

Analysis of Management Accounting Function in Entrepreneurial Orientation Culture in Private Manufacturing Firms in Kenya

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Abstract

The researcher analysed the management accounting function and the entrepreneurial orientation culture in Kenya focusing on the private manufacturing sector firms in several part across the country. Entrepreneurship and the entrepreneurial culture are two inseparable terms and cannot be handled in isolation. It appears as if entrepreneurship has an important role to play in today's society as globalization as well as environmental changes is increasing (Landstrom, 2009; Lovstal, 2011). Organizations confronted with fierce global complexity tend to regard entrepreneurship as a way of staying competitive and alert (Lovstal, 2011). However most often researchers avoid the deeper side of this aspect due to its complexity and continuous growth and development which mark this sector of economy which is ever changing. Most entrepreneur businesses fail within the first three years and the others by the fifth year they are no more. Series of research has been done around this area but very few have been done in line with this area. Thus the objective of the study was to have an in-depth analysis of the impact of management accounting function on entrepreneurial orientation culture (performance) in Kenya specifically targeting private manufacturing firms. The study employed a pilot study alongside a longitudinal and cross sectional research design. This design was considered appropriate as it enabled the researcher carry and an in-depth analysis of the variables which had not been realized, in spite of using a lot of resources in formulating them and this is because of the research designs and data types used. The sample was drawn from several manufacturing firms in Kenya. The method of sampling used was stratified random sampling and purposeful sampling to achieve desired representation from the selected organizations. The study used Secondary data and utilized inferential analysis using the E-views software of statistical analysis version 7. The study found out that strategic variance analysis which had an increase of 0.000231 for every one million units and communication technology with an increase of 0.000152 for every one million units affect entrepreneurial orientation culture positively as expected and confirms the previous studies, while investment which had a decrease of 0.000136 for every one million units and pricing decisions with an increase of 0.000203 for every one million units give mixed results on the same. The study findings on the mixed results was the variables depended on how firms treated these functions in their day to day running of the entities. The study concludes that management accounting plays a very important role in entrepreneurial culture and business growth though a number of enterprises do not practice this function or do not consider their components like pricing decisions and investment hence giving mixed results in their operations. Firms which take these variables (functions) into consideration in their operations more than often realize consistent growth path and are able to track their growth from period to period. The study recommends that firms from small and micro enterprises and corporate entities should embrace management accounting and its functions as an important tool of business growth rather than a terminology or a practice in corporate entities as a public relation instrument which SMEs shy away from. The study recommends further research in public sector enterprises and non-manufacturing firms to establish the effect of these variables on entrepreneurial culture and other factors which this study may not have captured and could be key in explaining this relationship.

Keywords: Management Accounting function, Entrepreneurial Orientation Culture, Private Manufacturing Firms in Kenya.

1.0 Background Information

Today, accounting is called "the language of business" because it is the vehicle for reporting financial information about a business entity to many different groups of people. Accounting that concentrates on reporting to people inside the business entity, is called management accounting and is used to provide information to employees, managers, owner-managers and auditors. Management accounting is concerned primarily with providing a basis for making management or operating decisions (Karanja, 2012). According to CIMA (2014), management accounting is a combination of accounting, finance and management with the leading edge techniques needed to drive successful businesses. For as long as civilization has been engaging in trade, methods of record keeping, accounting and accounting tools have been invented. Marla Matzer Rose, author of Accounting & Auditing History writes that the earliest known writing discovered by archaeologists has, when translated, been found to be records of tax accounting. Such writings have been found on clay tablets from Egypt and Mesopotamia from as early as 2000 to 3300 B.C., as humans formed governments, accounting became a necessity.

In the current civilization, the field of entrepreneurship has attracted a lot of attention stretching to a small

extent into the recent past (Wiklund, 2009). Entrepreneurial behavior underlies the inclination to undertake invention and innovation, including the creation of something new as well as the distribution and adoption of the new throughout in a given society. Entrepreneurial orientation has received substantial conceptual and empirical attention, representing one of the few areas in entrepreneurship research where a cumulative body of knowledge is developing. According to Covin and Lumpkin (2011) entrepreneurial orientation refers to the sustained exhibition of firm-level entrepreneurial behavior. Entrepreneurial orientation is a construct of central interest in management studies since the seminal work of Miller (1983) and its importance to firms' survival and prosperity (Lumpkin & Dess, 1996; Rauch, Wiklund, Lumpkin, & Frese, 2009) opens up a quest for the identification of its determinants (Covin & Slevin, 1991; Zahra, 1993). In particular, given that entrepreneurship is recognized to be a process of opportunity identification and exploitation carried out by those individuals holding managerial positions (Shane, 2010), where much effort has been devoted to the identification of top brass of the leadership.

Entrepreneurship has attracted interest in recent years from politicians, business people and employees. It appears as if entrepreneurship has an important role to play in today's society as globalization as well as environmental changes is increasing (Landstrom, 2009; Lovstal, 2011). Organizations confronted with fierce global complexity tend to regard entrepreneurship as a way of staying competitive and alert (Lovstal, 2011).

The interest in entrepreneurship has also been reflected in the academic debate (Lovstal, 2011). As interest and research within the entrepreneurial field have increased, the aim and direction of the research within the entrepreneurial field have increased. In today's studies there is more focus on the entrepreneurial process within organizations than on entrepreneurship by individuals (Stevenson and Jarillo, 2010).

The characteristics of entrepreneurship are not easy to distinguish because research and literature within the entrepreneurial field do not give a homogeneous definition. This has been the largest obstacle of creating a conceptual framework for the field of entrepreneurship. As mentioned above, most researchers have defined the field in terms of who the entrepreneur is and what he/she does. This term does not include the presence of lucrative opportunities and the presence of enterprising individuals (Ventkataraman, 2009). Schumpeter (2010) isolated entrepreneurially driven innovation in products and processes as the crucial engine driving the change process. Therefore, the absence of entrepreneurship from our collective theories of markets, firms, organizations and change makes our understanding of the business landscape incomplete (Vantkaramaran, 2009). One can argue that the lack of such a framework inhibits a thorough investigation of the importance of accounting systems in organizations with different strategic directions.

Wiklund (2009) contends that renewal of the economic system is important for a healthy economic development. He considers further that it is essential that old ideas are replaced by new ones and that old products, services and processes are substituted by those which are better and more effective. This implies that entrepreneurship is a key to economic development. For several firms, entrepreneurship and development of new products has become a central dimension in their strategies. The processes and increased pressure of new products development, which includes greater emphasis on first mover advantages, fast product introduction, more demanding product functionality, and shortening life cycles, increases the importance of controlling and coordinating this process. This matter has been stressed by academicians and practitioners (Davila, 2010). Not only is it important for a firm to support the process of new product development, but also to utilize old ideas. This can be done by well structured management and accounting systems, which combine new and old ideas and create a balance that bring out the best in both.

Although, discussed in a number of different settings, there are contexts in which the issue of entrepreneurship has not been addressed. One of these contexts is the field of accounting. As a matter of fact, it seems to exist as an avoidance of entrepreneurship in the accounting literature while, at the same time, accounting seems to be avoided in the entrepreneurship literature (Olson et al 2011). Even if some entrepreneurship researchers have discussed the issue, few have tried to observe how management accounting actually works within an organization with different levels of strategic orientation (Langfield and Smith, 2009). However, there are adjacent fields that have been more thoroughly explored. One of these, that should have considerable bearing on entrepreneurship, is the field focusing on strategic orientation (Miller and Friesen, 2012).

The interest in research of the relationship between strategic management control has increased significantly in recent years (Langfield and Smith, 2007). Nevertheless, there is an absence of a common point of reference for classifying business strategy. Different schemes of classification have been used and since previous studies have only considered one or several strategic variable, it is difficult to form an opinion on how strategy has influenced the design and use of management accounting systems. Several researchers believe that it is becoming more common for lower level employee to be actively involved in activities that are of strategic significance. This emphasizes the importance of informal control as an important aspect of accounting and management and the effectiveness of formal control may be dependent on the nature of the informal control.(Langfield-Smith,2007;Chenhall,2009). It is also a fact that interest has increased in studying accounting and management in different organizational contexts with different strategies orientation(Langfield-Smith,1997).With this in mind, and as a majority of prior studies within strategy and management accounting

have focused on formal attributes of control,(Simon,2009; Langfield, 2007) one can argue that in order to understand management accounting in different strategic orientation, it is important to include and capture more informal and modern attributes of control keeping the previous discussion in mind .

Scapens and Brownwich (2011) state that the traditional boundaries of the business are being challenged both, internally with new organizational structures and externally with new organizational forms. These changes have potentially important implications for the nature and role of management accounting. Scapens and Brownwich (2011) therefore suggest that more research on management accounting within and beyond new organizational forms needs to be carried out. Researchers advocate that entrepreneurship is not linked to a particular type of organizational context (Stevenson and Jarillo, 2010). They further advocate that management accounting systems are used in different ways depending on the strategy of the firm (Miller and Friesen, 2008). This fact highlights the opportunity of studying management accounting contexts, which have different entrepreneurial orientation.

An enterprising culture is ‘a commitment of the individual to the continuing pursuit of opportunities and developing an entrepreneurial endeavour to its growth potentials for the purpose of creating wealth for the individual and adding value to society’ (Kao 2003). Culture is important in any dimension of entrepreneurship as it determines the attitudes of individuals towards the initiation of entrepreneurship (Wortzel and Wortzel, 2009). The term “entrepreneurial culture” has become popular and widely accepted internationally and is an expression of an attitude towards commerce at a business level. It can be described as one in which a positive social attitude towards personal enterprise is prevalent, enabling and supporting entrepreneurial activity. According to Bateman (2007), those economies and regions which have flourished in the late 20th Century, have in common a business culture, which can be broadly described as “entrepreneurial”.

An entrepreneurial culture grows partly out of the current business environment of a country. Gordon (2009) significantly attributes this to historical experiences, beliefs, attitudes and values of the society. Of equal significance for entrepreneurial culture are the future hopes and aspirations of the society at large in a given country. At a basic level, entrepreneurship is viewed as a highly personalized activity. The entrepreneur is motivated to create a venture, which reflects their vision and ambitions, and is prepared to review and reorganize their social environment to make it materialize.

According to World Bank report (2012) Kenya is rated as the regional hub for trade and finance in East Africa attributable to the high level of entrepreneurship among Kenyans. Entrepreneurial success is simply a function of the ability of an entrepreneur to see business opportunities in the marketplace, initiate change and creates value through solutions. Entrepreneurs are widely recognized as the prime movers of economic development; the people who translate ideas into action.

In Kenya Entrepreneurship development is primarily aimed at youth in technical training institutions but is now being expanded to include the Universities. It involves introducing youth to entrepreneurship education with the aim of getting them to think about entrepreneurship and the role of business entrepreneurs in economic development. They also get an opportunity to analyze the difficult employment situation in Kenya and are encouraged to consider self-employment as a career choice. Stacked up against such a choice are many examples of business failures in the community, negative attitudes towards business, and misconceptions about what makes a business succeed (Nyokabi, 2012).

1.1 The Manufacturing Sector in Kenya

UNIDO (2012) and Awino (2007) point out that Kenya has the biggest formal manufacturing sector in East Africa and that this sector has grown over time both in terms of its contribution to the country’s Gross Domestic Product (GDP) and employment. In terms of employment generation, the sector is estimated to employ an average of 13 per cent of the labour force in the Kenyan formal sector. Manufacturing is one of the key activities of the economy that accounts for about 10 per cent of the Gross Domestic Product (GDP). It is evident from this trend that the sector makes an important contribution to Kenya’s economy (KAM, 2012). The average size of this sector for tropical Africa is 8 percent. Despite the importance and size of this sector in Kenya, it is still very small when compared to that of the industrialized nations (UNIDO, 2012; KIRDI, 2011). KAM (2012) statistics for Kenya’s economic performance according to sector (Appendix III) show that the sector contribute to a lesser extent to the Gross Domestic Product (GDP) as opposed to the other sectors, hence confirming UNIDO (2012) and KIRDI (2011).

The manufacturing sector contributes about 10 percent of the gross domestic product (GDP) (Economic Survey, 2013; UNIDO, 2012; Munyoki, 2007; KIRDI, 2009). During the year 2012, the manufacturing sector registered a growth rate of 3.1 percent which was a slower growth of 3.5 percent registered in 2011. The sector continued experiencing challenges that included high production costs, high costs of credit competition from imported goods and also uncertainties related to the 2013 general elections (Economic Survey, 2013). Economic Survey (2013) indicates that the total formal employment in the manufacturing sector increased by 2.3 per cent from 271.5 thousand persons in 2011 to stand at 277.9 thousand persons in 2012. The value of the output

increased by 2.6 per cent to Kshs. 1,042.2 billion during the review period. Total value added on the other hand increased by 8.3 per cent from Kshs. 292.4 billion in 2011 to Kshs. 316.7 billion in 2012. Industrial credit to the sector increased from Kshs. 270.8 million to Kshs. 473.3 million (Economic Survey, 2013; UNIDO 2012).

Further, Economic Survey (2012) shows that the overall sector posted mixed performance with majority of the sub-sectors showing positive growths. Key sub-sectors that registered positive growths included production of tobacco products; motor vehicles, trailers and semi-trailers, paper and paper products; basic pharmaceutical products; textiles; leather and related products; electrical equipment and machinery and equipment. The food industry which forms a major component of the sector registered a marginal decline. This was a result of reduced production of a number of products like processed milk and tea. Sales from Export Processing Zones (EPZ) on the other hand rose by 12.0 per cent to Kshs. 47.5 billion in 2012 while capital investment in EPZ rose by 28.7 per cent to stand at 34.1 billion in 2012 (Economic Survey, 2013).

Kenya Association of Manufacturers (2012) and the Economic Survey, (2013), point out that the removal of price controls, foreign exchange controls and introduction of investment incentives have, however, not resulted in major changes in the overall economy. In particular, they have not improved the manufacturing performance. Therefore it has been suggested that to build a self-sustaining industrial sector, it is necessary to establish strategic linkages within the domestic economy (Munyoki, 2007). Some efforts have to be made to promote strategic options among supply chains so as to enhance spread effects of industrial growth and to facilitate transfer of technology, skills and growth of small and medium scale sub-contractors (Awino, 2007; Kandie, 2009). Growth in the sector was, however, impeded by depressed domestic demand, increased oil prices and transport costs. Rising operating costs mainly as a result of higher power costs coupled with deteriorating road and rail networks further dampened growth in the sector. The growth in manufacturing sector was mainly attributed to the rise in output of the agro-processing industries. These included sugar, milk, grain milling, fish, tea, oils and fats processing sub-sectors. Other key sub-sectors of manufacturing that performed well in the 2009/2010 financial year were: manufacture of cigarette, cement production, battery (both motor vehicle and dry cells), motor vehicle assembly and production of galvanized sheets (KAM, 2002; 2009).

Awino (2010) and Kandie (2009) argue that, in 2005 the sector showed signs of recovery and that a growth of 2.7 percent in 2004 was recorded compared to 1.4 percent in 2003 (Economic Survey, 2005). The recovery is attributed to government imposing legislation to curb restructuring practices that disadvantaged local manufacturers and zero rating excise duty and related taxes. In addition, the African Growth Opportunity Act (AGOA) initiative and the Common Market for Eastern and Southern Africa (COMESA) trading arrangements continue to impact positively on the manufacturing sector (Economic Intelligent Unit, 2007). The sector grew by 6.9 percent in 2006 against 5.5 percent in 2005 and grew by 10 percent in 2007 (Economic Survey, 2010). The main components of this sector include food processing such as cereal milling, meat, dairy, sugar, fruits and vegetables; chemicals, beverages, tobacco, textile, paper, metal and electronic. The Manufacturing activities in Kenya are mainly concentrated in the main urban centres of Nairobi, Thika, Mombasa, Nakuru, Eldoret and Kisumu due to good infrastructure and markets (Kandie, 2009; Economic Survey, 2008; KAM, 2009).

The manufacturing industry in Kenya can be classified under three main sectors, namely, the agro-based industrial sector, engineering and construction industrial sector and the chemical and mineral industrial sector (KAM, 2012; Awino, 2007; GOK Vision 2030). However, K'Obonyo and Odera, (1995) and K'Obonyo, (1999) categorize the three major classifications into two: (i) agro-based and (ii) non-agro-based. The agro-based industrial sector had 45% of the firms in the industry while agro-based industrial sector contribute 55%. This study found that the agro-based industrial sector in Kenya consists of seven sub-sectors and provides the bulk (68 per cent) of value added from the manufacturing industry while the 32% was from the non-agro based industry. K'Obonyo (1999) argue that the agro-based industrial sector has developed on the basis of traditional domestic resource activities. The major challenges faced by this sector are related to the quantity, quality and price of raw materials mostly produced by small scale farmers (K'Obonyo and Odera, 1995; K'Obonyo, 1999). The seven sub-sectors that form the agro-based industrial sector are food processing, animal feeds, beverages and tobacco, miscellaneous food products, tanneries and leather products, woods and wood products and pulp and paper (Economic Survey, 2010; K'Obonyo and Odera, 1995; KAM, 2012; Awino, 2007; Kandie, 2009).

Entrepreneurship in Kenya is a highly risky and highly rewarding. Entrepreneurs make up a very large portion of the Kenyan economy. Kenya being the most entrepreneurial country in Eastern and Central Africa. However, majority of the entrepreneurs are small independent business people who do not have a management and accounting background trying to make a living to survive. On the other hand, the sector also houses a significant number of entrepreneurs (Nyasaka, 2012). It is in this regard that this study seeks to investigate the relationship between entrepreneurial orientation (EO) culture and management accounting in private manufacturing firms in Nairobi.

1.2 Statement of the Problem

Entrepreneurial culture is increasingly becoming critical for success in all kinds of organizations. Yet, like the

management of any other input, process and output, it requires configuration with management accounting function, without which an organization is unlikely to be competitive in terms of organization, management and productivity. Over the past, no studies have been carried out to establish the relationship between management accounting function and entrepreneurial culture (performance). Due to this, there is a gap in terms of research done to explore this connection linking the management accounting function and the entrepreneurial orientation culture (performance).

Research on and concern with management accounting function in relation to entrepreneurial orientation, has accelerated over the last two decades (Simon, 2009). Calls for research in this area and the general aspects of entrepreneurship have been made by several scholars including Lovstal (2011) and Stevenson and Jarillo (2010) who have expressly called for research on and documentation of management accounting and its effect on entrepreneurial orientation culture. Previous research works have failed to build upon each other's results and measurements of key variables are typically weak (Wiklund & Shepherd, 2009).

Most of the studies conducted have particularly focused on the service industry leaving other sectors out and in particular the manufacturing sector which is very important in any economy especially growing economies like Kenya. However, no systematic study has been undertaken to show the relationship between management accounting function and entrepreneurial orientation culture (performance) in manufacturing firms. In this respect for both the practitioners and academicians, it was of necessity to critically analyze the effect of management accounting function on entrepreneurial orientation culture (performance) of private manufacturing firms in Kenya.

2.0 Literature Review

The researches pursued within the field of accounting, management and entrepreneurship gives no explicit knowledge of how accounting and management are used and designed in entrepreneurial organizations (Olson et al, 2009). Even if some entrepreneurship researchers have discussed the issue, few have tried to observe how management accounting actually works within an organization with different levels of entrepreneurial orientation (Langfield and Smith, 2009).

When reviewing the empirical studies published in the above mentioned fields, it may be concluded that very few focus on the relationship between accounting, management and entrepreneurship (Young, 2009). However, there has been little research done in fields close at hand and these studies may be useful for understanding the context of entrepreneurship. Research considered being relevant in relation to entrepreneurial orientation and the design and use of management accounting is research that is focused on strategic orientation.

Strategy has been operationalized in many different ways in accounting and management research. The basic concepts and frameworks developed in the strategy literature have not always been widely adopted in these studies and the multidimensional nature of strategy is seldom recognized. These problems can lead to misspecification of the research design and may also affect the research findings differently (Langfield and Smith 2009). Below the various dimensions of strategy studied by different researchers presented, followed by their findings related to accounting and management.

Mintzberg (2009) has described strategy as a pattern of decisions about organization's future. According to Miles and Snow (2009), this takes on meaning when it is implemented through the organization's structure and process. Miles and Snow (2009) have described three different organizational types – defenders, prospectors and analyzers. The characteristic for each type derive from the rate of change in products of market development. Defenders are characterized by narrow product range and undertake little product or market development. There are some functions which limit organizational success for defender. These functions are finance, production and engineering with little emphasis on marketing research and development. The functional organizational structure for defenders reflects the specialization of products, markets and technology. Prospectors on the other hand, are described as creators of change, continually searching for market opportunities. Functions, such as marketing and research and development, dominate finance and production, with the consequent of less importance of efficiency and profit of performance, and rather large importance on maintaining industry leadership in product innovation. Analyzers combine the strongest characteristics of defenders and prospectors. According to Langfield and Smith (2009), this way of observing strategies focuses on typology.

Miller and Friesen (2012) use the extent of product innovation within a firm, when categorizing them as either conservative or entrepreneurial. The differences between the two types of firms, according to Miller and Friesen, are discovered when looking at the degree of environmental hostility, organizational differentiation, environmental heterogeneity and technocratisation. Entrepreneurs pursue innovation aggressively, whereas conservative firms reluctantly engage in innovations.

Miller (2010) says that "an entrepreneurial firm is one that engages in product-market innovation, undertakes risky ventures, and is first to come up with proactive innovations, beating competitors to the punch." Miller created a measurement instrument to measure the level of entrepreneurial strategy within an organization, which was a contribution to the study by Miller and Friesen (2011), where they argue that entrepreneurial

organizations try to obtain a competitive advantage by routinely making dramatic innovations and taking challenging risks. Management accounting systems were used to warn against excessive innovation. On the other hand, conservative firms engage in innovation with reluctance. The measurement developed by Miller (2010) linked the essential elements of environmental and strategic variables with a firm's entrepreneurial activities. These elements were the organization's actions regarding to innovation, risk taking and proactiveness. Focusing on these factors emphasizes the process of entrepreneurship rather than the actors behind it. Miller's conceptualization has been used often, when examining firm-level entrepreneurship (Zahra et al, 2009). However, Wiklund (2009) means that Miller's measurement instrument measures accomplished activities and present attitudes rather than actual behavior. This being so, strategic orientation and the concept of entrepreneurial orientation seem to be measured, rather than entrepreneurial strategy (Wiklund, 2009).

Porter (1985) has expressed a classification of strategy in terms of cost leadership, differentiation and focus, each of which will sustain a competitive advantage within an industry, but in different ways. Cost leadership implies that the firm aims to become the lowest-cost producer in its industry, by taking advantage of economies of scale. Firms with a differentiation strategy put weight on providing products with attributes highly valued by its customers, e.g. high quality. A firm that focus on a segment of the market with special needs has a focused strategy (Langfield and Smith, 2009).

Strategies characterized by a conservative orientation, trustees, defenders, harvest and cost leadership, evidently shown by researcher, use specialized and formalized work, centralized control systems, simple-coordination mechanisms and attention directing to problem areas. Strategies characterized by an entrepreneurial orientation, promoters, prospectors, build and product differentiation are likened to a lack of standardized procedures, decentralized and result oriented evaluation, flexible structures and processes, complex coordination of overlapping teams, and attention directing to curb excess innovation, according to researchers of the field (Langsfield and Smith, 2009).

Given the quantitative approach of the studies on strategy and management accounting, various measuring instruments have been used in operationalising the variables in the studies. This fact is probably one of the principal reasons for the conflicting findings in this area of research (Brown et al, 2011). Studies based on strategy-classification schemes of Miles and Snow (2008), Porter (1985) and Gupta and Govindarajan (2009) present the relationship between strategy and management control. A limited selection of earlier studies will be brought up in this section. The findings though, are inconsistent and suggest a number of contradictory conclusions (Langsfield-Smith, 2009; Brown et al, 2011).

As early as 1972, Khandawalla published a study on the relationship between the design and use of formal management accounting system and the intensity of competition. The study shows, that with increased competition there was more extensive reliance on formal systems of control. He also argued that intense product competition may require complex organizational forms. Langsfield and Smith (2007) argues that organizations facing intense product competition are likely to be those that follow strategies of a more entrepreneurial oriented kind. These findings were also corroborated by Kamm (2000), who concluded that formal control was greatest within firms that were oriented towards product innovation and market-innovation, that is to say entrepreneurial oriented firms.

There is some agreement among researchers that control and specific goals and budgets are found more important in firms characterized as being less entrepreneurial oriented than in firms characterized as being more entrepreneurial oriented. When it comes to incentive programs and performance evaluation, Simon (2009), Porter (1980), Gupta (1987) and Govindarajan (2008) found that awarded bonuses for the achievement of budget targets is more common for firms, which strategy characteristic is less entrepreneurial. Subjective performance evaluation was more appropriate for firms following a more entrepreneurial orientation.

Miles and Snow (2012) describe more entrepreneurial oriented firms as having difficulty implementing comprehensive planning systems. The control system focuses more on problem finding than problem solving. Flexible structures and processes may assist the organization to respond rapidly to innovation and creativity (Langsfield and Smith, 2009). The use of broadly defined jobs and the lack of standard operating procedures may encourage innovation. Therefore control may be decentralized and result oriented within firms that are more entrepreneurial oriented. Porter (1985) says more entrepreneurial oriented firms are relying on control to encourage creativity and innovation as well. Miller and Friesen (2012) state that it has been argued that firms, which follow a more entrepreneurially oriented strategy, require a control system that signals when productivity and efficiency have fallen and to signal when innovation needs to be curbed.

The studies made by Govindarajan (2009) and by Bruggeman and Van der Stede (2013) show findings, which are largely consistent. Both studies show, among other things, that business units, of a less entrepreneurial kind, resort more to tighter control with strict budget targets than do units with a more entrepreneurially oriented strategy. In comparison with the studies by Govindarajan (2009) and Bruggeman and Van der Stede (2009) the findings are similar. They show that more subjective performance monitoring followed from strategies associated with more entrepreneurially oriented firms. In other words, both Govindarajan (2009) and Bruggeman

and Van der Stede (2009) concluded that firms that are more entrepreneurially oriented deemphasize budget targets. Furthermore the budget was more often revised, and the reverse is applicable to firms that are less entrepreneurial.

Simons (2009) and Collins et al. (2009), however, unlike other studies, show that strategies linked with a less entrepreneurial orientation lead to loose control, while tight control was found in firms that are more entrepreneurially oriented. In other words, more entrepreneurial firms, in contrast to less entrepreneurial firms, use budgeting within the firm to a much greater extent (Collins et al, 2009). Simon also states that firms with higher entrepreneurial orientation emphasis forecasts more and frequent reporting and careful monitoring of revenues, while paying little attention to cost control.

According to Dent (2010), the looser control found that less entrepreneurially oriented firms were probably explained by the fact that cost control was provided by the production technology itself. The tight control in firms that are more entrepreneurially oriented was likely due to a desire to harmonize the pro-active culture with a more conservative view of the units opportunities for expansion.

2.1 Entrepreneurial Orientation Culture

Entrepreneurial orientation (EO) has its roots in the strategy making process (Mintzberg, 1973). Strategy making is an organization wide phenomenon that incorporates planning, analysis, decision making, and many aspects of an organization's culture, value system, and mission (Hart, 1992). Consistent with Mintzberg, Raisinighani and Theoret (1973) who noted that strategy making is "important, in terms of the actions taken, the resources committed, or the precedents set", EO represents the policies and practices that provide a basis for entrepreneurial decisions and actions. Thus, EO may be viewed as the entrepreneurial strategy-making processes that key decision makers use to enact their firm's organizational purpose, sustain its vision, and create competitive advantage.

Research within the field of entrepreneurship has a very long history with its roots in economics, but has developed into a multidisciplinary field. This has led to entrepreneurship being viewed from many different perspectives (Stevenson and Jarillo, 2010). Despite this fact, no common definition of entrepreneurship has been stated, but much knowledge within the field can be found (Landstrom, 2010; Lovstal, 2011 and Dergard, 2009). Entrepreneurship can be seen as an individual, social and economic phenomenon, which has been established in many firms (Dergard, 2009).

Venkataram (2009) emphasizes that entrepreneurship involves the nexus of two phenomenon; the presence of lucrative opportunities and the presence of enterprising individuals. He means that "entrepreneurship is about how, by whom, and with what consequences opportunities to bring future goods and services into existence and are discovered, created and exploited. Drucker (2010) further strengthens this argument by saying that entrepreneurship is an act of innovation that involves endowing existing resources with new wealth-producing capacity.

Brown et al., (2011) has developed an instrument that evaluates entrepreneurship in existing firms. The instrument is based on Stevenson's (2009) study, where entrepreneurial management is defined as a set of opportunities based on management practices. Stevenson (2009) contrasts entrepreneurial behavior with administrative behavior. Along the spectrum of behaviors between these extremes, promoter firms are placed at the entrepreneurial end and trustees at the administrative end. The promoter's sole intent is pursuing and exploring opportunities regardless of resources controlled, while the trustees strive to make the most efficient use of its resources pool. In order to operationalize Stevenson's theoretical reasoning, six-sub dimensions were identified by Brown et al.,(2011), which have high validity and reliability. These dimensions were labeled; strategic orientation, resource orientation, management structure, reward philosophy, growth orientation and entrepreneurial culture.

Entrepreneurship is an important variable and a cause that affects the management control system within a firm, although the evidence to support this claim is weak (Simon, 2009). Other possible variables that also affect management control systems are line of business, turnover, geographical location and size of the firm (Holme and Solvang, 2006). It is important to have in mind, that out of the previous mentioned influences of management accounting systems, the usage and design are important influences.

Entrepreneurship orientation culture in private manufacturing firms is the dependent variable in this study. It can be measured based on the various management practices in place ranging from strategic orientation, resource orientation, management structure, reward philosophy, growth orientation and entrepreneurial culture (Brown et al., 2011).

2.2 Strategic variance analysis

Variance analysis, also described as analysis of variance or ANOVA, involves assessing the difference between two figures. It is a tool applied to financial and operational data that aims to identify and determine the cause of the variance. In applied statistics, there are different forms of variance analysis. In project management, variance

analysis helps maintain control over a project's expenses by monitoring planned versus actual costs. Effective variance analysis can help a company spot trends, issues, opportunities and threats to short-term or long-term success.

Variance analysis is important to assist with managing budgets by controlling budgeted versus actual costs. In program and project management, for example, financial data are generally assessed at key intervals or milestones. For instance, a monthly closing report might provide quantitative data about expenses, revenue and remaining inventory levels. Variances between planned and actual costs might lead to adjusting business goals, objectives or strategies.

Relationships between pairs of variables might also be identified when performing variance analysis. Positive and negative correlations are important in business planning. As an example, variance analysis might reveal that when sales for product A rise there is a correlated rise in the sales for product B. Improved safety features for one product might result in sales increases. This information might be used to transfer this success to other similar products or firms.

An important type of prediction is business forecasting. It uses patterns of past business data to construct a theory about future performance. Variance data are placed into context that allows an analyst to identify factors such as holidays or seasonal changes as the root cause of positive or negative variances. In this study, the variable will be used to measure the variances across firms as an indicator of growth in terms of budgeting and consistency in the firms budgeting process.

2.3 Investments

Market capitalization is the total value of all outstanding shares of a publicly traded company. The market capitalization is calculated by multiplying the shares outstanding by the price per share. Market capitalization is one of the basic measures of a publicly-traded company and is the most common and appropriate way of determining estimating the value of a firm. Generally speaking, a higher market capitalization indicates a more valuable company. Many exchanges and indices are weighted for market capitalization. It is informally known as market cap. Market capitalization being a measure of the value of a company can also be arrived at by multiplying the number of either the outstanding shares or the floating shares by the current price per share. In this study, this variable will be used to measure the size of firms and their growth over time. This will enable the study to track the growth of firms and in particular entrepreneurial growth.

If you are intending to go big with your business, it is vital that you understand the important role of Investment and Money Management for your business. Basically, business expansion is what happens when your business hits the stage where too many opportunities come your way and you're unable to take advantage of them all. That is why as future business tycoons, it is best for you to learn the basics of managing your business to achieve a healthy and productive business.

Whether you find yourself a business coach, engage the services of a business mentor or work with a business consultant, anyone of these people can help you understand the importance of investment and how you can effectively manage your money during the process of business expansion. Money management is a skill that every individual must learn whether you are just an ordinary person or a business magnate. Basically money management is the art of learning how to preserve the money you have and wherever possible have it grow. Obviously being good at money management is very important for your personal funds as well as the funds of the business.

2.4 Pricing Decisions

Selling price per unit is the predetermined price for a quantity of work to be performed, product to be acquired or disposed including price charged for labor, material, and associated services such as equipment rental. Average prices represent, quite simply, total sales revenue divided by total units sold. Many products, however, are sold in multiple variants, such as bottle sizes. In these cases, managers face a challenge: they must determine 'comparable' units. Average prices can be calculated by weighting different unit selling prices by the percentage of unit sales for each product variant. If we use a standard, rather than an actual mix of sizes and product varieties, the result is price per statistical unit. Statistical units are also known as equivalent units. Average price per unit and prices per statistical unit are needed by marketers who sell the same product in different packages, sizes, forms, or configurations at a variety of different prices. As in analyses of different channels, these product and price variations must be reflected accurately in overall average prices. If they are not, marketers may lose sight of what is happening to prices and why. If the price of each product variant remained unchanged, for example, but there was a shift in the mix of volume sold, then the average price per unit would change, but the price per statistical unit would not. Both of these metrics have value in identifying market movements. Many studies involving senior marketing managers, majority of the managers agree that "average price per unit" metric very useful in managing and monitoring their businesses, while a small number found "price per statistical unit" very useful. In this study, the variable will be used to measure entrepreneurial growth or firms output in terms of

production over time and firm growth in their production capacity.

2.5 Communication Technology

Technology has changed business in many ways, but its effects on communication is arguably the most significant. Indeed, according to Walden University College of Management and Technology, communication through email, text messaging, instant messaging and even budding tools like social networking have been "among the most profound effects of technology on every area of business." However, while technology did make business communications faster and easier, it has also made, at times, communication more distracting and less clear. Technology affects almost every aspect of our lives. Just look around you and you'll see how wired we are. Thanks to the Internet, virtually anything you desire can be delivered to your door in a matter of days.

Smartphones improve overall productivity because they offer a diverse set of skills that hadn't been available before. Business activities deemed impossible just a few years ago can now be done effortlessly without being near a computer, extending the workday and improving productivity exponentially. Innovations in technology have increased the efficiency and confidence of workers because they permit them to work more quickly, with even the smallest of devices capable of containing a voluminous amount of applications and data. For example, an employee in Nairobi is easily capable of reaching a colleague in far places without actually having to speak instantly.

For all of the uses of the fax machine, nearly every transmission involved a crossing-of-fingers and a few "pleases" muttered under one's breath. Thankfully, image scanning has replaced the fax machine nearly completely, and employees everywhere are thankful for it. Aside from its reliability, a scanner easily provides workers with the ability to convert paperwork into digital files and back, which increases productivity and organization, as well as helps save money on storage, paper and toner. The transferal of data between far-flung locations so effortlessly is often downplayed because of the effort that it requires to do so: none. It still boggles the mind that technologies with such innovative features are available for a fraction of the price, in comparison to older technologies. A Voice over Internet Protocol (VoIP) system can replace a corporation's entire telecommunications system while allowing the company to operate at a higher level than it had beforehand, and expanding communication opportunities monumentally. With a more capable, easy way to communicate comes setbacks never anticipated before. Speed of response has become essential, and changes the way most people interact. It's now assumed that an employee with a company-issued smartphone will respond to emails or text messages, even during their own free time. Life—both personal and professional—has become more distracting, and stress is seemingly ever present. With the continuous development of office technologies comes changed expectations. It's important to utilize the benefits of having such efficient technologies, but it's important to manage time so that employees aren't overworked and too stressed to attain a productive level of output.

2.6 Conceptualization

Mugenda and Mugenda, (2003), define a variable as measurable characteristic that assume different values among the subjects. Kothari, (2004), defines a dependent variable as one that depends upon other variables. An independent variable is defined as one that is antecedent to the dependent variable.

In this study the dependent variable, "entrepreneurial orientation culture of private manufacturing companies in Kenya" is the subject of this study and is influenced by management accounting as the independent variable in terms of control, coordination, planning and communication. Entrepreneurial orientation culture (PERFORMANCE) will be measured in terms of attitude of entrepreneurs towards business growth, openness to business ideas, product diversification and property acquisition. The relationship between management accounting and entrepreneurial culture orientation is further affected by firm leadership and the prevailing economic condition.

2.7 Research Gap

The researches pursued within the field of accounting, management and entrepreneurship gives no explicit knowledge of how accounting and management are used and designed in entrepreneurial organizations (Olson *et al*, 2009). Even if some entrepreneurship researchers have discussed the issue, few have tried to observe how management accounting actually works within an organization with different levels of entrepreneurial orientation (Langfield and Smith, 2009). There is some agreement among researchers that control and specific goals and budgets are found more important in firms characterized as being less entrepreneurial oriented than in firms characterized as being more entrepreneurial oriented. When it comes to incentive programs and performance evaluation, Simon (2009), Porter (1980), Gupta (1987) and Govindarajan (2009) found that awarded bonuses for the achievement of budget targets is more common for firms, which strategy characteristic is less entrepreneurial. Subjective performance evaluation was more appropriate for firms following a more entrepreneurial orientation. Based on the empirical studies earlier mentioned it can be concluded that very few focus on the relationship between accounting, management and entrepreneurship (Young, 2009). However, there

has been little research done in fields close at hand and these studies may be useful for understanding the context of entrepreneurship. Research considered being relevant in relation to entrepreneurial orientation and the design and use of management accounting is research that is focused on strategic orientation.

Given the above account of deficiencies in research on management accounting and entrepreneurship orientation, it becomes paramount and pertinent to study whether the level of entrepreneurship orientation culture can be influenced by various management accounting aspects specifically: Controls, coordination, planning and communication.

3.0 Methodology

3.1 Research Design

In view of the philosophical orientation adopted for this study, the longitudinal and cross sectional research design was used. This approach provided the researcher with an opportunity to develop a broad-based understanding of the joint effect of management accounting on entrepreneurship variables within the private manufacturing entities across the industry and within a given time period. The adopted research design further allowed the researcher to test the hypotheses. The research design was considered because of the relationships amongst the study variables.

3.2 Target Population

The target population of this study comprised 498 large private manufacturing firms in Kenya who were registered members of the Kenya Association of Manufacturers (KAM) as at June 2009 as shown in Appendix II. These firms fall into twelve manufacturing sectors including: Building, Construction and Mining; Chemical and Allied; Energy, Electrical and Electronics; Food and Beverages; Leather and Footwear; Metal and Allied; Motor Vehicle and Accessories; Paper and Paper Board; Textiles and Apparels and Timber; Wood and Furniture as shown in Appendix I. The main reason for this choice was that these firms were likely to exhibit an elaborate relationship between the study variables while at the same time make use of accounting and management systems.

The population of the study cuts across both the industry and the business sector and to reinforce the expectation, the researcher identified four central repository of information including: (i) Kenya Association of Manufactures (KAM); (ii) Kenya National Bureau of Statistics (KNBS); (iii) the Kenya Industrial Research Development Institute (KIRDI) and (iv) Kenya National Chamber of Commerce (KNCC). The list of manufacturing firms from the Kenya Association of Manufacturers (KAM, 2009) was used to generate information with respect to the registered members. The list of manufacturing firms from KAM was compiled by picking manufacturing firms only that were in the 498 list for at least five years from 2005 and covering the period up to 2009. This list constitutes the sampling frame and was attached as Appendix 1. The number of employees was used to determine the size of the organization.

3.3 Sampling Design

A sample of 108 large private manufacturing firms was selected using stratified random sampling and purposeful sampling techniques. The sample was stratified into twelve manufacturing sectors shown in appendix 1. The agro-based industrial sector had 45% of the firms in the industry. Non-agro-based industrial sector contributed 55% (KAM, 2009).

As per recommendations of several authors (Shenoy et al., 2002; Sakaran, 2006; Cooper & Schindler, 2006; Mugenda & Mugenda, 2003), the following Fisher et al. (1996) formula was used to determine the sample size.

$$N = \frac{Z^2 pq}{d^2}$$

Where:

N = the desired sample size (if the target population is greater than 10,000)

p = the proportion in the target population estimated to have characteristics being measured. This is placed at 90% (0.9).

q = (1-p) i.e. the proportion in the target population estimated not to have characteristics being measured, (1-0.9) = 0.1.

d = the level of statistical significance set. For this study this was placed at 0.05

Z = the standard normal variation at the required confidence level. In this study, this was placed at 95% level of confidence.

In the current study, the proportion that was assumed to have the characteristics of the interest (population) was placed at 90% that is p = 0.9 (Kothari, 1990; Shenoy, 2002; Nunally, 1978). In other words the researcher was confident that as high as 90% of all possible samples taken from the target population would embrace the characteristics of that population. The researcher was also conscious of the fact that lower proportions of p lead

to a bigger sample, which might render the research cumbersome to conduct while higher proportions increase the risk of bias (Sakaran,2006; Cooper & Schindler,2006).

Using the formula specified above, the following sample size for populations with more than 10,000 units was obtained:

$$n = \frac{z^2 pq}{d^2}$$
$$n = \frac{(1.96)^2 (0.9)(0.1)}{(0.05)^2} = 138$$

$n = 138$ sample size for target population greater than 10,000

In the current study, the target population was less than 10,000 (i.e. 184); therefore, calculating the final sample estimate (n_f) required the following formula:

$$n_f = \frac{n}{1 + \frac{n}{N}} \quad \text{Where;}$$

n_f = The desired sample size (when the population is less than 10,000).

n = The desired sample size (when the population is more than 10,000).

N = The estimate of the population size (i.e. 498 in the case of the current study).

Applying the formula therefore yielded the following results:

$$n_f = \frac{138}{\left(1 + \frac{138}{498}\right)} = \frac{138}{1 + 0.27711} = 108$$

$$n_f = 108$$

From the above computation, the appropriate sample size for the current study was one hundred and eight (108) large private manufacturing firms. The figure was also approximately 22% of the target population (498) which was considered reasonable. This was supported by Sakara (2006) and Cooper and Schindler (2006) who suggested that a sample of at least 10% of the population is usually acceptable in a study. Stratified random sampling technique was used to select the desired sample from each stratum. The sample size for each stratum was proportionate to its contribution to the industry population and that the details are presented in appendix I.

The above procedures were applied and the results obtained with respect to the twelve categories of manufacturing sectors indicated in Appendix II. The sample from each stratum was selected randomly by applying the following procedure. A lottery exercise was performed by the researcher using school going children so as to come up with the firms to be included in the sample frame. Each firm was allocated a number in a piece of paper which was folded and placed in a container which was then shaken so as to effectively mix the papers. Eight (8) preselected school going children (one from each sector) were asked to pick the folded papers in turn and the corresponding numbers leading to firms chosen were then recorded on a piece of paper. The selected firms from each stratum totaling 108 provided data for the study.

3.4 Data Collection Instruments

This research will relied on quantitative data where secondary data was collected. Secondary analysis of existing or archived data has a rich history in the fields of economics, demography, and sociology (Duncan, 1991). Friedman (2007) also notes an increased frequency within the field of psychology and attributes this growth to two main factors which are the creation and maintenance of large longitudinal data sets by governmental and other funding agencies, and a growing emphasis on interdisciplinary Collaborations between psychologists and other social science researchers. Combined, these factors have made it possible for researchers in multiple disciplines to explore topics and design studies utilizing the best and worst practices and methodologies from previously disparate fields. Further, Brooks-Gunn, Phelps, and Elder (1991) encouraged developmental psychologists to embrace secondary data analysis as a cost-effective way to “study lives in context over time”.

Indeed, archived data sources for secondary analysis provide exciting opportunities and afford access to large population samples not otherwise available for most independent giftedness researchers at the university level. The study also employed a pilot test to capture the real facts on the ground. The researcher also utilized the theoretical model developed as a comparison with the conventional break- even point to test the simplicity and best use of the model by these firms.

This research relied on quantitative data where secondary data was collected. The study also employed a pilot test to capture the real facts on the ground. According to Mouly (2009), the questionnaires normally add more value to research because it allows the selection of a representative sample. It can be used in a wide geographical area than most other techniques and facilities. Confidentiality, which is the key to the study, is observed. It also enables easy and quick gathering of information from respondents. The questionnaires will contain both closed and open ended items. They will be administered to business development officers and Chief Accounting Officers of the private manufacturing firms.

3.5 Reliability of the Instruments

Reliability is the consistency of a set of measurement items, while validity indicates whether or not instrument is measuring what it should. Reliability does not, however, imply validity because while a scale may be measuring something consistently, it may not necessarily be what it is supposed to be measuring.

3.6 Validity of the Instruments

Validity, on the other hand, subsumes reliability. For reliability, the researcher used the most common internal consistency measure known as Cronbach's Alpha (α). It indicates the extent to which a set of measurement items could be treated as measuring a single latent variable (Cronbach, 1951). The standardized Cronbach's alpha is defined as:

$$\alpha = \frac{N \cdot \bar{C}}{\bar{V} + (N - 1) \cdot \bar{C}}$$

Where N is the number of components (items or testlets), \bar{V} is the average variance and \bar{C} is the average of all covariances between the components (i.e. average Pearson correlation coefficients between the components). The recommended value of $\alpha = 0.7$ will be used as a cut-off for acceptable levels of reliability (Annually, 1978; Cronbach, 1951). Cronbach's alpha generally increases when the correlations between the items increases. For this reason, the coefficient is also called the internal consistency or the internal consistency reliability of the test.

3.7 Operationalization of the Study Variables

Table 1 below shows the summary of measurement scales operationalizing the study variables. The study variables include: management accounting parameters (independent variable X), intervening variable (operating environment) and entrepreneurial culture orientation (dependent variable Y). Secondary data was collected from individual firm and subjected to a five point Likert scale to test their level of agreement on the various aspects.

Table 1 Summary of Operationalization of the Study Variables

No	Variables	Scales
1	Entrepreneurial Orientation Culture (Dependent Variable -Y) Performance Growth Productivity/output Profitability	Data on these variables will be collected from the source
2	Management Accounting function (Independent Variables- X) Strategic variance analysis Selling price per unit of output investment Communication Technology	Data on these variables will be collected from the source
3	Moderating Variables Leadership Prevailing economic conditions	A composite index of these variables was obtained by calculating the average of the total sum of the collected data.

3.8 Data Analysis

The study utilized inferential statistics through regression analysis to determine the relationship between management accounting and entrepreneurial orientation culture. Regression analysis was performed to predict the nature of the relationship in the various hypotheses. The E-views Statistical software was employed by the study to effectively analyze the data collected. Inferential statistics was used.

4.0 Findings

4.1 Regression Model

The relationship between entrepreneurial culture orientation and management accounting can be explained as a function of management accounting as illustrated by the following equation.

$$Y = f(X_1, X_2, X_3 \text{ and } X_4)$$

Further, the following linear regression model also indicates the relationship between management accounting entrepreneurial orientation culture (performance).

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y = Entrepreneurship Orientation Culture (performance)

α = constant (intercept)

β = slope (gradient) showing the rate at which the dependent variable is changing for each unit change in the independent variable.

X_1 = Strategic Variance analysis

X_2 = Pricing decisions

X_3 = Investment

X_4 = Communication technologies

ε = Error term

The coefficient of determination (R^2 value) is a measure of the degree of variability in the dependent variable, in this case level of entrepreneurship orientation culture attributable to predictor variables namely; control, coordination, planning and communication. In the model, the beta coefficient (β value) estimates the degree of change in entrepreneurial orientation culture resulting from each unit change in the independent variables.

4.2 Construction of Short-term Break-even Model

In SMEs' cost control cannot be too complicated, otherwise the process itself will impose high costs on them. In order to simplify SMEs' cost control, this model divides it into the following sections: administrative costs, production costs and marketing costs. Production costs include wages, benefits and other costs of workshop staff, costs of raw materials and variable costs changing in proportion to production. Marketing costs are the costs incurred by sales department. Management costs means all costs except the two costs introduced above. Assuming that we observe sales volume Q, management costs G(Q), production costs S(Q), marketing costs Y(Q). The table below shows the budget plan for the financial year 2018. Assuming no unexpected situations, the wages and welfares of workshop staff will not change much in the short term, and what can change is the number of personnel. Therefore, production cost depends on the material costs. Marketing cost varies indirect proportion to production, which means the higher the yield, the more it costs. Management cost also varies with yield; at the very start the costs rise faster, but the changing space will be slower, and will increase rapidly when the yield arrives at a certain amount. Therefore, the total cost of corporate production is equal to:

$$C^* = G(Q) + S(Q) + Y(Q)$$

Unit product cost is equal to:

$$C^* = [G(Q) + S(Q) + Y(Q)] / Q$$

So the short-term break-even model is:

$$M = PQ - [G(Q) + S(Q) + Y(Q)] \quad (1)$$

$$M/Q = Q - [G(Q) + S(Q) + Y(Q)] / Q \quad (2)$$

Table2 SMEs (Gonas) Budget 2018

Items	Budgeted Qty Units	Actual Qty Units	Price per unit Kshs	Actual Sales/ Kshs	Total (Kshs)
Products					
Bread	28,000	22,000	45	990,000	
Cakes	85,000	65,000	4	260,000	
Scorns	90,000	54,000	4	216,000	
Doughnuts	25,000	40,000	4	160,000	
Meat rolls	30,000	18,000	6	108,000	1,734,000
Costs					
Purchases				320,000	
Labour				160,000	
Transport				70,000	
Levies				40,000	
Premises				180,000	770,000
Profit					964,000

The three costs mentioned above indicate that SMEs and companies can manage administrative costs, production costs and marketing costs. Production cost is in fact related to productivity and production efficiency. Administrative cost is related to management efficiency and management effects, and its existence is for the purpose of production. Marketing cost is the cost to guarantee implementation, and also an important controllable cost. From the model, it can be observed that all these variables are about management accounting and practices which plays a major role in the harmonizing of enterprise costs and enhancing the enterprise's profitability.

4.3 COST CONTROL STRATEGY FOR SMES

Based on the above analysis, strengthening cost control concept and establishing cost control processes and systems, SMEs should pay attention to continuity and consistency of cost controls, the correctness and effectiveness of decision-making, and should also be concerned about the four factors: productivity, control of staff number, personnel consumption and material utilization, which a real so the four factors that affect costs. At the same time, to strengthen cost control, SMEs can also start from the following aspects: First, to increase productivity and reduce production costs is the first cost control strategy. Productivity reflects the important aspect of production costs. When productivity is high and labor cost is definite, the labor cost of product per unit is low. In general, many companies are concerned about this issue, and regard it as a core part of production management.

Second, increase efficiency. The second way to control cost is to limit the number of workers. Actually, productivity is one aspect to control workers. That is to say, in order to produce a certain yield, an enterprise of high productivity need fewer workers, and vice versa. It also applies to management and sales costs. An important strategy to control enterprise cost is to improve management efficiency and sales quality at a given production and productivity, with the same workers numbers and management and sales requirement. For the same management affair, the personnel cost will be reduced if the management efficiency is improved. For the same production, the required personnel cost will be lower if the sales quality, the performance of each salesman, is improved.

Third, to control personnel spending is the third strategy. Any corporate employees will consume certain substances, and companies need to control the quantity of consumed materials, which is an important aspect of cost control. To control personnel consumption, such as office supplies, needs to reduce personnel expenditures. For example, if companies control expenses of sales staff, their cost will be reduced.

Fourth, to conserve and improve material utilization efficiency is the fourth strategy. To control personnel spending calls for improving material utilization. As personnel consume material, their high consumption relates to low material utilization. Take raw materials for example, if we make efficient use of raw materials, we can get one more product with those materials. Take personnel's pen for another example, they can be used for several months or years if an efficient use is made, but might be missing or broken in a few weeks if not.

4.4 General regression

The results obtained from regression as shown in table 3 below indicates that all the independent variables are positive as expected including individual effects and confirms with the previous studies carried on similar grounds. This implies that the variables positively affect the dependent variable. In terms of R², the Prob(F-Statistic) clearly shows that the variables explain about 70% of the dependent variable which is very good and

above the conventional level of 50%. According to the results it shows that X_1 is positive and significant at all conventional levels of significance (1%, 2.5% , 5% and 10%) and this implies that X_1 strongly explains Y. Also from the results X_2 is also positive and significant at all conventional levels of significance and as expected. This also implies that X_2 which represents pricing decision has positive and significant influence on Y which is the entrepreneurial orientation culture. The results show that X_3 which is investments is positive though insignificant.

This implies that X_3 has no significant effect on entrepreneurial orientation culture though positive. On the other hand this could be indicating that probably in small firms and enterprises, investment is not clearly defined and hence absorbed in other firm activities. The results also indicate that X_4 is positive and significant at all conventional levels. This implies that X_4 which is communication technology has a positive and significant effect on entrepreneurial orientation culture as expected.

Table 3: FIXED EFFECTS MODEL

Dependent Variable: Y?

Method: GLS (Cross Section Weights)

Date: 10/07/15 Time: 13:46

Sample: 2005 2009

Included observations: 5

Number of cross-sections used: 79

Total panel (balanced) observations: 395

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1?	1.22E-09	4.40E-10	2.763438	0.0061
X2?	1.32E-07	5.00E-08	2.642034	0.0087
X3?	1.40E-09	3.05E-09	0.458538	0.6469
X4?	1.28E-08	2.76E-09	4.631229	0.0000
Fixed Effects				
_ARML—C	0.315766			
_BAMB—C	0.302115			
_KAKZ—C	0.280416			
_BATA—C	0.282154			
_BEMS—C	0.305959			
_ASPN—C	0.300237			
_CADB—C	0.292730			
_PIPE—C	0.267524			
_CENT—C	0.301161			
_COKE—C	0.284875			
_COOP—C	0.285828			
_HACO—C	0.294418			
_GLAX—C	0.294961			
_ICDC—C	4.868345			
_SUZU—C	0.364017			
_SCAN—C	0.310379			
_SPIL—C	0.323646			
_SUNP—C	0.342345			
_SMTL—C	0.316421			
_TOYO—C	0.311417			
_BATL—C	0.362976			
_BAYL—C	0.315994			
_BOCL—C	0.273207			
_BPIL—C	0.289016			
_EACL—C	0.268667			
_EAPC—C	0.247464			
_EBGL—C	0.404216			
_GENP—C	0.300968			
_KENT—C	0.159970			
_KEBL—C	0.195173			
_KTDA—C	0.334156			
_NBKL—C	0.204641			
_NEST—C	0.206338			
_NMGL—C	0.180098			

_OILB—C	0.253901
_SAMA—C	0.192175
_SHELL—C	0.244162
_SGML—C	0.191549
_UNGA—C	0.196864
_OREL—C	0.195108
_BAPL—C	0.232578
_CSEL—C	0.253951
_COPL—C	0.249835
_DEMK—C	0.255190
_ACFC—C	0.283569
_DIND—C	0.297808
_FACH—C	0.301617
_KPLC—C	0.327608
_ACID—C	0.350484
_EASI—C	0.265002
_GAPA—C	0.232295
_AMCL—C	0.229160
_EVBL—C	0.243830
_KPRL—C	0.241750
_LOKL—C	0.268815
_ALCL—C	0.282961
_EXCL—C	0.354282
_GBEL—C	0.355725
_HMWL—C	0.310695
_JABL—C	0.360153
_KORL—C	0.356244
_POPL—C	0.327289
_REML—C	11.86299
_SPEC—C	0.412991
_SKDL—C	0.410333
_UMLT—C	0.461599
_WCEA—C	0.435761
_KALU—C	0.533048
_MRML—C	0.525214
_NSPL—C	0.554518
_SECL—C	0.490014
_ABML—C	0.452780
_ENPL—C	0.429705
_ACME—C	0.408620
_BOBL—C	0.370982
_KNGT—C	0.312740
_NBPL—C	0.319066
_MIDT—C	0.321210
_SLKL—C	0.342843

Weighted Statistics

R-squared	0.700403	Mean dependent var	5.459898
Adjusted R-squared	0.621662	S.D. dependent var	2.820977
S.E. of regression	1.735159	Sum squared resid	939.3624
F-statistic	243.1326	Durbin-Watson stat	2.805521
Prob(F-statistic)	0.000000		

Unweighted Statistics

R-squared	0.317492	Mean dependent var	0.654886
Adjusted R-squared	0.138114	S.D. dependent var	2.471211
S.E. of regression	2.294218	Sum squared resid	1642.193
Durbin-Watson stat	0.992604		

Significance levels tested at 1%, 5% and 10%

4.5 COMMON UNWEIGHTED REGRESSION

The results of common unweighted regression below show that all the variables are significant except X3(Investment). X1 and X4 are consistent X2 and X3 are both negative but significant. This is contradictory to the expectation and from the previous analysis in table 4.1. This could be indicative that X2 which is the pricing decisions can affect a firm both negatively and positively depending with the firms take and policy on the same. This could mean that if a firm has proper pricing policy of its products then the firm realizes positive results and vice versa. Also on X₃ which is investment affects a firm both negative and positive ways depending on the enterprise's management of investment and capital altogether. This could be implying that a firm which has a proper investment and capital management policy will have positive effects on its growth and vice versa. From the study, it was found out that the sampled firms have common trend in terms of their capital management and investment policies. As the firms grows, their capital management and investment strategies also improves along the growth such that firms on the advanced growth path show better capital management and investment policy and vice versa.

Table 4: Weighted results

Dependent Variable: Y?
 Method: GLS (Cross Section Weights)
 Date: 10/07/15 Time: 13:48
 Sample: 2005 2009
 Included observations: 5
 Number of cross-sections used: 79
 Total panel (balanced) observations: 395

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.363638	0.011278	32.24224	0.0000
X1?	2.23E-09	5.21E-10	4.273084	0.0000
X2?	-2.01E-07	5.97E-08	-3.357994	0.0009
X3?	-1.36E-09	1.98E-09	-0.685956	0.4931
X4?	1.52E-08	1.72E-09	8.796483	0.0000
Weighted Statistics				
R-squared	0.804599	Mean dependent var		4.218611
Adjusted R-squared	0.802595	S.D. dependent var		3.350989
S.E. of regression	1.488853	Sum squared resid		864.5059
F-statistic	401.4752	Durbin-Watson stat		2.239159
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	-0.002254	Mean dependent var		0.654886
Adjusted R-squared	-0.012533	S.D. dependent var		2.471211
S.E. of regression	2.486650	Sum squared resid		2411.536
Durbin-Watson stat	0.674451			

Significance levels at 1%, 5% and 10%

4.6 Partial regression (X1, X2 X4)

The results of common weighted regression show that X1 and X4 are both positive and significant. This is consistent with the previous analysis. X3 is also significant but negative. This could be indicating that investment in small enterprises even when it is the key thing it is not distinct from the other firm activities. The Probability F statistic also indicates that strategic variance analysis and communication technology explains the presence of entrepreneurial orientation culture in these firms. Also this result confirms the previous regression which show that X1 and X4 are positive and significant

Table 5: Partial regression

Dependent Variable: Y?
 Method: GLS (Cross Section Weights)
 Date: 10/07/15 Time: 13:55
 Sample: 2005 2009
 Included observations: 5
 Number of cross-sections used: 79
 Total panel (balanced) observations: 395

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.364069	0.011265	32.31906	0.0000
X1?	2.27E-09	5.19E-10	4.374734	0.0000
X2?	-2.03E-07	5.97E-08	-3.390585	0.0008
X4?	1.40E-08	4.16E-10	33.66327	0.0000
Weighted Statistics				
R-squared	0.804682	Mean dependent var		4.219323
Adjusted R-squared	0.803183	S.D. dependent var		3.354817
S.E. of regression	1.488333	Sum squared resid		866.1180
F-statistic	536.9532	Durbin-Watson stat		2.221715
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	-0.002242	Mean dependent var		0.654886
Adjusted R-squared	-0.009932	S.D. dependent var		2.471211
S.E. of regression	2.483453	Sum squared resid		2411.508
Durbin-Watson stat	0.674381			

4.7 Fixed effects model regression (X1, X2, X4)

The fixed effect analysis is consistent with the previous analysis. The three variables X₁, X₂ and X₄ are all positive and significant. The variables; strategic variance analysis, pricing decisions and communication technology therefore positively affects entrepreneurial orientation culture. R² is also very high at 70% without X₃. This confirms that X₃ does not significantly affect entrepreneurial orientation culture in SMEs.

Table 6

Dependent Variable: Y?
Method: GLS (Cross Section Weights)
Date: 10/07/15 Time: 13:56
Sample: 2005 2009
Included observations: 5
Number of cross-sections used: 79
Total panel (balanced) observations: 395

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1?	1.31E-09	3.76E-10	3.491477	0.0005
X2?	1.19E-07	4.62E-08	2.584575	0.0102
X4?	1.40E-08	7.10E-10	19.69789	0.0000
Fixed Effects				
_ARML—C	0.315437			
_BAMB—C	0.303260			
_KAKZ—C	0.280986			
_BATA—C	0.283153			
_BEMS—C	0.307008			
_ASPN—C	0.300960			
_CADB—C	0.293822			
_PIPE—C	0.269281			
_CENT—C	0.302388			
_COKE—C	0.286043			
_COOP—C	0.287220			
_HACO—C	0.295693			
_GLAX—C	0.295762			
_ICDC—C	4.869597			
_SUZU—C	0.364970			
_SCAN—C	0.311778			
_SPIL—C	0.324234			
_SUNP—C	0.343399			
_SMTL—C	0.317217			
_TOYO—C	0.312241			
_BATL—C	0.363183			
_BAYL—C	0.316857			
_BOCL—C	0.273810			
_BPIL—C	0.289479			
_EACL—C	0.269630			
_EAPC—C	0.249016			
_EBGL—C	0.404791			
_GENP—C	0.302544			
_KENT—C	0.161396			
_KEBL—C	0.196153			
_KTDA—C	0.335750			
_NBKL—C	0.204583			
_NEST—C	0.206304			
_NMGL—C	0.181706			
_OILB—C	0.253356			
_SAMA—C	0.193686			
_SHELL—C	0.244044			
_SGML—C	0.192017			
_UNGA—C	0.196639			
_OREL—C	0.194130			
_BAPL—C	0.232270			
_CSEL—C	0.253649			
_COPL—C	0.250366			
_DEMK—C	0.255669			
_ACFC—C	0.283066			

_DIND—C	0.298523		
_FACH—C	0.308449		
_KPLC—C	0.332319		
_ACID—C	0.355215		
_EASI—C	0.265762		
_GAPA—C	0.232998		
_AMCL—C	0.229809		
_EVBL—C	0.244386		
_KPRL—C	0.242337		
_LOKL—C	0.269410		
_ALCL—C	0.283484		
_EXCL—C	0.354652		
_GBEL—C	0.355967		
_HMWL—C	0.310871		
_JABL—C	0.360260		
_KORL—C	0.356204		
_POPL—C	0.327138		
_REML—C	11.86287		
_SPEC—C	0.412684		
_SKDL—C	0.409749		
_UMLT—C	0.460741		
_WCEA—C	0.434762		
_KALU—C	0.531947		
_MRML—C	0.524171		
_NSPL—C	0.553242		
_SECL—C	0.488352		
_ABML—C	0.451242		
_ENPL—C	0.428089		
_ACME—C	0.406662		
_BOBL—C	0.368901		
_KNGT—C	0.310373		
_NBPL—C	0.316308		
_MIDT—C	0.318180		
_SLKL—C	0.339511		
Weighted Statistics			
R-squared	0.699969	Mean dependent var	5.560634
Adjusted R-squared	0.622325	S.D. dependent var	2.844218
S.E. of regression	1.747923	Sum squared resid	956.2881
F-statistic	365.1119	Durbin-Watson stat	2.770863
Prob(F-statistic)	0.000000		
Unweighted Statistics			
R-squared	0.317465	Mean dependent var	0.654886
Adjusted R-squared	0.140834	S.D. dependent var	2.471211
S.E. of regression	2.290595	Sum squared resid	1642.257
Durbin-Watson stat	0.992509		

4.8 Common regression (X1, X2, X3)

The below results from the common weighted regression involving strategic variance analysis, pricing decisions and communication technology show that strategic variance and communication technology are positive and significance at all levels of significance and consistent with the previous results which indicate that strategic variance analysis and communication technology significantly affect entrepreneurial orientation culture in SMEs. The R^2 is also very high at 80.5% which is a clear indication of how the three variables are key in explaining the dependent variable. Pricing decisions as a variable is still negative but significant at all levels of significance also implying that X3 has negative effect on the dependent variable. This is consistent with most of the above regression analysis.

Table 7 Common regression

Dependent Variable: Y?
 Method: GLS (Cross Section Weights)
 Date: 10/07/15 Time: 13:58
 Sample: 2005 2009
 Included observations: 5
 Number of cross-sections used: 79
 Total panel (balanced) observations: 395

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.383152	0.011635	32.93237	0.0000
X1?	3.12E-09	6.10E-10	5.116587	0.0000
X2?	-2.82E-07	6.55E-08	-4.303640	0.0000
X3?	1.59E-08	4.85E-10	32.72005	0.0000
Weighted Statistics				
R-squared	0.805150	Mean dependent var		4.193434
Adjusted R-squared	0.803655	S.D. dependent var		3.487691
S.E. of regression	1.545425	Sum squared resid		933.8407
F-statistic	538.5571	Durbin-Watson stat		1.980578
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	-0.002252	Mean dependent var		0.654886
Adjusted R-squared	-0.009942	S.D. dependent var		2.471211
S.E. of regression	2.483465	Sum squared resid		2411.531
Durbin-Watson stat	0.674151			

4.9 Fixed effects regression (X1, X2, X3)

The results below from the fixed effects regression of X1, X2 and X3 shows that the variables are positive and significant at all conventional levels of significance. X1 and X2 are consistent with the all the regression analysis done above. X3 is positive and significant in this analysis different from the previous ones which it was insignificant. This could be an indication that the variable which is investment has different effect on various firms depending on their categorization and management of capital and investments at large. This could also be indicating that SME firms have different policies regarding capital and investments.

Table 8 Fixed effects regression

Dependent Variable: Y?
 Method: GLS (Cross Section Weights)
 Date: 10/07/15 Time: 14:00
 Sample: 2005 2009
 Included observations: 5
 Number of cross-sections used: 79
 Total panel (balanced) observations: 395

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1?	1.52E-09	4.48E-10	3.399877	0.0008
X2?	1.33E-07	5.20E-08	2.550996	0.0112
X3?	1.46E-08	7.98E-10	18.30096	0.0000
Fixed Effects				
_ARML—C	0.314470			
_BAMB—C	0.300803			
_KAKZ—C	0.279198			
_BATA—C	0.280987			
_BEMS—C	0.304865			
_ASPN—C	0.299250			
_CADB—C	0.291815			
_PIPE—C	0.266681			
_CENT—C	0.300455			
_COKE—C	0.284302			
_COOP—C	0.285400			

_HACO—C	0.294166
_GLAX—C	0.294924
_ICDC—C	4.868505
_SUZU—C	0.364413
_SCAN—C	0.310975
_SPIL—C	0.324496
_SUNP—C	0.343392
_SMTL—C	0.317710
_TOYO—C	0.312945
_BATL—C	0.364694
_BAYL—C	0.317871
_BOCL—C	0.275303
_BPIL—C	0.291333
_EACL—C	0.271160
_EAPC—C	0.250182
_EBGL—C	0.407253
_GENP—C	0.304216
_KENT—C	0.163488
_KEBL—C	0.198954
_KTDA—C	0.338273
_NBKL—C	0.209223
_NEST—C	0.211362
_NMGL—C	0.185537
_OILB—C	0.259968
_SAMA—C	0.198702
_SHELL—C	0.251346
_SGML—C	0.199299
_UNGA—C	0.205251
_OREL—C	0.204155
_BAPL—C	0.242204
_CSEL—C	0.264238
_COPL—C	0.260789
_DEMK—C	0.266881
_ACFC—C	0.296124
_DIND—C	0.311183
_FACH—C	0.240627
_KPLC—C	0.266528
_ACID—C	0.289208
_EASI—C	0.277285
_GAPA—C	0.245568
_AMCL—C	0.243373
_EVBL—C	0.258968
_KPRL—C	0.257815
_LOKL—C	0.285897
_ALCL—C	0.301178
_EXCL—C	0.373902
_GBEL—C	0.376835
_HMWL—C	0.333388
_JABL—C	0.384540
_KORL—C	0.382436
_POPL—C	0.355391
_REML—C	11.89308
_SPEC—C	0.445206
_SKDL—C	0.444724
_UMLT—C	0.498219
_WCEA—C	0.474006
_KALU—C	0.573010
_MRML—C	0.567020
_NSPL—C	0.598588

_SECL—C	0.536377
_ABML—C	0.501605
_ENPL—C	0.481196
_ACME—C	0.462982
_BOBL—C	0.428377
_KNGT—C	0.373356
_NBPL—C	0.383159
_MIDT—C	0.389029
_SLKL—C	0.414660

Weighted Statistics			
R-squared	0.663949	Mean dependent var	5.502786
Adjusted R-squared	0.576984	S.D. dependent var	2.820638
S.E. of regression	1.834533	Sum squared resid	1053.405
F-statistic	309.2037	Durbin-Watson stat	2.612863
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.318351	Mean dependent var	0.654886
Adjusted R-squared	0.141950	S.D. dependent var	2.471211
S.E. of regression	2.289107	Sum squared resid	1640.124
Durbin-Watson stat	0.994059		

Pooled Regression Model

$$Y = 0.363638 + 0.000231 * X1 + 0.000203 * X2 - 0.000136 * X3 + 0.000152 * X4$$

5.0 FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

5.1 Summary of findings

The objectives of this study were: To explore how strategic variance analysis affects entrepreneurial orientation culture (performance) in private manufacturing firms in Kenya. To evaluate effect of pricing decisions on entrepreneurial orientation culture (performance) in private manufacturing firms in Kenya. To evaluate the effect of investment on entrepreneurial orientation culture (performance) in private manufacturing firms in Kenya. To evaluate communication technology affects entrepreneurial orientation culture (performance) in private manufacturing firms in Kenya. The first objective of the study was to explore how strategic variance analysis affects entrepreneurial orientation culture. In other words performance in private manufacturing firms in Kenya. Almost all the firms visited agreed that variance analysis is key to a firm's success. It is the duty of every firm to come up with proper budgets and to analyze the budgets properly. The best method of analyzing the budget is comparison between the actual revenue and expenditure and the budgets of the particular firm. This enables the manager to check on the variance between the budgeted figures and the actual and to take the necessary steps where required.

The study revealed that strategic variance analysis has a significant effect on entrepreneurial orientation culture (performance) as indicated by the regression results with beta 1.31E-09 and 3.12E-09 in table 4.4 and 4.5 respectively. The earlier studies on similar area of research have been using qualitative research which has proved difficult to estimate the relationship between these variables. The empirical results are among the first empirics to try and establish these relationships among the variables. The empirical results show that strategic variance analysis has a positive significant effect on entrepreneurial orientation culture. The empirical results are consistent with the previous researchers though they utilized qualitative research. The results are positive and significant at 95% and 99% confidence levels and with R² of 80% and 70% as indicated in table 4.4 and 4.5 respectively. This is enough evidence that strategic variance analysis is important in explaining entrepreneurial orientation culture.

The empirical results also show that SMEs though they do not have proper records to extract information enough to capture the relationship, the positive results and significance clearly indicate how significant the variable is in explaining this relationship. Also from the results, the study deduces that firms which do not apply proper budgeting methods have difficulties in management of their expenditure and this is clearly portrayed in their growth path. In all the firms visited strategic variance analysis proved to be a key element of performance. This is consistent with the other authors who have supported variance analysis to be a key factor to performance both in SMEs and multinational organizations.

The second objective of the study was to evaluate effect of pricing decisions on entrepreneurial orientation culture (performance) in private manufacturing firms in Kenya. From the empirical results pricing decisions show mixed results where both negative and positive results were obtained. From the empirical results, this

mixture could be implying that both results are possible depending on how a firm deliberates on its product prices. SMEs which properly deal with pricing decisions are highly likely to have positive results and unto entrepreneurial culture. Those firms, SMEs and other corporate firms which ignore the concept of pricing or firms which do not take this component to be important in their enterprise management practices tend to have retrogressive effects on their growth and probably face stunted growth in their operations.

Findings indicate that pricing decisions are very important for any business to perform efficiently as indicated by the beta figures 1.32E-07, -2.01E-07, -2.03E-07, 1.19E-07, -2.82E-07 and R^2 of 70%, 80%, 80%, 69%, and 80% in tables 4.1, 4.2, 4.3, 4.4 and 4.5 respectively. It is also a clear indication from the findings that pricing decisions are applied differently in SMEs and in other organizations. Whatever the method of application used performance of a firm always is influenced by pricing decisions. This is inconsistency with the other authors. As indicated by the findings of this study pricing decisions could have both positive and negative effects to a firm's performance depending on how these decisions are applied by the firm.

The third objective of the study was to evaluate effect of investment on entrepreneurial orientation culture (performance) in private manufacturing firms in Kenya. Investment is a key factor in a firm. Business firms should grow as the individual owners become rich also. As indicated by the empirical results, most SMEs do not take investment seriously to an extent that information and records on the investment path are lacking for most of the sampled firms. The findings show mixed results with betas 1.40E-09, -1.36E-09, 1.59E-08, 1.46E-08 and R^2 70%, 80%, 80% and 66% in tables 4.1, 4.2, 4.5 and 4.6 respectively and this is inconsistent with earlier studies. The results can be used to explore this new phenomenon due to its uniqueness. The earlier studies utilized data from corporate firms and this may not be used to make inference on SMEs because the characteristics of these kinds of firms are not the same with those of SMEs. Most of the earnings of these SMEs are for the consumption of the owners. The other researchers indicate that investment is key to the performance of the firm even though the study does not clearly indicate the same with SMEs. This is because most SMEs do not contain elaborate information on investment and hence much cannot be derived from their operations. However the positive results could be implying that investment has a significant effect on entrepreneurial orientation culture and this is consistent with most of the earlier studies. The negative results on the other hand could be implying that those firms without a clear investment policy and records tend to have negative effects on their overall growth because investment is combined with other variables which have negative effects on the firm.

The empirical results in line with the fourth objective of the study were to evaluate whether communication technology affects entrepreneurial orientation culture (performance) in private manufacturing firms in Kenya. Communication is very important for the performance of business organizations especially due to its role in connecting the various functions in an enterprise. It is a method of guiding and directing workers towards the vision and mission of the firm. It's through communication that managers get feedbacks on the feeling of employees towards their work. Through communication managers solve numerous issues in their businesses on daily basis. The empirical results with coefficients 1.28E-08, 1.52E-08, 1.40E-08, 1.40E-08 and R^2 70%, 80%, 80% and 69% in tables 4.1, 4.2, 4.3 and 4.4 respectively indicate that communication technology has a significant effect to the performance of the firm and the positive and significant results confirm that for entrepreneurship to succeed, then communication has to be embraced as a key component and otherwise could also be true for ignoring this variable. This is inconsistency with most of the previous studies which gave mixed. The study also supports that without effective communication the performance of the firm would be seriously affected.

5.2 conclusions

Most private manufacturing firms in Kenya are concentrated in towns due to the availability of good infrastructure in these towns. Management accounting has a big influence in private manufacturing firms as indicated by the study. Although these manufacturing firms have accounting officers and managers, they do not embrace management accounting the way it should be embraced. This was more evident after the findings of the pilot study. However the study showed that all these firms have their own ways of accounting for their resources. The study also showed that the developed break even model is simpler and easier to understand than the convectional break even model.

The method of calculating for the variance analysis is almost the same for all these firms but their pricing decisions are different which in turn give mixed results as our empirical evidence gives. Communication technology has been embraced as indicated by expenses on communication technology of these firms though on a small scale which give small indicators as the results confirm. Strategic variance analysis has shown to be very significant in affecting organizational performance as well as investment. The investment variable on the other hand also show that it has largely significant effect on performance though with some mixed results over the time and across firms.

Pricing decisions which has shown totally different results from earlier studies on its side has far reaching

effects on firm's performance and this according to our results could be indicative of the reversing effects it has on a firm's performance positively or negatively depending on how individual firms treat this variable and all its proxies. Apart from pricing decisions, the study deducts that depending on how organizations handle these variables their results could be different as well.

5.3 Recommendations of the study

Based on the findings, the following are recommended:

Private manufacturing firms in Kenya should be given proper training on the issues of management accounting. This will enable them to do proper budgeting and to compare these budgets with the actual performance. Proper and realistic budgets should be done by these firms to help them gauge their performance correctly. Pricing decisions should be seriously taken into consideration in business operations as a crucial component. As indicated by the study pricing decisions could impact negatively to the performance of the firm if not carried out properly.

Investment should be encouraged in these firms to enable growth rather than the owners consuming everything from the firm's proceeds thus getting rich at the detriment of the firm's growth. In general management accounting should be fully embraced by the all firm's ranging from the micro-enterprises, small enterprises, medium enterprises and the large or corporate enterprises for bettering their performance and hence enhance their growth paths.

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