.

The researcher set eleven questions pertaining extent of employment of MAPs. Responses obtained for cost collection systems: (74.0%, n=105) of the respondents who reported frequent and very frequent use of job costing and (26.0%, n=37) reporting rarely and occasional use. Similarly, (78.0%, n=112) respondents who reported frequent and very frequent use of batch costing, with (22.0%, n=30) reporting rarely and occasional use. On contract costing, (56.0%, n=80) of the respondents who reported frequent and very frequent use of job costing and (44.0%, n=62) reporting rarely and occasional use. Whereas on process costing (66.0%, n=96) of the respondents who reported frequent and very frequent use of job costing and (46.0%, n=34) reporting rarely and occasional use.

As for the costing systems, the researcher set four questions. Responses obtained (77.0%, n=109) of the respondents who reported frequent and very frequent use of Absorption Costing and (23.0%, n=33) reporting rarely and occasional use. Similarly, (66.0%, n=94) respondents who reported frequent and very frequent use of variable costing, with (34.0%, n=38) reporting rarely and occasional use. On variable and absorption costing, (80.0%, n=114) of the respondents who reported frequent and very frequent use of job costing and (20.0%, n=28) reporting rarely and occasional use. Whereas on activity based costing, (74.0%, n=105) of the respondents who reported frequent and very frequent use of job costing and (26.0%, n=37) reporting rarely and occasional use.

Table 4.12: Showing the Descriptive statements on use of a budgeting system

Use of a budgeting system in the firm	Frequency	Percentage
Yes	142	100
No	0	0
Total:	**142**	**100**

Source: Primary data, 2017

Table 4.12 shows that 100 % respondents affirmed use of budgeting systems in their organizations.

Table 4.13: Showing the Descriptive statements on use of a budgeting system

Statements on use of a budgeting system	N	RO	FVF
Purchasing budget	0.0% (0)	44.0% (62)	56.0% (80)
Production budget	0.0% (0)	26.0% (37)	74.0% (105)
Cash flow budget	0.0% (0)	44.0% (62)	56.0% (80)
Financial position budget	0.0% (0)	22.0% (31)	78.0% (111)

Source: Primary data, 2017

Key: N = Never, RO = Rarely and Occasionally FVF = Frequently and Very Frequently

As for the costing systems in Table 4.13, the researcher set four questions. Responses obtained (56.0%, n=80) of the respondents who reported frequent and very frequent use of Purchasing budget and (44.0%, n=62) reporting rarely and occasional use. Similarly, (74.0%, n=105) respondents who reported frequent and very frequent use of Production budget, with (26.0%, n=37) reporting rarely and occasional use. On Cash flow budget, (56.0%, n=80) of the respondents who reported frequent and very frequent use of job costing and (44.0%, n=62) reporting rarely and occasional use. Whereas on Financial position budget, (78.0%, n=111) of the respondents who reported frequent and very frequent use of job costing and (22.0%, n=31) reporting rarely and occasional use.

Table 4.14: Showing the Descriptive statements on frequency of budgets preparation

Statements on frequency of budgets preparation	N	RO	FVF
Monthly	0.0% (0)	27.0% (38)	73.0% (104)
Annual budget	0.0% (0)	10.0% (14)	90.0% (128)
Continuous/rolling budgeting	0.0% (0)	35.0% (50)	65.0% (92)

Source: Primary data, 2017

Key: N = Never, RO = Rarely and Occasionally FVF = Frequently and Very Frequently

For the frequency of budgets preparation as in Table 4.14, the researcher set three questions. Responses obtained (73.0%, n=104) of the respondents who reported frequent and very frequent use on a monthly basis, and (27.0%, n=38) reporting rarely and occasional use. On

annual use of budget preparation, (90.0%, n=128) respondents who reported frequent and very frequent use, with (10.0%, n=14) reporting rarely and occasional use. On continuous/rolling budgeting use, (65.0%, n=92) of the respondents who reported frequent and very frequent use of job costing and (35.0%, n=62) reporting rarely and occasional use. Whereas on Financial position budget, (78.0%, n=111) of the respondents who reported frequent and very frequent use of job costing and (22.0%, n=31) reporting rarely and occasional use.

Table 4.15: Showing the descriptive statements on extent to which these budgets were employed

Statements on frequency of budgets preparation	N	RO	FVF
Flexible budget	0.0% (0)	68.0% (92)	32.0% (50)
Incremental budgeting	0.0% (0)	12.0% (17)	88.0% (125)
Zero-based budgeting	0.0% (0)	60.0% (85)	40.0% (57)

Source: Primary data, 2017

Key: N = Never, RO = Rarely and Occasionally FVF = Frequently and Very Frequently

Table 4.15 shows the extent of budget preparation. The researcher set three questions. Responses obtained (32.0%, n=50) of the respondents who reported frequent and very frequent preparation of flexible budget, and (68.0%, n=92) reporting rarely and occasional use. On incremental budgeting, (88.0%, n=125) respondents reported frequent and very frequent use, with (12.0%, n=17) reporting rarely and occasional use. On Zero-based budgeting, (40.0%, n=57) of the respondents who reported frequent and very frequent use of job costing and (60.0%, n=85) reporting rarely and occasional use.

4.3.2 Research Question Number Two:– Roles were played by MAPs in SMEs' management in Nakawa Division

Table 4.16: Showing the descriptive statements on performance evaluation system

Use of a performance evaluation system	Frequency	Percentage
Yes	142	100
No	0	0
Total:	**142**	**100**

Source: Primary data, 2017

Table 4.16 shows that 100 % respondents affirmed use of performance evaluation system in their organizations.

Table 4.17: Showing the descriptive statements on use of performance evaluation system

Statements on use of performance evaluation system	N	RO	FVF
Financial measures			
Operating income	0.0% (0)	44.0% (62)	56.0% (80)
Return on investment	0.0% (0)	26.0% (37)	74.0% (105)
Variance analysis	0.0% (0)	35.0% (50)	65.0% (92)
Sales growth	0.0% (0)	22.0% (31)	78.0% (111)
Cash flows	0.0% (0)	60.0% (85)	40.0% (57)
Non-financial measures			
Number of customer complaints	40.0% (57)	12.0% (17)	44.0% (125)
Survey of customer satisfaction	20.0% (28)	45.0% (64)	35.0% (50)
Number of warranty claims	49.0% (70)	19.0% (27)	32.0% (45)
On-time delivery	60.0% (85)	12.0% (17)	28.0% (40)
Manufacturing lead time/cycle time	30.0% (43)	45.0% (64)	25.0% (35)
Defect rate	50.0% (71)	28.0% (40)	22.0% (31)
Employee turnover	60.0% (65)	12.0% (17)	28.0% (40)
Absentee rates	40.0% (57)	20.0% (28)	40.0% (57)

Source: Primary data, 2017

Key: N = Never, RO = Rarely and Occasionally FVF = Frequently and Very Frequently

With reference to use of performance evaluation system shown in table 4.17, the researcher set thirteen questions – five questions for financial measures and eight questions for non-financial measures. On financial measures, responses obtained (56.0%, n=80) of the respondents reported frequent and very frequent use of Operating income and (44.0%, n=62) reporting rarely and occasional use. Similarly, (74.0%, n=105) respondents who reported frequent and very frequent use of Return on investment, with (26.0%, n=37) reporting rarely and occasional use. On Variance analysis, (65.0%, n=92) of the respondents who reported frequent and very

frequent use Sales growth and (35.0%, n=50) reporting rarely and occasional use. Whereas on Cash flows budget, (40.0%, n=57) of the respondents who reported frequent and very frequent use of and (60.0%, n=85) reporting rarely and occasional use..

Whereas regarding non-financial measures, responses obtained (48.0%, n=68) of the respondents reported frequent and very frequent use of performance evaluation system to handle customer complaints and (12.0%, n=17) reporting rarely and occasional use, (40.0%, n=57) however, reported they were never used at all. Additionally, (35.0%, n=50) respondents reported frequent and very frequent use of performance evaluation system to survey customer satisfaction, with (45.0%, n=64) reporting rarely and occasional use, (20.0%, n=28) however, reported they were never used at all. On use of performance evaluation system for warranty claims, (49.0%, n=70) reported they were never used, (19.0%, n=27) of the respondents reported rarely and occasional frequent use and (32.0%, n=45) reporting and very frequent use. Regarding On-time delivery (60.0%, n=85) reported they were never used, (12.0%, n=17) of the respondents reported rarely and occasional frequent use and (28.0%, n=40) reporting and very frequent use. Regarding use of performance evaluation system for manufacturing lead time/cycle time, (30.0%, n=42) reported they were never used, (45.0%, n=64) of the respondents reported rarely and occasional frequent use and (25.0%, n=36) reporting and very frequent use. Regarding use of performance evaluation system for defect rates tracking, (50.0%, n=71) reported they were never used, (28.0%, n=40) of the respondents reported rarely and occasional frequent use and (22.0%, n=31) reporting and very frequent use. Regarding employee turnover monitoring using performance evaluation system, (49.0%, n=70) reported they were never used, (19.0%, n=27) of the respondents reported rarely and occasional frequent use and (32.0%, n=45) reporting and very frequent use. Regarding use of performance evaluation system to track absentee rates, (60.0%, n=85) reported they were never used, (12.0%, n=17) of the respondents reported rarely and occasional frequent use and (28.0%, n=40) reporting and very frequent use.

Table 4.18: Showing the descriptive statements on use of strategic management accounting

Statements on use of strategic management accounting	N	RO	FVF
Target costing in the design of new products	0.0% (0)	45.0% (64)	55.0% (78)
Strategic costing in determining the firm's strategy	0.0% (0)	26.0% (37)	74.0% (105)
An analysis of the costs incurred in each of the activities in the firm's value chain	0.0% (0)	35.0% (50)	65.0% (92)
Monitoring the costs that occur across stages of product development. *	0.0% (0)	22.0% (31)	78.0% (111)
Taking into account any strategic factors when setting price decision. **	0.0% (0)	60.0% (85)	40.0% (57)
The systematic collection of data on competitors' price reaction, demand reaction, and market position.	0.0% (0)	40.0% (57)	60.0% (85)

Source: Primary data, 2017

*for example costs of installation, operation, support, maintenance and disposal.

** for example factors: competitor price reaction, elasticity, market growth, economies of scale, and experience.

Key: N = Never, RO = Rarely and Occasionally FVF = Frequently and Very Frequently

Table 4.18 gives reference to use of strategic management accounting. The researcher set six questions. On Target costing in the design of new products, responses obtained (55.0%, n=78) of the respondents reported frequent and very frequent use of and (45.0%, n=64) reporting rarely and occasional use. Similarly, (74.0%, n=105) respondents who reported frequent and very frequent use of Strategic costing in determining the firm's strategy, with (26.0%, n=37) reporting rarely and occasional use. On analysis of the costs incurred in each of the activities in the firm's value chain, (65.0%, n=92) of the respondents who reported frequent and very frequent use. Regarding monitoring of costs that occur at all stages of the production development (78.0%, n=111) respondents who reported frequent and very frequent use and (21.0%, n=31) reporting rarely and occasional use. Whereas taking into account any strategic factors when setting price decision, responses obtained (60.0%, n=85) of the respondents reported frequent and very frequent use of performance evaluation system and (40.0%, n=57) reporting rarely and occasional use. Additionally, (35.0%, n=50) respondents reported frequent and very frequent use of performance evaluation system to systematic collection of data on competitors' price reaction, demand reaction, and market position, with (60.0%, n=85) reporting rarely and occasional use.

4.3.3 Research Question Number Three:– Factors which affecting the extent of the use of management accounting practices in SMEs' management in Nakawa Division.

Table 4.19: Showing the descriptive statements on Factors which affecting the extent of the use of management accounting practices

Statements on use of strategic management accounting	NI	LEME	HEVHE
How intense was competition for the firm's main product/product lines?	0.0% (0)	18.0% (26)	82.0% (116)

Source: Primary data, 2017

Key: NI = Not intense at all, LEME = Low Extent and Moderately Extent **HEVHE** = Highly Extent and Very Highly Extent

Table 4.19 shows that there is intense competition for SMEs' main products with (82%, n=116) respondents reporting Highly Extent and Very Highly Extent, while (28%, n=26) respondents reporting Low Extent and Moderately Extent of competition.

Table 4.20: Showing the descriptive statement on employ any accounting staff

Do you employ any accounting staff	Frequency	Percentage
Yes	142	100.0%
No	0	0
Total:	**142**	**100.0%**

Source: Primary data, 2017

In table 4.20, all the respondents in table reported their organizations employ qualified accounting staffs.

Table 4.21: Showing the descriptive statement on highest qualifications of your firm's internal accountant

Highest qualifications of your firm's internal accountant	Frequency	Percentage
PMR/SRP	0	0.0%
Bachelor Degree in Accounting/Finance	44	31.0%
SPM	8	6.0%
ACCA	90	63.0%
Total:	**142**	**100.0%**

Source: Primary data, 2017

Responses in table 4.21 shows that (31.0%, n=44) accounts staffs have Bachelor Degree in Accounting/Finance, (6.0%, n=8) have SPM while (63.0%, n=90) have ACCA. That implies

that there is effort in SMEs to employ only qualified staffs in the Accounts department to enhance financial performance.

Table 4.22: Showing the descriptive statement on owner/manager participation in the development of management accounting practices for your firm

Statements on owner/manager participation	NA	LEME	HEVHE
To what extent did your owner/manager participate in the development of management accounting practices for your firm?	0.0% (0)	39.0% (55)	61.0% (87)

Source: Primary data, 2017

Key: NA= Not at all, LEME = Low Extent and Moderately Extent, **HEVHE** = Highly Extent and Very Highly Extent

Responses in table 4.22 shows that (61.0%, n=87) owner/manager participation in the development of management accounting practices for their firms to highly extent and very highly extent, whereas (39.0%, n=55) to a Low extent and moderately extent. That implies that need for SMEs to employ only qualified staffs in the Accounts department to guide their organizations in development of management accounting practices for your firm.

Table 4.23: Showing the descriptive statements on extent of use of the following technologies were used in the organisation

Statements on extent of use of the following technologies were used in the organisation	NU	LUMU	HUMU
Flexible manufacturing system	20.0% (28)	45.0% (64)	35.0% (50)
Computer numerically controlled machines	49.0% (70)	19.0% (27)	32.0% (45)

Source: Primary data, 2017

Key: NU = Not used, LUMU = Low use and Moderately used HUWU = Highly Used and Widely Used

Table 4.23 shows responses obtained (35.0%, n=60) of the respondents reported high and very high use of Flexible manufacturing system and (45.0%, n=64) reporting low and moderate use, (40.0%, n=57) however, (20.0%, n=28) reported they were never used at all. Furthermore, (32.0%, n=40) of the respondents reported high and very high use of Computer numerically controlled machines and (19.0%, n=27) reporting low and moderate use, (49.0%, n=70) however, reported they were never used at all.

4.3.4 Research Question Number Four:– Relationship between MAPs and financial performance of SMEs in Nakawa Division.

4.3.5 Bivariate correlation analysis between Costing, budgeting, performance evaluation and decision support system and financial performance among SMEs

The researcher used the Pearson product correlation product moment technique to establish whether a relationship (negative or positive) existed between MAPs and financial performance and the results that emerged were shown in table 4.12 below.

Table 4.24: Bivariate Correlation results for Costing, budgeting, performance evaluation and decision support system and financial performance

		Costing, budgeting, performance evaluation and decision support system	Financial Performance
Costing, budgeting, performance evaluation and decision support system	Pearson Correlation	1	.675**
	Sig. (2-tailed)		.000
	N	142	142
Financial Performance	Pearson Correlation	.675**	1
	Sig. (2-tailed)	.000	
	N	142	142

**. Correlation was significant at the 0.01 level (2-tailed).

Source: Field data, 2017

Table 4.24 above shows variables; Costing and financial performance, Pearson correlation or beta value or R=.675**, Sig (p<0.01, .000) and n=142. The result of (.675**) reveals a positive relationship between Costing, budgeting, performance evaluation and decision support system and financial performance and financial performance. These revelations can be attributed to the fact that SMEs deployed qualified and competent staffs to spearhead their financial performance.

4.3.6 Linear Regression results for Costing, budgeting, performance evaluation and decision support system and financial performance among SMEs in Uganda

The researcher wanted to establish the effect or variation Costing, budgeting, performance evaluation and decision support systems had on financial performance among SMEs with the results obtained shown in the Table 4.13 below.

Table 4.25: Model Summary showing linear results for Costing and Decision support systems

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.675[a]	.456	.454	.57314

a. predictors: (constant), Costing

Source: Field data, 2017

Table 4.25, shows variables; Costing, budgeting, performance evaluation and decision support systems had on financial performance and the financial performance among SMEs in Uganda, Pearson correlation (R) or beta value or R=.675**, R^2 =.456, adjusted R^2 =.454, while the standard error of the estimate was (.57314). The adjusted R^2 =.454 results displayed reveal that the Costing, budgeting, performance evaluation and decision support systems had on financial performance had a 45.4%, (.454*100%) effect or variance on the financial performance among SMEs in Nakawa Division. The remaining percentage of 55.6% was attributed to other factors not linked to the study.

4.3.7 Correlation matrix depicting the multi-relationship between MAPs on financial performance

The correlation matrix technique was used to establish the multi-relationship between MAPs on financial performance of SMEs from Nakawa Division as shown in table 4.22 below.

Table 4.26: Correlation matrix for MAPs and Financial performance

		Costing	Budgeting	Performance evaluation	Decision support systems	Financial Performance
Costing	Pearson Correlation	1	.594**	.686**	.668**	**.675****
	Sig. (2-tailed)		.000	.000	.000	.000
	N	142	142	142	142	142
Budgeting	Pearson Correlation	.594**	1	.590**	.436**	**.587****
	Sig. (2-tailed)	.000		.000	.000	.000
	N	142	142	142	142	142
Performance evaluation	Pearson Correlation	.686**	.590**	1	.495**	**.645****
	Sig. (2-tailed)	.000	.000		.000	.000
	N	142	142	142	142	142
Decision support systems	Pearson Correlation	.668**	.436**	.495**	1	**.593****
	Sig. (2-tailed)	.000	.000	.000		.000
	N	142	142	142	142	142
Financial Performance	Pearson Correlation	.675**	.587**	.645**	.593**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	142	142	142	142	142

**. Correlation was significant at the 0.01 level (2-tailed).

Table 4.26 comprises of correlation matrix results including Costing (.675**), Budgeting (.587**), Performance evaluation (.645**) and Decision support systems (.593**). The results reveal a positive and statistically significant relationship with financial performance, Budgeting and Performance evaluation with Decision support systems. However, it can be observed that overall, Costing was the most dominant factor in influencing financial performance at (67.5%), (.675*100), closely followed by Performance evaluation at (64.5%), (.645*100). This was followed by Decision support systems at (59.3%), (.593*100) and finally Budgeting at (58.7%), (.587*100).

4.3.8 Regression matrix results for the multi-regression effect MAPs had on Financial performance

The regression matrix technique was used to establish the multi-regression effect MAPs had on financial performance of SMEs from Nakawa Division. The results were shown in table 4.27 below.

Table 4.27: Regression matrix of MAPs and Financial performance abilities

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.737[a]	.544	.539	.52646
2	.756[b]	.572	.566	.51104

Source: Field data, 2017

a. Predictors: (Constant), Performance evaluation, Budgeting, Costing

b. Predictors: (Constant), Performance evaluation, Budgeting, Costing, Decision support systems

As can be observed from the table 4.27, predicator (a) shows the multi-regression effect of costing, budgeting, performance evaluation and decision support systems with a (53.9%) on financial performance. The remaining percentage of (46.1%) can be attributed to other factors not part of the study.

Predicator (b) shows the multi-regression effect of MAPs including Costing, Performance evaluation and Budgeting on financial performance as moderated by sound management systems with a (56.6%) effect. The remaining percentage of (43.4%) can be attributed to other factors not part of the study.

4.4 Hypothesis Tested

The researcher aimed to test the H_1 – There were significant and positive relationships between selected contingent factors and the use of MAPs. H_1 – There was a significant and positive relationship between the use of MAPs and financial performance. Based on the results from the analysis, (Table 4.13), the Pearson correlation coefficient (r) of 0.675 which was highly significant at (0.000) indicated that there was significant and positive relationship between the use of MAPs and financial performance among SMEs from Nakawa Division contingent to other factors. The null hypothesis was rejected and alternative accepted. Findings suggest that there was significant evidence ($P<0.01$) at 99 per cent confidence interval that self–efficacy affects financial performance among SMEs from Nakawa Division.

CHAPTER FIVE

SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The purpose of the study was to examine the impact of managerial accounting practices on financial performance in small and medium enterprises in Uganda, a case study of Britania Alied Industries (Nakawa Division). This chapter presents the summary of the study findings, discusses results on hypotheses, draws conclusions and gives recommendations. It further gives the limitations and the areas for further research.

5.1 Summary of the Study Findings

This subsection gives the summary of the study objective by objective. The overall findings revealed that MAPs significantly determined Decision support systems of SMEs in Uganda.

5.1.1 Costing, budgeting, Performance evaluation, decision support system and financial performance among SMEs in Uganda

The results presented in the previous chapter four revealed a positive relationship overall (.675**) between costing, budgeting, performance evaluation and decision support systems and financial performance with a (45.4%) variance between the two variables. The following can be summarized that most SMEs (74.0%) used Costing, budgeting, Performance evaluation, decision support system and financial performance (77.0%) towards financial performance.

5.2 Discussion

This subsection discusses the findings of the study objective by objective.

5.2.1 Costing, budgeting, performance evaluation and decision support systems and financial performance among SMEs in Uganda

Costing was the conviction in personal abilities to either personally or together with others create a business venture. Results presented in chapter four reveal a positive relationship between costing, budgeting, performance evaluation and decision support systems and financial performance where the SMEs were found to deploy appropriate MAPs principles and qualified staffs. This was in line with the positive numerous responses that were obtained during the data collection.

5.3 Conclusions

This subsection gives the conclusion drawn from the study objective by objective.

From the earlier discussions held, it was found out that Costing, budgeting, performance evaluation and decision support systems were twined with financial performance and these were inseparable. Based on this, the following can be concluded. Budgeting processes help the process of financial performance although some organizations do not deploy it to the extent they ought.

Consequently, lesson learnt was: SMEs consistent use of Costing, budgeting, performance evaluation and decision support systems processes, leads to better financial performance.

5.4 Recommendations

This subsection makes the appropriate recommendations from the study. The following recommendation was made as per the findings:

To enhance financial performance in SMEs, management and cost accountants should use costing, budgeting, performance evaluation and decision support systems domains of MAPs in their operations.

5.5 Limitations of the study

In this study, the researcher encountered a limitation some of the targeted respondents being reluctant to fill the questionnaires. However, this was overcome by convincing respondents to receive and fill hardcopy questionnaires which were delivered by the researcher or trained research assistants.

The research was carried out in a small geographical area (Nakawa Division) and therefore information obtained reflected Nakawa Division as an urban business centre, yet situations may be different elsewhere. This may have an effect on generalizability of the research findings.

Lastly, the research encountered a limitation of time and financial resources. However, they were overcome through being efficient and effective on the usage of the non-renewable time resource and the usually limited financial resources.

5.6 Contributions of the study

The most significant contribution of the study was the awareness of the impact of MAPs (Costing, Budgeting, Performance evaluation and decision support systems) and financial performance of SMEs since the study found out that there was a significant positive relationship between study variables. Therefore, SMEs can use the recommendations to improve their performance.

Secondly, the study also has helped to develop a new body of knowledge about MAPs affecting financial performance among SMEs in a developing country context like Uganda.

5.7Areas for further research

Due to the time and financial constraints, the study centered on MAPs affecting financial performance among SMEs in an urban business hub. However, SMEs financial performance could be impacted by other factors not covered by the study. Therefore, other studies need to be conducted on the impact of MAPs on financial performance among SMEs from all urban and rural setups.

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APPENDICES

APPENDIX I: Questionnaire

Title: **The impact of managerial accounting practices on financial performance in small and medium enterprises**

Dear respondent,

This was an academic research about **the impact of managerial accounting practices on financial performance in small and medium enterprises** (SMEs) in Uganda. It was being carried out as a partial fulfillment for the requirements of the award of a Bachelor of Business Administration of Kampala International University. As one of the respondents, your opinions were very important to this study. The information provided only be used for academic purposes and was treated with utmost confidentiality.

The researcher requests you to spend a few minutes of your time and answer the questions that were in this questionnaire. Your co-operation was highly appreciated.

Thank you very much for your co-operation and time in advance.

BACKGROUND

1. Job /Title /Rank.....
2. Gender: Male [1] Female [2]
3. Age of respondents

18-25 [1] 26-33 [2] 34-41 [3]

42-49 [ ] 50-57 [ ] 58-Above [ ]

4. Educational level

O-level [ ] A-level [ ] Diploma [ ]

Degree [ ] Masters degree [ ] PhD [ ]

5. For how long have you been working with Britania Allied Industries?

Less than 1 year [ ] 1-3years [ ]

4-6years [ ] 7 years and above [ ]

This questionnaire has 5 sections.

Section 1: Profile of the firm

1. Years of operations/business

1-3 years [ ] 4-10 years [ ] More than 10 years [ ]

2. Manufacturing activities (sector)

Furniture [ ] Rubber and plastic [ ]

Food, and beverage [ ] Chemicals & chemical Products [ ]

Non-metallic mineral products [ ] Basic Metals [ ]

Others (Please specify) .....

3. Number of employees

0 – 4 [ ] 51 -150 [ ] 5 - 50 [ ] More than 150 [ ]

4. Annual sales turnover

Less than UGX 250,000 [ ] UGX 5.0 to RM 10 million [ ]

GX 250,000 - UGX 1.0 million [ ] GX 10 million - UGX 25 million [ ]

UGX 1.0 - UGX 5.0 million [ ] More than UGX25 million [ ]

Section 2: Extent of the use of management accounting practices

Part A: Costing system

5. Do you use a costing system in your firm? (Please tick in the appropriate box)

Yes [ ] No [ ]

If yes please continue to question number 6 and onwards. If no please proceed to part B (question 8).Please use the following scale for questions 6 and 7. Please circle your answer.

Never	Rarely	Occasionally	Frequently	Very Frequently
1	2	3	4	5

6	Please indicate the extent to which the following cost collection systems				
Job Costing	1	2	3	4	5
Batch Costing	1	2	3	4	5
Contract Costing	1	2	3	4	5
Process Costing	1	2	3	4	5

7.	Please indicate the extent to which the following costing systems were used in your firm				
Absorption Costing	1	2	3	4	5
Variable Costing	1	2	3	4	5
Variable & Absorption Costing	1	2	3	4	5
Activity based Costing	1	2	3	4	5

Part B: Budgeting system

8. Do you use a budgeting system in your firm? (Please tick in the appropriate box)

Yes [ ] No [ ]

If yes please continue to question number 9 and onwards. If no please proceed to the part C (question 12).

Please use the following scale for questions number 9 to 11. Please circle your answer.

Never	Rarely	Occasionally	Frequently	Very Frequently
1	2	3	4	5

9.	Please indicate which budgets were prepared.				
Sales budget	1	2	3	4	5
Purchasing budget	1	2	3	4	5
Production budget	1	2	3	4	5
Cash flow budget	1	2	3	4	5
Financial position budget	1	2	3	4	5

10.	Please indicate the frequency of budgets preparation.				
Monthly	1	2	3	4	5
Annual budget	1	2	3	4	5
Continuous/rolling budgeting	1	2	3	4	5

11.	Please indicate the extent to which these budgets were employed.				
Flexible budget	1	2	3	4	5
Incremental budgeting	1	2	3	4	5
Zero-based budgeting	1	2	3	4	5

Part C: Performance evaluation system

12. Do you use a performance evaluation system in your firm? (Please tick in the appropriate box)

Yes [ ] No [ ]

If yes please continue to question number 13 and onwards. If no please proceed to part D (question 14).

Please use the following scale for questions number 13. Please circle your answer.

Never	Rarely	Occasionally	Frequently	Very Frequently
1	2	3	4	5

13. Please indicate the extent to which these measure of performance evaluation were used.					
Financial measures					
Operating income	1	2	3	4	5
Return on investment	1	2	3	4	5
Variance analysis	1	2	3	4	5
Sales growth	1	2	3	4	5
Cash flows					
Non-financial measures					
Number of customer complaints	1	2	3	4	5
Survey of customer satisfaction	1	2	3	4	5
Number of warranty claims	1	2	3	4	5
On-time delivery	1	2	3	4	5
Manufacturing lead time/cycle time	1	2	3	4	5
Defect rate	1	2	3	4	5
Employee turnover	1	2	3	4	5
Absentee rates	1	2	3	4	5

Part D: Decision support system

14. Do you use decision support system in your firm? (Please tick in the appropriate box)

Yes [ ] No [ ]

If yes please continue to question number 15 and onwards. If no please proceed to part E (question 16).

Please use the following scale for questions number 15. Please circle your answer.

Never	Rarely	Occasionally	Frequently	Very Frequently
1	2	3	4	5

15. Please indicate the extent to which these analysis were used in your firm.					
Short-run analysis					
Break-even analysis	1	2	3	4	5
Stock control model	1	2	3	4	5
Product profitability analysis	1	2	3	4	5
Customer profitability analysis	1	2	3	4	5
Long-run analysis					
Payback	1	2	3	4	5
Accounting rate of return	1	2	3	4	5
Net present value	1	2	3	4	5
Internal rate of return	1	2	3	4	5

Part E: Strategic Management Accounting

16. Do you use strategic management accounting in your firm? (Please tick in the appropriate box)

Yes [ ] No [ ]

If yes please continue to question number 17 and onwards. If no please proceed to section 3, part A (question 18). Please use the following scale for questions number 17. Please circle your answer.

Never	Rarely	Occasionally	Frequently	Very Frequently
1	2	3	4	5

17. To what extent do you employ the following practices					
Target costing in the design of new products?	1	2	3	4	5
Strategic costing in determining the firm's strategy?	1	2	3	4	5
An analysis of the costs incurred in each of the activities in the firm's value chain?	1	2	3	4	5
Monitoring the costs that occur across stages of product development? *	1	2	3	4	5
Taking into account any strategic factors when setting price decision? **	1	2	3	4	5
The systematic collection of data on competitors'price reaction, demand reaction, and market position?	1	2	3	4	5

*for example costs of installation, operation, support, maintenance and disposal.

** for example factors: competitor price reaction, elasticity, market growth, economies of scale, and experience.

Section 3: Factors which affecting the extent of the use of management accounting practices

Part A: Market competition

Please use the following scale for question 18. Please circle your answer.

Not intense at all	Not intense	Slightly intense	Intense	Very intense
1	2	3	4	5

18	How intense was competition for the firm's main product/product lines?	1	2	3	4	5

Part B: Qualified internal accountant

Please tick in the appropriate box for question 19 and 20.

19. Do you employ any accounting staff?

If yes, please continue to question 20 and onwards, if no please proceed to Part C (question 21)

20. Please indicate the highest qualifications of your firm's internal accountant.

PMR/SRP [ ] Bachelor Degree in Accounting/Finance [ ]

SPM[ ] ACCA [ ]

Others (please specify) .....

Part C: Owner/manager participation

Please use the following scale for question 21. Please circle your answer.

Not at all	Low Extent	Moderately Extent	Highly Extent	Very Highly Extent
1	2	3	4	5

Not at all 1 Low extent 2 Moderate Extent 3 High Extent 4 Very High Extent 5

21	To what extent did your owner/manager participate in the development of management accounting practices for your firm?	1	2	3	4	5

Part D: Technology

Please use the following scale for question 22. Please circle your answer.

Not used	Low use	Moderately used	Highly Used	Widely Used
1	2	3	4	5

22. Please indicate the extent of use of the following technologies were used in the organisation.					
Flexible manufacturing system	1	2	3	4	5
Computer numerically controlled machines	1	2	3	4	5
Others (Please Specify)	1	2	3	4	5

Section 4: Performance of the firm

Please use the following scale for question 23 and onwards. Please circle your answer.

Decreased significantly	Decreased	No change	Increased	Increased significantly
1	2	3	4	5

23. During the last three years, in your opinion how do you see the following					
Level of productivity	1	2	3	4	5
Product quality	1	2	3	4	5
Numbers of Delivery on time	1	2	3	4	5
Sales growth rate	1	2	3	4	5
Operating profit growth rate	1	2	3	4	5
Cash flow growth rate	1	2	3	4	5

Section 5: The functions of management accounting

Please use the following scale for question 24. Please circle your answer.

Strongly disagree	Disagree	Slightly agree	Agree	Strongly agree
1	2	3	4	5

24. In your firm, management accounting practices have helped your management in:					
Planning the future strategies, tactics and operations	1	2	3	4	5
Controlling current activities	1	2	3	4	5
Measuring and evaluating performance	1	2	3	4	5
Optimizing the use of firm's resources	1	2	3	4	5
Reducing subjectivity in decision making process	1	2	3	4	5
Improving internal and external communication	1	2	3	4	5

For any additional information that you feel was relevant for this research and not included in the above sections, please feel free to add it down here or on a separate sheet of paper.

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Thank you very much for your time and response.

APPENDIX II:

Guide for practicing business graduates

1. Are you the owner or partner or employee in this business?
2. How did university education enhance your ability(ies) to establish and operationalize new ventures?
3. Which elements of Costing helped you in starting up this business? [beliefs, attitudes, intentions, (or other elements, please specify)].
4. How did you identify, develop and exploit the opportunity? [Admittance to information, effectual use of information, actively searching for opportunities, (or other ways, please specify)].
5. How did you acquire the resources used to start the business? (Financial, human, informational, social skills and social networks).
6. What type of business did you establish? (Sole proprietorship, partnership private limited liability company, public limited liability company).
7. How did these government policies affect your decision to establish the business? [Positive policies towards business, negative policies towards business. Mention any examples of government policies that affected your decision to establish the business and how those policies affected that decision to establish the business]

Thank you very much for your time and may God bless you.

APPENDIX III:

Documentary Review Checklist

This include documents from: NAKAWA DIVISION Website, NAKAWA DIVISION academic registrar's departmental documents.

NAKAWA DIVISION Human Resource departmental documents, Uganda Registration Services Bureau online documents

Kampala City Trader's Association.

Documents was reviewed to establish:

1. Names, telephone and email contacts.
2. Whether university programmes promote Costing, Budgeting, and acquisition of essential skills through the programme specific competences, learning outcomes, content, teaching and learning methods as well as the assessment and examinations set.
3. How Costing helped practicing business graduates in establishing ventures.
4. How practicing business graduates identified, developed and exploited the opportunities.
5. How practicing business graduates acquired the resources used to start the business.
6. Type(s) of business practicing business graduates established.
7. Government policies that affected practicing business graduates' decisions to establish the businesses.

APPENDIX IV:

Observation Checklist

Practicing graduates were observed on:

1.	Type of business	Sole Proprietorship	Partnership	Private Limited Liability Company	Public Limited Liability Company
2.	Size of business	Small	Medium	Large	
3.	Type of stock	First moving consumer goods	Hardware	Other specify:	
4.	Number of branches	Below 5	5 – 10	Above 10	
5.	Number of employees	Maximum of 4	Above 4 but below 50	Above 50	
6.	Initial investment	Below 1 million	1 – 10 million	Above 10 million	
7.	Total annual turnover	Maximum of UGX. 12 Million	Maximum of UGX. 360 Million	Above 360 million	
8.	Trading license fees paid	Below UGX. 100,000	100,000 – 200,000	Above 200,000 million	
9.	Taxes registered for	Income tax	VAT	Excise duty	Other: Specify

APPENDIX: V

Proposed Budget

No.	ITEMS	AMOUNT
1	Reams of papersA4 and Pens	35,000
2	Kaki envelops, internet surfing and Transport	150,000
3	Research Assistants and Communication	100,000
4	Typing and printing	150,000
5	Final Copy and Binding	68,000
6	Miscellaneous	50,000
	TOTAL	553,000

APPENDIX VI:

INTRODUCTORY LETTER

KAMPALA INTERNATIONAL UNIVERSITY

Ggaba Road, Kansanga* PO BOX 20000 Kampala, Uganda
Tel: +256 777 295 599, Fax: +256 (0) 41 - 501 974
E-mail: mugumetm@gmail.com,
* Website: http://www.kiu.ac.ug

COLLEGE OF ECONOMICS AND MANAGEMENT
DEPARTMENT OF ACCOUNTING AND FINANCE

JUNE, 2nd 2017

To whom it may concern

Dear Sir/Madam,

RE: INTRODUCTORY LETTER FOR LOGOSE ANNET MARY, REG NO. BBA/44294/143/DU

This is to introduce to you the above named student, who is a bonafide student of Kampala International University pursuing a Bachelor's Degree in Business Administration, Third year Second semester.

The purpose of this letter is to request you avail her with all the necessary assistance regarding her research.

Topic: - **THE IMPACT OF MANAGERIAL ACCOUNTING PRACTICES ON FINANCIAL PERFORMANCE IN SMALL AND MEDIUM ENTERPRISES IN UGANDA.**

Case Study: - **BRITANIA ALLIED INDUSTRIES NAKAWA DIVISION.**

Any information shared with her from your organization shall be treated with utmost confidentiality.

We shall be grateful for your positive response.

Yours truly,

Dr. KIRABO KYEYUNE BOUNTY JOSEPH
HOD – ACCOUNTING & FINANCE
0772323344

APPENDIX VII:

LETTER OF AUTHORIZATION

BRITANIA ALLIED INDUSTRIES LTD
PLOT NO. M 247B, NTINDA INDUSTRIAL AREA, P. O. BOX 7518, KAMPALA, UGANDA
TEL: 256-41-4332000, FAX: 256-41-4505701, E-mail: bpl@dawda.co.ug

BRITANIA ALLIED INDUSTRIES LTD,

P.OBOX 7518,

KAMPALA UGANDA,

DATE: 23\06\2017.

Dear Madam

RE: ACCEPTANCE LETTER FOR THE RESEARCH IN BRITANIA ALLIED INDUISTRIES

Logose Annet Mary, student from KIU pursuing a bachelors of business, majoring in accounting and finance has been allowed to carry out her research from our company.

Yours faithfully.

.....

Chief Accountant.