INFLUENCE OF ENTREPRENEURIAL DETERMINANTS ON SMALL AND MEDIUM ENTERPRISES’S SURVIVAL IN KAKAMEGA COUNTY KENYA

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Influence of Entrepreneurial Determinants on Small and Medium Enterprises Survival in Kakamega County Kenya.

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2019
DECLARATION

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

Signature…………………………….. Date……………………………

Tom Stevens Saka

This thesis has been submitted for examination with our approval as University Supervisors.

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DEDICATION

To my family, to all my friends and class fellows, I dedicate this work
ACKNOWLEDGEMENTS

Firstly, I would like first of all to thank the almighty God for giving me life, health and strength to carry out this work. Secondly, the undertaking and completion of this research work was made possible by a number of people, to whom I am profoundly grateful. I’ am particularly indebted to my supervisors Prof. Gregory. S. Namusonge and Prof. Mike A. Iravo for their guidance and encouragement in the course of the research. Appreciation goes to the lecturers of the School of Entrepreneurship, Procurement and Management of Jomo Kenyatta University of Agriculture and Technology, who faithfully imparted their knowledge and skills throughout the course. Finally, I extend my appreciation to my classmates and friends at Jomo Kenyatta University of Agriculture and Technology.
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DEFINITION OF KEY TERMS

Entrepreneurial Competency: Entrepreneurial competency is defined as the Individual characteristics including attitude and Behavior, which allows the entrepreneur to achieve business success (Shane et al., 2003).

Entrepreneurial finance: represent provided funds for business activities, making purchases or investing (Daniel, William and Don, 2012).

Entrepreneurial skills: are skills acquired through formal and informal training (Ballot et al. 2001).

Enterprises survival: Firms state or fact of continuing to live or exist (Elena & Orietta, 2003).

Small and medium enterprises: For this study the definitions of Small and Medium Enterprises sector in Kenya are based on employment size. A micro-enterprise is defined as having no more than 10 employees; a small enterprise with 11-50 employees; and a medium enterprise with between 50 to 100 employees while large enterprises have over 100 employees (Louis and Annette, 2005).

Technological innovation: is an idea, practice, or object that is perceived as new by an individual or other unit of adoption (Rogers, 2003).
ABSTRACT

This study assessed entrepreneurial determinants influencing small and medium enterprises survival in Kakamega county, Kenya; The study was guided by the following research objectives: To determine the influence of entrepreneurial skills on small and medium enterprises survival in Kakamega county, Kenya; to identify the influence of entrepreneurial competencies on small and medium enterprises survival in Kakamega county, Kenya; to assess the influence of access to entrepreneurial finance on small and medium enterprises survival in Kakamega county, Kenya; to evaluate the influence of technological innovation on small and medium enterprises survival in Kakamega county, Kenya. Both primary and secondary data were used by the study. The study target population comprised of 1,270 SMEs that had been in operation for a period of five years and above. The sample for the study consisted of 127 SMEs in Kakamega County. Data were analyzed using descriptive statistics, correlation analysis and regression analysis using SPSS version 20. The study used a multiple regression model to establish the relationship between dependent and independent variables. The study findings indicated that there is a positive and statistically significant relationship between SMEs survival (dependent variable) and Entrepreneurial Skills, Entrepreneurial Competencies, Access to Entrepreneurial Finance and Technological innovation (independent variables). The study recommended the need for the government as a policy setting organ to come up with conducive regulatory, trade, labour market, regional development, social and gender policies that suit the needs of aspiring and existing SMEs in order to influence entrepreneurial activities in the country and facilitate the survival of SMEs since SMEs are known to constitute larger percentage of economic activities. The SME owners should develop staff policies to facilitate the supply of qualified staff to support innovation in SMEs. Grants should be provided to business entrepreneurs on a competitive basis to undertake creative and innovative projects. Owners and managers should establish enterprise-oriented technology transfer units which are familiar with specific SMEs.
CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Small and Medium Enterprises (SMEs) make diverse contributions to economic and social welfare, which could be further enhanced. SMEs play a key role in national economies around the globe generating employment and value added. In the OECD area, SMEs are the predominant form of enterprise, accounting for approximately 99% of all firms. They provide the main source of employment, accounting for about 70% of jobs on average, and are major contributors to value creation, generating between 50% and 60% of value added on average (OECD, 2016b). In emerging economies, SMEs contribute up to 45% of total employment and 33% of GDP. When taking the contribution of informal businesses into account, SMEs contribute to more than half of employment and GDP in most countries irrespective of income levels (IFC, 2010). In addition, SME development can contribute to economic diversification and flexibility. This is especially relevant for resource-rich countries that are particularly vulnerable to commodity price

Small and Medium Enterprises survival is the subject of much interest to both academic and policy circles alike. At the very least their survival ensures wealth and employment creation, welfare effects and innovation. These great roles they play in the economies of both developed and developing countries has well been recognized and documented (GOK, 2005). Small and Medium Enterprises are able to bring about socio-economic transformation. Their promotion generates political interest. They are the means to bring equitable distribution of employment and income generating opportunities to the regions as well as bring social change. They cause the indigenous to explore their entrepreneurial talents, improve communities’ standard of living by creating conditions for sustainable livelihood and poverty alleviation (Burke, 2002). Numerous SMEs are assuming a main job in national enterprises (Lee, 2010). It is assessed that SMEs make
up over 90% of all business foundations around the world (Lee, 2010). As indicated by Kenya Economic survey (GoK, 2006); this part contributed more than 50% of new jobs made in 2005. SMEs represent more prominent than 97% of the all out number of firms in Organization for Economic Co-operation and Development (OECD) members

Micro, Small and Medium Enterprises (MSMEs) made 426,900 out of the 543,300 new employments made in Kenya in the year 2009, as indicated by Kenya Economic Survey (RoK, 2009). This was 89.9% of the complete new occupations made in Kenya that year. Around the same time, the part contributed kshs. 806,170 million of GDP which was 5.9 percent of the Gross Domestic Product (ROK, 2009). Nonetheless, there are difficulties that SMEs face during the time spent development. It is commonly perceived that Small and Medium Enterprises SMEs face one of kind difficulties, which influence their growth and profitability and henceforth, reduce their capacity to contribute adequately to economical improvement. Regardless of the huge job SMEs play in the economy past measurements demonstrate that three out of five SMEs flop inside the initial couple of months along stretches of activity (Kenya National Bureau of Statistics, 2007). Reasons behind failure of SMEs in Kenya incorporate restricted market get to, constrained access to information, funds and technology, absence of entrepreneurial competencies and skills, unfavourable policy and regulatory environment (ROK, 2005). Governments around the globe are placing increasing importance upon the survival of SMEs undertakings and providing increased resources to facilitate this accentuation (Burgess, 2001). This study tried to explore the entrepreneurial determinants influencing SMEs survival in Kakamega county Kenya.

1.1.1 Global perspective of SMEs survival

A number of studies have presented factors that determine the survival of Small and medium enterprises. These factors seem to be universal to both developed and developing economies. Poor management skills in SMEs are recognized as an acute problem in both developed and developing economies. OECD, 2003 published a report entitled “management training in SMEs” that studied SME management in Canada,
Finland, Germany, Japan, the UK and USA. The report quotes various studies establishing positive correlation between the degree of management training and the performance of an SME.

Analysis of the relationship between firm resources and strategies in a cross-section of over 250 small firms in US was conducted by Linda, Candida and Tatiana (2002). The findings indicated that small less glamorous firms should follow strategies that bring them closer to their customers, rather than innovation strategies that may be more appropriate for their high-technology counterparts.

In Europe, Bahar (2014) using survey data on thousands of euro area firms, conducted a study on factors that affect access to finance of SMEs in Euro area. The research found that changes in bank funding costs and borrower leverage mattered for firms’ access to finance. Increases in bank funding costs and borrowers’ debt-to-asset ratios are significantly and negatively associated with firms’ access to finance. The study finally concluded that access to finance was positively related to firm size and firm age. Quantitative and qualitative data were collected from a target sample of 6,000 organizations in Britain.

The determinants of the management training inside SMEs in the UK was examined by Dean (2002) and inferred that there was a poor dimension of interest in formal training and improvement in the UK. This was especially apparent inside the small firm segment. The literature, which thinks about this issue, inferred that there are various reasons why SMEs proprietors were, overall, hesitant to put resources into such training for themselves and their employees. Such reasons incorporate obliviousness of advantages, time issues, dread that preparation will improve employee versatility and, fundamentally, that there is little proof to show that interest in training and development prompted upgraded firm performance.

In Thailand, Chuthamas et al. (2010) identified factors that are affecting business success of SMEs. The study examined eight factors that influence the SMEs business
success. These factors are: SMEs characteristic, management and know-how, products and services, Customer and Market, the way of doing business and cooperation, resources and finance, strategy, and external environment. The regression analysis results showed that the most significant factors affecting success of SMEs in Thailand were SMEs characteristics, customer and market, the way of doing business, resources, finance and external environment.

In Sri Lanka, the findings revealed that there was no significant impact of marketing strategies on business growth among SMEs studied. Moreover, there was no impact on the behavior of the entrepreneurs and the business growth (Gajanayake, Iannella & Sahama, 2011).

The contribution of entrepreneurs in terms of their management skills towards the success of SMEs in the services sector in Malaysia was analyzed by Ahmad, Halim and Zainal (2010). The study found out that high entrepreneurial success was associated with high business operating skills, to obtain market niche that suited their size and capability and skills to offer more specialized services.

1.1.2 Regional perspective of SMEs survival

In Africa it is generally believed that SMEs face daunting challenges that have always gagged their robust growth. They include; lack of managerial expertise, inadequate education and skills, lack of Credit, technological change, poor infrastructure and insufficient market information. The SMEs find it extremely hard to access credit or finance. This often nips them in the buds, making their ‘infancy mortality’ very high. This makes their small held profit and casual reserve funds as the main promptly accessible wellsprings of capital. Business banks have dependably shied far from them because of the apparent high danger of default among SMEs. Small businesses in Africa can rarely meet the conditions set by financial institutions. SMEs are seen as a risk because of poor guarantees and lack of information about their ability to repay loans.
In South Africa, the research on whether managerial marketing aptitudes of SMEs add to high SMEs failure rate. The study set up that absence of marketing skills of SMEs unquestionably add to high business failure rate in South Africa and absence of promoting abilities negatively affects achievement of SMEs (Louise, 2010).

The impact of entrepreneurship education on the entrepreneurial intentions of university students in Egypt to start a new venture was investigated using Linen’s model, Hala (2014). The methodological approach involved analysis of a paper and pencil close ended questionnaire distributed to undergraduate students in their last year in a private Egyptian university from three faculties. The findings suggested positive relationship between entrepreneurship education and intentions and perceived desirability while no relation existed with perceived feasibility or self-efficacy. Given the significance and importance of entrepreneurship, it is desirable to reform the educational system to encourage creativity and innovativeness of students.

In Ghana, quantitative methodology and the study technique for gathering information were utilized to discover the effect of Quality Management Practices on the Performance and Growth of Small and Medium Sized Enterprises. The outcomes have set up that if firms execute quality management practices, it will have enormous effect on the performance and growth of SMEs in Ghana. The study additionally discovered support for the contention that quality management practices improve authoritative execution both in large and small firms in any piece of the world. The research has shown that Ghanaian proprietors/managers trust that quality administration is a key-contributing component to firm growth and performance (Fred, 2012).

In Tanzania, Audrey (2016) examined the Impact of Innovation on Performance of SMEs. The writing review uncovered that the investigations on innovation and its impact on execution are seen to have concentrated to Western, Middle and Far East and almost no experimental proof is discernible in Africa. The idea of the exact outcomes detailed in this paper showed a requirement for such examinations particularly in Africa where the exploration crevice is broadly seen here. The paper was accordingly a
reminder for observational investigations that survey the effect of development on SMEs performance in Africa and Tanzania specifically where the investigations of this nature are once in a while found in the reaview of literature directed in this paper.

In Nigeria, Oladele and Akeke (2016) showed that alluring and individual thought were identified with growth in sales and just persuasive inspiration was essentially identified with work development, while the management by objective had negative association with sales growth and unexpected reward was connected emphatically to business development. The examination inferred that enhancement for magnetic administration styles is a decent impetus to expanding deals development and that moving inspiration of the initiative style.

1.1.3 National perspective of SMEs survival

SMEs sector is not growing at the expected rate despite of the government’s efforts. According to research findings, SMEs have high mortality rates with most of them not serving to see beyond their third anniversary (Gakuru, 2011), (ROK, 2007), (ROK, 2005). Furthermore, SMEs face many challenges such as: Lack of Managerial expertise, Inadequate Education and Skills, Lack of Credit, Technological Change, Poor Infrastructure and insufficient Market information and entrepreneurial advisory services. Hence it is necessary to conduct a study to establish the factors that determine SMEs survival with a keen interest of recommending policies which will aim to improve the condition of this sector.

The current environment in which SMEs find themselves is marked by conditions where competition is increasingly dynamic. SMEs do not attract good funding because of many and varied barriers. About 90% of the SMEs die before their 5th year (Gakuru, 2011). SMEs in kenya employ75% of workforce and contribute 18% GDP.

The Micro and Small Enterprise (MSE) baseline survey of 1999, found out that the number of enterprises in the sector had grown from 910,000 in 1993 to about 1.3 million
in 1999. Out of the 1.3 million enterprises in 1999, about 66% were located in the rural areas while women owned 48% of the enterprises. According to the survey, 64.3% of the MSEs were in trade, 14.8% in services, 13.4% were in manufacturing while 7.7% were involved in other activities. Apparently, out of the 48% enterprises owned by women 75% were in trade and service sub-sectors.

The MSE baseline survey of 1999, postulated that the sector employed 2.4 million persons. This had increased to 5.2 million persons in 2002 as per the 2003 economic survey and translates to 675,000 jobs per year. The level of employment with MSE in 2002 accounted for over 74.2% of the total number of persons engaged in the country. This is evidence that, with proper development strategies the sector is capable of providing and surpassing the government’s target of creating 500,000 jobs per year (ROK, 2005).

As compared to the other sectors of the economy, the contribution of MSE sector to the country’s GDP has been impressive increasing from 13.8% in 1993 to over 18% in 1999. The average Kenyan MSE employs 1-2 workers while over 70% employs only one person. The lower end of these MSEs is often confined to subsistence at low value adding activities, both in urban and rural areas. Only a few MSEs grow to employ 6 or more workers. According to research findings, MSEs have high mortality rates with most of them not serving to see beyond their third anniversary. This phenomenon has made it difficult for MSEs to graduate into medium and large scale enterprises, thus the missing middle (Wanjau, 2012).

The influence of entrepreneurial skills on the level of innovation performance in youth enterprises in Kenya was investigated by Mukulu et al., (2016). The results indicated that entrepreneurial skills that were manifested in youth enterprises play a key role in determining the levels of innovation in those enterprises. The study also established that limited entrepreneurial skills existed because very little attention was given to training the youths before they were provided with financial support.
Researches have been conducted on the survival of SMEs in Kenya. For example Daniel and Willy (2015) directed an exploration on the capacity of SMEs to get to access to finance in Meru County, Kenya.

The study found out that the survival of SMEs in Meru county, Kenya depended on their ability to access finance. Gabriel (2011) conducted a study on factors influencing SMEs access to finance: A case study of Westland Division, Nairobi, Kenya and established that access to external funding and entrepreneurial characteristics determined the survival of SMEs in Westland division, Nairobi, Kenya.

Gunhild (2015) sought to determine whether SMEs were good business enterprises for Kenya’s growing banking sector. Thus, Kenya’s financial sector has expanded rapidly over the last decade and lending to businesses including small and medium size-enterprises has played a big part in the financing of SMEs. As the Kenyan economy is enjoying a period of relatively high growth, the financial sector’s ongoing ability to channel credit affordably and efficiently to SMEs will be needed to underpin inclusive and sustainable economic development.

The effect of strategic orientation on performance of SMEs in Nandi County Kenya was investigated by Nakola et al. (2015) and showed that customer orientation and technology orientation had significant and positive effect on SMEs’ performance. Thus, the study concluded that customer orientation and technology orientation made it possible for SMEs to achieve competitive advantage and thus a higher level of performance. It is therefore important for SMEs to focus on understanding customers and identifying their needs. Additionally, it would be prudent for those in the sales department to share information within their business concerning competitors’ activities. In addition, SMEs need to use the technology they utilize to attain competitive advantage.

This investigation tried to survey the pioneering determinants affecting SMEs survival in Kakamega county Kenya.
1.2 Statement of the problem

Small and medium enterprises (SMEs) sector is not growing at the expected rate despite of the government’s efforts. Research findings show that SMEs have high mortality rates with most of them not serving to see beyond their third anniversary (Gakuru, 2011); (Erikson & Kuhn, 2006).

The rate of SMEs collapse in developing economies as well as developed economies is disconcerting. The new SMEs fail inside the initial five years of their operation due lack of finance is rated at 33% to 41 % (Thaimuta, 2014). Empirical research has revealed that 3 in 5 SMEs do not survive within their first five years of operation in Kenya (Gakuru, 2011), (ROK, 2007), (ROK, 2005). SMEs account for 98% of total enterprises in Kenya. SMEs sector employs 80% of working force in Kenya and contributed 70% of GDP (Gross Domestic Product) in 2011 (ROK, 2012). SMEs development and survival is impeded by definite constraints limiting their access to resources such as Managerial expertise, in adequate Education and Skills, lack of Credit, Technology, Poor Infrastructure, insufficient Market information and entrepreneurial advisory services. Evolving technologies have impacted on SMEs forcing entrepreneurs to have the necessary skills and expertise to survive in the globalized economy.

Studies have been conducted to investigate determinants influencing SMEs survival. For instance, Mwangi and Namusonge (2014) conducted a research on the impact of innovation on SMEs growth on garment fabricating enterprises in Nakuru County. The determinants of growth oriented SMEs in Nairobi were investigated by Namusonge (2011). The key determinants in the assessment were managerial experience, education, training and the psychology of the entrepreneur. Voeten, (2015) conducted a research on enabling Innovation and Productivity Growth in Manufacturing SMEs in Low Income Countries. Audrey, (2016) investigated the impact of innovation on performance of SMEs in Tanzania. Oladele and Akeke (2016) conducted a study on effect of strategic leadership styles on sales and employment growth in SMEs in Nigeria. Shehnaz and Ramayah (2014) found out the effects of entrepreneurial competencies on success of
businesses in the context of Malaysian SMEs. Asma et al (2015) analyzed the factors influencing the growth rate of SMEs in Algeria. Past investigations have uncovered that entrepreneurs with enterprising abilities and capabilities perform superior to those ones with lower or non-entrepreneurial skills and competencies (Shehnaz & Ramayah, 2014).

In the vast majority of the researches featured and reviewed for this investigation, little has been done on the role of entrepreneurial skills, entrepreneurial competencies, access to entrepreneurial finance and technological innovation as basic determinants influencing SME survival particularly in the Kenyan setting and specifically in Kakamega County. The theory is significant to the study as it helps outline the importance of independent variables on the dependent variable which is SMEs survival.

1.3 Objectives of the study

1.3.1 General objective

The general objective of this study was to assess entrepreneurial determinants influencing small and medium enterprises survival in Kakamega County, Kenya.

1.3.2 Specific objectives

The investigation concentrated on the subsequent specific objectives:

1. To determine the influence of entrepreneurial skills on small and medium enterprises survival in Kakamega county, Kenya.

2. To identify the influence of entrepreneurial competencies on small and medium enterprises survival in Kakamega county, Kenya.

3. To determine the influence of access to entrepreneurial finance on small and medium enterprises survival in Kakamega county, Kenya.
4. To evaluate the influence of technological innovation on small and medium enterprises survival in Kakamega county, Kenya.

1.5 Research hypotheses

\( H_{01} \): Entrepreneurial skills do not influence on small and medium enterprises survival in Kakamega County, Kenya.

\( H_{02} \): Entrepreneurial competencies do not influence small and medium enterprises survival in Kakamega County, Kenya.

\( H_{03} \): Access to entrepreneurial finance does not influence small and medium enterprises survival in Kakamega County, Kenya.

\( H_{04} \): Technological innovation does not influence small and medium enterprises survival in Kakamega County, Kenya.

1.6 Significance of the study

First, recognizing and identifying the determinants influencing SMEs survival may be meaningful in terms of types of assistance, for instance, training, management, finance and technology that the government may provide. The study of this nature was very important because its findings provide useful information for the government and the general public regarding the determinants of the SMEs survival in the Kakamega County, the second largest county after Nairobi County.

The policy makers at county and government levels should be interested in knowing the determinants of the SMEs survival since it presents opportunity factors influencing job creation.

Second, Scholars and Practitioners should understand that Kenya is a globalized economy growing rapidly. Hence SMEs survival and development play vital role in providing ancillary services to large and multinational corporations. The key factors of
survival should help the Government to design the programmes and training required to promote SMEs survival and development. Planning for sector-specific labour requirements would be enhanced. The survival of SMEs guarantees employment creation which is the lynch-pin of economic development and growth. SMEs operate within the regions and communities. The entrepreneurs invest their funds and activities as well. The survival of SMEs guarantees offering of products and services to the community. The investment in activities will be reflected through the social responsibilities of the SMEs. The social responsibility will address the issues of community development. For instance the community will access cheaper products and services offered due to increased productivity. The increase in the SMEs survival encourages competition in turn enhancing production of superior products and services. SMEs survival transfers technology to the communities. As they strive to develop radically innovative technologies, they generate social benefits in excess of their returns. The community will be assured of employment creation.

Third, it was essential to determine whether the policies and management practices developed are adequate for the survival of SMEs in Kenya.

Researchers have found the survival of SMEs very important to the economic development of both developed and developing economies.

Fourth, the research draws policy-makers and SME owners/managers attention to the urgent need for specific practices and technology to enhance the survival and sustainability of SMEs in Kenya.

Non-governmental organizations (NGOs) that have been on the forefront of funding the SMEs with hope of eradicating poverty in communities should find the consequences of this investigation precious. For paradigm, the discoveries of the research should assist in identifying the major factors determining SMEs survival. NGOs turn to SMEs to contract financially significant projects since they are small in size, friendly, flexible and
tend to provide a reliable environment built on trust. This makes it easier to monitor and evaluate the performance of SMEs.

Thus, the finding of this study paves the way forward for the prospective nascent entrepreneurs to focus on major factors determining their survival. Entrepreneurs operate in crowded market niches, unreliable institutions and unclear policies) The results of this study should help SMEs regarding visioning, strategic planning and enhance the opportunities to not only survive but also thrive. Based on the findings of this study, SME owners may be able to focus on the stronger factors determining their survival and success in the competitive business environment in which they operate. Last but not least, the findings should sensitize entrepreneurs to understand factors influencing their survival which should result into expansion and possibly graduation of these MSEs to Medium and large size firms.

Finally, this study should contribute to the future development of this line of research in Kenya. Institutions of higher learning and researchers with interest in SMEs should find the results of this study very useful since it adds to the pool of literature on determinants of small and medium enterprises survival. The study will assist trainers and planners to develop programmes that strategize on the SMEs ability to survive and thrive. It is critical for policymakers to understand the factors that determine the survival of small and medium enterprises, thus creating sustainable employment opportunities. The study should contribute to the knowledge and capabilities enhancing the SMEs survival.
1.7 Scope of the study

The focus of this study was to assess entrepreneurial determinants influencing small and medium enterprises survival in Kakamega County, Kenya between 2010 and 2015. The choice of Kakamega County was because it has the second largest population in the country. There is a possibility of employees spinning off to self employment making SMEs vibrant sector in the county. The unit of analysis was SMEs that have been in operation for five and above years in Kakamega County. The respondents were owners and managers of SMEs studied. The geographical scope of the study was Kakamega County, Kenya.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of literature on entrepreneurial determinants influencing small and medium enterprises survival in Kakamega County, Kenya. It starts with the theoretical perspectives, it shows the conceptual framework and then reviews the factors determining small and medium enterprises survival in Kakamega County, Kenya.

2.2 Theoretical framework

Theory provides an explanation for a class of event. It is a way of binding together a multitude of facts so that one may comprehend them all at once (Kelly, 1955). A theory performs a number of capacities. To start with, it enables us to compose our perceptions and to manage information that would somehow or another be tumultuous and pointless. Second, it enables us to see connections among realities and reveal suggestions that would not generally be apparent in segregated bits of information. Third, it animates request as we scan for learning about a wide range of and frequently astounding part of conduct. A theory at that point rouses an examination that can be utilized to confirm, oppose or alter that theory.

2.2.1 The resource based theory

Wernerfelt (1984) developed the resource-based view theory. The presumption provides for understanding the significance of the organisations’ resources and offers a rationalization that performance and sustainability of an organization depend on the resources owned and controlled by the organization. This theory explains how entrepreneurs themselves build their business from resources they currently posses or can realistically acquire in order to gain a sustained competitive advantage (Dollinger, 1999). The resource based theory contends that the decision of which industry to enter
and what business to be in is not sufficient to guarantee achievement. The theory says that the nature and the feature of the resources the entrepreneur possess and can acquire can lead to long run success.

The resource based theory recognizes six types of resources: Financial resources (money and fungible financial stocks), physical resources (tangible property used in production and administration), Human resources (include knowledge, training and experience of the entrepreneur and his team of employees), technological resources (embodied in a process, system or physical transformation), reputation resources (perception in the firm’s environment), organization resources (Firm’s structure, schedules and frameworks). As per the Resource based theory meaning of (Goshal et al., 2002), the firm contains separated innovative abilities, reciprocal resources and hierarchical schedules and capabilities. Financial resources, for example, credit impact the development of a firm (Hartarska & Gonalez-Vega, 2006).

The theory states that accessibility of resources prompts continued upper hand which thus prompts growth of SMEs. As per Mughan et al. (2004) one noteworthy explanation behind the crumple of SMEs is by all accounts inadequate Management capacity, absence of ability, low dimensions of aptitudes and managerial competencies. Measure of beginning capital is emphatically identified with business achievement (Koop et al., 2000). A standout amongst the most vital parts of beginning another endeavor or extending a current one is access to vital resources (Littunen, 2000).

In the vast majority of the researches featured and reviewed for this investigation, little has been done on the role of entrepreneurial skills, entrepreneurial competencies, access to entrepreneurial finance and technological innovation as basic determinants impacting SME survival particularly in the Kenyan setting and specifically in Kakamega County. The theory is significant to the study as it helps outline the importance of independent variables on the dependent variable which is SMEs survival.
The resource-based view (RBV) of the firm has been around for over 20 years during which time it has been both widely taken up and subjected to considerable criticism. According to Kraaijenbrink et al. (2010) the principal critiques evident in the literature, arguing they fall into eight categories. They concluded that the RBV’s core message can withstand criticism from five of these quite well provided the RBV’s variables, boundaries, and applicability are adequately specified. Three critiques that cannot be readily dismissed call for further theorizing and research. They arise from the indeterminate nature of two of the RBV’s basic concepts resource and value and the narrow conceptualization of a firm’s competitive advantage, an inappropriately narrow neoclassical economic rationality, thereby diminishing its opportunities for progress.

2.2.2 Finance Theory

Several economists have been able to explain the role of finance with the assistance of different finance theories. The finance theory concept involves studying several ways by which businesses as well as individuals raise funds and how these funds are allocated to projects and at the same time considering the risk factors associated with them. In simple terms, financing may also mean provision and allocation of funds to some business project. Wernerfelt (1984), developed the resource-based view theory. The theory provides for understanding the importance of the organizations’ resources and offers an explanation that performance and sustainability of an organization depend on the resources owned and controlled by the organization.


2.2.3 Competence based theory

In his research “the origins of competency-based theory”, Hodge (2007) attempted to trace the origins of competency-based training and competency based theory. A distinction is made between societal and theoretical origins. Hodge (2007) argued that competency based theory has its societal origins in the United States of America during the 1950s, 60s and 70s. Public debate and government initiatives centered on the widely held view that there was a problem with the quality of education in the United States. One of the responses to this crisis was the performance based teacher education movement which synthesized the theory of education that became competence based training (CBT). The theoretical origins of competency based theory derive principally from behaviourism and systems theories two broad theoretical orientations that influenced educational debate in the United States during the formative period of competency based theory.

Competence based theory shares many features with the resource based theory but it has a slight different emphasis and defines “competence” more narrowly than resource based theory does. Competitiveness ultimately comes from producing better (more demanded) products more quickly. Such products should be unanticipated by competitors. To keep ahead a firm uses its core competences. A Core competence is anything that allows access to a wide variety of markets, offers real and perceivable benefits to buyers, is difficult or expensive for competitors to imitate and is extendable to other products/markets in the future. In a sense, competence based theory offers more hope to the entrepreneur than resource based theory. The entrepreneur’s responsibility, then is to recognize what core competences are necessary to exploit a particular opportunity to innovate in their achievement and to sustain them (Wickham, 2006).

Previous studies support the competence based theory. Bird (1995) states that competency refers to the quality of entrepreneur’s action that contributes to venture outcomes. The entrepreneurial competencies are associated with the formation, survival and venture’s growth (Colombo & Grilli, 2005). Moreover, the literature focuses on
different mechanisms whereby competencies can impact on performance. First, the competent entrepreneurs seek for better venture opportunities. Second, management competencies of entrepreneurs are related to formulate venture strategy that better fit within their businesses. Therefore the theory is significant to the study as it helps outline entrepreneurial competencies as one of current study’s independent variable.

2.2.4 Neo-classical theory

According to Glancey and McQuaid (2000) the central principle of neo-classical economics is that the economics can be modeled as a system in which equilibrium is attainable. In such economies, there is believed to be little scope for entrepreneurship when the system is in equilibrium and, in the early equilibrium models, the entrepreneur was seen as a manager or co-coordinator of the three main factors of production: land, labour and capital.

However in the capital equilibrium model developed by Marshall (1842-1924) a distinction is made between those who develop new and improved methods of business and those who are unable to avoid taking risks, and those who follow beaten tracks and are given wages of superintendence. To Marshall, business development requires more than superintendence, it requires: knowledge of the trade, technical knowledge, the ability to identify opportunities, cautious judgment, leadership capacity and desire to improve performance.

Several economists in different places at about same time (the 1870s and 4880s) began to base value on the relationship between cost of production and subjective elements later called supply and demand. This came to be known as the marginal revolution in economics, and the overarching theory that developed from these ideas came to be called neoclassical economics. The pioneers in using the term neoclassical economics were the American Economist Thorstein Veblen (Glancey & McQuaid, 2000). Neoclassical theory has been criticized in several ways. Keynes argued that even if equilibrium would be restored eventually through market forces the time required for
this to occur was too long. Veblen said that the neoclassical view of the economic world was unrealistic (Moggridge, 1976). This theory is relevant to this study as it addresses how entrepreneur’s knowledge is one of the independent variables is positively related to the firm’s performance.

2.2.5 Agency theory

The agency theory explains how best the relationship between agents and principals can be tapped for purpose of governing a corporation to realize its goals. Interest on agency relationship became more prominent with the emergence of the large corporation. There are entrepreneurs who have a knack for accumulation of capital, and managers who have a surplus of ideas to effectively use that capital. Since the owners of the capital (principals) have neither the requisite expertise nor time to effectively run their enterprises, they hand them over the agents (managers) for control and day-to-day operations, hence, the separation of ownership from control, and the attendant agency problem. In an agency relationship, principals and agents have clearly defined responsibilities: Principals are select and put in place governors (directors and auditors to ensure effective governance system is implemented, while agents are responsible for day-to-day operations of the enterprise.

Historically, definitions of corporate governance also took into considerations the relationship between the shareholder and the company, as per “agency theory”, i.e. director-agents acting on behalf of shareholder-principles in overseeing self-serving behaviors of management. However, broader definitions of corporate governance are now attracting greater attention (Solomon & Solomon, 2004). Indeed, effective corporate governance is currently understood as involving a wide number of participants.

The primary participants are management, shareholders and the boards of directors, but other key players whose interests are affected by the corporation are employees, suppliers, customers, partners and the general community.
In such a principal – agent relationship, there is always “inherent potential for conflicts within a firm because the economic incentives faced by the agents are often different from those faced by the principals” (ISPA, 2002).

The theory is relevant to the study as it informs entrepreneurism which is inline with the study discipline.

2.2.6 Stewardship theory

According to Davis et al. (1997), a steward protects and maximizes shareholders wealth through firm performance, because by so doing, the steward’s utility functions are maximized. In this perspective, stewards are managers working to protect and make profits for the shareholders. Therefore, stewardship theory emphasizes on the role of management being as stewards, integrating their goals as part of organization (Davis et al., 1997).

The stewardship perspective suggests that stewards are satisfied and motivated when organizational success is attained. The theory recognizes the importance of governance structures that empower the steward and offers maximum autonomy built on trust (Donaldon & Davis, 1991). It stresses on the position of employee to act more autonomously so that the shareholders’ returns are maximized. Indeed, this can minimize the costs aimed at monitoring and controlling employee behaviour (Davis et al., 1997). Daily et al. (2003) assess that in order to protect their reputations as decision makers in organization, managers are inclined to operate the firm to maximize financial performance as well as shareholders ‘profit. In this sense, it is believed that the firm’s performance can directly impact perfection of their individual performance.

The theory is relevant to the study as it also explains the role of entrepreneurs as owners of SMEs.
2.3 Conceptual framework

Conceptual framework is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation (Kombo and Tromp, 2009). A conceptual framework is a research tool intended to assist a researcher to develop awareness and understanding of the situation under scrutiny and to communicate it. When clearly articulated, a conceptual framework has potential usefulness as a tool to assist a researcher to make meaningful subsequent findings. It forms part of the agenda for negotiation to be scrutinized, tested, reviewed and reformed as a result of investigation and it explains the possible connections between the variables (Smyth, 2004). This study is informed by: The resource based theory, competence based theory and Neo-classical theory.
Independent Variables

Entrepreneurial skills
- Employees appraisal
- Education and qualifications
- Development of employees

Entrepreneurial competencies
- Decision making
- Communication
- Leadership

Access to entrepreneurial finance
- Types of finance
- Availability of external financing
- Affordability of external financing

Technological innovation
- New products/Services
- New production techniques
- Information communication technology

Dependent Variables

SMES survival:
- Sales turnover
- Profitability
- Increase in number of SMES

Figure 2.1: Conceptual framework
2.4 Empirical literature review

This section discusses past studies according to the objectives of the study. The section reviewed literature on entrepreneurial skills, entrepreneurial competences, access to entrepreneurial finance and technological innovation. Empirical literature review was a directed search of published works, including periodicals and books, that discussed theory and presents empirical results that are relevant to the topic at hand (Zikmund et al., 2010). Literature review allows a researcher to place his or her research into an intellectual and historical context. In other words, literature review helps the author declare why their research matters (Kaifeng & Miller, 2008).

2.4.1 Entrepreneurial skills

A skill is simply knowledge which is demonstrated by action. An entrepreneur is someone who has a good business idea and can turn that idea into reality. This calls upon three sorts of skills. General management skills are needed to organize the physical and financial resources to run the venture and people. The management skills are needed to obtain the necessary support from others for the venture to succeed and ability to see how they satisfy the customer’s needs and why the customer finds them attractive.

Some of the marketing skill challenges of SMEs have been addressed in the various studies on SMEs. These can relate to the following: Gain an understanding of the market and potential for growth, market segmentation, market needs analysis, access to finance, competitiveness and marketing of products and services (Scheers, 2010).

Poor management skills in SMEs are recognized as an acute problem in both developed and developing economies. OECD, 2003 published a report entitled “management training in SMEs” that studied SME management in Canada, Finland, German, Japan, the UK and USA. The report quotes various studies establishing positive correlation between the degree of management training and
Performance of SME. Baron (2003) noted that Human resource management assumes basic job in the survival and accomplishment of the small and medium firms. So entrepreneurial skills is one of factors that determine the survival of SMEs. Lekhanya and Kobus (2016) in their study on the Determinants of survival and development of small and medium ventures in countryside KwaZulu – Natal South Africa inferred that the entrepreneurs did have suitable persons in their management positions. Further, it indicates that they did not have entrepreneurial skills to run their SMEs.

Empirical analysis of the factors that affect the survival of SMEs in South Africa was conducted by (Worku, 2013). The study found out that the SMEs were viable and adversely affected by lack of entrepreneurial skills. The study concluded that SMEs that were ran by operators with adequate entrepreneurial skills had relatively larger probability of survival in comparison to SMEs that were ran by operators with inadequate entrepreneurial skills. Management skills are necessary in the running and viability of SMEs. The management actions generally referred to as the tasks of planning organizing, leading, coordinating and control have significant influence on SMEs survival. The impact of entrepreneurial skills on the viability and long-term survival of SMEs was conducted by Marivate (2014) in Tshwane, South Africa. The study postulates that entrepreneurial skills are needed for implementing strategic decisions in an effective manner that leads to long-term survival of SMEs. This concurs with Hickey et al. (2017) who describes Management as traditionally being concerned with coordinating SMEs resources to achieve its goal. More contemporary descriptions highlight that management is the process of working with and through other people to achieve the goals of the business in the rapidly changing environment.

In a study on the analytical analysis of entrepreneurial kills in some selected small scale businesses in the southern region of Nigeria, Larry (2015) concluded that low levels of education existed among the entrepreneurs as majority of them had school certificate as their highest qualification depicting very low entrepreneurial skills.
A study was conducted on influence of entrepreneurial skills on the dimension of innovation execution in youth ventures in Kenya, Mukulu et al. (2016). The research was limited to the youth enterprises that had benefited from youth enterprise development fund (YEDF) going for giving knowledge and a model that would assist the young with running increasingly gainful and practical organizations in a progressively aggressive manner through innovation and creativity. In the context of this study, innovation performance was interpreted as the number of new products, new markets, trademarks and patents in youth enterprises while entrepreneurial skills were in the dimensions of communication skills, decision making and propensity to risk taking. The objective of the study was achieved by investigating how entrepreneurial skills have affected communication skills, decision making skills and risk taking propensity thus raising competitive advantage and sustainable growth of the youth enterprises. Descriptive research design was used in a combination of qualitative and quantitative models, techniques and measures.

Questionnaires and interview guide were used to collect the data. Stratified, random sampling, purposive and judgmental sampling techniques were employed on the youth enterprises and was done at different stages to get the sample for this study. Data was descriptively analyzed and then multiple regression analysis was done as was the case with a similar study carried out on the relationship between intellectual capital and financial performance. The results indicated that entrepreneurial skills that were manifested in youth enterprises play a key role in determining the levels of innovation in those enterprises. Limited entrepreneurial skills existed because very little attention is given to training the youths before they are funded. It is assumed that the youths possess basic skills in entrepreneurship yet very small elements of the soft skills were observed.

A study on Entrepreneurship Skills for Growth-Orientated Businesses by Cover and Thomas (2012) found that each entrepreneur requires a different ‘game plan’ four main dimensions of skill identified: Technical, Managerial, Entrepreneurial, and Personal Maturity. Econometric models showed poor relationship between existing management
training and enhanced firm performance. New models of teaching and training entrepreneurship should focus on development of entrepreneurial attributes.

The findings of a study on Impact of marketing strategies and behavior of SMEs in Sri Lanka revealed that there was no significant impact of marketing strategies on their business growth. Moreover, there was no impact of the behavior of the entrepreneurs and the business growth, Gajanayake (2012). The study was based on secondary and primary data. Data was gathered by the sample of 100 entrepreneurs in Gampaha district who were engaged in the manufacturing sector. Both descriptive statistics and inferential statistics such as correlation, and partial correlation were applied through SPSS to test the validity of formulated hypotheses.

The research by Tamara (2011) titled “Marketing knowledge and strategy for SMEs: can they live without it?” argued that Small firms typically possess certain characteristics, which serve to differentiate them from larger organizations. These characteristics include inherent weaknesses with respect to capitalisation and marketing awareness and practice. Many observed problems stemmed from businesses failing to practice marketing or produce marketing strategy and plans. High failure rates of small firms are largely attributed to weaknesses in financial management and marketing. The paper reviewed issues pertaining to marketing practice of strategy and planning in the small firm, acknowledges inherent weaknesses with regard to marketing in small firms, reviews marketing practice in the context of small firm characteristics, and considers the roles of owner/managers in improving small firm’s marketing practice.

Analysis made by the contribution of entrepreneurs in terms of their management skills towards the success of SMEs in the services sector in Malaysia was analyzed by Ahmad et al. (2010). The methods used were descriptive analysis, Pearson correlation, stepwise regression procedures and t-test. The data for the study were collected through mail questionnaires sent out to selected entrepreneurs. The empirical information results from analyzing the data were obtained from 186 entrepreneurs. The researchers found that high entrepreneurial success was associated with high business operating skills, skills to
obtain market share that suits their size and capability and skills to offer more special services.

The impact of entrepreneurship education on the entrepreneurial intentions of university students in Egypt to start a new venture was investigated using Linen’s model, Hala (2014). The methodological approach involved analysis of a paper and pencil close ended questionnaire distributed to undergraduate students in their last year in a private Egyptian university from three faculties. The findings suggested positive relationship between entrepreneurship education and intentions and perceived desirability while no relation existed with perceived feasibility or self-efficacy. Given the significance and importance of entrepreneurship, it is desirable to reform the educational system to encourage creativity and innovativeness of students.

Regardless of whether absence of managerial and marketing skills of SMEs proprietors added to high business failure rate in South Africa was reviewed, Louise (2010). The research inferred that the absence of promoting aptitudes negatively affected the achievement of small and medium firms in South Africa. The decision was that a positive association between’s absence of marketing skills and business failure exists in South Africa. The test was to improve the marketing abilities of entrepreneurs

The study took an initial “sounding” of author’s understanding about the transition of graduates into such organizations. While research data provided some insight into the barriers which work to discourage more SMEs from recruiting graduates, this understanding appeared inadequate and insufficiently segmented to provide a detailed knowledge of the problems. A prevailing assumption was that graduates lack skills required by SME employers. Yet the limited research findings reveal ambiguity about the extent to which SMEs effectively deploy graduate labour, (Rick, 2002)

Two- thirds of SMEs in the EU endeavor to confront expanding rivalry through progress of product quality (Antonio, 2011). The researcher found that efficiency increases and development can't be accomplished based on low-talented work. All things considered
SMEs need to put resources into human resource development so as to pick up a feasible upper hand.

The determinants of the management training research led, Dean (2002) inside Small firms in the UK, reasoned that inside the UK there was a poor dimension of interest in formal investment in training and development. This was especially clear inside the Small businesses. The literature which thought about the issue, presumed that there were various reasons why small firm proprietors were, in general, hesitant to put resources into such training for themselves and their workers. Such reasons included, numbness of advantages, time issues, dread that preparation will improve employee versatility and, basically, that there is little proof to show that interest in training and development prompts upgraded firm performance. On the premise that there has been some discussion and experimental examination with respect to why training does not happen, this paper takes an discretionary position and thinks about what issues and procedures may support the choice to put resources into training - especially the management training. Discoveries were drawn from exact research on an example of firms where venture had been made in such training over the most recent two years; the signs being that such speculation was not key or proactive but rather incited by issues which compromised business performance.

Researchers argued that smaller less “glamorous” firms are more prevalent in the US economy than high-technology companies (Linda et Al., 2002). These small firms are known for their inability to erect barriers to imitation, making the development of competitive advantage difficult. The findings indicated that small less glamorous firms should follow strategies that bring them closer to their customers, rather than innovation strategies that may be more appropriate for their high-technology counterparts.

The examination on how the implementation of value management practices will affect on the performance and development of small and medium enterprises in a developing nation, Ghana was led by Fred (2012). The quantitative methodology and the overview strategy for gathering data were utilized. The survey was managed through the vis-à-vis
meet. A sample of 200 SMEs that utilize not in excess of 50 workers inside the city capital, Accra was chosen and interviewed. The outcomes have built up that if firms actualize quality Management practices; it will tremendously affect the performance and growth of SMEs in Ghana. The investigation likewise discovered support for the contention that quality management practices improve organisational performance both in large firms and SMEs in any part of the globe. The investigation has exhibited that Ghanaian owner/managers trust that quality management is a key-contributing element to firm growth and performance.

The human resource management has been a problematic issue in SMEs. Renee et al. sorted to analyze human resource strategies in family and non-family businesses. The survey utilized a sample of 1,369 organizations representing every company employing between 20-100 people in Northern Ireland. This research analyzed key issues emerging from the 219 (16 per cent) responses received and provided a comparison of HRM practices in family and non-family businesses. Overall, the findings suggested that family business practices within HRM were different from their non-family counterparts.

2.4.2 Entrepreneurial competencies

Understanding the role of entrepreneur gives a better insight about what competencies needed by entrepreneurs to ensure the survival of the SME as well as business success. Firstly, the role of decision makers is focusing on the development of entrepreneurial competencies. Kiggundu (2002) in-depth analysis of entrepreneurial competencies saw competencies of entrepreneurs as having dual origins: first, components that are more deeply rooted in the entrepreneur’s background (i.e. traits, personality, attitudes, self image, and social roles) and second, components that could be acquired at work or through theoretical or practical learning (i.e. skills, knowledge, and experience).

Secondly, Strong communication is needed. Research findings suggest that networks provide SMEs opportunities to achieve sustainable competitive advantages and thus
compete successfully in the marketplace. In this study, the research question explores the effectiveness of the network usage on the entrepreneurial orientation (EO) development and the moderate role of the EO in the network-SME growth relationship.

Lastly, entrepreneurs need effective leadership. Taking a look at the global business environment today, one would find that competition is complex, challenging, and filled with competitive threats and opportunities for firms. It is only organizations with effective leadership practices that can help to enhance performance since they would be able to bring about change in the turbulent business environment (Burke, 2002).

A comprehensive study of over 2000 managers was performed, first popularizing, identifying and assessing over one hundred potential competencies, Boyatzis (1982). The study defined competency as, “A capacity that exists in a person that leads to behavior that meets the job demands within the parameters of organizational environment and in turn brings about desired results.” The underlying characteristic that an individual brings to a job situation that can result in effective or superior performance in such job is considered to be competency.

This is consistent with David McClelland who claimed that competencies could be used for predicting job performances and further held that competencies were not biased by race, gender or socio-economic factors. His study helped to identify performance aspects which are not attributable to a worker’s or degree of knowledge, skill and intelligence.

This is concurring with Spencer and Spencer (1993) who defined “competency as underlying characteristic of an individual that is causally related to criterion referenced effective and/or superior performance in a job or situation. Similarly, “A Competency is a set of skills, related knowledge and attributes that allow an individual to successfully perform a task or an activity within a specific function or job” (UNIDO, 2002). Although theses definitions vary in different forms, however the following components are found commonly in all the definitions: Competency is composed of knowledge, skills, and abilities.
The competencies of an entrepreneur constitute an important factor in determining the success of the SME. A significant number of researchers have clearly suggested this, Chandler and Jansen (1992); (Bird, 1995). This was consistent with Rogerson (2001) who argued that in order to understand the factors leading to the success or failure of the entrepreneurship process, it is necessary to look at the capacity needed to be a successful entrepreneur or improve entrepreneurial conduct.

Based on this premise, the competencies of the entrepreneur are key endogenous factors in the entrepreneurial process leading to SMEs success, growth or failure. In order to explore the competencies required by entrepreneurs in managing their own SMEs, researchers should first understand the roles played by entrepreneurs as owner-managers. The available literature suggests that entrepreneurs, particularly those in SMEs, are engaged in three important roles: The entrepreneurial role, which assists with business development; the managerial role, which assists with functional needs which include human resources management, marketing, operations, administration, finance and planning; and the technical or functional role, which is needed for functioning and producing products Beaver and Jennings (2005); Ucbasaran et al., (2004); Baum and Lock, (2004) and Chandler and Jansen (1992).

The impact of entrepreneurial competencies on SMEs performance in the Malaysian Hospitality and Tourism Industry, adopted content analysis to analyze the existing studies on entrepreneurial competencies, business performance, and SMEs in HTI, Sulaiman et al. (2016). The findings indicated that very few of these SMEs are successful while a large percentage are operating at survival stage and others are on the verge of collapsing due to lack of entrepreneurial competencies. Lack of entrepreneurial competencies impacted negatively on their business performances. The findings also revealed that the SMEs' performance would depend greatly on internal and external factors, including financial and non-financial measures.

The impact of vital administration styles on sales and employment growth in small and medium enterprises in Nigeria think about was directed by Oladele and Akeke (2016).
The information for the investigation was gathered from proprietors/CEOs of SMEs through an organized self-managed survey utilizing a two-stage inspecting technique on a sample of 550 respondents. The leadership factors were positioned utilizing relative significance while the recognized variables were incorporated into the regression analysis. The outcomes demonstrate that appealing and individual thought were identified with development and just moving inspiration was altogether identified with business development, while the executives by goal had negative association with sales growth and unexpected reward was connected emphatically to employment growth. The investigation presumed that enhancement for magnetic initiative styles is a decent impetus to expanding sales growth and that persuasive inspiration of the administration style.

Entrepreneurial competencies have effect on success of businesses in the context of Malaysian SMEs (Shehnaz & Ramayah, 2014). The study argued that the external integration moderates the influence of entrepreneurial competencies on success of SMEs businesses. Hence, the entrepreneurs should be competent enough to manage their relationships with their customers and suppliers to get competitive advantage. Only sustainable competitive advantage will ensure business survival and success. The research adopted the resource based view of competencies (RBV) which claims that entrepreneurial competencies are valuable and intangible resources that leads towards the success of business. Entrepreneurial competencies alone are not enough to ensure the survival and success of businesses. Since, SMEs have scarce resources of finance, skills, technology and knowledge; therefore SMEs sustainable business success highly depends on many other factors such as supplier’s capabilities as well as customer’s integration. Moreover, the strong relationships of SMEs with their customers and suppliers enable them to access the information regarding latest customer choices and tastes, technologies and new methods of innovations.

The influence of entrepreneurial characteristics and competencies on business performance in small and medium enterprises was tested by Endi, et al. (2013). The study was conducted with 147 SMEs owner in Malang regency East Java Indonesia.
using survey instrument. Data analysis used the Structural Equation Modeling. The results indicated that the entrepreneurial characteristics have a significant influence on business performance. Entrepreneurial competencies showed mediating relationship between entrepreneurial characteristics and business performance. It means the more powerful entrepreneurial characteristics will lead to an increase in the competency of the SMEs owner, which will ultimately have an effect on business performance.

2.4.3 Access to entrepreneurial finance

There are a few factors that impact access to back by SMEs. An exploration on the components affecting access to fund by micro, small and medium enterprises (MSME) in Meru County, Kenya was conducted by Daniel and Willy (2015). The study adopted a descriptive survey design collecting both primary and secondary data through a questionnaire. The target population was 22,451 MSME’s in Meru County. The study revealed that information asymmetry, business risks and transactional costs influence access to finance. The transactional cost emerged as the most critical factor or the most significant predictor to access finance. This is consistent with the study by Kihimbo et al. (2012) in which transactional cost was cited as the major impediment to obtaining credit in Kakamega County.

Using World Bank Enterprise Survey of 2009 in Vietnam, Phuong (2012) conducted a study on what determines access to credit by SMEs. The database for the study not only included small and medium enterprises but also large enterprises. The scope of data was very wide but in the measure of determinants of SMEs credit availability, the data was rather limited. The binominal logit model was used to assess the influence of firm and financial characteristics, credit worthiness, industry and region dummy on the probability that firms access credit. The study showed that in general, businesses in Vietnam depended too much on real estate and land as collateral compared with other Asian countries. As a result, this might have caused problems for small businesses in accessing bank loans. However, this did not apply with Central North where it was extremely easy for small business to access capital.
The determinants of development arranged SMEs was led in Nairobi County (Namusonge, 2001). The key determinants in the investigation were administrative experience, instruction and preparing and the brain science of the business visionary. The examination reasoned that accessibility and sort of money are key determinants of the development execution of SMEs. Business visionaries’ properties likewise have impact on development execution.

Africa’s SMEs have little access to funds which in this way hampers their development and possible development. Their principle wellsprings of capital are their held income, casual funds and credit affiliations, which are flighty, not exceptionally verify and have little degree for hazard sharing in light of their local or style center. Access to formal money is poor in view of the high danger of default among SMEs and because of insufficient monetary facilities.

Small business in Africa can rarely meet the conditions set by financial institutions, which see SMEs as a risk because of poor guarantees and lack of information about their ability to repay loans. The financial system in most of Africa is under-developed however and so provides few financial instruments. Capital markets are in their infancy, shareholding is rare and no long-term financing is available for SMEs. Non-bank financial intermediaries, such as micro-credit institutions, could be a big help in lending money to the smallest SMEs but they do not have the resources to follow up their customers when they expand.

Lack of credit has been indicated as one of the serious constraint faced by SMEs, hindering their survival (Oketch, 2000). Credit can have a negative effect on firm survival in unstable economies with high macroeconomic volatility. A sudden increase in nominal interest rates can put a firm in financial difficulties which can force it to downsize or even close down. This was observed in Kenya when nominal interest rates doubled in a period of one year in the 1990s (Nkurunziza, 2004). The survival of SMEs has been directly linked to its financing. Improper financing has been posited as the
main cause of failure of SMEs (Longenecker et al., 2006). Therefore, Access to entrepreneurial finance determines SMEs survival.

SMEs financing, Afua (2011), looked at the Impact of Venture Capital Financing on SMEs in the Tema Metropolis in Ghana. In order to achieve the objectives for the study, 50 questionnaires were administered to Manager/SME owners operating within the Tema Metropolis with focus on Elsa Foods Ltd using convenience sampling techniques. The findings showed that SMEs continue to rely on many financing options both at their conceptual and expansion stage. Majority of the SMEs were however not aware or had little knowledge about Venture Capital Financing as an alternative to financing. Firms that had benefited from Venture Capital Financing stated that they did not only receive capital inflow but was accompanied with monitoring, technical skills and expertise, access to management, marketing and distribution and reputation for attracting further finance.

SMEs have been perceived as being extraordinary supporters of the Kenyan economy offering both employment and stage for inventive thoughts. They structure a bigger level of the organizations that work in Kenya when contrasted with their partner, the expansive organizations. They are anyway looked with numerous requirements that upset their execution and thusly their development. An investigation was led by Gabriel (2011) on elements impacting SMEs access to fund: A contextual analysis of Westland’s Division, Kenya

One of the primary requirements that have been featured throughout the years is the budgetary limitation. The requirement for account is of central significance for the accomplishment of any firm, be it huge or little. The examination included essential information got through poll and meetings. Auxiliary information was gotten from diaries, books and web.

Access to finance has been cited in many studies as the most prominent constraint to the survival of SMEs in equally developed and developing economies. An investigation was
directed by Phouphet (2011) on SME Access to Finance: Evidence from Laos. It uncovered that a standout amongst the most acute problems was financial constraints. In order to promote SMEs as engines of growth, it is crucial to understand the issues surrounding SMEs' access to finance. 198 samples from a nation-wide survey were used for this study. The results showed that access to finance could improve SMEs' performance. But Lao SMEs face various financial constraints such as collateral, complex application processes as well as a limited economic environment and options for financial sources. Only a small portion of SMEs were able to access finance. However, larger domestic firms, in terms of capital, which were determined to grow their businesses, seemed to have a greater possibility of being able to access financial sources.

The factors influencing the growth rate of small and medium-sized enterprises) in Algeria was analyzed, Asma et al. (2015) to explore the extent to which their success or failure depended on the wider business climate. The research revealed that the growth of SMEs in Algeria was hampered by several interrelated factors, which included business environmental factors that were beyond control of inner factors of the SMEs. The outer elements incorporated the lawful and administrative structure, access to outside financing and HR limits. The inner variables included of entrepreneurial characteristics, management capacities, marketing skills, and technological capacities.

Formal and informal systems enable SMEs to produce social capital by fashioning system ties, expanding on trust and sharing a dream among partners. It empowers them to get essential assets, backing, knowledge and information, which might be generally out of reach to them. An exact examination was led by means of an organized survey on sample of 100 SMEs in West Bengal with 50 firms having enrollment in industry/exchange relationship as the trial gathering and another 50 firms having just casual associations as the control gathering. Discoveries of the various relapse examination uncovered that the effect of social capital on firm execution is fundamentally more prominent in firms occupied with formal and casual systems.
administration as opposed to firms installed just in the casual system (Mausumi & Sharmistha, 2015).

Using survey data on thousands of Euro area firms, Bahar (2014) conducted a study on factors that affect the access to finance of SMEs in Euro area. The research found that changes in bank funding costs and borrower leverage matter for firms’ access to finance were major factors. Increases in bank funding costs and borrowers’ debt-to-asset ratios are significantly and negatively associated with firms’ access to finance. The use of subsidies significantly improves access to finance of SMEs. Finally, access to finance is found to be positively related to firm size and firm age. Changing needs are experienced over the financial growth life-cycle of SMEs. Start-ups rely on insider finance, trade credit and to a lesser degree, angel finance. More recently, start-ups may use crowd funding and accelerators as sources of funding. As the SMEs grows and gains track record, it is likely to become acceptable to access external finance such as bank credit, venture capital (VC) and public debt/equity (Vanacker & Manigart, 2010).

It is clear in Prior research that a number of factors constrain the growth of SMEs, especially lack of financial resources or capital. However, the degree to which limited financial resources alone are a major obstacle is still debatable. Studies by Dia (1996), Harper (1996) Godsell (1991) and Hart (1972) found that additional capital is often not required and can be overcome through creativity and initiative. This is consistent with Kallon (1990) who discovered that the measure of capital expected to begin a business is fundamentally negative when identified with the rate of growth for the SMEs. The exploration additionally proposes that access to commercial credit did not contribute to entrepreneurial success in any significant way, and, if it did, the relationship would be negative.

Stokes and Wilson (2006) also added on to say that financial difficulties of SMEs arise, either because of an inability to raise sufficient funds to properly capitalize the business, or a mismanagement of the funds that do exist or a combination of both. He explained that, access to external funds may be difficult to achieve for new or young, SMEs with
no track record, especially for owners without personal assets to offer as security. Stokes and Wilson (2006) go on to stress that many new owner managers, having received funds, misuse them; small businesses are notorious for their lack of proper financial controls and information.

2.4.4 Technological innovation

Innovation has influence on small and medium enterprise growth (Mwangi & Namusonge (2014). It is portrayed as the presentation of new or improved procedures, items or administrations dependent on new logical or mechanical information as well as authoritative ability (OECD, 2015). There are diverse kinds of advancement in business. Anyway it very well may be identified with new items or administrations, new generation forms, new promoting strategies, and new hierarchical or administrative structure. Development may likewise include innovation, licensed innovation, business, or physical action (Scheers, 2010).

Advancement portrays the business visionary as an individual who presents new or improved items, new creation procedures, new procedures, new markets, new advertising or deals strategies, new channels of dispersion and advancement, techniques for correspondence, new data sources and crude materials, new or improved administrations, new techniques for financing, new innovations including apparatus, hardware and data advances, new association structure (Rwigema & Venter, 2004).

Globalization of markets with a higher rivalry environment calls for SMEs to be highly innovative. Technological changes rapidly occur in the external environment forcing shorter product and technology lifecycles. SMEs have to focus on making technological innovation which is key driver for sustainable competitive advantage for their long-term survival (Dadfar et al., 2013).

The factors determining technological innovation are varied and several. These factors include: firm size, finance, consumer preferences, culture factors, management skills,
competitive advantage, economic factors and technological capacity. Firm size affects
the absorption of the new knowledge in the organization. The appropriation and
utilization of new technology is for the most part identified with the span of the firm. It
has been argued that larger firms have advantage in innovation. This idea is supported
on the argument that larger firms have stronger cash flows to fund innovation when it
occurs and that fixed costs of innovation are spread over larger volumes of sales (O’cass
& Weerawardena, 2009). Innovation success is based on the financial base of the SMEs.
Financial resources are key enablers of innovation. Availability of resources enables
innovation to occur. SMEs with weaker financial factors cannot fund innovation (Lecerf,
2012).

Firms work closely with consumers so as to meet their demands. Often firms have to
develop new products to meet consumers’ requirements. Sometimes
consumers/customers originate new ideas impacting on product development. Laforet,
(2011) advises that customers should participate in launches, process innovation and to
lesser extent, in business strategy.

Economic structure plays a role in technological innovation (Rujirawanich et al., 2011).
All areas of business activities are affected by financial and economic crisis. It results in
accessing financial sources that are much needed for investments, especially
technological innovations (Lesakova, 2014). When SMEs are encouraged to expand
eventually leads to innovation, growth and employment in the economy (Volchek et al.,
2013). Innovation is key source of competitive advantage in the knowledge economy
(Ahmed & Prajogo, 2006; Daghlous, 2004). Rareness, value, substitutability and
immutability are named in the resource based view as the indicators of measuring the
potentiality of firm resources to generate sustainable competitive advantage Barney
(1991). Chen (2009) argues that the firms with valuable and rare resources like assets,
capacities, trademarks, information and knowledge can use them to implement value-
creating strategies that cannot be duplicated by other firms to obtain sustainable
competitive advantages. The competitiveness of SMEs will be increased through
adopting Information and Communication Technology (Apulu & Latham, 2011). This is
consistent with Subrahmanya, et al. (2010) who summed up that those SMEs which have technological innovation have a higher growth compared to the SMEs which are not creative in the job, investment and sales turnover.

Most examinations talk about product innovation and process innovation and all these are critical towards improvement being at nation or authoritative dimension. Item development is the presentation of a decent or administration that is new or essentially improved in regards to its attributes or planned uses; incorporating noteworthy enhancements in specialized particulars, segments and materials, fused programming, ease of use or other practical qualities (OECD, 2015).

Item advancement by and large methods the association's procedure for presenting new thoughts, new items/wares, new innovation, work processes, new assembling strategies, new administrations and new appropriation and conveyance Rouse (2013). It is by and large set that the item development turns into the most imperative wellspring of auxiliary change in an economy since it cautions the blend of items, industry and occupations, which make up an economy. Then again alludes to the new systems, strategies, hierarchical structures and information encapsulated in the dissemination channels, items, applications, just as client desires, inclinations, and necessities. This incorporates huge changes in systems, gear or potentially programming. It can generously prompt diminished unit expenses of creation or conveyance, to build quality, or to deliver or convey new or altogether improved products (OECD, 2015).

Firm growth is an approach to present advancement and is a leitmotiv of mechanical change (Pagano & Schivardi, 2003). For example, if a firm needs to develop and get by in a focused industry, it needs to join new advancements so as to be increasingly productive. In this sense, development is a test a firm should meet by presenting advancement. Advancement is unavoidable for firms which need to create and keep up an upper hand and increase section into new markets. Development is quick turning into a urgent factor in organization execution and survival because of the advancement of the focused condition (Becheikh et al., 2006).
On access to business data, numerous Small organizations work in a data inadequate condition because of absence of appropriate business bolster administrations and the poor data stream (Oshikoya & Hussain, 2007). Access to data has anyway been not given a similar consideration as different requirements to development of SMEs like access to back, business sectors, innovation or preparing.

An exploration on the effect of Innovation on Performance of Small and Medium Enterprises (SMEs) was done in Tanzania by Audrey (2016). The examination utilized a work area system to research the overall existing observational investigations on the connection between Innovation on Small and Medium Enterprises (SMEs) execution. The writing review uncovered that the investigations on advancement and its impact on execution are seen to have concentrated to Western, Middle and Far East and almost no experimental proof is discernible in Africa. The outcomes from survey additionally discovered that no predictable outcomes on whether the advancements inside and out impact firms execution. The end was thusly not for the most part suitable. The idea of the experimental outcomes revealed in this paper showed a requirement for such investigations particularly in Africa where the examination crevice is broadly seen here.

Core competencies are major drivers behind the success of many Small and Medium sized organizations (Michael et al., 2015). While Information Technology (IT) can be leveraged to enhance these competencies, changes in IT and poor planning may result in core rigidities. Many SMEs experience difficulties in planning and aligning IT applications with business objectives and core competencies and limited scientific studies have been conducted to assist SMEs in this regard. The study examined the alignment of IT applications with non-technological competencies in South Africa and Uganda. It sought to identify those configurations of IT applications and non-technological competencies that result in IT-based competencies needed to ensure competitiveness in e-commerce in the SME sector. The perspective of alignment as a gestalt was adopted. 112 SMEs were surveyed and three alignment configurations consisting of SMEs with innovative IT competencies; Operational IT competencies and adaptive IT competencies were revealed. SMEs with innovative IT competencies
developed the most IT-based competencies. They achieved this by leveraging various operational and strategic IT applications to enhance a number of non-technological competencies.

An investigation on determining innovation factors for SMEs was directed by Ebru, et al. (2014). The specialists found that SMEs are the fundamental components of the economy which is in charge of driving advancement and rivalry in numerous financial divisions. To be a rival in such economies those SMEs should bolster key administration choices effectively. The issue could be in choice stage as indicated by economic situations with numerous outside and inward factors. To adapt to uncertainty officials need to think about suitable methodologies.

A research on enabling Innovation and Productivity Growth in Manufacturing Small and Medium Sized Enterprises in Low Income Countries: Qualitative Exploration of Policy and Research Issues were conducted in Kenya by Voeten, (2015). Although the new products and new processes in the interviewed Kenyan companies were not radical and ‘new to the world’, they were new for the companies, as units of analysis. Interestingly, most company owners and managers did not perceive their incremental adoption, adaptation and new combinations of existing technologies to be innovation. They associated innovation with a radical technological invention or breakthrough.

Innovation dispersion projects should: guarantee quality control, advance client introduction, update the imaginative limit of firms - including the advancement of general consciousness of the estimation of development among the board - and invigorate interest for specialized and hierarchical change; expand on existing between connections in national development frameworks and give more prominent lucidness between program plans (for example targets, destinations, methods of help) and administration conveyance, expand on assessment and appraisal in Nigeria. Innovation dispersion projects ought to specifically have instruments for evaluation which can direct and improve their task and the executives on a proceeding with premise. The United States have programs that are adequately invigorating quality in dissemination
forms, while Germany has complex institutional set-up catalyzing communications between existing performers in the national advancement framework. Nigeria can't be an exemption on the off chance that we should hold our situation as one with the most grounded economy in Africa and contend successfully in the worldwide market (Hakeem, 2015).

Adoption of Information and Communication Technology in SMEs was found to increase the competitiveness, Apulu and Latham (2011). This is consistent with Subrahmanya, et al (2010) who summed up that those SMEs that have technological innovation have a higher growth compared to those that are not creative in the sales turnover, investment and job. They maintain and acquire facilities, attract and retain capable staff to produce and market a product or do other things necessary to ensure the survival of the SMEs.

2.4.5 SMES’ survival

Macroeconomic conditions and firm-level characteristics, such as, size, age, resource-based arguments, management, governance, capacity to obtain external finance to start and expand, stability in production and operations are of fundamental importance in explaining SME’s long-term survival. Among these, financing is often cited as bottleneck restricting the development of SMEs in China (Chow & Fung, 2000). To help ease SME finance, the Shenzhen Stock Exchange officially inaugurated a board for small and medium-sized enterprises in 2004. The SME Board was opened to growing SMEs with outstanding main business or innovative high-tech start-ups. The new board is designed to facilitate financing by the emerging SMEs, which badly need funds but have few fund-raising channels.

The theory development and valuable recommendation for the better performance entrepreneurs is not possible without appropriate performance measurement of entrepreneurship, Murphy ed. al. (1994). There are eight dimensions of performance measurement in entrepreneurship, which are very widely used in research. These
dimensions are efficiency, growth, profit, size, liquidity, success/ failure rate, market share and leverage (Murphy et. al., 1994). Most of these dimensions are measured through in a financial prospective and small portion of measurement is also done through operational and non-financial performance measurement. Murphy (1994) said that each dimension of performance is measured through different way and show different frequency.

Efficiency (measured through return on assets, return on investment, and return on equity, gross revenues per employee), Growth (can be measured through changes in sales, changes in employees, market share growth, changes in net income margin, and changes in CEO/owner compensation and changes in labour expenses to revenues), Profit (return on sales, net profit margin, gross profit margin, net profit level, net profit from operation, pretax profit and clients estimate of incremental profit, Size and liquidity (measured through sales level, ability to fund growth, current ratio, quick ratio, total asset turnover and cash flow to investment), Success/Failure (Discontinued businesses, researcher subjective assessment, return on net worth and responded subjective assessment), Market Share (respondent assessment and firm product sales to industry product sales). For the sake of this work SMEs survival will be measured through efficiency, liquidity and profitability.

The factors that affect the success of small and medium enterprises in Thailand were identified by Chuthamas et al. (2010). The study examined eight factors that influence the SMEs success. These factors are: SMEs characteristic, management and know-how, products and services, Customer and Market, the way of doing business and cooperation, resources and finance, Strategy, and external environment. The theoretical framework had been drawn out and questionnaire was designed based on the factors chosen. Eight hypotheses were developed to find out factors that are affecting Business Success of SMEs in Thailand. The entire hypotheses were successfully tested with SPSS and five hypotheses were accepted. The regression analysis result showed that the most significant factors affecting success of SMEs in Thailand were SMEs characteristics,
customer and market, the way of doing business, resources and finance, and external environment.

A research on factors that may affect upon business achievement in the two municipals of Ilala and Temeke SMEs was finished by Jimmy (2011). The examination included 60 SMEs, 30 from every district. The investigation inspected the degree to which pioneering skill impacted business achievement in SMEs. The examination was led at Ilala and Temeke Municipals. Despite the fact that it has been hard to determine why in comparable circumstances a few business visionaries fizzle while others succeed, it is through that the emphasis on "innovative capabilities" offers a viable methods for tending to the marvel. SMEs are as yet looked by absence of suitable learning and abilities, constrained aptitudes, restricted access to data innovation, reliance on poor and outdated innovation. The investigation utilized arbitrary examining since SMEs are numerous and dissipated in wide geological zone. A standout amongst the most genuine obstacles was constrained limit of individuals who begin and work the SMEs, regarding the mentalities, inspiration, introduction, abilities and encounters. Education and training programs could provide owners with opportunities to explore their motives of firm ownership and better understanding of the consequences of not seeking success. The findings of the study showed that business or entrepreneurial failures are mostly attributed to inadequacy of financial resources. The conclusion of the study indicated that one of the other serious impediments is the limited capacity of people who start and operate the businesses, in terms of the attitudes, motivation, exposure, skills and experiences.

Managerial skills are more important factor in entrepreneurial success. Stressing that it is human factors that make the difference between success and failure (T.N. Sinha, 1996). Dobbs and Hamilton (2007) accentuated the beneficial outcome of past experience on little undertakings development by suggesting that proprietor chiefs with past experience were bound to stay away from expensive missteps than those with no related knowledge.
2.5 Critique of existing literature

The reviewed literature on entrepreneurial determinants influencing small and medium enterprises survival in Kakamega County, Kenya yielded mixed results. Most of the reviewed studies however did not look at the effect of entrepreneurial skills, entrepreneurial competences, access to entrepreneurial finance and technological innovation in one study. The studies looked at the variables in isolation. The review of literature indicated a positive relationship between entrepreneurial skills and SMEs survival as revealed by Mukulu et al. (2016), Hala (2014), Thomas (2012), Fred (2012), Tamara (2011) and Ahmad et al. (2011).

The impact of entrepreneurial competencies research conducted by Sulaiman et al (2016) on Small and Medium Enterprises Business Performance in the Malaysian Hospitality and Tourism Industry found that lack of entrepreneurial competencies impact negatively on business performance. Oladele and Akeke (2016) concluded that improvement on charismatic leadership styles is a good catalyst to increasing sales growth in small and medium enterprises in Nigeria. Shehnaz and Ramayah (2014) argued that entrepreneurial competencies alone are not enough to ensure the survival and success of SMEs. Since, SMEs have scarce resources of finance, skills, technology and knowledge; therefore SMEs sustainable success highly depends on many other factors such as supplier’s capabilities as well as customer’s integration. Moreover stronger relationships of SMEs with their customers and suppliers enable them to access the information regarding latest customer choices and tastes, technologies and new methods of innovations. Endi, et al. (2013) indicated that the entrepreneurial characteristics have a significant influence on business performance. Entrepreneurial competencies are mediating in the relationship between entrepreneurial characteristics and business performance. It means powerful entrepreneurial characteristics will lead to an increase in the competence of the SMEs owner, which will ultimately have an effect on SMEs performance.
The determinants of growth oriented SMEs inquire about were directed in Nairobi County, Namusonge (2011). The examination presumed that accessibility and sort of fund are key determinants of the development execution of SMEs.

Gabriel (2011) also concluded that the need for finance is of paramount importance for the success of any firm, be it big or small. According to Bahar (2014) access to finance was found to be positively related to firm size and firm age. Mausumi and Sharmistha (2015) uncovered that the effect of social capital on firm execution is altogether more prominent in firms occupied with formal and casual systems administration as opposed to firms installed just in the casual system.

Asma, et al. (2015) concluded that the growth of SMEs in Algeria was hampered by several interrelated factors, which include business environmental factors that were beyond SMEs’ control and internal factors of the SMEs. The external factors include the legal and regulatory framework, access to external financing, and human resources capacities. The internal factors comprise entrepreneurial characteristics, management capacities, marketing skills, and technological capacities. Daniel and Willy (2015) who examined factors influencing access to finance by micro, small and medium enterprises in Meru county, Kenya, revealed that information asymmetry, business risks and transactional costs influence access to finance. The transactional cost emerged as the most critical factor or the most significant predictor to access to finance. Phouphet (2011) conducted a study on SME Access to Finance: Evidence from Laos and found that only a small portion of SMEs were able to access finance. None of studies above mentioned how much entrepreneurial finance is required. Neither do they mention how much would be enough.

On technological innovation, it was found that innovation has influence on small and medium enterprise growth by (Mwangi & Namusonge (2014), Michael et al. (2015), Ebru, et al. (2014), Voeten, (2015) but Hakeem (2015) added that innovation dissemination software engineers should: guarantee quality control, advance client introduction, update the imaginative limit of firms including the advancement of general
consciousness of the estimation of development among the board and invigorate interest for specialized and authoritative change. Also in Tanzania Audrey (2016) found that no consistent results on whether the innovations influence firms performance. The current sought to use all the variables and investigate their effect on SMEs survival in Kakamega County, Kenya in order to achieve a comprehensive analysis.

2.6 Research gaps

The review of literature indicated that conceptual and contextual research gaps existed. Conceptual research gaps existed because the reviewed studies used either one or two of the variables under the current study but not all the four variables in the same study. An example is the study conducted by Mukulu et al. (2016) which used entrepreneurial skills only, a study by Sulaiman, et al (2016) used entrepreneurial competences only, a study by Sulaiman et al. (2016) used access to entrepreneurial finance only and a study by Voeten, (2015) which used technological innovation only.

The study conducted by Sulaiman, et al. (2016) on impact of entrepreneurial competencies on Small and Medium Enterprises Performance in the Malaysian Hospitality and Tourism Industry found that lack of entrepreneurial competencies influenced negatively on business performance but Shehnaz and Ramayah (2014) argued that entrepreneurial competencies alone are not enough to ensure the survival and success of businesses. The study sought to clarify the influence of entrepreneurial competences on SMEs in Kakamega County.

As the reviewed studies revealed different results on technological innovation. This study analyzed its influence on SMEs in Kakamega count, Kenya and come up with clear recommendations.

The review also indicated existence of contextual research gaps because the reviewed studies were conducted in a different context as compared to the current study. The
The current study sought to fill the existing research gaps by looking at the combined influence of the four variables on SMEs survival in Kakamega County, Kenya.

The preference of SMEs source of funding was conducted by Kihimbo et al. (2012) in Kakamega municipality. The study concluded that Most SMEs preferred their own private financing than external financing.

There is research gap in this study since it only looked at Kakamega municipality and not the entire County. This means, the study was carried out more than 8 years ago. The research also just studied selected SMEs and not the industry as a whole.

2.7 Summary of the literature review

The above chapter reviews the various theories that explain the independent and dependent variables of the study. The reviewed theories are then critiqued for relevance to specific variables. The study is hinged on the resource based theory, competence based theory and Neo-classical theory. Empirical literature on both independent and dependent variables was also reviewed. It is from this review that research gaps were highlighted.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the exploration organization, the population in the examination, data gathering techniques, measure of factors, the legitimacy and unwavering quality test, data analysis and anticipated limitations of the study. Research methodology is a strategy which moves from the underlying assumptions to research design and data collection, Myers (2009). However, the common classification of research method is qualitative and quantitative notwithstanding other modes of distinctions. Empirically, both quantitative and qualitative methods are based on the nature of acquaintance, how the researcher interprets the results of the research. In other words, it refers to research methods-data collection and analysis, generalizations and representations derived from the data. The sequence of the chapter is as follows: research design, population premeditated, sampling frame, sample and sampling techniques, instruments, data collection procedures, pilot test, data processing and analysis including regression model specification that was used to test the hypotheses of the study as articulated in chapter one. Included are the measures that were used to ensure the reliability and validity of the research instruments.

Anchoring the design is the research philosophy. This investigation is entrenched in the positivism philosophy. This philosophy according to Sekaran (2013) can also be called quantitative, objectivist, scientific or traditionalist philosophy. It was adopted because the descriptive approach adopted as the research design perfectly falls in the scientific category where the test of the hypotheses can tell the cause-effect relationships of the study.
This section introduces the exploration structure, the number of inhabitants in the examination, information gathering techniques, estimation of factors, the legitimacy and unwavering quality test, data analysis and anticipated limitations of the study.

### 3.2 Research Design

The descriptive survey research design was applied. The descriptive survey was applied because it was able to describe the characteristics of a particular population in a systematic and accurate manner. Descriptive design was used because it focused on complex analysis to bring out the correlation of variables. Causal relationship sought to establish how one variable affects changes in another. Thus, focused on understanding, explaining, predicting and controlling relationships between variables.

### 3.3 Target Population

Populace is a gathering of people, articles or things from which tests will be taken for estimation or it is a whole gathering of people,

### 3.4 Target Population

Population is a group of individuals, objects or items from which samples will be taken for measurement or it is an entire group of persons, or elements that have at least one thing in common (Kombo and Tromp, 2008). The target population of the study was 1270 SMEs that had been in operation for a period of 5 years and above in Kakamega County, Kenya. To be included in the study, the SME was both registered small and medium firms in the county. Kakamega County was selected because had the second largest population in the country. There was a possibility of employees spinning off to self employment making SMEs a vibrant sector in the county.
3.5. Sampling frame

A simple definition of a sampling frame is a set of source materials from which the sample is selected (Mugenda & Mugenda, 2003). The definition also encompasses the purpose of sampling frames, which is to provide a means for choosing the particular members of the target population that are to be interviewed in the survey (Bailey, 2008). Sample Frame is a complete list of all the cases in the population, from which a probability sample is drawn. In this study the sample frame was drawn from the list of SMEs that had been in business for at least 5 years and above in Kakamega County, Kenya.

3.6. Sample Size

Test size of a measurable example is the quantity of perceptions that comprise the example (Saunders, Lewis & Thornhill, 2007). For this situation, it alludes to the particular number of SMEs to be taken on the examination in order to empower the specialist surmise about the whole SMEs in the investigation territory practically speaking, the example measure utilized in the investigation was resolved dependent on the cost of information gathering, the span of the populace, reason for the investigation and the need adequate factual capacity to distinguish an impact. A few key actualities of measurements depict this marvel, including the law of huge numbers and as far as possible hypothesis (Cohen, 1988). Kerlinger, (2006) demonstrates that an example of size, 10% of the objective populace is sufficiently expansive inasmuch as it considers dependable information examination. This was additionally the situation for (Ngugi, 2012) because of scholarly capital on the development of Small and Medium Enterprises in Kenya. Subsequently, an example size of 127 SMEs which was 10% of the populace (N=1270) was sufficient for the examination. The example dispersion is as appeared table 3.1.
Table 3.1: The distribution of sample size of SMEs in Kakamega County

<table>
<thead>
<tr>
<th>Area</th>
<th>Population</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kakamega central Sub-county</td>
<td>320</td>
<td>32</td>
</tr>
<tr>
<td>Kakamega south Sub-county</td>
<td>292</td>
<td>30</td>
</tr>
<tr>
<td>Lugari Sub-county</td>
<td>233</td>
<td>23</td>
</tr>
<tr>
<td>Butere Sub-county</td>
<td>195</td>
<td>20</td>
</tr>
<tr>
<td>Mumias Sub-county</td>
<td>124</td>
<td>12</td>
</tr>
<tr>
<td>Matungu Sub-county</td>
<td>106</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1270</strong></td>
<td><strong>127</strong></td>
</tr>
</tbody>
</table>

*Source: Kakamega County report 2015*

### 3.7 Data collection methods

Data collection refers to the process of gathering raw and unprocessed information that can be processed into meaningful information, following the scientific process of data analysis (Gall, Gall & Borg, 2007). The study used both primary and secondary data.

#### 3.7.1 Primary data

The study used quantitative primary data. Primary data were obtained from questionnaires. The researcher obtained primary data on entrepreneurial skills, entrepreneurial competences, Access to entrepreneurial finance and technological innovation. The questionnaire used a 5 point likert scale, on questions and interview. (Appendix I). Drop and pick later method was used.

#### 3.7.2 Secondary data

Secondary data were gathered from the financial statements and annual reports of the firms, from historical reports, for example, official distributions of the Kakamega County government which records all enrolled SMEs in the County and distributed
archives. Data was additionally acquired from libraries, web, open and private associations and to a great extent work area survey of distributed writing on SME development.

3.8 Pilot testing

To check the validity and reliability of the questionnaires in gathering data required for purpose of the study, pilot study was carried out. The purpose of pilot testing was to establish the accuracy and appropriateness of the research design and instrumentation (Saunders, Lewis & Thornhill, 2007). A pilot study was conducted using 20 respondents which represent more than 10% of the study sample. According to Cooper and Schindler (2003) the respondents in a pilot test don't need to be factually chosen when testing the validity and reliability of the instruments. The point was to test the unwavering quality and legitimacy of the questionnaire. It also aimed at determining if there were any flaws, limitations, or other weaknesses within the questionnaire design and therefore allow for revisions to be made to the questionnaire prior to the implementation of the study.

3.8.1 Validity Tests

Validity can be described as the extent to which instrument measures what it purports to measure (Jankowicz, 2005). Validity concerns the accuracy and meaningfulness of inferences which are based on the research results (Bryman & Cramer, 2005). There were three kinds of validity relevant for this research; criterion related validity, content validity and construct validity. Criterion related validity also referred to as instrumental validity, was used to demonstrate the accuracy of a measure or procedure by comparing it with another measure or procedure which had been demonstrated to be valid. The study relied on instruments developed in other related studies as well as concepts generated from a broad range of appropriate literature. Content validity was based on the extent to which measurement reflected the specific intended domain of content. This study used content validity to examine whether the content of the research instrument covered representative sample of construct domain that was measured.
To understand whether this research had constructed validity, the researcher followed the subsequent steps. First the theoretical relationships were specified. Second the empirical relationship between the measures of the concepts was examined. Third, the empirical evidence was interpreted in terms of how it would clarify the construct validity of the particular measure tested.

3.8.2 Reliability Test

Reliability is the consistency of a set of measurement items or the degree to which an instrument measures the same way each time it is used under the same condition with the same subjects (Cronbach, 1951). It is the extent to which a questionnaire tests observation or any measurement procedure and produces the same results. A measure is considered reliable if a person’s score on the same test given twice is similar. Various variables may impinge upon reliability of findings. For instance, respondents might be biased or not be in the mood of answering questions with degree of interest. To minimize such variables, Sekaran (2003) advise that respondents must be carefully chosen to ensure they were willing to participate in the study and would answer questions with minimum degree of bias.

Two methods of testing reliability were used in this study: test for equivalence and internal consistency test. Test of equivalence was ensured through questionnaire pretesting with a sample of technically equivalent respondents not participating in the study. Internal consistency of the research instrument used Cronbach’s Alpha.

\[
\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N - 1) \cdot \bar{c}}
\]

3.9 Data analysis procedure and presentation

Data analysis is a practice in which raw data is ordered and organized so that useful information can be extracted from it (Gall et al, 2007). Descriptive statistics were used
to perform data analysis. SPSS was used to produce descriptive and inferential statistics which were used to derive conclusions and generalizations regarding the population. The particular descriptive statistics were mean scores and standard deviation. The particular inferential statistic were regression and correlation analysis. The analysis of variance (ANOVA) was checked to reveal the overall model significance. In particular, the calculated $F$ statistic was compared with the tabulated $F$ statistic. A critical $p$ value of 0.05 was also be used to determine whether the overall model was significant or not. A basic $p$ estimation of 0.05 was additionally used to decide if the individual factors were critical or not.

A numerous direct relapse show was utilized to connect the free factors to the reliant variable as pursues:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where:

$Y$ = SMEs survival

$X_1$ = Entrepreneurial skills (ES)

$X_2$ = Entrepreneurial competences (EC)

$X_3$ = Access to entrepreneurial finance (AEF)

$X_4$ = Technological innovation (TI)

$\beta_0$ = Constant

$\beta_1, \beta_2, \beta_3, \beta_4$ = Regression coefficients to be estimated

$e$ = stochastic term
### 3.10 Variable measurement

#### Table 3.2: Variable Measurement

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Type</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMEs survival</td>
<td>Dependent</td>
<td>Sales turnover</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Profitability</td>
</tr>
<tr>
<td>Entrepreneurial skills</td>
<td>Independent</td>
<td>Level of education, qualifications, appraisal reports and development of employees in terms of training and motivation.</td>
</tr>
<tr>
<td>Entrepreneurial competences</td>
<td>Independent</td>
<td>Decision making, communication and leadership level in terms of strategies, conceptual, and business opportunity</td>
</tr>
<tr>
<td>Access to entrepreneurial finance</td>
<td>Independent</td>
<td>Level of external finances, availability and affordability of external finances.</td>
</tr>
<tr>
<td>Technological innovation</td>
<td>Independent</td>
<td>Dimension of changes in the manner in which things are done in the venture in all parts of the business for example production procedures, circulation channels, new items, new technologies new markets and in general administration conveyance among others</td>
</tr>
</tbody>
</table>

Table 3.3 shows the statistical test used to test the hypothesis. They include t-test and F-test.
**Table 3.3: statistical test for the hypothesis**

<table>
<thead>
<tr>
<th>S/N</th>
<th>Hypothesis to be tested</th>
<th>Test statistics used</th>
<th>Decision at 5% level of significance</th>
</tr>
</thead>
</table>
| H1  | $H_0$: Entrepreneurial skills do not affect SMEs survival  
     $H_1$: Entrepreneurial skills affect SMEs survival  
     OR  
     $H_0 : \beta_1 = 0$  
     $H_1 : \beta_2 \neq 0$ | T-test | Reject HO if P-value is greater i.e p-value > 0.05 |
| H2  | $H_0$: Entrepreneurial competences do not affect SMEs survival  
     $H_1$: Entrepreneurial competences affect SMEs survival  
     OR  
     $H_0 : \beta_1 = 0$  
     $H_1 : \beta_2 \neq 0$ | T-test | Reject HO if P-value is greater i.e p-value > 0.05 |
| H3  | $H_0$: Access to Entrepreneurial finance does not affect SMEs survival  
     $H_1$: Access to Entrepreneurial finance affects SMEs survival  
     OR  
     $H_0 : \beta_1 = 0$  
     $H_1 : \beta_2 \neq 0$ | T-test | Reject HO if P-value is greater i.e p-value > 0.05 |
| H4  | $H_0$: Technological innovation does not affect SMEs survival  
     $H_1$: Technological innovation affects SMEs survival  
     OR  
     $H_0 : \beta_1 = 0$  
     $H_1 : \beta_2 \neq 0$ | T-test | Reject HO if P-value is greater i.e p-value > 0.05 |
| H5  | $H_0$: Entrepreneurial skills, entrepreneurial competences, access to entrepreneurial finance, technological innovation do not affect SMEs survival  
     $H_1$: Technological innovation affects SMEs survival.  
     OR  
     $H_0 : \beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$  
     $H_1 : \text{at least one } \beta_i \neq 0$ | F-test | Reject HO if P-value is greater i.e p-value > 0.05 |
CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter is mainly concerned with organization, analysis and presentation of data collected from respondents using questionnaires designed to measure the hypothesis of the study and also the secondary data which were obtained from financial statements and manual reports of the firms and others. The main aim of this study involved finding out whether: Entrepreneurial Skills, Entrepreneurial Competencies, Accessing Entrepreneurial Finance and Technological innovation had no influence on SMEs survival in Kakamega County. The chapter presents empirical findings and results using the techniques indicated in chapter three.

4.2 Response rate

One hundred and twenty seven questionnaires (127) were given out and only one hundred and twelve questionnaires (112) were completed and returned representing a response rate of 88.2% and none response rate of 11.8%. According to Mugenda and Mugenda (2003), a response rate of 50% is considered good and response rate greater than 70% is considered to be very good. Kothari (2004) indicated that for a social study response rate above 60% is adequate. Based on the assertions of Oloyo (2001), a good response rate for a study is important because it reflects the suitability of the study procedure. The response rate of 88.2% was therefore a good representative of respondents.
Table 4.1: Response Rate

<table>
<thead>
<tr>
<th>Response rate</th>
<th>Sample size</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaires Returned</td>
<td>112</td>
<td>88</td>
</tr>
<tr>
<td>Questionnaires not returned</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>127</td>
<td>100</td>
</tr>
</tbody>
</table>

4.3. Gender of the respondents

Out of 112 respondents, 55.35% (62) were male respondents while 44.64% (50) were female respondents. These findings indicate that there were more male respondents in this study as compared to the female respondents. Since the population was mainly targeting small and medium enterprises in Kakamega County, the findings suggest that there was gender imbalance between male and females in small and medium enterprises in Kakamega County, in other words many firms are owned by male compared to female.

4.4 Age bracket of the respondents

From the findings, 4.3% indicated that they were aged between 21 - 30 years, 39.3% of the respondents indicated that they were aged between 31 - 40 years, 47.9% indicated that they were aged between 41 - 50 years and 8.5% indicated that they were aged between 51-60 years. This shows that most of the respondents were aged between 41- 50 years.

4.5 SMEs Categories

The findings were presented in table 4.2. From the study findings, the majority 39.29% of the SMEs were categorized as General Trade, 27.68% of the SMEs was categorized as Service Industry, 20.54% of the SMEs were categorized as Agricultural Activities,
and 6.25% of the SMEs were categorized as Health Care, 3.57% of the SMEs were categorized as Educational and Training and 2.68% of the SMEs were categorized as others. Finding implies that most of the SMEs were categorized under general trade.

**Table 4.2: SMEs Categories**

<table>
<thead>
<tr>
<th>Public institution</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Trade</td>
<td>44</td>
<td>39.29</td>
</tr>
<tr>
<td>Service Industry</td>
<td>31</td>
<td>27.68</td>
</tr>
<tr>
<td>Health Care</td>
<td>7</td>
<td>6.25</td>
</tr>
<tr>
<td>Agricultural Activities</td>
<td>23</td>
<td>20.54</td>
</tr>
<tr>
<td>Educational and Training</td>
<td>4</td>
<td>3.57</td>
</tr>
<tr>
<td>Other Categories</td>
<td>3</td>
<td>2.68</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>100.00</td>
</tr>
</tbody>
</table>

**4.6 Length of business**

The study sought to establish how long the business has been in existence. The results presented in table 4.6 indicate that, majority (56.25%) of the SMEs have existed for a period of 6-8 Years while 21.43% of the SMEs have existed for a period of 9-10 Years, (11.61%) of the SMEs have existed for a period of 3-5 Years, lastly 10.74% the SMEs have existed for a period of more than 10 Years. This implies that the SMEs which have existed for a period more than 6 years were more likely to be aware of the issues/challenges that affect their SMEs.
Table 4.3: Length of Business

<table>
<thead>
<tr>
<th>Length of service</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-5 Years</td>
<td>13</td>
<td>11.61</td>
</tr>
<tr>
<td>6-8 Years</td>
<td>63</td>
<td>56.25</td>
</tr>
<tr>
<td>9-10 Years</td>
<td>24</td>
<td>21.43</td>
</tr>
<tr>
<td>More than 10 Years</td>
<td>12</td>
<td>10.74</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>100.00</td>
</tr>
</tbody>
</table>

4.7 Position of the respondents in the business

The study sought to establish the Position of the Respondent in the Business. The results presented in table 4.4 indicate that, majority (54.46%) of the SMEs are managed by entrepreneurs, followed by 20.54% being managed by Family members, 15.18% being managed by employees while 9.82% being managed by managers.

This proposes the majority of the SMEs in Kakamega County are not sufficiently expansive to utilize numerous individuals.

Table 4.4: Position of the Respondent in the Business

<table>
<thead>
<tr>
<th>Length of service</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner</td>
<td>61</td>
<td>54.46</td>
</tr>
<tr>
<td>Manager</td>
<td>11</td>
<td>9.82</td>
</tr>
<tr>
<td>Employer</td>
<td>17</td>
<td>15.18</td>
</tr>
<tr>
<td>Family member</td>
<td>23</td>
<td>20.54</td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td>100.00</td>
</tr>
</tbody>
</table>
4.8. Dimension of education of respondents

Further examination demonstrated that greater part at 55.56% of the respondents had secondary dimension of instruction, 22.22% of the respondent had tertiary dimension of training, 11.14% of the respondent had essential dimension of training and finally 8.9% of the respondent had no amount of training and 2.18% of respondents had degrees. The findings also suggest many SMEs in Kakamega County are mainly managed by those who have secondary level of education.

4.9 Pilot results

To check the validity and reliability of the questionnaires in gathering data required for purpose of the study, pilot study was carried out. The purpose of pilot testing was to establish the accuracy and appropriateness of the research design and instrumentation (Saunders, Lewis & Thornhill, 2007). A pilot study was conducted using 20 respondents which represent more than 10% of the study sample

4.9.1 Reliability and Validity of Research Instrument.

Reliability is a measure which shows the level at which the research instrument is free from error (not bias) so as to ensure consistent measurement across various items in the instrument. Reliability of the instrument was conducted using Cronbach’s alpha constant which is a measure of internal consistency and average correlation. According Zinbarg et al., (2005), an alpha coefficient of 0.70 or higher indicated is reliable as it has a relatively high internal consistency and can be generalized to reflect opinions of all respondents in the target population. Higher alpha coefficient values mean there is consistency among items in measuring the concept of interest. Based on the variable Entrepreneurial Skills had 8 factors, Cronbach constant was 0.731 which was slightly above 0.7 before no factor was removed. Items on variable Entrepreneurial Competencies did not require any adjustment since the alpha constant was 0.824. For Accessing Entrepreneurial Finance alpha constant was 0.567. However, after removing
one factor, the reliability increased to 0.736. Technological innovation had an alpha constant of 0.604 which rose to 0.832 after removing factor seven. Lastly the dependent (SMEs survival) variable had alpha constant 0.743 so no factor was removed. Table 4.5 shows the summary of the finding based on the reliability of the research instrument and the overall Cronbach's constant was 0.7732 hence the instrument was reliable.

Table 4.5: Reliability of instruments

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach's Alpha before removing</th>
<th>Cronbach's Alpha after removing</th>
<th>No of Items before removing some factors</th>
<th>No of Items after removing some factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Skills</td>
<td>0.731</td>
<td>0.731</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Entrepreneurial Competencies</td>
<td>0.824</td>
<td>0.824</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Accessing Entrepreneurial Finance</td>
<td>0.567</td>
<td>0.736</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Technological innovation SMEs survival</td>
<td>0.604</td>
<td>0.832</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>SMEs survival</td>
<td>0.743</td>
<td>0.743</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>MEAN</td>
<td>0.6938</td>
<td>0.7732</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.9.2 Factor analysis

Factor analysis is mainly concerned with internal-correlations among data to come up with internally consistent surrogates of the variable (Mugenda, 2010). These correlations normally assist the researcher to formulate and interpret the components (variables). Cooper and Schindler (2008) suggest that variables with factor loading 0.7 are acceptable. However a minimum of 0.4 value of factor loading is allowed as suggested
by other researchers. In order to test for construct validity and highlight variability among observed variables and to also check for any correlated variables for redundancy in data to be reduced factor analysis was important in the study as suggested by Hair et al. (2010).

The study adopted factor analysis to reduce the number of indicators which do not explain the effect of Entrepreneurial Skills on SMEs survival in Kakamega County and retain the indicators which are capable of explaining the effect. Exploratory factor analysis was employed to assess construct one-dimensional scales and identify the structure of the measurement or outer model for the items in the study. This was performed purposefully to refine/retain the Strongly Agree number of factors. In this case only factors with values 0.4 and above were used for further analysis as recommended by Hair et al. (1998) and Tabachnick and Fidell (2007). Hair et al. (1998) and Tabachnick and Fidell (2007) described the factor loadings as follows: 0.32 (poor), 0.45 (fair), 0.55 (good), 0.63 (very good) or 0.71 (excellent).

The findings in Table 4.6 below shows that the overall factor analysis for all the variables that is the four factors measuring the independent variables and dependent variables; Entrepreneurial Skills had eight items with factor loadings 67.3%. All the items were accepted based on the general rule of thumb for acceptable factor loading of 40% above. No item was removed or expunged. The result of the factor analysis for Entrepreneurial Competencies with seven items, a factor loading of 66.8% was recorded. This implies that all items fall within the acceptable threshold based on the general rule of thumb as none of the item was dropped. The factor analysis for Accessing Entrepreneurial Finance, with eight items shows that factor loadings 62.9%. One factor was eliminated. For Technological innovation, there were seven items of which one item was dropped for inconsistency factor loading was 61.6%. The dependent variable SMEs survival was also subjected to factor analysis. All the factor loadings were above 55.8% which implies that all items fall within the acceptable threshold as no item was dropped from table 4.6. It indicates that all the factor loading of all the items were above 40% and thus all were considered for further statistical analysis.
Table 4.6: Summary of Factor Analysis

<table>
<thead>
<tr>
<th></th>
<th>Number of Items</th>
<th>Factor Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Entrepreneurial Skills</td>
<td>8</td>
<td>.673</td>
</tr>
<tr>
<td>2  Entrepreneurial Competencies</td>
<td>7</td>
<td>.668</td>
</tr>
<tr>
<td>3  Access Entrepreneurial Finance</td>
<td>8</td>
<td>.629</td>
</tr>
<tr>
<td>4  Technological innovation</td>
<td>6</td>
<td>.616</td>
</tr>
<tr>
<td>5  SMEs survival</td>
<td>3</td>
<td>.558</td>
</tr>
</tbody>
</table>

4.10 Descriptive Results

The respondents were asked to rate various statements on independent and dependent variables on a likert scale of 1 to 5. The statements were based on a likert scale ranging from strongly disagree, disagree, neutral, agree and agree strongly.

4.10.1 Entrepreneurial Skills

The respondents were asked to rate various statements on entrepreneurial skills on a likert scale of 1 to 5. The results are presented in Table 4.7.
Table 4.7: Entrepreneurial Skills Descriptive Results

<table>
<thead>
<tr>
<th>Statement</th>
<th>SD</th>
<th>DA</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business plan skills have led to increase in sales &amp; profitability</td>
<td>1.4</td>
<td>14.</td>
<td>33.</td>
<td>29.</td>
<td>3.9</td>
<td>1.315</td>
</tr>
<tr>
<td>Proposal development skills have led to increase in sales &amp; profitability</td>
<td>13</td>
<td>6.6</td>
<td>32.</td>
<td>31.</td>
<td>4.2</td>
<td>1.348</td>
</tr>
<tr>
<td>Keeping records skills have led to increase in sales &amp; profitability</td>
<td>18</td>
<td>14</td>
<td>21</td>
<td>28</td>
<td>3.1</td>
<td>1.302</td>
</tr>
<tr>
<td>Communication skills have led to increase in sales &amp; profitability</td>
<td>5.5</td>
<td>12</td>
<td>21</td>
<td>43</td>
<td>3.6</td>
<td>1.546</td>
</tr>
<tr>
<td>Budget control skills have led to increase in sales &amp; profitability</td>
<td>11</td>
<td>12</td>
<td>24</td>
<td>26</td>
<td>3.3</td>
<td>1.386</td>
</tr>
<tr>
<td>Marketing skills have led to increase in sales &amp; profitability</td>
<td>12</td>
<td>12</td>
<td>27</td>
<td>28</td>
<td>3.2</td>
<td>1.302</td>
</tr>
<tr>
<td>Decision making skills have led to increase in sales &amp; profitability</td>
<td>5.5</td>
<td>9.5</td>
<td>29</td>
<td>40</td>
<td>3.6</td>
<td>1.546</td>
</tr>
<tr>
<td>Time management skills have led to increase in sales &amp; profitability</td>
<td>17</td>
<td>12</td>
<td>21</td>
<td>43</td>
<td>3.6</td>
<td>1.546</td>
</tr>
<tr>
<td>Average</td>
<td>3.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.41</td>
</tr>
</tbody>
</table>
The first objective of the study sought to determine the influence of Entrepreneurial Skills on SMEs survival in Kakamega County. The respondents were asked to indicate the extent to which they thought the following statements contributed to the survival of SMEs in Kakamega county and the findings were as follows: Business plan skills have led to increase in sales and profitability were rated 29.9% Strongly Agree, 33% Agree, 20.3% Neutral, 14.4% Disagree and 1.4% Strongly Disagree. Proposal development skills have prompted increment in sales and profitability were appraised 31.0% Strongly Agree, 32.8% Agree, Neutral 12.9% Disagree, 1.4% unequivocally Disagree. Record keeping abilities have prompted increment in deals and benefit were rated, 31.0% strongly agree, 32.8% Agree 15.9% Neutral, 6.6% Disagree and 13.7% Strongly Disagree. Communication skills have led to increase in sales and profitability were also rated as follows: 18.5% strongly Agree, 18.5% Agree 28.0% Neutral, 21.0% Disagree while 14.0% strongly Disagree. Budget control skills have led to increase in sales and profitability were rated 31.0% Strongly Agree, 32.8% Agree 15.9% Neutral, 6.6% Disagree and 13.7% strongly Disagree. Marketing skills have led to increase in sales and profitability were rated 31.0% strongly Agree, 32.8% Agree 15.9% Neutral, 6.6% Disagree and 13.7% Strongly Disagree the rest of the findings are shown in table 4.23. Decision making has prompted increment in deals and gainfulness were appraised 40.9% emphatically Agree, 29% Agree 10% Neutral, 9.5% Disagree and 5.5% unequivocally Disagree. Time the executives has prompted increment in deals and benefit were rated 43.4% strongly Agree, 21.5% Agree 5.5% Neutral, 12.5% Disagree and 17% Strongly Disagree. On a five point scale, the mean of the responses was 3.56 which means that majority of the respondents were agreeing to the statements in the questionnaire. The standard deviation was 1.41 meaning that the responses were clustered around the mean response.
4.10.2 Entrepreneurial Competencies

The respondents were asked to rate various statements on entrepreneurial competencies on a likert scale of 1 to 5. The statements were based on a likert scale ranging from strongly disagree, disagree, neutral, agree and strongly agree. The results are presented in Table 4.8.

Table 4.8: Entrepreneurial Competencies Descriptive Analysis

<table>
<thead>
<tr>
<th>Statement</th>
<th>S.D</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>S. A</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employing staff with relevant qualifications has led to increase in sales and profitability</td>
<td>1.4%</td>
<td>16.4%</td>
<td>22.3%</td>
<td>34.9%</td>
<td>28.9%</td>
<td>2.4</td>
<td>1.315</td>
</tr>
<tr>
<td>Encouraging team work among the employees has led to increase in sales and profitability</td>
<td>13.7%</td>
<td>6.6%</td>
<td>15.9%</td>
<td>32.8%</td>
<td>31.0%</td>
<td>2.4</td>
<td>1.348</td>
</tr>
<tr>
<td>Continuous staff training and development has led to increase in sales and profitability</td>
<td>14.0%</td>
<td>18.5%</td>
<td>21.0%</td>
<td>28.0%</td>
<td>18.5%</td>
<td>2.9</td>
<td>1.302</td>
</tr>
<tr>
<td>Rewarding high performing employees has led to increase in sales and profitability</td>
<td>17.0%</td>
<td>12.5%</td>
<td>5.5%</td>
<td>21.0%</td>
<td>43.9%</td>
<td>3.6</td>
<td>1.546</td>
</tr>
<tr>
<td>Clear job descriptions for employees has led to increase in sales and profitability</td>
<td>13.7%</td>
<td>6.6%</td>
<td>15.9%</td>
<td>32.8%</td>
<td>31.0%</td>
<td>2.4</td>
<td>1.348</td>
</tr>
<tr>
<td>Clear reporting channels for employees has led to increase in sales and profitability</td>
<td>14.0%</td>
<td>18.5%</td>
<td>21.0%</td>
<td>28.0%</td>
<td>18.5%</td>
<td>2.9</td>
<td>1.302</td>
</tr>
<tr>
<td>Retaining experienced staff in the business has led to increase in sales and profitability</td>
<td>1.4%</td>
<td>16.4%</td>
<td>22.3%</td>
<td>34.9%</td>
<td>28.9%</td>
<td>2.4</td>
<td>1.315</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.71</td>
<td>1.353</td>
</tr>
</tbody>
</table>
The second objective of the study sought to determine the influence of Entrepreneurial Competencies on SMEs survival in Kakamega County. The respondent were asked to indicate the extent to which they think the following statement contributed to the survival of SMEs in Kakamega county and the findings were as follows: employing staff with applicable capabilities has prompted increment in sales and profitability were appraised as 28.9% Agree, 34.9% Strongly Agree, 22.3% Neutral, 16.4% Disagree, 1.4% Strongly Disagree. Empowering collaboration among the workers has prompted increment in sales and profitability was evaluated 31.0% Agree, 32.8% emphatically Agree, 15.9% Neutral 6.6% Disagree, 13.7% firmly Disagree. Consistent staff preparing and development has prompted increment in sales and profitability were appraised as 18.5% Agree, 32.8% Strongly Agree 15.9% Neutral, 6.6% Disagree and 13.7% unequivocally oppose this idea.

Compensating high performing employees has prompted increment in sales and profitability was likewise evaluated as follows: 18.5% Agree, 28.0% Strongly Agree 21.0% Neutral, 18.5% differ while 14.0% strongly disagree. Clear sets of expectations for employees have prompted increment in sales and profitability were likewise appraised as pursues: 18.5% Agree, 28.0% Strongly Agree 21.0% Neutral, 18.5% Disagree while 14.0% Strongly Disagree; Clear revealing channels for workers has prompted increment in sales and profitability were additionally evaluated as follows: 18.5% Agree, 28.0% Strongly Agree 21.0% Neutral, 18.5% Disagree while 14.0% Strongly Disagree; Retaining experienced staff in the business has prompted increment in sales and profitability were also rated as follows: 18.5% Agree, 28.0% Strongly Agree 21.0% Neutral, 18.5% Disagree while 14.0% Strongly Disagree. On a five point scale, the average mean of the responses was 2.71 which means that majority of the respondents were agreeing to the statements in the questionnaire. The standard deviation was 1.353 meaning that the responses were clustered around the mean response.
4.10.3 Access Entrepreneurial Finance

The respondents were asked to rate various statements on Access to entrepreneurial finance on a likert scale of 1 to 5. The statements were based on a likert scale ranging from strongly disagree, disagree, neutral, agree and strongly. The results are presented in Table 4.9.

Table 4.9: Access Entrepreneurial Finance Descriptive Analysis

<table>
<thead>
<tr>
<th>Statement</th>
<th>S.D</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>S.A</th>
<th>Mean</th>
<th>Std. D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quick access to finances has led to growth of business</td>
<td>39.4</td>
<td>24.4</td>
<td>19.3</td>
<td>15.4</td>
<td>1.4</td>
<td>2.4</td>
<td>1.315</td>
</tr>
<tr>
<td>Access to finance with Flexible terms has led to growth of business</td>
<td>26.0</td>
<td>30.8</td>
<td>20.9</td>
<td>8.6</td>
<td>13.7</td>
<td>2.4</td>
<td>1.348</td>
</tr>
<tr>
<td>Access to finance from commercial banks has led to growth of business</td>
<td>18.5</td>
<td>20.5</td>
<td>26.0</td>
<td>25.0</td>
<td>10.0</td>
<td>2.9</td>
<td>1.302</td>
</tr>
<tr>
<td>Access to affordable to finances has led to growth of business</td>
<td>27.0</td>
<td>32.5</td>
<td>15.5</td>
<td>11.0</td>
<td>13.9</td>
<td>3.6</td>
<td>1.546</td>
</tr>
<tr>
<td>Access to finance from microfinance institutions has led to growth of business</td>
<td>21.3</td>
<td>26.2</td>
<td>32.2</td>
<td>14.0</td>
<td>6.2</td>
<td>3.3</td>
<td>1.386</td>
</tr>
<tr>
<td>Re-inventing back finances generating from the business has led to growth of business</td>
<td>18.5</td>
<td>20.5</td>
<td>26.0</td>
<td>25.0</td>
<td>10.0</td>
<td>2.9</td>
<td>1.302</td>
</tr>
<tr>
<td>Proper management of finances has led to growth of business</td>
<td>27.0</td>
<td>32.5</td>
<td>15.5</td>
<td>11.0</td>
<td>13.9</td>
<td>3.6</td>
<td>1.546</td>
</tr>
<tr>
<td>Access to finance from informal sources has led to growth of business</td>
<td>21.3</td>
<td>26.2</td>
<td>32.2</td>
<td>14.0</td>
<td>6.2</td>
<td>3.3</td>
<td>1.386</td>
</tr>
<tr>
<td>Mean</td>
<td>3.05</td>
<td>1.387</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The third objective of the investigation sought to determine the impact of Access to Entrepreneurial Finance on SMEs survival in Kakamega County. The respondent were approached to demonstrate the degree to which they thought the accompanying articulation contributed to the survival of SMEs in Kakamega area and the discoveries were as per the following: Quick access to funds has prompted growth of business was evaluated 39.4% Strongly Agree, 24.4% Agree, 19.3% Neutral, 15.4% Disagree and 1.4% Strongly Disagree. Access to fund with Flexible terms has prompted development of business was evaluated as 26.0% firmly Agree, 30.8% Agree 20.9% Neutral, 8.6% Disagree and 13.7% Strongly Disagree. Access to back from business banks has prompted development of business was likewise evaluated as pursues: 18.5% Strongly Agree, 20.5% Agree 26.0% Neutral, 25.0% Disagree while 10.0% Strongly Disagree. Access to moderate accounts has prompted development of business was appraised as pursues: 27.0% Strongly Agree, 32.5% Agree 15.5% Neutral, 11.0% Disagree while 13.9% Strongly Disagree. Access to fund from smaller scale money organizations has prompted development of business was appraised as pursues: 21.3% Strongly Agree, 26.2% Agree 32.2% Neutral, 14.0% Disagree while 6.2% Strongly Disagree; Re-contributing back accounts created from the business has prompted development of business was evaluated as pursues: 21.3% Strongly Agree, 26.2% Agree 32.2% Neutral, 14.0% Disagree while 6.2% Strongly Disagree. Appropriate administration of accounts has prompted development of business was evaluated as pursues: 21.3% Strongly Agree, 26.2% Agree 32.2% Neutral, 14.0% Disagree while 6.2% Strongly Disagree. Access to fund from casual sources has prompted development of business was evaluated as pursues: 21.3% Strongly Agree, 26.2% Agree 32.2% Neutral, 14.0% Disagree while 6.2% Strongly Disagree. On a five point scale, the average mean of the responses was 3.05 which means that majority of the respondents were agreeing to the statements in the questionnaire. The standard deviation was 1.387 meaning that the responses were clustered around the mean response.
4.10.4 Technological Innovation

The respondents were asked to rate various statements on Technological innovation on a likert scale of 1 to 5. The statements were based on a likert scale ranging from strongly disagree, disagree, neutral, agree and strongly. The results are presented in Table 4.10.

Table 4.10: Technological innovation Descriptive Analysis:

<table>
<thead>
<tr>
<th>Statement</th>
<th>S.D</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>S.A</th>
<th>Mean</th>
<th>Std. D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction of new products and services has led to increase in sales</td>
<td>3.0%</td>
<td>10.7%</td>
<td>11.3%</td>
<td>34.6%</td>
<td>40.4%</td>
<td>3.6</td>
<td>1.315</td>
</tr>
<tr>
<td>and profits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction of quality inputs and raw materials has led to increase in</td>
<td>7.0%</td>
<td>17.3%</td>
<td>18.2%</td>
<td>25.5%</td>
<td>32.0%</td>
<td>3.7</td>
<td>1.348</td>
</tr>
<tr>
<td>sales and profits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to new methods of payments has led to increase in sales and</td>
<td>4.0%</td>
<td>19.0%</td>
<td>26.0%</td>
<td>26.5%</td>
<td>24.5%</td>
<td>3.1</td>
<td>1.302</td>
</tr>
<tr>
<td>profits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improvement on existing goods and services has led to increase in sales</td>
<td>4.5%</td>
<td>5.3%</td>
<td>25.7%</td>
<td>37.5%</td>
<td>27.0%</td>
<td>3.2</td>
<td>1.546</td>
</tr>
<tr>
<td>and profits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New improved methods of production has led to increase in sales and profit</td>
<td>6.2%</td>
<td>14.0%</td>
<td>32.2%</td>
<td>26.2%</td>
<td>21.3%</td>
<td>3.3</td>
<td>1.386</td>
</tr>
<tr>
<td>Introduction to new channels of distribution has led to increase in sales</td>
<td>10.0%</td>
<td>18.5%</td>
<td>20.5%</td>
<td>25.0%</td>
<td>26.0%</td>
<td>2.9</td>
<td>1.302</td>
</tr>
<tr>
<td>and profits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.366</td>
</tr>
</tbody>
</table>

The fourth objective of the investigation sought to determine the impact of Technological innovation on SMEs survival in Kakamega County. The respondents
were approached to show the degree to which they thought the accompanying articulations add to survival of SMEs in Kakamega county and the findings were as per the following: Introduction of new products services has prompted increment in sales and profitability were appraised 40.4% Strongly Agree, 34.6% Agree, 11.3% Neutral, 10.7% Disagree and 3% Strongly Disagree. Introduction of quality inputs and raw materials has prompted increment in sales and profits were appraised as 32.0% Strongly Agree, 25.5% Agree 17.3% Neutral, 18.6% Disagree and 7.0% Strongly Disagree. Prologue to new strategies of payments has prompted increment in sales and profits were likewise appraised as pursues: 24.5% Strongly Agree, 26.5% Agree 26.0% Neutral, 19.0% Disagree while 4.0% Strongly Disagree. Enhancement for existing products and services has prompted increment in sales and profits were evaluated as pursues: 27.0% Strongly Agree, 37.5% Agree 25.7% Neutral, 5.3% Disagree while 4.5% Strongly Disagree.

New improved strategies for production has prompted increment in sales and profits were rated as follows; 31.3% Strongly Agree, 31.2% Agree 27.2% Neutral, 9.0% Disagree while 1.3% Strongly Disagree. Prologue to new channels of distribution has prompted increment in sales and profits were rated 27.0% Strongly Agree, 37.5% Agree 25.7% Neutral, 5.3% Disagree while 4.5% strongly Disagree. Table 4.10 shows the details of the findings. On a five point scale, the mean of the responses was 3.3 which means that majority of the respondents were agreeing to the statements in the questionnaire. The standard deviation was 1.366 meaning that the responses were clustered around the mean response.

4.10.5 SMEs survival

The respondents were asked to rate various statements on SMEs survival on a likert scale of 1 to 5. The statements were based on a likert scale ranging from strongly disagree, disagree, neutral, agree and strongly agree. The results are presented in Table 4.11.
Table 4.11: SMEs survival Descriptive Analysis:

<table>
<thead>
<tr>
<th>Statement</th>
<th>S.D</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>S.A</th>
<th>Mean</th>
<th>Std. D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability has increased for the last five years</td>
<td>3.0%</td>
<td>10.7%</td>
<td>11.3%</td>
<td>34.6%</td>
<td>40.4%</td>
<td>3.6</td>
<td>1.315</td>
</tr>
<tr>
<td>Sales have increased for the last five years</td>
<td>7.0%</td>
<td>17.3%</td>
<td>18.2%</td>
<td>25.5%</td>
<td>32.0%</td>
<td>3.7</td>
<td>1.348</td>
</tr>
<tr>
<td>Number of SMEs has increased in Kakamega county</td>
<td>4.0%</td>
<td>19.0%</td>
<td>26.0%</td>
<td>26.5%</td>
<td>24.5%</td>
<td>3.1</td>
<td>1.302</td>
</tr>
</tbody>
</table>

The results were as follows: Profitability has increased for the last five years were rated as 3.0% Strongly Disagree, 10.7% Disagree 11.3% Neutral, 34.6% Strongly Agree 40.4% Agree. Sales turnover has increased for the last five years were rated as 7.0% Strongly Disagree, 17.3% Disagree 18.2% Neutral, 25.5% Strongly Agree 32.0% Agree. Kakamega County was rated as 4.0% strongly disagree, 19.0% Disagree 26.0% Neutral, 26.5% Strongly Agree 24.5% Agree. On a five point scale, the average mean of the responses was 3.4 which means that majority of the respondents were agreeing with the statements in the questionnaire. The standard deviation was 1.321 meaning that the responses were clustered around the mean response.

4.11 Normality test

4.11.1 Normality test using Skwness and Kurtosis

Skewness and kurtosis statistic were adopted to check the normality in the study as recommended by Myoung (2008). The skewness value for a normal distribution is zero, usually implying symmetric distribution. On the other hand Kurtosis is a measure of the peakness of a distribution. West et al. (1996) proposed a reference of substantial departure from normality as an absolute skewness value greater than 2 and an absolute
kurtosis value greater than 7. However, for this study the recommendation of Myoung (2008) who asserted that as a rule of thumb a variable is reasonably close to normal if its skewness and kurtosis have values between -1.0 and +1.0. The results presented in table 4.12 indicate that the variables Entrepreneurial Skills, Entrepreneurial Competencies, Access to Entrepreneurial Finance, Technological innovation and SMEs survival were normally distributed since they lie within the ±1 range recommended by Myoung (2008).

Table 4.12: Normality Test

<table>
<thead>
<tr>
<th>Variables</th>
<th>Test</th>
<th>Statistic</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurial Skills</td>
<td>Skewness</td>
<td>0.268</td>
<td>0.128</td>
</tr>
<tr>
<td></td>
<td>Kurtosis</td>
<td>0.416</td>
<td>0.195</td>
</tr>
<tr>
<td>Entrepreneurial Competencies</td>
<td>Skewness</td>
<td>0.217</td>
<td>0.143</td>
</tr>
<tr>
<td></td>
<td>Kurtosis</td>
<td>0.311</td>
<td>0.195</td>
</tr>
<tr>
<td>Access to Entrepreneurial Finance</td>
<td>Skewness</td>
<td>0.264</td>
<td>0.146</td>
</tr>
<tr>
<td></td>
<td>Kurtosis</td>
<td>0.514</td>
<td>0.296</td>
</tr>
<tr>
<td>Technological innovation</td>
<td>Skewness</td>
<td>-0.132</td>
<td>0.122</td>
</tr>
<tr>
<td></td>
<td>Kurtosis</td>
<td>-0.612</td>
<td>0.311</td>
</tr>
<tr>
<td>SMEs Survival</td>
<td>Skewness</td>
<td>0.131</td>
<td>0.181</td>
</tr>
<tr>
<td></td>
<td>Kurtosis</td>
<td>0.116</td>
<td>0.175</td>
</tr>
</tbody>
</table>

4.11.2 Normality test using Kolmogorov Smirnov and Shapiro Wilk.

Kolmogorov Smirnov and Shapiro Wilk test were also used to test for normality for all the variables and the results are displayed in table 4.13. From the outcome, it was evident that the entire variables were normally distributed since p-values were greater
than 0.05 for both Shapiro Wilk and Kolmogorov test. These values confirm further that the data was normally distributed as were the cases of Skewness and Kurtosis test.

### Table 4.13: Kolmogorov- Smirnov and Shapiro-Wilk

<table>
<thead>
<tr>
<th>Variables</th>
<th>Kolmogorov-Smirnov&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>Df</td>
</tr>
<tr>
<td>Entrepreneurial Skills</td>
<td>.042</td>
<td>127</td>
</tr>
<tr>
<td>Entrepreneurial Competencies</td>
<td>.041</td>
<td>127</td>
</tr>
<tr>
<td>Access to Entrepreneurial Finance</td>
<td>.053</td>
<td>127</td>
</tr>
<tr>
<td>Technological innovation</td>
<td>.047</td>
<td>127</td>
</tr>
<tr>
<td>SMEs Survival</td>
<td>.031</td>
<td>127</td>
</tr>
</tbody>
</table>

* This is a lower bound of the true significance.

<sup>a</sup> Lilliefors Significance Correction

### 4.11.3 Normality test using Q-Q plot

In some cases, Shapiro Wilk test may be biased by the sample size, as the test may be statistically significant from a normal distribution in any scenarios where we have large samples. To be sure, a Q–Q plot or P-P Plot was employed for verification. Q-Q Plot is a graphical procedure that plots the observed values on the X-axis and the expected values on the Y-axis. If it is normally distributed the points should fall on a straight line. In this
study normality test for the dependent variable is displayed in the figure 4.1. From the figure we can conclude that data was normally distributed.

4.11.4 Outliers test

Outlier refers to those observations which appear at the extreme end of the data that is those observations which appear very far from measures of central tendency. The presence of outliers may sometimes make the data not to be normally distributed or may lead to biasness in the analysis. For this reason it was necessary to test the presence of outliers and the use of Box plot was adopted. In cases where outliers exist it is necessary to remove the outliers to avoid biasness.

4.11.5 Autocorrelation Test

Autocorrelation is an assumption in regression that the error terms are independent of each other. It is also known as serial correlation. It determines the similarity between observations as a function of the time lag between them. The Durbin-Watson test was used to determine if autocorrelation existed. A value of $d$ means there is no autocorrelation. If Durbin Watson value is substantially below 2 then the data is positively autocorrelated. If $d$ value is substantially above 2 means then the data is negatively autocorrelated, as presented in table 4.14. Durbin Watson value was 1.812 indicating that there was no serial correlation in the data.

Table 4.14: Autocorrelation Test

<table>
<thead>
<tr>
<th>Test</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durbin-Watson</td>
<td>1.812</td>
</tr>
</tbody>
</table>
4.11.6 Heteroscedasticity

Heteroscedasticity normally occurs when a variance does not remain constant error across observation, long and Ervin (2000). Breusch-Pagan can be used to test the null hypothesis that the error variance remains constant against the alternative that the error variances are not constant. Breusch-Pagan tests the invalid speculation that heteroscedasticity is absent if p-esteem is > 0.05, the invalid theory rejected. If chi-square value is > 9.22 indicates that heteroscedasticity is present (Sazali, Hashida, Jegak & Raduan, 2010). In this study, the chi-square value was 4.372 showing that heteroscedasticity was not a problem as indicated in table 4.15.

Table 4.15: Breusch-Pagan for Heteroscedasticity

<table>
<thead>
<tr>
<th>Ho Constant Variance</th>
<th>Variables</th>
<th>Chi2(1)</th>
<th>Prob &gt; Chi2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ho Constant Variance</td>
<td>Entrepreneurial Skills, Entrepreneurial Competencies, Access to Entrepreneurial Finance and Technological innovation</td>
<td>4.372</td>
<td>0.1471</td>
</tr>
</tbody>
</table>

4.12 Correlations

The correlation coefficient is a measure of linear association between two variables. Values of the correlation coefficient are always between -1 and +1. A correlation coefficient of +1 indicates that two variables are perfectly related in a positive linear sense. A correlation coefficient of -1 indicates that two variables are perfectly related in a negative linear sense and a correlation coefficient of 0 indicates that there is no linear relationship between the two variables. A correlation coefficient of between 0.0 and 0.19 is considered to be “very weak”, between 0.20 and 0.39 is considered to be “weak”,
between 0.40 and 0.59 is considered to be “moderate”, between 0.60 and 0.79 is considered to be “strong” and between 0.80 and 1.0 is considered to be “very strong”.

The researcher carried out correlation analysis between the variables of the study utilizing Pearson product-moment correlation coefficient. Correlation Coefficient was utilized to test whether there existed interdependency between autonomous factors and furthermore whether the independent variables were related to dependent variable.

The findings demonstrate that all the independent variables had a positive and significant correlation with SMEs survival. Entrepreneurial skills (r=0.553, p-value=0.000), Entrepreneurial competencies (r=0.519, p-value=0.000), Access to entrepreneurial finance (r=0.547, p-value=0.000) and Technological innovation (r=0.591, p-value=0.000) had a positive and significant relationship with SMEs survival.

**Table 4.16: Correlation Coefficient**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Entrepreneurial</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Skills</td>
<td>Competencies</td>
<td>Finances</td>
<td>Innovation</td>
</tr>
<tr>
<td>Pearson</td>
<td>1</td>
<td>.595**</td>
<td>.664**</td>
<td>.142</td>
</tr>
<tr>
<td>Entrepreneurial</td>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skills</td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>127</td>
<td>127</td>
<td>127</td>
<td>127</td>
</tr>
<tr>
<td>Pearson</td>
<td>.595**</td>
<td>1</td>
<td>.646**</td>
<td>.292**</td>
</tr>
<tr>
<td>Entrepreneurial</td>
<td>Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competencies</td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>173</td>
<td>173</td>
<td>173</td>
<td>173</td>
</tr>
<tr>
<td>Pearson</td>
<td>.664**</td>
<td>.646**</td>
<td>1</td>
<td>.341**</td>
</tr>
<tr>
<td>Access</td>
<td>Entrepreneurial</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finances</td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.001</td>
</tr>
<tr>
<td>N</td>
<td>127</td>
<td>127</td>
<td>127</td>
<td>127</td>
</tr>
<tr>
<td>Pearson</td>
<td>.142</td>
<td>.292**</td>
<td>.341**</td>
<td>1</td>
</tr>
<tr>
<td>Technological</td>
<td>Innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>Sig. (2-tailed)</td>
<td>.062</td>
<td>.000</td>
<td>.001</td>
</tr>
<tr>
<td>N</td>
<td>127</td>
<td>127</td>
<td>127</td>
<td>127</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
4.13 Multicollinearity

The standard issue in multicollinearity is that, the standard errors and thus the variances of the estimated coefficients are inflated when multicollinearity exists (Simon, 2004). Test for multicollinearity among study variables was conducted utilizing Tolerance and Variance Inflation Factor (VIF). Variance Inflation Factor was checked for evidence of multicollinearity where their numerical values were all well below the cut-off value of 10 suggested by Neter, Kutner, Wasserman and Nachtsheim (1996). Gujarat and Porter (2010), view that as a rule of the thumb if VIF of independent variables exceeds 10, that variable is collinear. Based on this rule of the thumb, there was no collinearity among the independent variables. From the results, inspection of the Variance Inflation Factors (VIFs) showed that multicollinearity was not a concern. No variable was observed to have VIF value above 10 and no tolerance statistic was below 0.100 as suggested by Hamilton (2006). This hence led to a conclusion that no predictor had a strong linear relationship with any of the predictor(s).

Table 4.17: Multicollinearity Test

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>Entrepreneurial Skills</td>
<td>.323</td>
</tr>
<tr>
<td>Entrepreneurial Competencies</td>
<td>.334</td>
</tr>
<tr>
<td>Access to Entrepreneurial Finance</td>
<td>.649</td>
</tr>
<tr>
<td>Technological innovation</td>
<td>.866</td>
</tr>
</tbody>
</table>
4.14 Influence of Entrepreneurial skills on SMEs survival

4.14.1 Entrepreneurial skills Linearity Test

To find out whether there was linear relationship between Entrepreneurial Skills and SMEs survival Pearson moment’s correlation coefficients was used as suggested by Cohen, West and Aiken, (2003). The result of the findings is presented on table 4.18. The result indicates that the variables SMEs survival and Entrepreneurial Skills had a strong positive relationship indicated by a correlation coefficient value of 0.631**. This suggests that there was a linear positive relationship between Entrepreneurial Skills and SMEs survival which means that an increase in Entrepreneurial Skills would lead to a linear increase in SMEs survival.

**Table 4.18: Entrepreneurial Skills Correlations Coefficients**

<table>
<thead>
<tr>
<th>Variables</th>
<th>SMEs Survival</th>
<th>Entrepreneurial Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>SMEs Survival</td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>-.631**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>Entrepreneurial Skills</td>
<td>N</td>
<td>127</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
4.14.2 Regression Analysis for Entrepreneurial Skills

Table 4.19 indicates the model summary for the regression between Entrepreneurial Skills and SMEs survival. An R squared of 0.398 indicates that 39.8% of SMEs Survival is explained by changes in Entrepreneurial Skills.

Table 4.19: Model Summary Entrepreneurial Skills

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.631a</td>
<td>.398</td>
<td>.375</td>
<td>.10376</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Entrepreneurial Skills

The ANOVA table 4.20 shows that the regression model between Entrepreneurial Skills and SMEs Survival was significant (it indicates the goodness of fit for the regression model established between dependant variable and independent variable). F statistic of 82.349 indicated that the overall model was significant as this was further supported by a probability value of 0.000 which is less than 0.05 (p=0.00>0.05).

Table 4.20: ANOVA - Entrepreneurial Skills

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>4.824</td>
<td>1</td>
<td>4.824</td>
<td>82.349</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>7.381</td>
<td>126</td>
<td>.058</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12.205</td>
<td>127</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The regression coefficient table 4.21 shows that the regression model between Entrepreneurial Skills and SMEs survival was given as Y=2.741+0.184X1 which demonstrate that there was a positive and huge connection between Entrepreneurial Skills and SMEs survival. The regression coefficient of 0.184 indicates that for unit increase of Entrepreneurial Skills, SMEs Survival increases by 0.184.

Table 4.21: Regression Coefficients- Entrepreneurial Skills

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.741</td>
<td>.054</td>
<td>50.759</td>
<td>.000</td>
</tr>
<tr>
<td>Entrepreneurial Skills</td>
<td>0.184</td>
<td>.017</td>
<td>.633</td>
<td>69.53</td>
</tr>
</tbody>
</table>

a. Dependent Variable: SMEs Survival

4.15 **Influence of Entrepreneurial competencies on SMEs survival**

4.15.1 **Entrepreneurial Competencies Linearity Test**

Linearity of variables was tested using correlation coefficients as suggested by Cohen, West and Aiken, (2003). To establish whether there is a linear relationship, the study adopted the Pearson moment’s correlation coefficients which are presented in table 4.22. The results indicate that the variables SMEs survival and Entrepreneurial Competencies had a strong positive relationship as indicated by a correlation coefficient of 0.641**. This implies that there is a linear positive relationship. Thus an increase in Entrepreneurial Competencies would result in a linear increase in SMEs Survival.
Table 4.22: Entrepreneurial Competencies Correlations Coefficients

<table>
<thead>
<tr>
<th>Variables</th>
<th>SMEs Survival</th>
<th>Entrepreneurial Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.641**</td>
</tr>
<tr>
<td>SMEs Survival</td>
<td>N</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>.641**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>1</td>
</tr>
<tr>
<td>Entrepreneurial</td>
<td>N</td>
<td>127</td>
</tr>
<tr>
<td>Competencies</td>
<td></td>
<td>127</td>
</tr>
</tbody>
</table>

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

4.15.2 Entrepreneurial Competencies Regression Analysis

Regression analysis was conducted to establish the relationship between the Entrepreneurial Competencies and SMEs survival. From the findings an R- square value of 0.327 was recorded indicating that 32.7% of SMEs Survival was explained by Entrepreneurial Competencies. The model summary table 4.23 shows the findings.

Table 4.23: Model Summary for Entrepreneurial Competencies

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.572a</td>
<td>.327</td>
<td>.316</td>
<td>0.132498</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Entrepreneurial Competencies
The F-statistics presented in table 4.24 indicated that the overall model was significant, that is, the independent variable, Entrepreneurial Competencies were a good joint explanatory for SMEs survival with F-value of 72.001. P-Value = 0.000 < 0.05 also indicates that the model was fit.

Table 4.24: ANOVA. Entrepreneurial Competencies

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3.672</td>
<td>1</td>
<td>3.672</td>
<td>72.001</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>8.732</td>
<td>126</td>
<td>.051</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12.404</td>
<td>127</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: SMEs Survival  
b. Predictors: (Constant), Entrepreneurial Competencies

From the regression coefficient table 4.25, there was positive and significant relationship between Entrepreneurial Competencies and SMEs survival. The model is given as 
\[ Y = 1.078 + 0.651X_2 \] . The regression coefficient of 0.651 indicates that an increase in Entrepreneurial Competencies by 1 unit leads to an increase in SMEs Survival by 0.651 units.

Table 4.25: Regression Coefficients- Entrepreneurial Competencies

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.078</td>
<td>.313</td>
</tr>
<tr>
<td>1</td>
<td>Entrepreneurial Competencies</td>
<td>0.651</td>
</tr>
</tbody>
</table>
4.16 Effect of Access to Entrepreneurial finance on SMEs survival

4.16.1 Linearity Test for Access to Entrepreneurial Finance

Linearity of variables was tested using correlation coefficients as suggested by Cohen, West and Aiken, (2003). To establish whether there is a linear relationship, the study adopted the Pearson moment’s correlation coefficients and the result presented in table 4.26 below. The results indicate that the variables SMEs survival and Access to Entrepreneurial Finance had a solid positive relationship as shown by a connection coefficient of 0.701.

<table>
<thead>
<tr>
<th>Variables</th>
<th>SMEs Survival</th>
<th>Access to Entrepreneurial Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>.701**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>SMEs Survival</td>
<td>N 127</td>
<td>127</td>
</tr>
<tr>
<td>Access to Entrepreneurial Finance</td>
<td>.701**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>127</td>
<td>127</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
4.16.2 Regression Analysis for Access to Entrepreneurial Finance

A straightforward regression analysis was directed to set up the connection between the Access to Entrepreneurial Finance and SMEs survival. An R-square estimation of 0.643 demonstrated that 64.3% of SMEs Survival is disclosed by Access to Entrepreneurial Finance

The F-statistic presented in table 4.27 indicates that the model was significant with p-value being less than 0.05.

Table 4.27: Model Summary for Access to Entrepreneurial Finance

<table>
<thead>
<tr>
<th>Model Summary Access to Entrepreneurial Finance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

Table 4.28: ANOVA. Access to Entrepreneurial Finance:

<table>
<thead>
<tr>
<th>Model</th>
<th>Sumof Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>7.911</td>
<td>1</td>
<td>7.911</td>
<td>226.676</td>
<td>.000b</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>4.393</td>
<td>126</td>
<td>.0349</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12.304</td>
<td>127</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: SMEs Survival

b. Predictors: (Constant), Access to Entrepreneurial Finance:

c. The regression results in table 4.29 propose further that there was a positive and enormous connection between Access to Entrepreneurial Finance and SMEs survival. The model is given as Y=3.184+ 0.701X3 from the relapse show each unit change in Access to Entrepreneurial Finance, SMEs survival changes by 0.701units
Table 4.29: Regression-Coefficient for Access to Entrepreneurial Finance in Policy process

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>3.184</td>
<td>.149</td>
<td>11.299</td>
<td>.000</td>
</tr>
<tr>
<td>1</td>
<td>Access Entrepreneurial</td>
<td>0.701</td>
<td>.040</td>
<td>.802</td>
</tr>
</tbody>
</table>

a. Dependent Variable: SMEs Survival

4.17 Effect of Technological Innovation on SMEs survival

4.17.1 Linearity Test for Technological Innovation

To establish whether there is a linear relationship between technological innovation and SMEs survival, the study adopted the Pearson moment’s correlation coefficients and the result is presented in table 4.30. The results indicate that the variables SMEs survival and Technological innovation had a strong positive relationship as indicated by a correlation coefficient of 0.492.
Table 4.30: Technological innovation Correlations Coefficients

<table>
<thead>
<tr>
<th>Variables</th>
<th>SMEs Survival</th>
<th>Technological innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>.491**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>SMEs Survival</td>
<td>N 173</td>
<td>127</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Technological</td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>innovation</td>
<td>N 127</td>
<td>173</td>
</tr>
</tbody>
</table>

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

4.17.2 Regression for Technological innovation.

A simple regression analysis was conducted to establish the relationship between the Technological innovation and SMEs survival. An R-square value of 0.293 indicated that 29.3% of SMEs Survival is disclosed by Access to Entrepreneurial Finance in Policy process. The F-measurement introduced in table 4.31 shows that the model was critical with p-estee being under 0.05.

Table 4.31: Model Summary for Technological innovation

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Technological innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model R</td>
<td>R Square</td>
</tr>
<tr>
<td>1</td>
<td>.541 a</td>
</tr>
</tbody>
</table>
Table 4.32: ANOVA. Technological innovation

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2.973</td>
<td>1</td>
<td>2.973</td>
<td>45.055</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>8.331</td>
<td>126</td>
<td>.066</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11.304</td>
<td>127</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: SMEs Survival

b. Predictors: (Constant), Technological innovation

The regression results indicated in table 4.33 suggest further that there was a positive and significant relationship between SMEs Survival and Technological Innovation. From the regression model every unit change in Technological Innovation, SMEs survival changes by 0.312 units. The model is expressed as $Y=1.115+0.312X_4$

Table 4.33: Regression-Coefficient for Technological innovation

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.115</td>
<td>.146</td>
<td>11.562</td>
<td>.000</td>
</tr>
<tr>
<td>1</td>
<td>Technological innovation</td>
<td>0.312</td>
<td>.042</td>
<td>.492</td>
</tr>
</tbody>
</table>

a. Dependent Variable: SMEs Survival
4.18 Multivariate Regression

This section presents the results on the joined impacts of all the free factors which are Entrepreneurial Skills, Entrepreneurial Competencies, Access to Entrepreneurial Finance and Technological Innovation on the needy variable that is SMEs Survival. A various direct relapse display was utilized to test the criticalness of the impact of the free factors on the reliant variable. Accordingly the overall model for the study was:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e \]

Where:

\( Y = \) SMEs Survival

\( X_1 = \) Entrepreneurial Skills

\( X_2 = \) Entrepreneurial Competencies

\( X_3 = \) Access to Entrepreneurial Finance

\( X_4 = \) Technological Innovation

Table 4.34 demonstrates the examination of the strength of the model utilized in the investigation. The outcomes show that the general model was agreeable as it is upheld by coefficient of assurance otherwise called the R-square of 0.74477. This means that all the independent variables explain 74.48% of the variations in the dependent variable.
Table 4.34: Overall Model Fitness

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.863&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.74477</td>
<td>.7326</td>
<td>.14097</td>
<td>1.812</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Entrepreneurial skills, Entrepreneurial competencies, Access to Entrepreneurial Finance, Technological Innovation
b. Dependent Variable: SMEs Survival

Table 4.35 provides the outcomes on the investigation of the variance (ANOVA). The outcomes show that the general model was measurably huge. This was bolstered by an F measurement of 44.9426 and the detailed p esteem (0.000) which was not exactly the ordinary probability of 0.05 significance level. These results suggest that the independent variables are good predictors of SMEs survival.

Table 4.35: Analysis of Variance (ANOVA)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>10.966</td>
<td>4</td>
<td>2.7415</td>
<td>44.9426</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>123</td>
<td>.061</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18.405</td>
<td>127</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: SMEs Survival
b. Predictors: (Constant), Technological Innovation, Entrepreneurial Competencies, Entrepreneurial Skills, Access to Entrepreneurial Finance in Policy process:

Regression of coefficients results in Table 4.36 shows that there is a positive and significant relationship between SMEs survival (dependent variable) and Entrepreneurial Skills, Entrepreneurial Competencies, Access to Entrepreneurial Finance and Technological Innovation. From the findings, the overall model obtained is expressed as:

\[ Y = 1.416 + 0.723X_1 + 0.473X_2 + 0.687X_3 + 0.369X_4 \]
These were supported by beta coefficients of 1.416, 0.723, 0.473, 0.687 and 0.369 respectively. This result shows that a change in either of the variables will definitely lead to a positive change in SMEs survival.

**Table 4.36: Overall Regression Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients B</th>
<th>Std. Error</th>
<th>Standardized Coefficients Beta</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.416</td>
<td>.258</td>
<td></td>
<td>3.554</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial Skills</td>
<td>.723</td>
<td>.021</td>
<td>-.004</td>
<td>-.060</td>
<td>.000</td>
<td>.323</td>
</tr>
<tr>
<td>Entrepreneurial Competencies</td>
<td>.473</td>
<td>.061</td>
<td>.657</td>
<td>9.450</td>
<td>.000</td>
<td>.334</td>
</tr>
<tr>
<td>Access to Entrepreneurial Finance</td>
<td>.687</td>
<td>.070</td>
<td>.136</td>
<td>2.724</td>
<td>.000</td>
<td>.649</td>
</tr>
<tr>
<td>Technological innovation</td>
<td>.369</td>
<td>.027</td>
<td>.267</td>
<td>6.176</td>
<td>.000</td>
<td>.866</td>
</tr>
</tbody>
</table>

a. Dependent Variable: SMEs survival

In addition to that, the hypotheses:

H₀₁: Entrepreneurial Skills do not have effect on SMEs survival in Kakamega county (H₀: β₁ = 0 vs. H₁: β₁ ≠ 0)

H₀₂: Entrepreneurial Competencies do not have effect on SMEs survival in Kakamega county (H₀: β₂ = 0 vs. H₁: β₂ ≠ 0)

H₀₃: Access to Entrepreneurial Finance does not have effect on SMEs survival in Kakamega county (H₀: β₃ = 0 vs. H₁: β₃ ≠ 0)
H₀₄: Technological innovation does not have effect on SMEs survival in Kakamega county (H₀: β₄ = 0 vs. H₁: β₄ ≠ 0)

were tested and the results also indicates all the hypotheses were rejected. The table below show the summary of the hypotheses rejected.

Table 4.37: Overall Regression Coefficients

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>t-value</th>
<th>Sig value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₀: β₁ = 0</td>
<td>.476</td>
<td>.000</td>
<td>Reject H₀</td>
</tr>
<tr>
<td>H₁: β₁ ≠ 0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H₀: β₂ = 0</td>
<td>.409</td>
<td>.000</td>
<td>Reject H₀</td>
</tr>
<tr>
<td>H₁: β₂ ≠ 0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H₀: β₃ = 0</td>
<td>.116</td>
<td>.025</td>
<td>Reject H₀</td>
</tr>
<tr>
<td>H₁: β₃ ≠ 0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H₀: β₄ = 0</td>
<td>.066</td>
<td>.033</td>
<td>Reject H₀</td>
</tr>
<tr>
<td>H₁: β₄ ≠ 0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.19 Discussion of Findings

The primary objective of this study was to assess the influence of entrepreneurial determinants on SMEs survival in Kakamega County. The results obtained demonstrate significant and positive relationship between the entrepreneurial determinants: Entrepreneurial competencies, Entrepreneurial skills, Access to entrepreneurial finance and Technological innovation and SMEs survival in Kakamega County.
As per the discoveries of this investigation demonstrated that there was a positive and significant connection between Entrepreneurial Skills and SMEs survival. The discoveries are bolstered by the investigation directed by Mukulu et al. (2016), Hala (2014), Thomas, (2012), Fred, (2012); Tamara, (2011) and Ahmad et al. (2011). Analysis made by Ahmad, Halim and Zainal (2010) on the contribution of entrepreneurs in terms of their management skills towards the success of small and medium enterprises (SMEs) in the services sector in Malaysia found that high entrepreneurial success was associated with high business operating skills, skills to obtain market share that suits their size and capability and skills to offer more specialized services. An investigation by Hala (2014) suggested positive relationship between entrepreneurship education and intentions and perceived desirability. The study by Louise (2010) presumed that the absence of promoting aptitudes negatively affected the achievement of independent companies. The determination was that a positive connection between's absence of showcasing aptitudes and business failure exists in South Africa. The test was to improve the promoting aptitudes of entrepreneurs. A study conducted by Mukulu et al. (2016) indicated that entrepreneurial skills that were manifested in youth enterprises played a key role in determining the levels of innovation in those enterprises and then affected positively their survival.

The findings from this study show that Entrepreneurial Competencies have positive and significant influence on SMEs survival. Past studies have also revealed similar results to this. The study by Oladele and Akeke (2016) concluded that improvement on charismatic leadership styles is a good catalyst to increasing sales growth and that inspirational motivation of the leadership style. Also Entrepreneurial competencies have effect on success of businesses in the context of Malaysian SMEs (Shehnaz & Ramayah, 2014). A study by Endi, et al. (2013) indicated that the entrepreneurial characteristics have a significant influence on business performance. Entrepreneurial competencies showed mediating relationship between entrepreneurial characteristics and business performance. It means more powerful entrepreneurial characteristics will lead to an
increase in the competence of the SMEs owner, which will ultimately have an effect on business performance and survival.

The findings on access to entrepreneurial finance revealed that Access to Entrepreneurial finance has positive and significant influence on SMEs survival. This is supported by Namusonge (2011) concluded that availability and type of finance are key determinants of the growth and performance of SMEs. Gabriel (2011) also concluded that the need for finance is of paramount importance for the success of any firm, be it big or small. According to Bahar (2014) access to Entrepreneurial finance was observed to be decidedly identified with firm size and firm age. Asma et al. (2015) reasoned that the development of SMEs in Algeria was hampered by several interrelated factors, which include business environmental factors that were beyond SMEs’ control what's more, interior components of the SMEs. The outside components incorporate the lawful and administrative system, access to outer financing, and HR limits. The inside variables include entrepreneurial characteristics, management capacities, marketing skills, and technological capacities. Daniel and Willy (2015) who examined factors influencing access to finance by micro, small and medium enterprises in Meru County, Kenya, revealed that information asymmetry, business risks and transactional costs influence access to finance. The transactional cost emerged as the most critical factor or the most significant predictor access to finance.

The findings of this study on technological innovation found that innovation has positive and significant influence on small and medium enterprises survival. This is corroborated by the studies of Mwangi and Namusonge (2014); Michael et al. (2015); Ebru et al. (2014); Voeten, (2015) that revealed the same and included that technology dispersion projects should: guarantee quality control, advance client introduction, overhaul the creative limit of firms including the innovation of general attention to the estimation of development among the executives and animate interest for specialized and organizational change.
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter manages the synopsis of the findings, conclusion and recommendations. This was done in accordance with the objectives of the investigation. Areas of further research were proposed.

5.2 Summary

The findings of the investigation revealed that the consolidated effect of independent variables influenced SMEs survival. The research findings showed that Entrepreneurial skills, Entrepreneurial competencies, Access to entrepreneurial finance and Technological innovation are positively and significantly associated with SMEs survival.

5.2.1 Entrepreneurial skills

The first objective of the investigation was to determine the effect of entrepreneurial skills on SMEs survival in Kakamega County. The findings of the investigation revealed that there was a positive and significant connection between Entrepreneurial Skills and SMEs survival. Based on the findings, the study concluded that entrepreneurial skills are positively and significantly associated with SMEs survival. So as to test the objective hypothesis - H01: Entrepreneurial skills do not influence SMEs survival t-test was utilized to test the relationship between Entrepreneurial skills and SMEs survival at 95% significant level. The null-hypothesis was rejected on the grounds that the t - critical was less than the t - computed which along these lines affirmed the significance of the relationship between entrepreneurial skills and SMEs survival. The ANOVA was additionally used to test the hypothesis and the results demonstrated that the F – critical was less than the F-computed and in this way likewise the null-hypothesis was rejected.
suggesting that Entrepreneurial skills have effect on SMEs survival in Kakamega County. This is likewise upheld by Louise (2010) who presumed that a positive correlation between absence of marketing skills and business failure exists in South Africa.

5.2.2 Entrepreneurial competencies

The second objective of the study was to identify the effect of Entrepreneurial competencies on SMEs survival in Kakamega County. The investigation findings revealed that there was positive and significant connection between Entrepreneurial competencies and SMEs survival in accordance with the findings of different researchers like Shehnaz and Ramayah (2014) who found that Entrepreneurial competencies have effect on success of businesses in the context of Malaysian SMEs. So as to test the objective hypothesis - *H02: Entrepreneurial competencies do not affect SMEs survival* t-test was utilized to test the relationship between Entrepreneurial competencies and SMEs survival. Null-hypothesis was rejected in light of the fact that the t – critical was less than the t- computed which hence affirmed the importance of the connection between Entrepreneurial competencies and SMEs survival. The ANOVA was likewise used to test the theory and the outcomes demonstrated that the F – critical was less than the F- computed and in this way correspondingly the null-hypothesis was rejected inferring that entrepreneurial competencies have influence on SMEs survival in Kakamega County.

5.2.3 Access to Entrepreneurial Finance

The third objective of the investigation was to assess the impact of Access to entrepreneurial finance on SMEs survival. The study results indicated that there was a positive and noteworthy connection between Access to Entrepreneurial Finance and SMEs survival. Regression analysis established the relationship between the Access to Entrepreneurial Finance and SMEs survival. An R- square value of 0.643 indicated that 64.3% of SMEs Survival is explained by Access Entrepreneurial Finance. This is upheld
by (Namusonge, 2011) who presumed that accessibility and sort of finance are key determinants of the growth and performance of SMEs.

To test the objective hypothesis - \( H03: \text{Access to Entrepreneurial Finance does not influence SMEs survival} \) was computed and t-test was utilized to test the connection between access to entrepreneurial finance and SMEs survival at 95% significance level. The null- hypothesis was rejected in light of the fact that the t - critical was less than the t - computed which accordingly affirmed the connection between access to entrepreneurial finance and SMEs survival. The ANOVA was likewise used to test the hypothesis and the results demonstrated that the F – critical was less than the F-computed in this manner the null-hypothesis was rejected inferring that access to entrepreneurial finance has influence on SMEs survival.

### 5.2.4 Technological Innovation

The fourth objective of the investigation was to determine the influence of Technological innovation on SMEs survival in Kakamega County. The findings demonstrate that there was a positive and significant relationship between SMEs Survival and Technological innovation. The outcome shows that the variables SMEs survival and Technological innovation had strong positive relationship as indicated by a correlation coefficient of 0.492; this is consistent with the findings of other scholars like Mwangi and Namusonge (2014), Michael et al. (2015), Ebru, et al. (2014), Voeten, (2015) who revealed the same and included that technology dispersion projects should: guarantee quality control, promote customer orientation, redesign the innovative capacity of firms including the advancement of general consciousness of the value of innovation among the management and invigorate interest for Technical and organizational change. So as to test the objective hypothesis - \( H04: \text{Technological innovation does not influence SMEs survival} \) t-test was utilized to test the connection between Technological innovation and SMEs survival. The null-hypothesis was rejected on the grounds that the t - critical was less than the t - computed which in this manner affirmed the significance of the relationship between Technological innovation and
SMEs survival. The ANOVA was additionally used to test the hypothesis and the outcomes demonstrated that the F – critical was less than the F- computed and in this way correspondingly the null-hypothesis was rejected suggesting that Technological innovation has an effect on SMEs survival in Kakamega County.

5.3 Conclusions

In chapter one, the problem in this study was recognized as vulnerability and difficulties to survival of most of the small and medium enterprises failing within the first few months of operation (Erikson and Kuhn, 2006) regardless of the vital job they play in the Kenyan Economy and the government endeavors to help the development of this sector. In light of the findings the research presents the accompanying conclusions:

5.3.1 Entrepreneurial skills

In view of the study findings inferred that entrepreneurial skills are positively and sigficantly associated with SMEs survival in Kakamega County. Accordingly SME entrepreneurs should choose and chip away at the perspectives that have greater effect on SMEs growth. SME entrepreneurs, managers and employees need skills and knowledge important to run their firms. The part of training has an impact on the survival of SMEs whereby the more training and education of the entrepreneurs and managers of SMEs, the higher the probability of business success and growth of the SMEs. The dimension of experience the entrepreneurs and managers of SMEs have, also have influence on the survival of SMEs.

5.3.2 Entrepreneurial competencies

Another conclusion made by the study is that, entrepreneurial competencies are positively and significantly associated with SMEs survival in Kakamega County. Some studies have exposed that the entrepreneurial characteristics have a significant influence on business performance. Entrepreneurial competencies showed mediating relationship between entrepreneurial characteristics and business performance. It means more
powerful entrepreneurial characteristics will guide to an increase in the competency of the SMEs owner, which will ultimately have an effect on business performance and survival.

5.3.3 Access to entrepreneurial finance

The investigation discoveries demonstrate that there was a positive and significant correlation between Access to Entrepreneurial Finance and SMEs survival in Kakamega County. Access to entrepreneurial finance is a key factor affecting the survival of SMEs. Results demonstrate that it is critical for entrepreneur to comprehend the financial structure, for example, wellsprings of funds, availability and affordability to fund so as to comprehend the survival of SMEs. Access to entrepreneurial finance empowers a firm to extend the current businesses, improve tasks and bolster innovative activities that can give them a focused edge in the market, in this manner prodding their development and survival.

5.3.4 Technological innovation

The last conclusion made by the study is that there was a positive and significant relationship between SMEs Survival and Technological innovation. Innovative firms develop twice as quick, both in profitability and sales turnover contrasted with firms that neglect to innovate. SMEs along these lines should think of innovative methods for getting things done in the event that they need to survive. SMEs should concoct new products, new services, new client base status, new markets, new material sources, and new technologies and continue improving current procedures in production goods and service conveyance so as to stay focused, increment productivity therefore survive.
5.4 Recommendations

5.4.1 Policy intervention

The study suggests the requirement for the government as a policy setting organ to concoct conducive regulatory, trade, labour market, territorial development, social and gender orientation strategies that suit the necessities of aspiring and existing SMEs so as to influence the entrepreneurial activities in the nation and encourage the survival of SMEs since they are known to constitute larger percentage of economic activities. This is additionally in such a case that very much bolstered SMEs will encourage the way toward achieving the vision 2030 and the millennium development objectives. There is need for the government to set up a considerably more steady institutional system for SMEs.

The investigation prescribes that to build access to valuable business information; the government needs a policy for ICT mediators to make information accessible explicitly to SMEs. There is necessity for the Ministry of Industrialization and Enterprise development to build up a web based exchanging gateway for SMEs to associate them to business sectors and market information.

5.4.2 SMEs’ Owners

The SME owners ought to create staff strategies to encourage the supply of qualified staff to facilitate innovation in SMEs. Grants ought to be given to staff to embrace innovative projects. Owners and managers ought to build up big enterprise - oriented technology transfer units which know about explicit SME problems. With the help from the government they should think of a development subsidizes policy to finance innovation consultants who will bolster SMEs innovations. Proprietors and managers of SMEs need to grasp and bolster innovation by putting resources into it and thinking of innovative activities in product development and production, marketing and distribution.
and other generally administration conveyance forms so as to achieve a competitive edge which will encourage business growth.

5.4.3 Theoretical Studies and Academic Implications

The results from this research have added to the current load of learning in the literature on entrepreneurial factors impacting SMEs survival in Kakamega County. There have been various studies on elements influencing SMEs survival, however exceptional blend of the variables in this investigation entrepreneurial skills, entrepreneurial competencies, Access to entrepreneurial finance and Technological innovation gives extra information and fills the gap that has existed in different investigations.

5.4.4 Areas for further research

The investigation has drawn out the entrepreneurial determinants influencing SMEs survival in Kakamega County. The research along these lines prescribes that to add weight to this investigation:

1. Further studies ought to be done on different determinants influencing survival of SMEs in Kakamega County. This is on the grounds that the research was limited to just four determinants and subsequently forgetting others which can be investigated on further.
2. Further investigations ought to be done on same determinants influencing survival of SMEs in an alternate county other than Kakamega County.
3. Further research should likewise be possible on micro scale enterprises which was not reckoned in this investigation in light of the fact that the majority of them are not enrolled which can be a reason for research factors upsetting their enlistment procedure with the neighborhood experts subsequently making access to data on their reality a test to researchers.
REFERENCES


Organisation for Economic Co-operation and Development (OECD), (2015). The financial and human resources invested in education; access, participation and progression in education, New York: publication


Zinbarg, R. E., Revelle, W., Yovel, I., & Li, W. (2005). Cronbach’s α, Revelle’s β, and McDonald’s ω H: Their relations with each other and two alternative conceptualizations of reliability. *Psychometrika, 70*(1), 123-133.
APPENDICES

Appendix I: Questionnaire

PART A: BACKGROUND INFORMATION ( Please tick (√) where applicable)

1. Gender: Female [ ] Male [ ]

2. Age bracket: Less than 18yrs [ ] 19yrs -30yrs [ ] 1-40yrs [ ] 50 yrs [ ]
Over 50yrs [ ]

3. In which of the following categories does your business belong?
   Agricultural activities [ ] healthcare [ ] General Trade [ ]
   Education and Training [ ] Service Industry [ ]
   Other category……………………………………

4. For how long has the business been in existence?
   3-6 years [ ] 6-8 years [ ] 8-10 years [ ] More than 10 years [ ]

5. What is your position in the business?
   Owner [ ] Manager [ ] Employee [ ] Family member [ ]
   Other…………………………………………………………

6. How many employees are there in the business?
   10-29 [ ] 30-49 [ ] 50-49 [ ] 0-89 [ ] Over 90 [ ]

7. Please indicate your level of education
   [ ] 120 [ ]
PART B: SURVIVAL INDICATORS

Indicate in Kenya shillings, the amount of sales and profits made in the years shown.

Survival indicator (sales turnover in million KSHs):

8. Year 2010: Less than 100,000 □ 100,001 – 200,000 □ 200,001 – 300,000 □
   300,001 – 400,000 □ Over 400,000 □

9. Year 2011: Less than 100,000 □ 100,001 – 200,000 □ 200,001 – 300,000 □
   300,001 – 400,000 □ Over 400,000 □

10. Year 2012: Less than 100,000 □ 100,001 – 200,000 □ 200,000 – 300,000 □
    300,001 – 400,000 □ Over 400,000 □

11. Year 2013: Less than 100,000 □ 100,001 – 200,000 □ 200,001 – 300,000 □
    300,001 – 400,000 □ Over 400,000 □

12. Year 2014: Less than 100,000 □ 100,001 – 200,000 □ 200,001 – 300,000 □
    300,001 – 400,000 □ Over 400,000 □

Survival indicator (Profitability in million KSHs):

13. Year 2011: Less than 50,000 □ 50,001 – 100,000 □ 100,001 – 200,000 □
    200,001 – 300,000 □ Over 300,000 □

□ □
14. Year 2012: Less than 50,000  50,001 – 100,000  100,001 – 200,000
   200,001 – 300,000  [ ]  Over 300,000  [ ]

15. Year 2013: Less than 50,000  50,001 – 100,000  100,001 – 200,000
   200,001 – 300,000  [ ]  Over 300,000  [ ]

16. Year 2014: Less than 50,000  50,001 – 100,000  100,001 – 200,000
   200,001 – 300,000  [ ]  Over 300,000  [ ]

17. Year 2015: Less than 50,000  50,001 – 100,000  100,001 – 200,000
   200,001 – 300,000  [ ]  Over 300,000  [ ]

Have the following factors influenced the survival of your business?

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18. Entrepreneurial skills
   [ ]

19. Entrepreneurial competences
   [ ]

20. Access to finance
    [ ]

21. Technological innovation
    [ ]
**PART C: INFLUENCE OF ENTREPRENEURIAL SKILLS ON THE SURVIVAL OF SMEs**

Please indicate the extent to which entrepreneurial skills has contributed to the survival of your business by ticking (✓) the extent of agreement or disagreement with the descriptions for access to business information. Use the scale: Strongly Agree - S.A, Agree - A, Neutral - N, Disagree - DA and Strongly Disagree - SD.

<table>
<thead>
<tr>
<th>Influence of entrepreneurial skills on SME survival</th>
<th>S.A</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>S</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>54. Business plan skills have led to increase in sales and profitability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55. Proposal development skills have led to increase in sales and profitability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>56. Keeping records skills have led to increase in sales and profitability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57. Communication skills have led to increase in sales and profitability</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>58. Budget control skills have led to increase in profitability</td>
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<td>59. Marketing skills have led to growth of the business</td>
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<td>60. Decision making skills have led to an increase in sales and profitability</td>
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<td>61. Time management skills to increase in sales and profitability</td>
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PART D: INFLUENCE OF ENTREPRENEURIAL COMPETENCES ON THE SURVIVAL OF SMEs

Please indicate the extent to which entrepreneurial competencies influenced the survival of the business by ticking (√) the extent of agreement or disagreement with the descriptions for human capital. Use the scale: Strongly Agree - S.A, Agree - A, Neutral - N, Disagree - DA and Strongly Disagree – SD.

<table>
<thead>
<tr>
<th>Influence of entrepreneurial competencies on SME survival</th>
<th>S.</th>
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<tbody>
<tr>
<td>Employing staff with relevant qualifications has led to increase in sales and profitability</td>
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<td>Encouraging team work among the employees has led to increased profitability.</td>
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<td>Continuous staff training and development has led to increase in sales and profitability</td>
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<td>Rewarding high performing employees has led to increase in sales</td>
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<td>Clear job descriptions for employees has led to increase in sales and profitability</td>
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<td>Clear reporting channels for employees has led to increase in sales</td>
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<td>Retaining experienced staff in the business has led to increased sales and profitability</td>
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<td>Providing employees with a conducive working environment has led to growth of the business</td>
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<td>Motivating staff with good pay and benefits has led to increase in sales and profitability</td>
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</table>

124
43. Mention any other ways you have adopted to manage employees that has contributed to the growth of your business.

__________________________________________________________________________

__________________________________________________________________________

PART E: INFLUENCE OF ACCESS TO ENTREPRENEURIAL FINANCE ON THE SURVIVAL OF SMEs

Please indicate the extent to which Access to finance has contributed to the survival of your business. By ticking in the spaces provided (✓) the extent of agreement or disagreement with the descriptions for access to finance. Use the scale of Strongly Agree - S.A, Agree - A, Neutral - N, Disagree - DA and Strongly Disagree - SD.

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<thead>
<tr>
<th></th>
<th>S.A</th>
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<tr>
<td>Influence of access to entrepreneurial finance on SME survival</td>
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<td>44. Quick access to finances has led to growth of the business</td>
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<td>45. Access to finance with flexible terms has led to growth of the business</td>
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<td>46. Access to finance from commercial banks has led to the growth of the business</td>
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<td>47. Access to affordable finances has led to the growth of the business</td>
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<td>48. Access to finances from micro finance institutions has led to growth of the business</td>
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<td>49.</td>
<td>Re-investing back finances generated from the business has led to growth of the business</td>
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<td>50.</td>
<td>Proper management of finances has led to growth of the business</td>
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<td>51.</td>
<td>Access to finances from informal sources has led to growth of the business</td>
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52. What is your major source of finances for your business?

……………………………………………………………………………………………

…………………………………………………………………………………………

53. What attracted you to the source of finance above?

   The low cost □

   Flexible terms □
PART F: INFLUENCE OF TECHNICAL INNOVATION ON THE SURVIVAL OF SMEs

22. Have you embraced new methods and ways of doing business?

YES [ ] NO [ ]

Please indicate the extent to which various technological innovations have influenced survival of your business. Indicate by ticking (✓) the extent of agreement or disagreement with the forms of innovation provided using the scale: Strongly Agree - S.A Agree - A, Neutral - N, Disagree - DA and Strongly Disagree - SD.

<table>
<thead>
<tr>
<th>Influence of technical innovation to SME survival</th>
<th>S.A</th>
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<th>D.A</th>
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<tr>
<td>23. Introduction of new Products and services has led to increase in sales and profits</td>
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<td>24. Introduction of Quality Inputs and raw materials has led to increase in sales and profits</td>
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<td>25. Introduction of new methods of payments like M-Pesa by customers has led to an increase in sales</td>
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<td>26. Improvements on existing goods and services has led to an increase in sales</td>
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<td>27. New improved methods of production has improved quality of products and increased sales and profits</td>
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<tr>
<td>28. Introduction of new channels of distribution for goods and services has increased profitability</td>
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</table>
Introduction of improved modes of communication with customers and suppliers has led to growth of the business

Improvements in service delivery to customers has led to increase in sales

New technologies in form of machines and equipment has led to increased sales and profits

32. What are the factors that hinder the introduction of new ways of doing business?

[   ] Lack of skilled personnel

[   ] Low business growth

[   ] Limited capital base

[   ] Adoption of new technology has not been fully realized

Any other reasons? Specify

........................................................................................................................................

........................................................................................................................................

33. Mention any other new ways of doing things that you have introduced in your business

........................................................................................................................................

........................................................................................................................................
Appendix II: Approval Letter

Dear Sir/Madam,

I am Tom Stevens Saka a PhD student at the Jomo Kenyatta University of Agriculture and Technology (JCUAT). As part of the requirements for the award of this degree, I am carrying out a research to assess the “Influence of entrepreneurial determinants of Small and Medium Enterprises Survival in Kakamega County, Kenya”. I humbly request you to participate in this research through your assessment of the business skills, technology, finance required by the entrepreneurs to run their small businesses. This is in addition to supplying secondary data as requested in the secondary data collection sheet attached on the questionnaire.

The results of the study will be used purely for academic purposes and will therefore be treated with utmost confidentiality. Your anonymity and the confidentiality of your responses will be fully protected. You do not include your name. The completed questionnaire will be securely stored and made available only to my thesis supervisors and me. The results will be contained in the thesis that will be available at the Jomo Kenyatta University of Agriculture and Technology library in Juja. It is also hoped that, aspects of the results will be published in professional and academic journals. Any need for clarifications do not hesitate to contact me or the College of Human Resource Development at JCUAT.

Thank you.

Yours faithfully,
Appendix III: Kakamega County Map