

**EFFECT OF ENTREPRENEURIAL COMPETENCIES ON  
THE SURVIVAL OF SMALL AND MEDIUM  
ENTERPRISES IN KENYA**

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**Effect of entrepreneurial competencies on the survival of small and  
medium enterprises in Kenya**

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philosophy in entrepreneurship in the Jomo Kenyatta University of  
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## DECLARATION

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

Signature ..... Date.....

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

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## **DEDICATION**

This thesis is dedicated to Allah, my Creator and my Master, my wives and children for their symbol of love and giving, and to the loving memory of both my late mother Safina Ouso and my late wife Sheilla Anyango, your memories are a treasure I cherish.

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## **LIST OF ABBREVIATIONS & ACRONYMS**

<b>ANOVA</b>	Analysis of Variance
<b>BLUE</b>	Best Linear Unbiased Estimator
<b>CLRM</b>	Classical Linear Regression Model
<b>CPD</b>	Continuous Professional Development
<b>CSR</b>	Corporate Social Responsibilities
<b>DTI</b>	Department of Trade and Industry
<b>DW</b>	Durbin -Watson
<b>EBITDA</b>	Earnings Before Interest, Taxes, Depreciation, and Amortization
<b>EC</b>	Entrepreneurial Competency
<b>GDP</b>	Gross Domestic Product
<b>HTI</b>	Hospitality and Tourism Industry
<b>ICT</b>	Information Communication Technology
<b>ID</b>	Identification Code
<b>ILO</b>	International Labour Organization
<b>IP</b>	Intellectual Property
<b>MSEA</b>	Micro and Small Enterprise Authority
<b>OLS</b>	Ordinary Least Square

<b>QCA</b>	Qualitative Content Analysis
<b>Q-Q</b>	Quantile Quantile
<b>R &amp; D</b>	Research and Development
<b>RBV</b>	Resource Based View
<b>RoK</b>	Republic of Kenya
<b>SBP</b>	Single Business Permit
<b>SIC</b>	Standard Industry Classification
<b>SME</b>	Small and Medium Enterprise
<b>SOEP</b>	Socio-Economic Panel
<b>SPSS</b>	Statistical Package for Social Scientists
<b>UAE</b>	United Arab Emirates
<b>USA</b>	United States of America
<b>VIF</b>	Variance Inflation Factor

## **OPERATIONAL DEFINITION OF TERMS**

**Competencies** These can be defined as a cluster of related knowledge, traits, attitudes and skills that affect a major part of one's job; that correlate with performance on the job; that is possible to be evaluated against known standards and that can be improved via training and development (Sanchez, 2012).

### **Entrepreneurial**

**Competency** This can be defined as knowledge, traits, skills and attitudes that affect the willingness and ability to perform the entrepreneurial job of new value creation; that can be evaluated directly or indirectly against known standards; and that can be improved through training and development (Lackeus, 2013).

**Entrepreneurship** This is the practice of starting new organizations or revitalizing mature organizations, particularly new business generally in response to identified opportunities. It is about taking risk, demonstrating initiative and creative thinking and organizing social and economic mechanisms to turn resources and situations to practical account, (Eroglu & Picak, 2011).

**Innovation** This is the process of commercializing an idea with a view to making profit. It is the process that transforms new ideas into new value-turning an idea into value or the process that combines ideas and knowledge into new value. This results into new products or services, new processes, new markets or new sources of supply (Okpara, 2007).

**Leadership** This is a process by which an individual influence the thoughts, attitudes, and behaviors of others. The Leader sets direction for the firm; help see what lies ahead; visualize what he might achieve and how to achieve it; encourage and inspire the subordinates (Kehinde, Idris & Oluitan, 2014).

**Networking** This is really about making meaningful connections, helping each other and nurturing these relationships. Moreover, entrepreneur's networking is intrinsically related to their social capital which is the actual and potential resources individuals obtain from their relationships with others through a favorable reputation, high status and personal referrals, (Buhler, 2007).

**Risk taking** In entrepreneurship, risk taking is the determination to devote resources to opportunities with a high probability of failure. More often than not, the definition relates to ideas of danger, loss, threat, damage and injury; however, in some instances we see the likelihood of gain through accepting such challenges (Barberis, 2013).

### **Small and medium**

**Enterprises (SMEs)** The Kenya's official definition of SME which is adopted in this study recognizes SMEs with respect to employment size: Micro enterprises (1-9 employees), Small Enterprise (10-49 employees), Medium Enterprise (50-99 employees). Use of the term "employment" here does not necessarily imply partially or fully paid employment; but refers to the total number of people working in the business whether they are partially, fully paid or not (RoK, 2016).

**Survival**

This is the act of a business continuing its activity without interruptions, remaining in operation for a longer time by turning around the business. It is the ability of a firm to continuously be in operation despite various challenges i.e. the managerial process of directing the affairs of a firm regularly on a going concern basis (Akindele, Oginni & Omoyele, 2012).

## ABSTRACT

Small and Medium Enterprises (SMEs) play an important role in almost all national economies ranking them as the key drivers of economic growth. There has been concerted efforts directed towards enhancing their survival and eventual growth of which researchers, policy makers and governments alike tend to put more emphasis on. The threat to survival is real and unless there is intensive effort from concerned parties, the situation might become out of control. The collapse ration of SMEs is alarming for developing countries as well as developed countries and Kenya is no exception. Their survival is not optimistic the world over. Given this minimal survival rate, it becomes vital to research on the factors/characteristics/management abilities that are required to enable SMEs to survive and indeed progress to the growth phase of the organizational life cycle. The threat to survival is real and requires a concerted effort from both policy makers and the entrepreneurs themselves. This study, therefore, sought to examine the effect of entrepreneurial competencies (innovation, leadership, networking and risk-taking) on the survival of SMEs in Kenya. The study is geared towards assessing survival prospects of SMEs in Kenya should they opt to use appropriate entrepreneurial competencies. The study was guided by the following research objectives which include; finding out what role is played by entrepreneur's innovation, leadership, networking and risk-taking competencies on the survival of SMEs in Kenya. The study reviewed past activities and this was explained by the literature review. The literature review evaluated the relationship between each of the various entrepreneurial competencies and their effect on survival of SMEs worldwide. The study therefore opted to adopt a descriptive research design. The target population was 268,100 registered SMEs who are operating under single business permit (SBP) in Nairobi City County where a stratified random sampling was applied to identify 400 SMEs. Data analysis was by way of descriptive statistics (frequencies and percentages), tables and graphical presentations, and multiple linear regression model where survival was regressed against the four variables of entrepreneurial competencies to make statistical reference. The findings revealed that entrepreneurial competencies (innovation competency, leadership competency, networking competency and risk-taking competency) of the SME owner-managers (entrepreneurs) have a positive and significant effect on the survival of SMEs in Kenya thereby increasing their chances of survival. The study therefore recommends that SMEs through the management should embrace innovation competency as a means of enhancing their survival, enhance leadership competency which is a key aspect in firm survival and performance, ensure that they embrace networking competency as a way of gaining competitive advantage and widening their customer base and adopt calculated risk-taking strategies in their operations.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the study**

Small and Medium Enterprises (SMEs) play an important role in almost all national economies ranking them as the key drivers of economic growth. The idea that SMEs and economic growth are very closely and positively linked together has undoubtedly made its way since the early works of Schumpeter (Adeoye, 2015). They are considered as the engine of growth and development of countries due to their immense contributions to the manufacturing subsector, diversification of output, and reduction of unemployment (Iorun, 2014). They create employment not only to the business owners but also to others since the sector is characterized by ease of entry, small scale operations, adaptive technology, and are found in every part of a country.

The SME sector is expanding fast and wide to include entrepreneurs bent on solving societal problems. These new crop of entrepreneurs are thus widening the importance of SMEs beyond what is traditionally known (Lam, & Harker, 2015). Ormiston & Seymour (2011) noted that within the last decade more and more entrepreneurs through their SMEs are focusing their work on resolving social problems. Whether it is poverty or climate change, these important issues deserve the efforts of these eager entrepreneurs, and their work benefits the society not just through the jobs they create or the sleek product they deliver, but by the people they help. In doing so, they often act with little or no intention of gaining personal profit.

There is arguably high mortality rate of SMEs within the first three years of operation. Efforts directed towards enhancing their survival and eventual growth has been a concern to researchers, policy makers and governments. Many SMEs encounter problems that limit their survival. Ng and Kee (2013) argue that in order to survive and become successful in today's competitive and rapidly changing market environments,

SMEs need to continuously acquire and enhance their entrepreneurial competencies. They believe that entrepreneurial competencies play a pivotal role in ensuring survival and success of business. The focus here is on the entrepreneur because it is him who makes the difference: he sets the conditions, the boundaries, the characteristics and ultimately the value creating ability of the enterprise (Sanchez, 2012).

Small and Medium Enterprises (SMEs) cover a variety of enterprises providing goods and services. They encompass sole proprietorship or entrepreneurship, family business and partnerships, and may be incorporated or unincorporated. Small and Medium Enterprises come in many different shapes and sizes; however, in today's complex business environment they may have close financial, operational or governance relationships with other enterprises. These relationships often make it difficult to precisely draw the line between an SME and a larger enterprise. Small and medium enterprises are named by adjectives indicating size, thus economists tend to divide them into classes according to some quantitative measurable indicators. The most common criterion to distinguish between large and small businesses is the number of employees (Hatten, 2011).

The definition adopted by regulators recognizes the number of employees, sales and/or turnover size. The commonest among the three is the number of employee's criterion. European Commission lends support to this as the main criterion (Ardic, Mylenko & Saltane, 2011). In Kenya, SMEs are officially defined according to employment size: Micro enterprises (1-9 employees), Small Enterprise (10-49 employees), Medium Enterprise (50-99 employees). Use of the term "employment" here does not necessarily imply partially or fully paid employment; but refers to the total number of people working in the business whether they are partially, fully paid or not (RoK, 2016). This study is therefore restricted to firms with less than 100 employees.

### **1.1.1 Global perspective on SMEs**

It is estimated that SMEs make up more than 90% of all new business establishment worldwide. They have been identified by the Western economies as a significant strategy of job and wealth creation. In the developing countries, interest in the role of SMEs in economic growth is considerably high, regeneration in general and the creation of employment opportunities in particular. They are widely recognized the world over for their role in the social, political and economic development (World Bank, 2014a).

Empirical studies show that SMEs contribute to over 55% of GDP and over 65% of total employment in high-income countries. SMEs and informal enterprises account for over 60% of GDP and over 70% of total employment in low-income countries, while they contribute over 95% of total employment and about 70% of GDP in middle-income countries (Nyagah, 2013). The relative importance of SMEs and the informal sector are inversely associated with economic development. In the least developed economies, the contribution of SMEs to employment and GDP is less than that of the informal sector, where the great majority of the poorest of the poor make a subsistence level of living (Okpara, 2011).

The contribution made by SMEs does vary widely between countries and regions. Nevertheless, although they play particularly key roles in high-income countries, SMEs are also important to low-income countries, making significant contributions to both GDP and employment (Dalberg, 2011). When combining the data for those countries for which reasonably good data are available, SMEs account for 52% of private sector value added, this provides a reasonable estimate for the sector's global economic contribution. The contribution of SMEs to economic fundamentals nonetheless varies substantially across countries: from 16% of GDP in low-income countries (where the sector is typically large but informal) to 51% of GDP in high-income countries (ACCA 2010). Though SMEs play an important role in national economy and provide the majority of job opportunities, the survival of SMEs are not optimistic around the world. According to previous researchers, 68% of all SMEs in the United States of America (USA) made

their exit from business within 5 years, only 19% survived from 6 to 10 years, merely 13% survived in excess of 10 years while in Europe, only 65% of SMEs survived for more than 3 years, and 50% survived for more than 5 years (Cao, 2012).

### **1.1.2 Regional Perspective on SMEs**

In middle-income countries, formal SMEs contribute about 20% more to employment and GDP than the informal SMEs (Nyagah, 2013). Thus, in these countries, eliminating factors that discourage informal enterprises from entering the formal SME sector would also bring about gains in economic terms. This is witnessed by the fact that SMEs as compared to informal sector contribute over 3 times both in total employment (approximately 65%) and GDP (approximately 55%) in high-income countries and that these countries are also taking initiative to bring as many informal enterprises as possible into the formal sector (IFC, 2006; Ngugi & Bwisa, 2013).

In Africa SMEs play a momentous role in the macro economy. There has been an obvious rise in the widespread emergence of SMEs in Sub-Saharan Africa (Okpara, 2011). In considering the SMEs' economic contribution in some selected Africa countries, the Department of Trade and Industry (DTI, 2012) of South Africa indicates that there are more than 800,000 SMEs and has estimated that total economic output of SMEs in South Africa to be 50% of GDP. It is also estimated that they provide employment to about 60% of the labour force. In Nigeria, SMEs are extremely imperative and contribute significantly to economic growth, principally in the manufacturing sector. Small and Medium Enterprises constitute between 70% to 90% of the business establishment in the manufacturing sector (Eniola & Ektebang, 2014).

However, the mortality rate of SMEs in Africa remains very high; it is posited that five out of seven new SMEs fail within the first year of operation. For instance, in South Africa, it is said that five out of seven new SMEs fail within the first year of operation (Entrepreneur, 2014). This would mean that only two out of seven new SMEs will survive in their first year. The same case is replicated in almost all the African countries.

### **1.1.3 Small and medium enterprise in Kenya**

Small and medium enterprises cover more than 95 percent of all firms in Sub-Saharan Africa. In Kenya, a number of factors have contributed to the rapid expansion in the sector. One of the factors is the general decline in the economic performance of the Kenyan economy as a result of recession and liberalization of the 1980's. This resulted in a number of large companies to adjust to the economic realities by becoming lean through retrenchment and downsizing. The effect of this was massive job losses and reduced employment opportunities in the formal sector which resulted in people venturing into small businesses (RoK, 2013). In the last three decades, there has been a growing awareness of the importance of developing entrepreneurship and small business management in Kenya for sustained economic growth, rapid employment generation and poverty eradication (RoK, 2013; World Bank, 2014a).

Ngugi and Bwisa (2013) noted that SMEs accounted for a significant proportion of economic activities in Kenya's urban and rural areas; generating over 70% of all new jobs annually. They further indicated that the role of SMEs in terms of employment creation, income generation, economic diversification and growth, make the sector an important factor in future industrial development for the country. Small and Medium Enterprises form one of the fastest growing and most dynamic sectors of the Kenyan economy. In 2014, the sector had the largest share of employment accounting for 82.7% of the total jobs. It employed 11.8 million people as opposed to 2.4 million people employed by other sectors (RoK, 2015).

In Kenya SMEs are easy to start since Kenyans are creative, innovative and full of business ideas the reason why they are quite many. The biggest problem faced by these enterprises is that they don't last in the market for a considerable good time before being faced out by well-established businesses. As much as the number of SMEs grow by the day, a number of them have had shorter lifespan due to the many challenges they are facing. The collapse ration of SMEs is alarming for developing countries as well as developed countries. In Kenya, they have been found to have very high mortality rates

and as a result, measures to cope with this mortality are vital (Ochanda, 2014). They are therefore threatened for survival as competitive enterprises. Just like in many developing countries, in Kenya the survival rate of SMEs is only 10-20% (Ruhii, Ngugi & Waititu, 2014).

#### **1.1.4 Small and medium enterprises (SMEs) in Nairobi County**

According to the Micro, Small and Medium Establishments Report (RoK, 2016) there are an estimated 268,100 SMEs located in Nairobi trading under single business permit making Nairobi City County to have the lion share of SMEs in Kenya. The highest proportion of employment in licensed SMEs was recorded in Nairobi City County, which accounted for 27.8 per cent of the persons engaged. Nairobi County had the highest proportion of small sized establishments at 14.8 per cent (RoK, 2016). All these are attributable to the fact that Nairobi City County is the business, industrial and financial hub of Kenya.

The County receives the highest revenue allocation to counties accounting for approximately 10% of the total national allocation (RoK, 2015). Majority of both licensed and unlicensed establishments are concentrated in Nairobi City County. There is, however, a wide gap between the high number of SMEs in Nairobi and the other counties. This can be explained by the high population in Nairobi as compared to other counties. High population translates to high demand for goods and services and by extension, business opportunities for the SMEs. With services concentrated in Nairobi, several SMEs and companies have their bases located in the county or at its immediate hinterland and commuter zones. This gives Nairobi City County an advantage over other counties as more jobs and wealth is created thereby forming an attractive investment hub for investors and a job haven for job seekers. The pull factors for both investors and job seekers serve as a catalyst for entrepreneurial growth and development (RoK, 2016).

### **1.1.5 Small and medium enterprises survival**

According to Akindele, et.al. (2012) business survival is the ability of a firm to continuously be in operation despite various challenges i.e. the managerial process of directing the affairs of a firm regularly on a going concern basis and meets the needs of all stakeholders. In order to survive, firms always keep a close tab on the various activities that determine their continuity. Hurst (2010) concurs but hasten to add that it is the ability to resist business collapse and evolve as a worthy, strong and stable success. Of course, some surviving businesses do not grow by any significant margin as they start small and stay small throughout their entire lifecycle but the fact remains they are surviving (Hurst & Pugsley, 2011).

Entry to markets is relatively easy but survival is not to some firms (Kiveu & Ofafa, 2013). Much of the work has argued that productive and efficient firms will survive and inefficient firms will not (Shiferaw, 2009). The high failure rate is a course of concern to many countries. Therefore, the academic literature recognizes the need to study further factors that may favor the probability of survival of firms (Ejermo & Xiao, 2014). According to the research-based view, one of the most important intangible resources for predicting business survival is entrepreneurial experience which in this paper is analysed in the context of entrepreneurial competency.

Survival was measured in terms of the length/duration of time the enterprise has continuously been in business without interruptions. For an enterprise to survive longer its liquidity, profitability and diversification strategy have to remain strong as brought about by entrepreneurial competency (Sanchez, 2012). In entrepreneurship, liquidity constraints force start-ups to join a competitive market with limited capacity (weak and small) and that this initial cash hiccups would impact negatively on the firm's survival probabilities. As noted by Barbosa 2016) such liquidity constraints may block SMEs from creating buffers against random shocks, thereby affecting investment projections negatively and having an impact on such firms' survival probabilities.

This is also associated with working capital where judicious cash projections, balances, inventories and associated cash receivables should take a leading role.

Basic economic theory stipulates that firms can only stay in markets when they are profitable as opposed to when they are making losses (Barbosa, 2016). Kumlachev (2012) lends support to this basic economic principle. According to him, high firm profitability can be construed to be a sign of efficiency and market power. Should higher profitability be as a result of higher efficiency which then means higher productivity then survival prospects is enhanced but if such high profitability emanates from market power, longer lifetimes are envisaged from SMEs that are more profitable. The asset base of a firm is widened by profits attributable to innovation and advertising which in turn ease such firm's survival. Profitability is therefore advocated as a precondition to longevity (Barbosa, 2016).

Diversification is also said to impact positively SMEs survival probability because in such circumstances variation of earnings is vehemently reduced (Sohl, 2012). However, for SMEs the argument is in favor of a posited negative relationship based on the fact that small firms' economic viability relies so much on finding niche markets to service through specialization and concentration of efforts but being extremely careful not to disperse scarce resources out of the primary line of business to other avenues that are remotely understood by the enterprise (Barbosa, 2016). Such diversification can include corporate diversification where interrelated activity complements the main activity, market diversification by invading new markets, and product diversification by coming up with new products.

#### **1.1.6 Entrepreneurial competencies and SME survival**

There is widespread acknowledgement that the success, performance, survival and growth of a SME is heavily dependent on the competencies of the entrepreneur (Mitchelmore & Rowley, 2013). Mitchelmore and Rowley (2010) however point that there is an overall consensus on the discussion of, presumably, the individuals who start

and transform their business to possess given entrepreneurial competencies. The authors state that these entrepreneur's competencies can be described as a certain group of competencies which is relevant to the successful performance of entrepreneurship. Entrepreneur's competencies relate to their survival and success. In their study, the researchers summarize that the entrepreneurial competencies can be defined as higher-level characteristics which represent the total entrepreneur's ability to successfully perform a job role and as comprising of knowledge, skills and personality traits which are influenced in turn by the education, training, family background, experience and other demographic aspects of the entrepreneurs. Training has the ultimate effect of shaping entrepreneurial competency or orientation and therefore contributes to entrepreneurial survival and performance (Mukulu, 2012).

According to Vijay and Ajay (2011), a competence is an underlying characteristic of persons, which results in effective and/or superior performance in a job. A job competence is the underlying characteristics of a person, in that may be motive, traits, skills, aspects of one's self-image, a body of knowledge, set of skills and cluster of appropriate motives/traits that an individual possess to perform a given task. Entrepreneurs especially those operating in the SME context, face numerous situations that require them to make quick decisions, therefore having the abilities to undertake high level of conceptual activities are important for the survival and success of their business. They posit that competency model could shed some light into ways to increase the likelihood of business survival and success especially in the context of a developing country.

The complexity in business operation in a continuously changing competitive business environment which results from fast technological advancements requires quick remedial action (Otieno, Bwisa & Kihoro, 2012). An entrepreneur is expected to interact with these environmental forces which require him to be highly competent in different dimensions like intellectual, attitudinal, behavioral, technical and managerial aspects (Penchev & Salopaju, 2011). Entrepreneurs are therefore challenged to deploy a set of competencies to succeed in their entrepreneurial endeavors (Kochadai, 2012). In fact,

the competency is a wider concept which includes the knowledge, attitudes, behaviors and skills which help a person capable of transforming his ideas into realities with an excellence in its performance in a given context. It does not refer to those behaviors which do not demonstrate excellent performance. Finally, competencies are not work motives, but do include observable behaviors related to motive (Mitchelmore & Rowley, 2010).

Endi, Suracham, Armanu and Djumilah (2013) found that entrepreneurial competencies propel business performance, the higher the competence that SME owners portray the higher the likelihood of good business performance. Most of the business failures are due to SME owner-manager's incompetence, inadequacy and inexperience in managing their business and taking quick remedial action in crisis situations. Entrepreneurial competencies portfolio has a positive impact on the organizational performance as such are positively related to entrepreneurial survival and specifically, high entrepreneurial competencies and high managerial competencies are linked to satisfaction on financial performance whereas high managerial competencies and high technical competencies are linked to satisfaction on non-financial performance. Entrepreneurial competencies are a predictor of SMEs business survival and success (Ahmad, Ramayah, Wilson & Kummerow, 2010; Gerli, Gubitta & Tognazo, 2011; Griffin, 2012; Roepga, 2011).

## **1.2 Statement of the problem**

The Micro, Small and Medium Establishments report (RoK, 2016) indicates that there is high mortality rate of SMEs in Kenya with a total of 2.2 million businesses having closed from 2012 to 2016. It is argued that in Kenya, just like in many developing countries, the survival rate of SMEs is only 10-20% (Ruhui, Ngugi & Waititu, 2014). It is this minimal survival rate that continues to attract the attention of researchers with a view to putting more emphasis to survival and growth-oriented parameters. Several researchers (Abdul & Ngugi, 2015; Martin & Namusonge, 2014; Namusonge, 1999; Ngugi & Bwisa, 2013; Nyagah, 2013; Ochanda, 2014) have attempted to uncover the primary determinants of new venture success/failure and trying to come up with a

comprehensive catalogue of factors which leads to such success/failure of new ventures. The high mortality rate is raising concern over sustainability of this critical sector. The SME sector has great potential as we realize that while many SMEs fail, others survive beyond infancy and adolescence, becoming major success stories, creating wealth for their founders and jobs for the communities they serve (Vijay & Ajay, 2011).

Could poor entrepreneurial competencies or lack thereof be the driving force behind this minimal survival rate of SMEs in Kenya? Previous studies (Ahmad, 2007; Ahmad, Halim & Zainal, 2010; Madatta, 2011; Kochadai, 2012; Ng & Kee, 2013; Sanchez, 2012) conducted in other countries have found positive relationship between existences of competencies and SMEs survival. For instance, in Spain entrepreneurial competencies have not only direct impact, but also indirect impact on SME firm performance via the mediating effect of organizational capabilities (Sanchez, 2012). In Tanzania, Madatta (2011) found out that entrepreneurial competencies are directly associated to business success.

Since each market and economy has its own features that provide a unique environment for SMEs to develop and operate, the Kenyan scenario requires its own analysis. In Kenya, most studies relating to SMEs failure rate have mainly concentrated on the growth aspect (Abdul & Ngugi, 2015; Bernadette, 2012; Ngugi & Bwisa, 2013; Njama, 2013; Nyagah, 2013; Ochanda, 2014; Ong'olo & Awino, 2013). There has been little attempt to explore survival prospects and more specifically examining the effect of entrepreneurial competencies on the survival of Small and Medium Enterprises in Kenya as in this case. This study, therefore, seeks to address this knowledge gap.

### **1.3 Objectives**

#### **1.3.1 General objective**

The study sought to examine the effect of entrepreneurial competencies on the survival of SMEs in Kenya.

#### **1.3.2 Specific objectives**

The Specific objectives of this study are as follows:

1. To establish the effect of innovation competency on the survival of Small and Medium Enterprises in Kenya.
2. To examine the effect of leadership competency on the survival of Small and Medium Enterprises in Kenya.
3. To explore the effect of networking competency on the survival of Small and Medium Enterprises in Kenya.
4. To determine the effect of risk-taking competency on the survival of Small and Medium Enterprises in Kenya.
5. To examine the effect of entrepreneurial competencies (combination of innovation, leadership, networking and risk taking) on the survival of SMEs in Kenya.

### **1.4 Research hypotheses**

The study aims to test the following research hypotheses: -

#### *Hypothesis 1*

**H<sub>a1</sub>**: Innovation competency has significant effect on the survival of Small and Medium Enterprises in Kenya

*Hypothesis 2*

**H<sub>a2</sub>:** Leadership competency has significant effect on the survival of Small and Medium Enterprises in Kenya

*Hypothesis 3*

**H<sub>a3</sub>:** Networking competency has significant effect on the survival of Small and Medium Enterprises in Kenya

*Hypothesis 4*

**H<sub>a4</sub>:** Risk-taking competency has significant effect on the survival of Small and Medium Enterprises in Kenya

*Hypothesis 5*

**H<sub>a5</sub>:** Entrepreneurial competency (combination of innovation, leadership, networking and risk taking) has significant effect on the survival of Small and Medium Enterprises in Kenya

## **1.5 Justification of the study**

### **1.5.1 Aspiring entrepreneurs**

The study is important to start-ups so that they can be able to evaluate their competencies that will enhance their chances of survival and eventual growth. It will serve as a resource for personal decision-making as a *self-evaluation aid* that can be used to increase prospective entrepreneur's awareness of their strengths and weaknesses with regard to future business endeavors. Having the right idea early on about which competencies are necessary, a person can focus more effectively on developing them and thus avoid the unproductive wondering where to concentrate the so valuable personal time and efforts.

### **1.5.2 Business consultants**

These professionals would thus be more aware of the competencies which the entrepreneurs need to master and be trained on thereby be able to offer proper guidance and assistance.

### **1.5.3 Current entrepreneurs**

As for existing SMEs, it is time to re-look at their competencies and in the event of any deficiency then think of how to enhance the same either through training or education. Knowing which of their personal competencies (existing and to be developed) might positively affect their business, entrepreneurs can thus act with greater accuracy and confidence towards the accomplishment of their goals.

### **1.5.4 Policy makers**

The rate of new firm formation is critically important for economic development as policy makers increasingly acknowledge the substantial contribution that SME's can make to an economy in terms of employment creation, acceleration of usage of factors of production, economic growth, social good, business linkages and more importantly as a major contributor to gross domestic product (GDP). It is however rather worrying if their survival rate is threatened. This research would therefore help policy makers formulate policies that are geared towards ensuring SME's survival based on what would increase their entrepreneurial competencies.

### **1.5.5 Scholars**

The study is in my opinion of great importance to scholars as they are able to gain both theoretical and practical knowledge on how entrepreneurial competencies affect survival of SMEs in Kenya. Other than providing empirical evidence, this study will not only add value to existing stock of knowledge in the literature of entrepreneurial competency and survival of SMEs but also provide a milestone for future research in this area of SME survival particularly in Kenya.

### **1.6 Scope of the study**

The study focused on the role played by entrepreneurial competencies on the survival of the SMEs in Kenya. The study captured SME owners in Nairobi City County as a representative of the country by virtue of being the business, industrial and financial hub of Kenya. Again in terms of the number of SMEs, Nairobi City County tops the list as compared to other counties. Out of 1,506,500 licensed SMEs, the top ten counties in terms of numbers include Nairobi City County 268,100, Nakuru County 118,200, Meru County 95,100, Kiambu County 92,400, Uasin Gishu County 57,600, Kakamega County 53,000, Homabay County 48,500, Kajiado 46,100, Mombasa 41,900 and Kisumu 40,200 (RoK, 2016). The study was undertaken to research on the issues contained in the research objectives. The study was conducted from September 2016 to March 2018.

### **1.7 Limitations of the study**

The major limitation in this study was that some SME owners considered part of their information as confidential and hence were not readily willing to share such. To address this limitation, the study was assisted by a letter of introduction from the university that assured the respondents that the information provided would be used purely for academic purpose and would thereby be maintained as confidential and anonymous as the case may be. In addition, the researcher also promised to share the findings with those respondents who made such requests. The data collection was undertaken at a time

when there was high political tension occasioned by electioneering period. This was overcome by extending the data collection period past the election period. The study depended on questionnaires which were hand-delivered to the respondents for immediate response. However, given the nature of their business and other engagements, some respondents lacked time to immediately participate in the study. To this end the questionnaires were left behind with them to fill and collected later at an agreed time/date/day.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter reviews existing literature relevant to this study which is the effect of entrepreneurial competencies on the survival of SMEs. The chapter develops theoretical review, conceptual framework, empirical review and critical review that is used in the study in relation to each and every variable in the study. The overall intent of the literature review is to enable the researcher identify visible knowledge gaps. In the end, there is summary of the literature and the research gaps.

#### **2.2 Theoretical review**

Theories are formulated to explain, predict and understand phenomena and in many cases, to challenge and extend existing knowledge within the limits of critical bounding assumptions (Swanson, 2007). The theoretical framework is the structure that can hold or support a theory of a research study. The theoretical framework introduces and describes the theory that explains why the research problem under study exists. A formal theory is syntactic in nature and is only meaningful when given a semantic component by applying it to some content (that is facts and relationships of the actual historical world as it is unfolding (Zima, 2007). A theoretical framework consists of concepts and together with their definitions and references to relevant scholarly literature, existing theory that is used for a particular study. The theoretical framework must demonstrate an understanding of theories and concepts that are relevant to the topic of research paper and that relate to the broader areas of knowledge being considered.

Grant and Osanloo (2014) highlighted the necessity of identifying one's theoretical framework and argued that a researcher's choice of framework is not arbitrary but reflects important personal beliefs and understandings about the nature of knowledge, how it exists (in the metaphysical sense) in relation to the observer, and the possible

roles to be adopted, and tools to be employed consequently, by the researcher in his/her work. Without a theoretical framework, the structure and vision for a study is unclear. It serves as the guide on which to build and support a study, and also provides the structure to define how one will philosophically, epistemologically, methodologically, and analytically approach the dissertation as a whole. Thus, the theoretical framework consists of the selected theory (or theories) that undergirds one's thinking with regards to how the researcher understands and plans to research a topic, as well as the concepts and definitions from that theory that are relevant to the topic.

### **2.2.1 Theory of innovation- Schumpeter's theory**

It is often said that "there are plenty of ideas around" but innovative ones are not easily available (Faltin, 1999). The attempt to generate them needs in-depth analysis in the particular business field and perseverance in trying to create a new solution. Of course, ideas have to be put into practice and it is certainly not an easy task to do this. But as it is an arduous process, it would be a pity to build the whole edifice on a weak foundation (Faltin, 2001). The quality of the entrepreneurial idea is of utmost importance (Kavanagh & Hisrich, 2010). Whether one can successfully conquer the market or have to fight for mere survival does very much depend on the quality of the concept that one develops and refines (Wolf & Schoorlemmer, 2007).

According to Ngugi (2013) the most widely known theory of innovation is that of Schumpeter's 1934. His original theory of innovative profits emphasized the role of entrepreneurship (his term was entrepreneurial profits) and the seeking out of opportunities for novel value-generating activities which would expand (and transform) the circular flow of income, but it did so by distinguishing invention or discovery from innovation, commercialization and entrepreneurship.

Schumpeter (1943) relied on a distinction between two realms of economic analysis and corresponding to these realms are two different means for creating profits. The first realm is grounded on the circular flow of income and this is the realm of traditional

economic theory focused upon the determination of prices and quantities in the markets that link together the flows of inputs and products. In this realm, the economy is most easily analyzed as either stationary or as growing at a steady state in the form of a simple reproduction of at least some existing elements of the economy on an expanded scale. Profits derived from positions of market power (some might say from market imperfections), since in perfectly competitive conditions profits would be driven to zero. In this traditional context of price and quantity setting in the realm of circulation or markets, an increase in profits to values above the 'normal' must be attributed to a rise in the degree of market power. Now when profits are achieved through the market-based adjustment of prices and quantities by firms that possess the market power to do so, then it is appropriate to use the conventional apparatus for the analysis of profit maximization and optimization by rational economic agents (Heertje, 2006).

The second realm is that of novelty-creating economic activity which generates new sources of value-adding productive endeavour and which disturbs the circular flow of income. In this realm, growth must be understood as an inherently disruptive rather than as a smooth process, which the later Schumpeter (1943) termed 'creative destruction'. Creative destruction calls for entrepreneurs to suspend current paradigms and to think of new ways of doing things. Profits derive from creating new fields of productive activity, given that there is inertia in the wages of the firms responsible, such that their wage costs only rise with lag (Etro, 2007).

Firms may engage in internal innovation in order to introduce new products or services, or to enter new markets; they may rejuvenate themselves by innovating and altering internal process, structures, or capabilities; they may identify and adapt new ways of competing in existing markets; or they may proactively create entirely new product markets that other companies have not recognized or actively exploited (Claude-gaudillat & Quélin, 2006). Innovating frequently requires defining an innovation in technical terms and thus demands a high degree of specialized knowledge—the specific nature of which depends on the particular business and industry (Sledzik, 2013).

This theory is relevant to this study since survival is pegged on profitability and the theory emphasizes on entrepreneurial profits. Schumpeter's theory of profits through innovation focuses upon the quasi-monopoly positions developed in markets by entrepreneurial firms that enjoy first mover advantages. This common approach to Schumpeter's theory renders it understandable within the conventional framework of market-based analysis, in which institutions are discussed only with regard to their role in the process of economic exchange, primarily through markets (or with reference to a hypothetical alternative market in the case where such transactions are within firms). Since the leading innovators establish a temporary monopoly within some output (product) or input (process) markets, they obtain 'super' profits from innovation, typically associated with higher output prices and lower input prices or costs. This also relates to diversification as to market diversification by invading new markets, product diversification by coming up with new products and corporate diversification where interrelated activities complement the main activity.

### **2.2.2 Theory of leadership- Path-goal theory**

Yukl (2011) defines leadership, in the context of an organisation, as the ability of an individual to influence others within the same organisation to understand, agree and adhere to what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives for the benefit of the organisation. Northouse (2010) defines leadership as a process whereby an individual influences a group of individuals to achieve a common goal. These definitions suggest several components central to the phenomenon of leadership. Some of them are as follows: (a) Leadership is a process (b) leadership involves influencing others, (c) leadership happens within the confines of a group, (d) leadership involves goal attainment, and (e) these goals are shared by leaders and their followers. The very act of defining leadership as a process suggests that leadership is not a characteristic or trait with which only few certain people are endowed with at birth. Defining leadership as a process means that leadership is a transactional event that happens between leaders and their followers.

Viewing leadership as a process means that leaders affect and are affected by their followers either positively or negatively. It stresses that leadership is a two-way, interactive event between leaders and followers rather than a linear, one-way event in which the leader affects the followers and not vice versa. Defining leadership as a process makes it available to everyone-not just a select few who are born with it. More important, it means that leadership is not restricted to just the one person in a group who has formal position of power (Yukl, 2011).

According to Northouse (2010), the Path-Goal model is a theory based on stipulating a leader's behavioral/management style that the employees can best emulate in their work environment to enable them realize certain milestones for the betterment of the organisation. The leader clearly defines the goal, specify the path to achieving the goal, removes obstacles if any and provide the required support whether financial, moral or otherwise. The goal here is to increase the employees' motivation, empowerment and satisfaction to enable them become productive members of the organization. This theory can best be thought of as a process in which leaders identify and select specific behaviors that are in tandem with the employees' needs and the working environment so that they may provide a perfect guide to the employees in their path obtaining their daily work goals/targets.

Path-goal theory originally developed by Evans (1970) and later modified by House (1971), was designed to identify a leader's most practiced style as a motivation to get subordinates to accomplish targets. The path-goal theory gives credence to the idea that motivation plays an important part in how a supervisor and a subordinate interact and, based on that interaction, the overall subordinate's success. The path-goal theory, according to House (1971), presents two basic propositions. Firstly, "One of the strategic functions of the leader is to enhance the psychological states of subordinates that result in motivation to perform or in satisfaction with the job" (House 1971). In other words, leaders need to be cognizant of the necessary steps to clarify goals, paths and enhance satisfaction through extrinsic rewards, which will in turn increase subordinates' intrinsic motivation. Secondly, House (1971) asserted that particular situational leader behaviour

will accomplish the motivational purpose. The path-goal theory recognizes four leadership behaviors to increase subordinates' motivation. House and Mitchell (1974) based the four leadership styles on three attitudes exhibited by subordinates: (a) subordinates' satisfaction (b) subordinates' expectations of their leaders, and (c) subordinates' expectations of effective performance.

According to Johnson and Klee (2007) the four path-goal leadership styles that function to provide structure to subordinates are directive, supportive, participative, and achievement oriented parameters. The directive leader clarifies expectations and gives specific guidance to accomplish the desired expectations based on performance standards and organizational rules. The supportive leader behaves in a responsive manner thus creating a friendly climate and verbally recognizes subordinates' achievement in some rewarding modus. The participative leader takes on consultative behaviors such as soliciting subordinates for suggestions prior to making a final decision, albeit, to retain authority to make the final decision. The achievement-oriented leader "sets challenging goals, expects subordinates to perform at their highest level, continuously seeks improvement in performance and shows a high degree of confidence that the subordinates will assume responsibility, put forth effort and accomplish challenging goals".

This theory is relevant to this study since every SME aims to survive and move to the growth phase. The leaders behaviour is aligned to the employee's motivation so as to make them more productive. The leader's conduct and attitude have the ability to influence followers, become role model, give clear command and control, and establish direction, all aimed at a path for achieving a goal which in this case is survival (Dhlahla, 2011). The key to understanding the path-goal theory of leadership is to think about the path that subordinates must follow to achieve goals assigned. Subordinates are motivated by their leader to achieve these goals when leaders clearly define the goals, clarify the path to completing the goals, remove obstacles to completing the goals, and provide support to help achieve the assigned goals.

### **2.2.3 Theory of networking- Social network theory**

A business network is a collection of people, preferably with a broad array of experience and knowledge, to which an individual is connected and with which the individual is in periodic contact (Rathwell & Peterson, 2012). Ideally, any member of this network would answer an e-mail request for help within 24 hours. It's that level of responsiveness that one should aspire to when assembling a sound business network. Networking is a key competency of the entrepreneurs. They are embedded in social networks which play a decisive role in their overall business undertakings (Muzychenko, Zalan & Wells, 2008). These entrepreneurial social networks have attracted a great amount of research interest in the literature. Furthermore, it is largely accepted that entrepreneurs run their own independent ventures, but of critical importance is that they operate within and develop a network of people that they can refer to for addressing different problems, get support, increase revenues, find new ideas and utilize external knowledge (Tjosvold, 2008).

Ko and Butler (2007) have overviewed the main findings, which indicate that the majority of the entrepreneurs possess well developed and extensive social networks, being a valuable source of business ideas and particularly significant to be the weak ties which have a greater likelihood of providing new information. Building contacts and relationships are overally seen as important aspects for moving up on one's career or simply to get business success. Entrepreneurs have to take an active role in setting up their own communication channels so that they can anticipate emerging issues, get ahead of breaking information, obtain coaching relative to important decisions and request help to get things done. These activities are part of what constitutes "business networks"-developing, nurturing and tapping contacts to further business or personal success (Dimitrijevic & Engel, 2004).

Entrepreneur's networking is intrinsically related to their social capital. Ellison, Steinfield and Lampe (2011) defined social capital as "the actual and potential resources individuals obtain from their relationships with others (through a favorable reputation,

high status and personal referrals)”. Social capital has a direct impact on the speed and likelihood of the entrepreneurs establishing new businesses and on their overall success (Muzychenko et al., 2008). In their study, social capital together with intellectual and psychological capitals is presented to determine the acquisition and further development of various entrepreneurs’ competencies necessary for their successful operations. Something more, social capital is often the result of the entrepreneur’s social skills (Praszkie, Nowak & Zablocka-Bursa, 2009). The authors describe the social skills as certain competencies that help the entrepreneurs in their effective interaction with others and might have a role for their overall success.

According to Machirori and Faloki (2013) the social network theory was introduced by Moreno (1937) who argued that individuals in any society are involved in a number of social relationships with each other. Within a society/group marked by a high degree of social disintegration, trustworthiness among members is low and the value derived from such connections is not great. Therefore, members will seek to form linkages and networks. This will result in mutual bonds among members creating trustworthiness which leads to beneficial information sharing and resource exchanges (Al-Tabbaa & Ankrah, 2016).

Social network analysts have focused attention on the abstract contours of a social space comprising concrete relationships among entities. The social network tradition has largely ignored physical space, yet the idea that space is important to understanding innovation has wide credence. Moreover, evidence that shows proximity’s effects on network tie formation is mounting. Whether because of gaps in a web of relationships, indirect ties connecting partners or central locations in an industry structure, social networks can dictate access to information and resources, thus enhancing performance (Whittington, Owen-Smith & Powel, 2009).

The relevance of this theory to this study stems from the fact that in today’s competitive business world, the entrepreneur majorly relies on referrals to get business transactions or clinch business deals. According to Christakis and Fowler (2009) this

concept of network and its focus lies on the person who has the relationship with ego and thus, social network research utilizes the relationship either directly or indirectly between the ego and their alter(s). Alters comprise family members, friends, relatives and business contacts. With the vulnerability of the business environment today, the social network is considered as a weapon to secure important resources for SME firms. The greater the social network circle, the higher the chances of clinching more business transactions aimed at creating more profit hence prospects of survival.

#### **2.2.4 Theory of risk taking- Prospect theory**

Kim and Vonortas (2014) cited Liles (1974) who speculated about what he believed is at risk in a new venture. He suggested that in becoming an entrepreneur an individual risks financial well-being, career opportunities, family relations, and psychic well-being. The personal financial obligations that the entrepreneur makes to an unsuccessful enterprise can result in major losses to the entrepreneur and could jeopardize his future standard of living. Realizing that the financial and emotional consequences of failure could be devastating, Liles suggested that the potential entrepreneur is well advised to analyze carefully the risks associated with his specific business proposal and then to determine whether or not he is willing to undertake them. Liles concluded that the decision is largely dependent upon the potential entrepreneur's perception of the risk involved.

According to Barberis (2013) one of the most influential descriptive theories of decision making under uncertainty is Kahnema and Tversky's (1979) Prospect Theory. They later revised it to cumulative prospect theory in 1992 (Tversky & Kahneman, 1992) which illustrates four elements to include reference dependence, loss aversion, diminishing sensitivity and probability weighting functions. To begin with, in prospect theory, people derive utility from gains and losses, measured relative to some reference point, rather than from absolute levels of wealth. This assumption which is further motivated by Kahneman and Tversky's is known as "reference dependence," with explicit experimental evidence but also by noting that our perceptual system works in a more or

less the same way: we rarely consider their absolute magnitudes but are more attuned to changes in attributes such as brightness, loudness and temperature (Barberis, 2013).

Second is the “loss aversion,” i.e. the idea that people are much more sensitive to losses—even small losses—than to gains of the same magnitude. Informally, loss aversion is generated by making the value function steeper in the region of losses than in the region of gains. For a loss averse individual, however, the gamble is unappealing: the pain of losing Kshs. 1,000/= far outweighs the pleasure of winning the same or even slightly higher amount (Verendel, 2008). Third, this theory stipulates that the value function is concave in the region of gains but convex in the region of losses. This element of prospect theory is known as diminishing sensitivity because it implies that, replacing a loss (or gain) portends a significant utility impact as well. The concavity over gains captures the finding that people tend to be risk averse over moderate probability gains i.e they typically prefer a certain gain of say Kshs. 500/= to a 50% chance of winning Kshs. 1,000/=. However, in losses the reverse is the case i.e. they prefer a 50 percent chance of losing Kshs. 1,000/= to losing Kshs. 500/= for sure. This motivates the convexity over losses (Barberis, 2013).

The last aspect of prospect theory is probability weighting. In prospect theory, people do not weight outcomes by their objective probabilities but rather, by transformed probabilities or decision weights which influences their final decision on whether to take the risk or not. The decision weights are computed with the help of a weighting function whose argument is an objective probability. In cumulative prospect theory, the weighting function is applied to cumulative probabilities (Al-Nowaihi & Dhami, 2010).

In cumulative prospect theory, the unlikely state of the world in which the individual gains or losses Kshs. 1,000/= is over weighted in his mind, thereby explaining these choices. More broadly, the weighting function reflects the certainty equivalents people state for gambles that offer Kshs. 500/=: say, with probability. To sum it up, the central idea in cumulative prospect theory is that people derive utility from “gains” and “losses” measured relative to a reference point. This theory has the additional feature of

diminishing sensitivity in the gains and loss segments, making winning individuals risk-averse and losing individuals risk-loving. It is noted that individuals who are on the margin are most likely to quit near the reference point, they are even less likely to quit while behind compared to while ahead (Barberis, 2013).

This theory is relevant to this study due to the fact that entrepreneurs need to be risk averse in order to succeed and survive in their business endeavors. A risk averse entrepreneur prefers lower returns with known risks rather than higher returns with unknown risks. Prospect theory is a theory of decision making under conditions of risk where such decisions are pegged on assessments or judgments about the external state of the world. This theory therefore directly addresses how these choices are framed and evaluated in the decision-making process.

### **2.2.5 Theory of survival- Profit maximization theory**

Firms' entry and their survival patterns that is the number and size of entrants, how long they last and the market share they achieve overtime are important elements of understanding the dynamics of market competition. Entrants bring new products and processes into the markets by introducing competitive pressure to the incumbent firms. However, they find it difficult to survive. Entry into the market is relatively easy but survival is not (Esteve-Perez & Mainez-Castillejo, 2008). Firms make profits (and sometimes losses). Pure economic profit can be defined as the difference between a firm's income and all costs, explicit and implicit, incurred to deliver the goods or services sold. Thus, an accurate measure of economic profit should deduct, for all inputs, the "opportunity cost", that is, the value of the factor in its best alternative use. When the firm is managed by an entrepreneur who gathers together the resources needed to produce a given output, it is realistic to believe that his aim is to maximize the net expected return from his activity over a long run period. Maximizing expected returns means that, given the available technology and input prices, the owner-manager should first choose the least expensive combination of factors for every production level (Vranceanu, 2014).

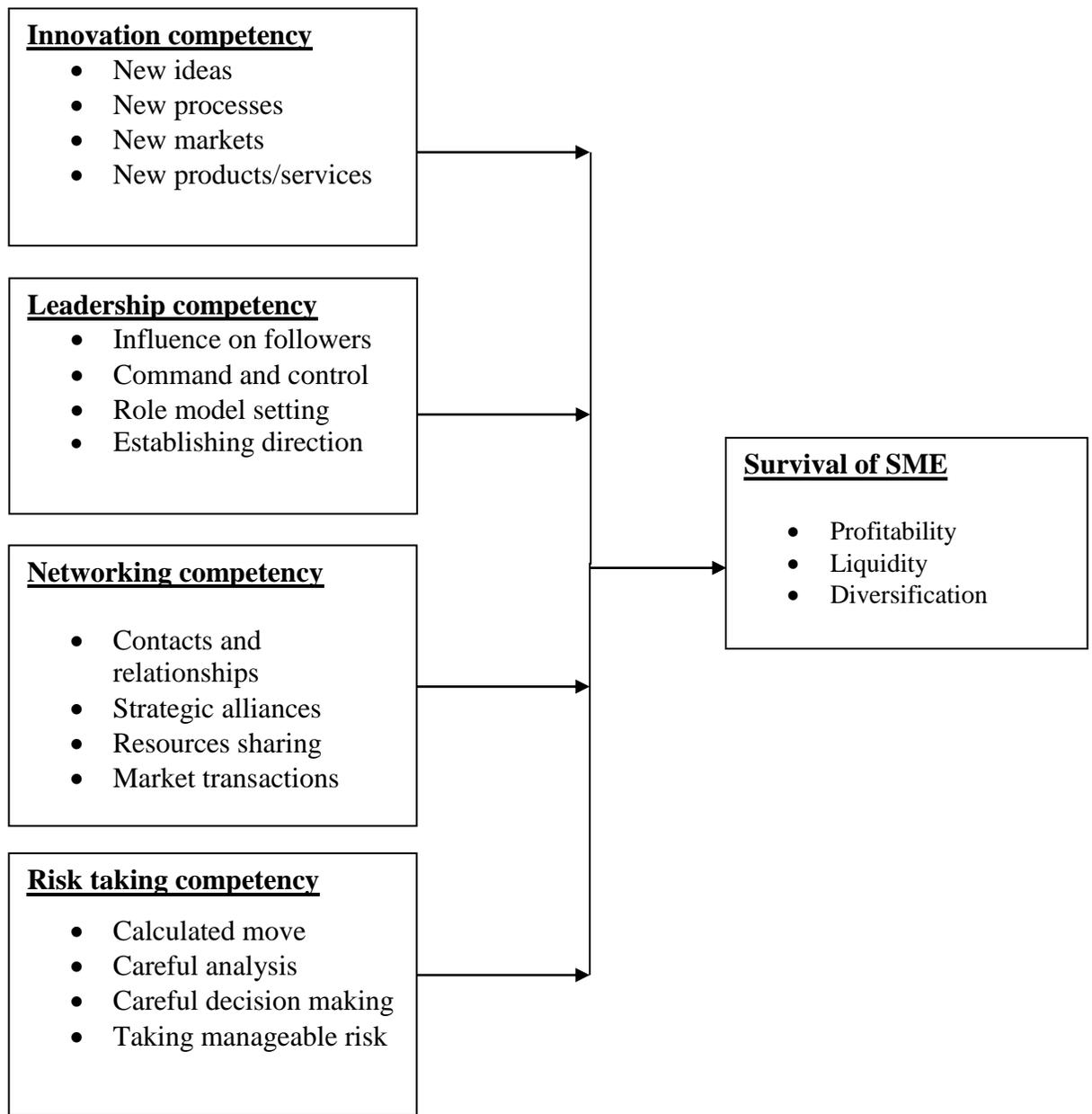
The profit maximization theory could be traced back as early as Adam Smith's writing in *The Wealth of Nations* (Abdullah, 2010). As Adam Smith argued that every business person with his/her own company (based on contractual duties to owners) would act in self-interest to maximize profit and by so doing increase the aggregate benefit to the society. A firm seeks its objectives through the medium of profit and, more specifically, through conversion of its resources into goods and/or services and then obtaining a return on these by selling them to customers. In this respect, survival of the firm depends on profit: unless profits are generated and used for generation of future profit and replacement of resources, the firm will eventually run down (Kumlachew, 2012).

In profit maximization theory, the strategies are driven primarily (but not exclusively) by the objective of maximizing the organization's profitability in the long run with the ultimate purpose of developing sustainable competitive advantage over the competitor. The application of this theory to the field of corporate turnaround is pretty straight forward. The objective of turning around company is to change the company situation from bad to good or better. And the first option and perhaps the only option at that time, is to enhance the company's profitability. This means that profit-maximization is the main or perhaps the only objective available for the turning around companies in order to survive (Schmitt-Grohé & Uribe, 2012).

The theory is relevant to this study because profits is the main determinant to survival. It is the entrepreneur's desire to maximize profits which basically means higher returns at lower costs. Every entrepreneur with his/ her own company would act in self-interest to maximize profit and by so doing prolong his/her stay in the market (Barbosa, 2016). A firm seeks its objectives through the medium of profit and, more specifically, through conversion of its resources into goods and/or services and then obtaining a return on these by selling them to customers. In this respect, survival of the firm depends on profit but only if such profits are ploughed back into the business.

### **2.3 Conceptual framework**

Mugenda (2008) defines conceptual framework as a concise description of the phenomenon under study accompanied by a graphical or visual depiction of the major variables of the study. Conceptual framework is a graphical or diagrammatical representation that shows the relationship between dependent variable on one side and independent variables on the other side (Walliman, 2011). In the study, the components of entrepreneurial competencies studied constitute the independent variables side which influence survival of SME in Kenya that constitutes dependent variable as illustrated in Figure 2.1.



**Independent variables**

**Dependent variable**

**Figure 2.1: Conceptual framework**

### **2.3.1 Innovation competency and SME's survival**

For SMEs to thrive in a competitive world of business, they need to progressively innovate to ensure that their goods and services reach untapped customer needs (RoK, 2016). Firms with substantial innovation are less likely to fail (Wagner & Cockburn, 2010). Firms that adopt radical innovation are more likely to survive because of higher returns from adoption as a result of gaining a larger market share (Langerak, Rijdsdijk & Dittrich, 2009). In order to survive and thrive in increasingly hypercompetitive market, innovation is the only solution because it has been acknowledged as a key driver of firm growth and productivity (Ganotakis, 2012). The prevailing view in the empirical literature appears to be that there is a positive association between the innovativeness of firms and their subsequent survival (Wagner & Cockburn, 2010).

Innovation is the route by which firms create inimitable assets, and so achieve sustainable competitive advantage (Esteve-Perez & Manez-Castillejo, 2008). The underlying rationale is that encouraging firms to innovate will lead to a better economic performance, higher growth, more jobs and higher wages (Duran, Kammerlander, Van Essen & Zellweger, 2016). Successful corporate entrepreneurship involves simultaneous attention to both innovation and exploitation and therefore involves an array of activities and processes. Innovative firms show significantly higher profits and growth figures than firms that are not innovative. These innovations renew companies, enhance their competitive advantage, spur growth, create new employment opportunities and generate wealth (Goksoy, Vayvay & Ergeneli, 2013).

Aghion and Jaravel (2015) argue that there is a positive impact of innovations on profits. Small and Medium Enterprises (SMEs) pursuing an innovation strategy may benefit in several ways. Innovation is an opportunity for entrepreneurial firms to gain rents through the temporary establishment of a monopoly and considers continuous innovation activity as the key source of long term entrepreneurial success. Since SMEs are nimbler than their larger counterparts, they can move faster and hence, obtain these monopoly rents for a longer period of time. The introduction of innovative products, services, processes

or business models tailored to attractive niches is an additional opportunity for SMEs to stand out from competition (Silva, 2012). In so doing, SMEs can benefit from high brand loyalty of buyers and reduced-price sensitivity of demand as a consequence of customers valuing the uniqueness of the innovation. Serving attractive niches with innovative products is particularly advantageous for SMEs compared to large firms due to their limited size and greater nimbleness (Rosenbusch, Brinckmann & Bausch, 2011).

According to Colombelli, Krafft, and Vivarelli (2016) innovative startups tend to survive longer compared to their non-innovative colleagues. To them greater survival is achieved when startups engage successfully in both product innovation and process innovation, laying more emphasis to the latter. They managed to show that process innovation rather than sole risky product innovation may assure higher chances of survival for startups. Should the main motivation to start a new firm be linked to innovative projects, then higher survival rates and better post entry performance should be expected.

However, there are also works that claim that innovation cannot have any effect or adversely affect the firm survival (Christensen, 2013). These works argue that this effect occurs mainly when the firm develops innovations that require a greater amount of economic and technological resources for development and implementation (Buddelmever, Jensen & Webster, 2010). Similarly, other studies show that the positive influence of innovation on survival is significant to a certain point but from that point the company no longer benefits from innovation (Zhang & Mohnen, 2013). Even though researches that support a direct positive relationship between innovation and survival are the most abundant, still there is no literature unanimity on the relationship between innovation and survival and as such various studies indicate the need to further research on this relationship (Boring, 2015). Therefore, based on these findings, there is a need for an in-depth investigation on how firms' innovation activities are related to their survival (Colombelli et.al., 2016; Ganotakis, 2012; Langerak et.al., 2009).

All of these benefits attributable to innovation help SMEs to successfully compete with well-established incumbents that can rely on a much larger base than their smaller counterparts (Rosenbusch et.al., 2011). By offering highly innovative products, small firms can avoid price competition (Bressler, 2012). In addition, innovative products may create new demands and thus, facilitate firm growth. If the innovating SME manages to set high barriers preventing competitors from market entry, the company's position in the industry is strengthened and the innovation can lead to persistent above-average returns (Silva, 2012).

### **2.3.2 Leadership competency and SMEs survival**

Effective leadership is seen as a potent source of management development and sustained competitive advantage for organizational performance improvement (Edoka, 2015). For instance, transactional leadership helps organizations achieve their current objectives more efficiently by linking job performance to valued rewards and by ensuring that employees have the resources needed to get the job done (Obiwuru, Okwu, Akpa & Nwankwere, 2011). Visionary leaders create a strategic vision of some future state, communicate that vision through framing and use of metaphor, model the vision by acting consistently and build commitment towards the vision (Karodia, Mandiya, & Machera, 2014). Visionary leadership will result in high levels of cohesion, commitment, trust, motivation, and hence performance in the new organizations environments.

Dola (2015) argues that when some organizations seek efficient ways to enable them outperform others; a longstanding approach is to focus on the effects of leadership. Entrepreneurial leaders are believed to play a pivotal role in shaping collective norms, helping teams cope with their environments and coordinating collective action. This leader-centered perspective has provided abundant understanding into the relationship between leadership style and team performance (Jing & Avery, 2011). Some studies have explored the strategic role of leadership to investigate how to employ leadership paradigms and use leadership behaviour to improve organizational performance

(Obiwuru, et al., 2011; Shrestha, 2012). This is because intangible assets such as leadership styles, culture, skill and competence and motivation are seen increasingly as key sources of strength in those firms that can combine people and processes and organization performance.

Research has confirmed leadership's pivotal role in initiating and developing corporate social responsibilities (CSR) programs and initiatives within and across organizations (Packard, 2009). The role of the leader in guiding business toward sustainable social responsibility is complex and vast, and it has been alleged that it requires a unique array of leadership skills and competencies. Leadership styles and leadership capabilities and competencies most prevalent among leaders whose organizations have successfully experienced changes in organizational strategy and focus, transitioned toward, and achieved more socially responsible behaviors are presented throughout the literature (D'Amato, Henderson & Florence, 2009).

Chief executive officers believe the one factor that will determine their fate is the quality of their leadership talent. Every leader is aware of the value of a well-defined business strategy. Few, however, give thought to the leadership that will be required to implement strategies that call for changes in the direction or capabilities of the organization. Without proper leadership, even the best and boldest strategies die on the vine, their potential never realized (Pasmore, Lafferty, Spencer, 2009). According to D'Amato et.al (2009) leadership competencies consistent with "responsible" leaders include courage, business acumen, passion, having a life ("you can't think out of the box if you are always in the box"), compassion, sense of humor, and vision for legacy (instead of vision for activity). The challenge for today's leaders is to perform effectively in an environment of uncertainty and ambiguity while reconciling the diversity of interests, needs, and demands of multiple stakeholders.

Kehinde et.al. (2014) argue that leadership is very important to the survival and effectiveness of organization's performance. As organizations grow, the expectations about their performances increase and demand for good leadership tends to multiply.

Leadership ability is a valuable skill and those who possess it reap high rewards. They contend that, from every indication, there is a strong link between leadership strategies and survival of the organization. However, most leaders tend to learn more from failure than from success, notwithstanding failure and success of the firm are two sides of the same coin source (Roomi & Harrison, 2011).

### **2.3.3 Networking competency and SMEs survival**

Networking allows small business to engage in relationship marketing and it can be part of social capital to provide opportunities to connect to various industries and the depth of closeness in relations (Taneja, & Toombs, 2014). Business networking plays a vital role in increasing the competitiveness of SMEs. Networking is a useful way for SME owner/managers to expand marketing expertise and improve their performance. As such, networking in form of clusters, strategic alliances and business collaborations has become popular among the SMEs as a competitive tool (Turyakira & Mbidde, 2015). According to Watson (2007), networking appears to be significantly positively associated with business's survival; and both formal and informal networks are associated with SME survival, but only formal networks are associated with growth.

Networks can be divided into two groups based on their types of ties. Networks that primarily consist of arm's-length relations are diverse and lack social cohesion, whereas networks that consist of embedded relations are cohesive and facilitate repeated social and business interactions (Martinez & Aldrich, 2011). In addition, a cohesive network comprises members who are strongly and nearly exclusively connected to one another. Kalm (2012) argued that network relationships can provide emotional support for entrepreneurs who assume risks and thus increase the desires of entrepreneurs to continue conducting business. Entrepreneurs can also use networks to gather information, ideas, or advice. More importantly, small business owners can gain access to research and development (R & D), out-sourced by major firms; establish joint R&D ventures; and establish other relationships, such as marketing or manufacturing relationships (Maina, Marwa & Waiguchu, 2016).

Firms are truncated in their resources endowment, outsource certain parts of the value chain and transact with other economic actors having complementary assets. External contacts perform a very important role in the procurement of those assets and the identification of entrepreneurial opportunities, since economic actions are embedded within larger inter-organizational networks (Vissa & Chacar, 2009). Networks are vital to the discovery of opportunities, to the testing of ideas and to garner resources for the formation of the new organization (Klyver & Schott, 2011). Potential partners are often very reluctant to put their reputation, capital, or other resources at risk in a start-up, whose financial prospects, if not its longevity, are uncertain.

Embedded ties with partners, which can be defined as ‘ties that are reinforced by mutual feelings of attachment, reciprocity and trust, can enhance support for a start-up by the commitment of their resources (Burt, 2009). As networks provide information benefits, a focal firm with higher level of social capital is better positioned to find entrepreneurial opportunities (Ebbers, 2014). Other firms having ties with the focal firm provide information regarding new technological and market opportunities and solicit collaboration in exploiting new entrepreneurial opportunities. These firms also make referrals on behalf of the focal firm to third parties that are in search of strategic alliances to exploit or explore new entrepreneurial opportunities (Sytych, Tatarynowicz & Gulati, 2012).

Contacts are also conducive to the mobilization of external resources from third parties since those very contacts signal positive assessment regarding the start-up’s future prospects (Partanen, Möller, Westerlund, Rajala, & Rajala, 2008). Schallenkamp and Smith (2009) provided ample evidence that successful entrepreneurs were particularly active in networking with business people and regulators. Kozan and Akdeniz (2014) likewise found that entrepreneurial networks are positively associated with organizational growth. Business network is seen from three components, the performer, activity, and source in each sub-network. As a result, business network will cover individual network, performance network and source network (Ismail, 2012).

### **2.3.4 Risk taking competency and SMEs survival**

According to the World Economic Forum Global Risks report (2008), while the financial conditions of the past decade allowed for an exceptional period of economic growth and stability worldwide, the interconnected global business environment also presents new sources of increased volatility, including systematic financial risk, skyrocketing food prices, rapidly extending supply chains and a looming energy crisis. This calls for analytical risk taking. Risk-taking was the earliest identified entrepreneurial characteristic. A key dimension of the entrepreneurial psyche is risk-taking propensity which is acknowledged as essential for the success and growth of a business how entrepreneurs perceive and manage risks in their environment (Ahmad & Seymour, 2008).

Some writers hold the view that small business owners, managers and entrepreneurs worldwide, perceive their role in making risky decisions as rather similar, even though risk management is culturally conditioned. The attitude of entrepreneurs is that they take risks only after carefully analyzing the situation in hand. Well-seasoned risk-taking requires careful decision making (Bezzina, 2010). As entrepreneurship is certainly associated with various risks, the researchers imply that entrepreneurs do take risks, however risks they perceive they can manage and understand (Penchev & Salopaju, 2011). Penchev and Salopaju (2011) argued that entrepreneurs have a preference for moderate risk taking in situation where they possess a degree of control and skills in realizing profits. They further state that entrepreneurs are not proactive or take risks just because they are expected to do so, but they use these competencies when situations demand them. They also use their own sense in estimating if they are able to take risks, by looking at themselves, if they can handle them or not.

Success in risk taking is generally acknowledged as being more as a result of design than as a result of luck (Bezzina, 2010). Why would risk-averse individuals and entities ever expose themselves intentionally to risk and increase that exposure over time? One reason is that they believe that they can exploit these risk to their advantage and generate

value. How else can you explain why companies embark into emerging markets that have substantial political and economic risk or into technologies where the ground rules change on a day-to-day basis? By the same token, the most successful companies in every sector and in each generation, share a common characteristic. They achieved their success not by avoiding risk but by seeking it out (Peng, 2015). There are some who would attribute the success of these companies and others like them to luck, but that can explain business that are one-time wonders (miraculous achievement once) leading to a single successful product or service which is neither repeated nor continuous. Successful companies are able to go back to the well again and again, replicating their success on new products and in new markets. To do so, they must have a template for dealing with risk that gives them an advantage over the competition (Cameron & Shah, 2015).

#### **2.4 Empirical literature review**

A Cross Cultural Study of entrepreneurial competencies and entrepreneurial success in SMEs in Australia and Malaysia conducted by Ahmad (2007) viewed entrepreneurial competencies as a mechanism whereby the likelihood of achieving business success can be improved. He adopted a mixed method approach whereby two studies were conducted in a sequential fashion. In one of the study qualitative method was adopted in which individual interviews were conducted with 30 entrepreneurs- 20 from Australia and 10 from Malaysia- who operated SMEs in the manufacturing and service sectors. The aim was to elicit behaviors that delineate competencies and thus enable identification of entrepreneurial competencies that are context-specific and of relevance in the current business environment. The second study, Part one proceeded with validating the model entrepreneurial competencies. This involved determining the psychometric rigor of the model and establishing the psychometric properties of all dependent variables (measures of business success) and covariates (that is business environment and entrepreneurs' cultural orientations) using a sample of 391 SME entrepreneurs (179 Australians and 212 Malaysians). Both the comprehensive and parsimonious models of entrepreneurial competencies were used to examine the perceived effect of entrepreneurial competencies on business success in Malaysia and

Australia. The findings of the study confirmed that entrepreneurial competencies were strong predictors of business success in both countries.

Ahmad, Halim and Zainal (2010) carried out a study entitled: Is Entrepreneurial Competency the Silver Bullet for SME Success in a Developing Nation? The study proposed the direct relationship between entrepreneurial competency and business success in SMEs by taking into consideration the various roles held by entrepreneurs in managing their own ventures. The study argued that entrepreneurs are believed to hold vital positions in the organization they have created. Through their decision and actions, entrepreneurs pursue their business agenda that would ensure their survival and success in the industry. Their business vision and personal goals are also believed to affect the way they run their organizations. Engaging in entrepreneurial role demands familiarity with the environment surrounding them to enable them recognize and spot high quality opportunities that best fit their business (Ahmad et al 2010). Second, in translating these opportunities into positive outcome, entrepreneurs are required to carefully manage their internal and external resources. Clearly, entrepreneurs in SMEs engage in complex tasks in operating successful ventures (Ahmad et al 2010). Third, the complexity of tasks undertaken by entrepreneurs' dictates that they need to prepare themselves with relevant competencies that could be utilized in developing a successful organization. In other words, it is important for entrepreneurs to equip themselves with relevant competencies that will eventually enhance their business survival and performance (Ahmad et al 2010).

Vijay and Ajay (2011) studied Entrepreneurial Competency in SME's in India. This was out of the realization that SMEs especially in the emerging economies are struggling to navigate the current rough economic ocean. They argued that debates are going on among scholars, practitioners and policy makers to identify a model to assist SMEs to sail smoothly through the stretch of hurdles. The study posited that competency model could shed some light into ways to increase the likelihood of business survival and success especially in regard to a developing country. They developed a theoretical framework to link entrepreneurial competencies and business success by taking into

consideration the various roles held by entrepreneurs in managing their own business but based upon the contention that call researchers to focus on the contribution and ability of the business owners in generating successful ventures. The study concluded that the complexity of tasks undertaken by entrepreneurs' dictates that they need business agenda that would ensure their survival and success in the industry. Their business vision and personal goals are also believed to affect the way they run their organization. Engaging in entrepreneurial role demands familiarity with the business environment and prepare themselves with relevant competencies that could be utilized in developing a successful organization. In other words, it is important for entrepreneurs to equip themselves with relevant competencies that will eventually enhance their business survival and performance.

Tehseen and Ramayah (2015) studied the effects of entrepreneurial competencies on success of SMEs in Malaysian. The paper argued that the the influence of entrepreneurial competencies on success of SMEs businesses is moderated by external integration. Hence to get competitive advantage, the entrepreneurs should be competent enough to manage their relationships with their customers and suppliers. The research adopted the resource-based view (RBV) of competencies which claims that entrepreneurial competencies are valuable and intangible resources that lead towards the success of business. But they further argued that 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 also depends on many other factors such as supplier's capabilities as well as customer's integration.

Sajilan, Tehseen and Adeyinka-Ojo (2016) looked at a conceptual framework of the impact of entrepreneurial competencies on SMEs' performance in the Malaysian Hospitality and Tourism Industry (HTI). This study was set out to achieve two objectives. First is to identify the impact attributable to entrepreneurial competencies on the business performance or success of small and medium enterprises (SMEs) in the Malaysian hospitality and tourism industry (HTI). The second objective was to develop

a framework for the SMEs entrepreneurial competencies and business performance indicators in the HTI. For the purpose of achieving the aim of this paper, qualitative content analysis (QCA) was adopted to analyse the extant literature work reviewed in this paper. The eight steps in QCA were adopted as outlined. These included: (1) deciding on the research questions; (2) selecting the research material; (3) building a coding frame; (4) dividing the research material into units of coding; (5) trying out the coding frame; (6) evaluating and modifying the coding frame; (7) main analysis; and (8) interpreting and presenting the findings. The findings showed that the SMEs business performance would depend greatly on internal and external factors, including financial and non-financial measures. Similarly based on the combination of significant features as: (a) the entrepreneur's characteristics; (b) the small firm's characteristics; and (c) the firm's development strategies, entrepreneurial competencies would impact on the performance of SMEs in the HTI.

#### **2.4.1 Innovation competency**

Baldaachino (2009) studied entrepreneurial creativity and innovation in Malta. The objective of the study was to explore ways in which start-up entrepreneurs are creative and innovative and how that has led to their survival in the business they are engaged in. Data was collected by means of combination of in-depth interviews and telephone questionnaires with entrepreneurs who started up an enterprise in Malta between January 2002 and June 2007. Data collection and analysis took place in two phases: Phase One utilized a qualitative method of data collection while Phase Two made use of the quantitative method to substantiate the findings of the first phase of research. The data collected in Phase One was fully analyzed before Phase Two was conducted, as the preliminary findings from the qualitative research were fed into the quantitative part of the study for further investigation. The results indicated that creativity and innovation were deemed important for initial survival and for continued growth and success, with frequent references to initial innovative business ideas, a subsequent flow of new ideas for products or services, creative solutions to problems and innovative business processes.

Zhang and Mohnen (2013) using a large dataset of over 100,000 Chinese firms created between 2000 and 2006 explored whether there is a link between innovation effort taken as research and development (R&D) or innovation output (the share of innovative sales) and the firm's duration of survival. Primary data was as compiled by the National Bureau of Statistics of China which is particularly suitable for the analysis of new firm survival because it is a yearly census of all state-owned and all non-state-owned firms with sales higher than 5 million RMB (Yuan) and also because it has a longitudinal dimension, that is, individual firms are identified by an identification code (ID) that allows them to be followed over time. A firm is identified as a new firm when it has a new ID. Similarly, a firm is defined as dead when its ID disappears. They estimated a complementary log-log model with time-varying explanatory variables controlling for individual heterogeneity and found out that innovative firms tend to survive longer, more so because of R&D than because of introducing new products. Most of their studies were based on existing firms that are heterogeneous with respect to their pre-sample history, which could determine their chances of survival. They identified the difference in survival due to innovation activities by conditioning on firm size, ownership and sector specific characteristics. They found an inverse-U relationship between R&D or innovation output and long-term firm survival.

Ngugi, McOrege and Muiro (2013) carried out a research on the influence of innovativeness on the growth of SMEs in Kenya in which the study adopted descriptive survey and exploratory design. The study targeted 4560 SMEs in Nairobi City County who were registered by Ministry of Industrialization and Ministry of Trade. Regression models were used to examine the influence of innovativeness skills on growth of SMEs in Kenya. Questionnaires were used as the main data collection. The gathered data was then analysed using descriptive statistics and inferential data analysis methods. The results of the analysis indicated that innovation has a positive influence on the growth of SMEs in Kenya. The tendency of owner/manager to engage in and support new ideas, novelty, experimentation and creative processes results in new products, services or technological processes which has a great influence on the performance of SMEs.

Al-Ansari and Pervan (2014) undertook a study on innovation practices as a path to business growth performance: a study of small and medium sized firms in the emerging United Arab Emirates (UAE) market. Data was collected in the form of survey questionnaire. This research study adopted the seven-point Likert scale (as being interval-level measurement) as the measured scale in the survey questionnaire. The exploratory approach was used here to provide further input into the identification of items and latent variables. Innovations is increasingly realized as a contributory factor to higher business growth performance in various industries and strengthening the competitive advantage of the firm to survive in the market, similar to SMEs in the Dubai market. The study concluded that with many of the SMEs of today operating in a highly competitive environment, innovation may be the key to achieving successful business growth performance.

Colombelli et.al. (2016) examined the role played by innovation on survival under the title “To be born is not enough: The key role of innovative startup”. The study looked at the reasons why entry *per se* is not necessarily good and the evidence that linked innovative startups to their long survival compared to their non-innovative counterparts. Data was collected from the French Statistical Office. Other than the effects of the innovation related variables, additional control for the effects of a number of variables such as age and size that have proved to affect a firm’s survival in previous empirical works. In their framework, own empirical analysis showed that when startups engage successfully in both product innovation and process innovation, with a key role of the latter, higher survival prospects is achieved. Interestingly the study went beyond a purely microeconomic perspective to discuss the key role of the environment within which innovative entries occur to gather further evidence. What was shown and discussed in their contribution strongly supports the proposal for a proper economic policy agenda, the creation and survival of innovative start-ups should become one of the qualifying factors.

Roper and Xia (2014) investigated how firms' innovation strategy choices moderate the innovation-survival relationship. More specifically, they considered three elements of firms' innovation strategies which may *ceteris paribus* moderate the relationship between any given type of innovation and survival. First, they examined whether having external linkages as part of firms' innovation strategy influences the innovation-survival relationship. Second, they considered whether the receipt of public support for innovation moderates the innovation-survival relationship. Finally, they considered whether the use of intellectual property (IP) protection – which may enhance the anticipated and actual returns from innovation - influences the impact of innovation on survival. Their analysis was based on UK Community Innovation Survey data matched with survival data from firms' published accounts where they were able to match nearly 80 per cent of UK CIS respondents. Their empirical analysis was based on data from the Third UK Community Innovation Survey, which relates to firms' innovation activity over the 1998 to 2000 period, matched with longitudinal company registry data on survival. They used Cox proportional hazard models and related probit models to explore the relationship between firms' innovation strategy choices and survival. They found out that each of their innovation indicators – relating to both product and process change – was associated with a decrease in the probability of failure. The effects being significant only for process innovation and sales of improved products. Their baseline estimates were consistent with the general result in their innovation-survival literature that innovating firms generally have a higher survival probability than non- innovating firms.

Ebert, Brenner and Brixy (2015) carried out a study entitled “New Firm Survival: The Interdependence between Regional Externalities and Innovativeness”. They provided a first study that analysed the moderating role of the innovation behavior of start-ups on their benefiting from regional localization as well as Jacobs externalities (knowledge generated in one industry may also be adapted in another industry). The focus of their study was on the relationship between new firm survival and externalities emerging from a specialized and/or diversified regional economy. The study relied on new and representative panel survey data, which contains information about 6,776

German firms from nearly all economic sectors that were started between 2007 and 2011. This data provided the opportunity to gain valuable insights into the first critical years of the analyzed young businesses and to test the hypotheses a semiparametric Cox regression was applied. To answer the hypotheses, regressions were run for the full sample of all 6,776 start-ups, as well as for high-tech (2,588 subjects) and non-high-tech environments (4,188 subjects) separately. The study found out that highly innovative entrepreneurial firms appear to benefit from a diversified economic surrounding thereby increasing their chances of survival.

Martin and Namusonge (2014) explored the influence of innovation on SMEs growth. The study probed the influence of technological, product and process innovations on growth of garment manufacturing industries in Nakuru, Kenya. The study noted that innovation is essential for the survival and growth of any business. It has changed the way companies conduct business and the way both customers and clients acquire goods and services. Stratified random sampling and purposive sampling techniques were employed in deriving the study sample. Data was collected using structured questionnaires and analyzed using descriptive statistics with the aid of Statistical Packages for Social Scientist (SPSS 20). They established a perceived link between innovation and business growth noting that innovation has continued to influence businesses in the garment making industry in many ways and so it is such a vital component in any business undertaking that without it, it is virtually impossible for a business to survive due to the increased competition that is observed within industries.

#### **2.4.2 Leadership competency**

Obiwuru et.al. (2011) investigated the effects of leadership style on organizational performance: a survey of selected small scale enterprise in Ikosi-Ketu Council Development area of Lagos State, Nigeria. The research followed a survey design, and analysis based on primary data generated through a structured questionnaire administered on respondents. The analysis showed that each of charisma and intellectual stimulation/individual consideration traits of transformational leadership style exerts

positive but insignificant effect on followers and performance. The study concluded that transactional leadership style is more appropriate in inducing performance in small scale enterprises than transformational leadership style. Consequently, the study recommended that small scale enterprises should adopt transactional leadership style but strategize to transit to transformational leadership style as their enterprise develop, grow and mature.

Ozsahin and Acar (2011) linked leadership style to business performance in Turkey. This research was conducted on 343 middle and senior managers of 125 high performing firms operating in manufacturing industry in Turkey, between the years of 2008-2010. High performing firms had to fulfilling the criteria that (1) being indicated in the list of “Fortune 1000 of Turkey” between the years of 1997-2007, and (2) not having undergone a loss for those 10 years. The survey, which was conducted on high performing firms of Turkey survived in series of crises, highlighted the relationship among the leadership style, learning orientation and firm performance. The data derived from the questionnaires were analyzed through the SPSS statistical packaged software. For evaluation purposes, factors analysis, reliability analysis, correlation and regression analyses were used. The analysis arising therefrom revealed that both dimensions of learning orientation (commitment to learning and shared vision and open-mindedness) mediate the effects of the relations-oriented and task-oriented leadership on the firm performance. The most prominent result to emerge from data was that commitment to learning and shared vision and open-mindedness mediates the effects of task-oriented leadership and relations-oriented leadership behaviour on firm performance.

Kehinde et.al. (2014) carried out a study “Organizational Survival: The Effects of Leadership Skill and Strategy” in Nigeria. The major objective of the study was to evaluate reasons for the success and failure of leaders in business organizations over time but specifically to determining the impact of leaders’ skills and strategies on organization survival or success. The study made use of the survey research design, the population of the study was the staff of four major firms which were Cadbury Nigerian plc, Doyin group of companies, Zenith Bank plc, and Access Bank plc and five

universities top executive and top academicians in the field of management and social science in Nigeria. The most capitalized and the least capitalized firms were those chosen or selected for fair sample, the total sampling frame remained 300. The study made use of primary data that were generated through a survey using questionnaire. It should be noted that the study focused on why leaders of firms fail and why they succeed. The study revealed that the top management and leadership's styles, skills and strategies will make for success or failure in the firm depending on the establishment of necessary strategies. It is pertinent to note that failure and success of organization leadership is not a product of power and confidence of the leader, it is however absolutely dependent on available information and ability to evaluate events within and outside of the firm.

Ng, Kee and Ramayah (2016) carried out a study on the role of transformational leadership, entrepreneurial competence and technical competence on enterprise success of owner-managed SMEs in Malaysia. The study hypothesized that three factors (transformational leadership, entrepreneurial competence and technical competence) are crucial to the success of SMEs. Self-reported questionnaires were deployed to gather data from Malaysia SMEs using purposive sampling. Both the Statistical Package for Social Sciences (SPSS) and the Partial Least Squares Structural Equation (SmartPLS) were used for data analysis and hypothesis testing. The findings revealed that the transformational leadership, entrepreneurial competence, and technical competence of owner-managers have a positive, significant and substantial impact on the success of SMEs. They concluded that SMEs should stretch and leverage their scarce resources and capabilities, especially in transformational leadership, entrepreneurial competence, and technical competence, through ongoing training and collaboration to survive and grow into larger successful organizations.

Szczepańska-Woszczyńska and Kurowska-Pysz (2016) researched on sustainable business development through leadership in SMEs. The aim of this paper is to examine the role and scope of the influence of leadership on the sustainable development of SMEs. Research methods included the theoretical analysis of scientific literature and a direct

survey. The quantitative sample for analysis contained 138 managers, the representatives of companies (SMEs) located in Poland. The obtained results showed that leadership is one of the key aspects that enable sustainability. They provided theoretical reflections on the relationship between the sustainable business development of SMEs and leadership, also verified by the empirical study conducted among managers of private companies.

### **2.4.3. Networking competency**

Omar (2015) researched on the Entrepreneurial Network of Muslim Women Entrepreneurs in the Southern Region of Malaysia. The paper sought to empirically explore the dynamic roles of strong and weak ties within Muslim female entrepreneurs' networks during critical problems ("tipping points"), and how this affects the subsequent performance of the small business. This is a qualitative study that involved four cases of Muslim women small businesses in Johor Malaysia. This method was particularly appropriate for the study since it dealt with complex social phenomenon where relationships of entrepreneurs, which can be characterized as abstract and subjective, can only be gathered through interactions with the respondents and the stakeholders that entails the data richness. The results of the study indicated that the personal networks (i.e., spouse, family, close relatives and close friends) of all these entrepreneurs, who they regard as strong ties, are vital for both the start-up and the developing phase. This is because the relationship has existed long before the business was established, and they are readily available in terms of supporting the entrepreneurs. The findings support the idea that the relationship with business networks (suppliers, customers and employees) is established at the start-up stage for they are the individuals/parties that entrepreneurs strongly rely on to run the business. However, connections with other individuals/parties of the business network (such as financial institutions, Governments agencies, clubs and associations, and other entrepreneurs) are established at the developing phase of the business.

Ogunnaike and Kehinde (2013) carried out a study on social networking and business performance in Nigeria. The research study examined the nature of relationship between social networking and business performance using selected respondents were entrepreneurs in Ota, Nigeria. The study had specific objectives as; (i) to ascertain the extent to which social media networks are used by entrepreneurs (ii) to find out the purpose for which those sites were visited (iii) to determine the effect of electronic networking on sales turnover and (iv) to identify the effect of physical networking on business efficiency. The study used survey research method with structured questionnaire that was distributed among the sampled respondents to elicit relevant information to the study from entrepreneurs that is SME owners. The special emphasis was on the effect of social networking on SME performance and survival. The findings showed that network-based system can bring the success every entrepreneur craves in business. Owners of business should be involved in social networking which will enhance their business and the right social media should be used to get current information relevant for the business which will increase business success. The research concluded that social media networking has become a viable tool in the hand of any modern entrepreneur for business differentiation and success because the business world is becoming more competitive in the emerging global village.

Taneja and Toombs, (2014) wrote a paper on networking entitled “Putting a face on small businesses visibility, viability, and sustainability: the impact of social media on small business marketing”. The paper focused on the role and relevance of social media in small businesses. The objectives were: (1) to analyze which social media would be more effective in the marketing and promotion of small organizations; (2) to explore the benefits and limitations of social media in small business marketing strategies, compared to the traditional promotion tools; (3) to determine how social media helps in differentiating businesses from their competitors; and (4) to analyze the importance of small businesses incorporating social media into their marketing efforts. They found out that the use of social media has become a common place in organizations. As organization leaders understand more about social media, they can think beyond the

likes and how many members and followers they have to opportunities that keep their business alive and, in their communities, and with their customers and prospects. They discovered that small business leaders are using social media marketing to promote their business to gain visibility, viability, and sustainability to survive in the current competitive era.

Širec and Bradač (2009) examined how networking impact the SMEs growth in Slovenia. The study investigated the entrepreneurs networking activities and their impact on previous growth as well as growth aspirations of the company. They tested the described relationship through two hypotheses namely: (1) networking is positively correlated with previous growth of the company; (2) networking is positively correlated with growth aspirations of the company. First, a framework was developed for a conceptualization of entrepreneurship that incorporates measures relating to the networking activities. This involves a refinement of previously proposed, but inadequately tested, theoretical constructs into an empirically testable framework. The second, and closely related, objective of this research was the development and testing of a valid and reliable survey instrument that lends itself to establishing this framework for future studies, enabling an international comparison of a multi-dimensional conceptualization of entrepreneurship phenomena. The statistical population of the research was Slovenian small and medium-sized companies (joint-stock companies, limited liability companies, non-limited liability companies) in all Standard Industry Classification (SIC) categories. Quota sampling was used. Questionnaires were used to gather data concerning company owners. The study found out that the cooperation with different partners is of utmost importance for SMEs.

Turyakira and Mbidde (2015) investigated networking for SMES in Uganda. The primary objective of this paper was to identify networking factors that influence the competitiveness of SMEs and to develop a hypothesized model that can be tested on SMEs with a view to improving the survival rate of SMEs in Uganda. This was a conceptual paper that followed a quantitative research paradigm. Quantitative data was collected using a structured questionnaire and analyzed using Statistical Programme for

Social Scientists (SPSS) for Windows. The study concluded that for SMEs to benefit from networking arrangements, they need to establish sincere interest to their partners by encouraging conversation. The goal of networking is to establish long-term mutually beneficial relationships with partners in order to boost profitability.

Peprah (2013) undertook a study on the role of networking on sustainable entrepreneurship. The objective of this study was to explore the role networking play in making entrepreneurship more sustainable. Using a sample of 320 women entrepreneurs from the Mfantiman district of Ghana. The study adopted two stage multinomial logit as well as ordinary least square (OLS) estimation techniques to determine the effects of number of network on start-up capital and credit amount. Result of the study showed that women entrepreneurs in the Mfantiman district belong to at least one of the four networks identified as religious, occupational, political or ethnic. Entrepreneurship requires information resources to start business activities. While they hold some of these resources themselves, they often complement their resources by making other contacts. These contacts create social capital which serves as a necessary and sufficient condition for successful entrepreneurship.

#### **2.4.4 Risk taking competency**

Caliendo, Fossen and Kritikos (2010) conducted a research in Germany to investigate the impact of risk attitudes on entrepreneurial survival. To test the hypotheses, they empirically analyzed whether the risk attitudes of active entrepreneurs have an influence on their survival prospects. They based their analysis on the German Socio-Economic Panel (SOEP), an established, representative panel survey that contains detailed information about the socio-economic situation of approximately 22,000 persons living in 12,000 house-holds in Germany. Key to their analysis was new measures of risk attitudes that were added to the SOEP in the 2004 survey wave. For this analysis, they employed a questionnaire that asked respondents about both their willingness to take risks in occupational choices giving them insight into their subjective risk attitudes, and their hypothetical decisions about how much to invest in a safe versus a risky investment

which reveals their objectivity measurable risk preference. Several questions dealt with attitudes toward risk in general and in specific contexts, including occupation, the relevant domain for employment decisions. They used the yearly outcomes provided by those individuals who answered the risk questions for the years 2000 to 2005, assuming the stability of risk attitudes at least over this relatively short period of time and also used self-employment as a measurable proxy of the concept of entrepreneurship.

The findings revealed that persons with particularly low or particularly high-risk attitudes fail as entrepreneurs more often than do persons with medium-level risk attitude. The finding notably holds for all kinds of risk measures. Their analysis further revealed that the economic impact of this variable is fairly strong. Specifically, the failure rates of medium-level risk takers drop by about 40% compared with those not willing to take any risk, whereas those of high risk takers almost double. They concluded that risk attitudes *ceteris paribus* are a defining characteristic of entrepreneurship. Whereas previous research suggest that these attitudes have a significant impact on the decision to become an entrepreneur, they extend existing knowledge by showing that attitudes have similarly strong influence on the survival and failure rates of already active entrepreneurs.

Kinyua, Ogollah and Mburu (2015) linked risk management strategies to project performance of SMEs in the information communication technology sector. The overall objective of this study was to establish the effects of risk management strategies on the project performance of such SMEs in Nairobi, Kenya. The independent variables were the risk management strategies while dependent variable was the project performance of the SME ICT project. A descriptive research design was adopted. Target population was 48 ICT SMEs in Nairobi, Kenya and the study adopted random sampling technique to select sample size. Primary data was collected using a questionnaire which was self-administered through drop and pick questionnaires to sampled members of the employees working in the ICT SMEs. The study concluded that many ICT enterprises in Nairobi, Kenya have realized the importance of risk management practice in ICT project

management to achieve process success. They carry out risk management to maximize the performance.

Peng (2015) analysed risk taking and firm growth in Japan using firm data from 2002-2012 to examine the relationship between risk taking and firm performance of SMEs and large private firms. The survey was comprised of all firms with more than 50 employees and with capital of more than 30 million yen, covering both manufacturing and non-manufacturing industries. First, they adjusted Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) by two-digit SIC industry code. Then, used consecutive 11 years of data on EBITDA/Assets and computed the deviation of adjusted EBITDA/Assets over 2003-2012 at firm level. The finding of the study was that corporate growth and corporate earnings are statistically and economically affected by risk-taking competency. More importantly risk taking was identified to be positively related to corporate earnings, and thus higher risk-taking firms had smaller cash flow shortfalls.

## **2.5 Critic of existing literature**

Sanchez (2012) conducted a study in Spain on the influence of entrepreneurial competencies on small firm performance. The study found out that competitive scope and organizational capability are important elements particularly for firms which have high levels of entrepreneurial competencies. This study however concentrated in the services sector with a high percentage having few employees. An extension of this study would be to collect SME samples to capture industry differences.

Madatta (2011) carried out a study in Tanzania on the role of entrepreneurial competencies on the success of SMEs. The study found out that success of business is achieved because of appropriate management decision e.g. flexibility and ability to adapt quickly to changes, strategic planning and ability to seize opportunities. However, the study failed to enrich the analysis given its narrow approach, therefore future research

should attempt to further explore the effect of entrepreneurial competencies in other transition economies.

In Indonesia, Endi et al. (2013) studied the role entrepreneurial characteristics and competency play in business performance in SME. The study found out that entrepreneurial competencies are mediating to influence entrepreneurial characteristics of business performance. Although the research managed to test empirically the proposed model, there are still some limitations that should be considered. First, the study only focused on SMEs in the region of Malang Indonesia. Therefore, to get the results more widely, further research could develop a research location in some areas. Second, this study did not consider the demographic factors of the owners of SMEs, therefore further research might consider testing entrepreneurial characteristics based on gender differences i.e. to compare business performance of male and female owners of SMEs given their entrepreneurial competencies.

Gerli, Gubitta and Tognazzo (2011) carried out a study in Italy on entrepreneurial competencies and firm performance and found out that it is of utmost importance for entrepreneurs to develop some specific competencies in order to obtain a higher performance. However, the study concentrated in Italy high and medium-high tech firms. A replica study can be done in developing countries.

Ng and Kee (2013) conducted a studied in Malaysia on the effect of entrepreneurial competencies on SME performance under the influence of organizational culture. The study found out that in order to compete successfully locally and globally, SMEs should be equipped with strong entrepreneurial competencies. The areas of expertise cover knowledge, capabilities and skills through continuous learning. Small and Medium Enterprise should nurture an organizational culture which is conducive for entrepreneurial competencies through organizational learning. Ideally SMEs should be equipped with three competencies, namely, Entrepreneurial competencies (focusing on business opportunities and values creation); Managerial competencies (focusing on people management and complexity on effective planning, organizing, coordinating and

control); and Technical competencies (focusing on science and technology and innovation for customer requirements). The study however admitted that their list of competencies was not exhaustive as there are several other key success factors like SME leadership, innovation and image and reputation, all of which are avenues for further research.

Wickramaratne, Kiminami and Yagi (2014) carried out a study on entrepreneurial competencies and entrepreneurial orientation of tea manufacturing firms in Sri Lanka. The findings indicated that entrepreneurial competencies of owner/manager are positively related to the entrepreneurial orientation and its dimensions. However, apart from being limited to tea industry, Sri Lanka is a low country tea industry that cannot warrant a generalization and so a further longitudinal study may offer remarkable insights about how owner/managers entrepreneurial competencies would affect entrepreneurial orientations of tea manufacturing firms.

## **2.6 Summary of literature reviewed**

The literature reviewed the relationship between each of the various entrepreneurial competencies and survival of SMEs. These included innovation, leadership, networking and risk-taking competencies. Reviewed literature generally agrees that these attributes of EC affect the survival of SMEs. In general, entrepreneurship research has shown that entrepreneurial competencies have a positive impact on SME performance and eventual survival. Enterprises with managers who have high levels of entrepreneurial competencies tend to scan and manage the environment in which they operate in order to find new opportunities and consolidate their competitive positions. Entrepreneurial competencies influence significantly to business survival and success.

Research suggest that innovation benefit a firm in several ways including temporary establishment of a monopoly, enabling SMEs to stand out from competition thereby gaining profits and is a key source of long term entrepreneurial survival and success. Entrepreneurial visionary leadership will result in high levels of cohesion, commitment,

trust, motivation, and hence high performance in the new organizational environments. Networks are vital to the discovery of entrepreneurial opportunities, provide information benefits, create link with other business people and regulators which then leads to a higher degree of business success. Risk-averse individuals believe that they can exploit these risks to their advantage and generate value as they achieve their success not by avoiding risk but by seeking it out. Their success is by design not by luck and so they deal with risk that give them an advantage over their competition.

## **2.7 Research gaps**

The empirical studies indicate that research in the area of entrepreneurial competency has been done but not in a comprehensive approach and more so in Kenya. The few studies which have been done in Kenya in reference to SMEs indicate that they have majorly focused on the entrepreneurial competency on performance and success other than survival of the firms. For instance, Ng and Kee (2013); Sanchez (2012); and Wickramaratne et al. (2014) who from their literature review focused on the entrepreneurial competencies as it relates to performance other than survival of the firms. Again, most of these studies have been done in developed countries as opposed to developing countries. The Tanzania case of Madatta (2011) who investigated the role of entrepreneurial competencies on the success of SMEs in Tanzania could provide linkage to the Kenya scenario but again it has a narrow approach as to managerial decisions only.

A previous study that is close to this one is Abdul and Ngugi (2015) who in their research explored the Influence of Entrepreneurial Competencies on the growth of SMEs in Kenya. The study aimed at investigating the influence of entrepreneurial competencies on the growth of SMEs in Kenya. The findings of the study can be said to have provided some implications for policy interventions which can enhance SME growth, by development of the proprietor's entrepreneurial competencies, which are rarely stable but can be trained and modified as the case may be. Also, the empirical data provided supportive evidence that SMEs growth can be improved by the owner's

entrepreneurial competencies. Here again the choice of only 115 SMEs is a small sample size which the study even recommended that a similar study could be done using a bigger sample size.

This study, therefore, intends to fill these pertinent gaps in literature by studying the selected independent variables (innovation, leadership, networking and risk-taking) on the effect of entrepreneurial competencies on the survival of SMEs in Kenya. This study will not only add value to existing literature but also provide empirical evidence on the role played by entrepreneurial competencies on the survival of SMEs in Kenya and fill the existing contextual and conceptual gaps.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter focuses on the research design and methodology that were employed to gather data for the study. In this chapter, the discussions by the researcher are centered research design and philosophy, target population, sampling technique, data collection procedure, pilot testing and data processing and analysis. The explanations here form the basis upon which the analysis are conducted.

#### **3.2 Research design**

Research design refers to the overall strategy that one chooses to integrate the different components of the study in a coherent and logical way, thereby ensuring effective address of the research problem. Research design is the general plan of how one goes about answering the research questions. It gives structures within which the study is implemented (Thomas, 2010).

The study adopted a descriptive research design which is useful when the problem has been well designed and where the researcher can conduct field survey by going to the population of interest in order for the respondents to explain certain features, based on their own understanding about the problem under study (Creswell, 2013). It uses a pre-planned design for analysis and also determines and reports the way things are. A descriptive research design is used when data are collected to describe persons, organizations, settings or phenomena. According to Salaria (2012) descriptive research study is a method of research which concerns itself with the present phenomena in terms of conditions, practices, beliefs, processes, relationships or invariable trends.

The choice of this design was informed by the fact that entrepreneurial competencies come in the form of individual behavior which can easily be described and much information can be acquired through such description. It is also useful for identifying variables and hypothetical constructs which can be further investigated through other means. Such a design is concerned with the characteristics of the whole sample as opposed to the characteristics of individuals thereby providing useful information to the solutions of local issues (problems).

### **3.2.1 Research philosophy**

According to Galliers (1991) as cited by Wang (2012), a research philosophy can be said to be a belief about the way in which data about a phenomenon should be gathered, analyzed and used. The various philosophies of research approach are encompassed by epistemology (what is known to be true) and doxology (what is believed to be true). The purpose of research and science is therefore to transform things believed into things known: doxa to episteme. In the Western tradition of research and science, two major research philosophies have been identified as positivist (sometimes called scientific) and interpretivist (also known as anti-positivist). In this research positivist research philosophy has been adopted. (Mkansi & Acheampong, 2012).

#### **Positivism**

The term positivism has at least three meanings. It can be a commitment to social evolution, an articulated philosophical tradition: logical positivism or it can refer to a set of scientific research practices: methodological positivism. First, it is an epistemology that identifies scientific knowledge with covering laws—that is, statements of the type “if A occurs, then B will follow.” Second, it is an ontology that equates existence with objects that are observable. Third, it is associated with a self- understanding of scientific activity in which social science is independent of the reality it describes (Riley, 2007). The positivist paradigm asserts that real events can be observed empirically and explained with logical analysis. The criterion for evaluating the validity of a scientific

theory is whether our knowledge claims (i.e., theory-based predictions) are consistent with the information we are able to obtain using our senses (Kaboub, 2008).

The belief that reality is stable and can be observed and described from an objective viewpoint without interfering with the phenomena being studied comes from the positivist. It is their contention that a phenomenon should be isolated and that observations should be repeatable to gain acceptance. To form relationships between some of the constituent elements of the social world with a view to identifying irregularities requires manipulation of reality with variations in only a single independent variable. To come up with predictions one needs to rely on the previously observed and explained realities and their inter-relationships. Positivism has a long and rich historical tradition and is so embedded in our society that any knowledge claim that is not rooted in positivist thought are invalidated as ascientific (Wang, 2012).

### **3.3 Target population**

Population refers to an entire group of individuals, events or objects having a common observable characteristic. Population is therefore the aggregate of all that conforms to a given specification (Mugenda, 2008). According to Ngechu (2004), a population is a well-defined or set of people, services, elements and events, group of things or households that are being investigated. This definition implies that the population of interest is homogeneous. And by population the researcher means the complete census of the sampling frames.

Target population in statistics is the specific population about which information is desired (Mugenda, 2008). The concept of a target population is an informal one, sometimes defined as “the population about which information is wanted” or the “totality of elements which are under discussion and about which information is desired. According to the Micro, Small and Medium Establishments report (RoK, 2016) there are an estimated 1,506,500 licenced SMEs in Kenya out of which 268,100 SMEs are located

in Nairobi trading under single business permit. The target population was therefore the 268,100 SMEs (RoK, 2016).

### **3.4 Sampling frame, techniques and sample size**

A sampling frame describes the list of all the units in population from which the sample was selected. Simply put, sampling frame is the sampling range or the list of all sampling units in the survey population (Zhengdong, 2011). It is the source material or device from which a sample is drawn. Sampling technique on the other hand refers to the method of selecting a sample. It is the methods used in drawing samples from a population usually in such a manner that the sample will facilitate determination of some hypothesis concerning the population. The study used stratified random sampling method. The population was first grouped into strata of manufacturing, wholesale and retail trade and service activities. From each stratum, simple random sampling was applied.

A sample is a carefully selected subgroup or subset that is a representative of the population under study (Teddlie & Yu, 2007). Choosing a sample size is basically to determine the number of observations or replicates to include in a statistical sample. The sample size is an important feature of any empirical study in which the goal is to make inference about a population from a sample. Yamane (1967) as cited by Singh and Masaku (2014) provides a simplified formula to calculate sample sizes. This formula is used to calculate the sample sizes where the population is large. It assumes a certain level of significance which normally ranges from 0.01 to 0.1 but 0.05 is the most commonly used.

$$n = \frac{N}{1 + N(e)^2}$$

Where **n** is the sample size, **N** is the population size (268,100), and **e** is the level of significance (0.05). When the formula is applied to the above sample, we get an equation as below: -

$$\begin{aligned}
 \mathbf{n} &= \frac{\mathbf{268,100}}{\mathbf{1+268,100(0.05)^2}} \\
 &= \mathbf{399.4} \\
 &\text{say } \mathbf{400}
 \end{aligned}$$

The sample size of the study was therefore 400. This is as stratified as in Table 3.1 where the respective sample sizes were 48 for manufacturing, 248 for wholesale and trade, and 104 for service.

**Table 3.1: Sampling table**

<b>Industry</b>	<b>Target population</b>	<b>Sample size</b>
Manufacturing	32,515	48
Wholesale and retail trade	166,030	248
Service	69,555	104
<b>Total</b>	<b>268,100</b>	<b>400</b>

Source: RoK, (2016)

### **3.5 Data Collection instruments**

Data collection is the process of gathering and measuring information on targeted variables in an established systematic fashion, which then enables one to answer relevant questions and evaluate outcomes. Data collection instruments on the other hand are the

tools for data collection (Zohrabi, 2013). The goal for all data collection is to capture quality evidence that then translates to rich data analysis and allows the building of a convincing and credible answer to questions that have been posed.

The data collection instruments are varied and differ substantially in financial requirements, time and other resources the researcher has. They include questionnaire, interview, experiments, survey, observation and reading. The study used a questionnaire to collect the required data. A questionnaire is a data collection instrument that sets out in a formal way the questions designed to elicit the desired information (Wadi, 2016). It consists of a list of structured questions, un-structured questions and Likert rating scales relating to the field of inquiry with spaces provided for selection of choices and explanatory answers. Close ended questions have the advantage of collecting viable quantitative data while open-ended questions allow the respondents freedom of answering questions and the chance to provide in-depth responses. Questionnaire was preferred because it is efficient, cheap and easy to be administered (Schultze & Avital, 2011).

### **3.6 Data collection procedure**

Data collection procedure is the process of how to approach respondents with a view to collecting data, after having decided what to collect of course (Peersman, 2014). A formal data collection process is necessary as it ensures that data gathered are both defined and accurate and that subsequent decisions based on arguments embodied in the findings are valid. The process provides both a baseline from which to measure and in certain cases a target on what to improve. Primary data was collected using a questionnaire. This is a technique of data collection in which each person is asked to respond to the same set of questions in a predetermined order (Waidi 2016; Zohrabi, 2013). The study adopted stratified random sampling to identify the respondents who are owners of SMEs trading in Nairobi City County under single business permit (SBP). The respondents were first grouped as per industry i.e. manufacturing, wholesale and retail trade and service out of which respondents approached randomly until the required

number per industry was reached. The questionnaires were hand-delivered to the respondents for immediate response and where the respondents were either reluctant or busy then the same were left with them to fill and collected later at an agreed time or date. Secondary data on the other hand was collected from publications such as books, journals, periodicals, newspapers and magazines, and government publications like the Kenya Bureau of Statistics.

### **3.7 Pilot testing**

Cooper and Schindler (2011) indicated that a pilot test is a preliminary study conducted to give credence to the final study by detecting flaws, weaknesses and limitations in design and instrumentation of a data collection instrument, and to provide proxy data for selection of a probability sample. A pilot study is conducted when a questionnaire is given to just a few people with an intention of pre-testing the questions. Pilot test is an activity that assists the researcher in determining if there are flaws, limitations, or other weaknesses within the interview design and allows him or her to make necessary revisions prior to the implementation of the study (Kvale, 2007). The rule of thumb is that 10% of the sample should constitute the pilot test (Cooper & Schindler, 2011). The researcher carried out a pilot study to pre- test the validity and reliability of data collected using the questionnaire. Diagnostic tests were also carried out. To this end the researcher selected a pilot group of 40 firms being 10% of the target sample of 400 SMEs. Whatever procedure one uses to collect data, such must be re-examined to check its authenticity in giving the the expected results. This is what has generally been accepted as reliability and validity. The reliability and validity of any research depends to a large extent on the appropriateness of the instruments (Walliman, 2011). Essentially the researcher ensured that the instrument chosen was valid and reliable.

### **3.7.1 Reliability of research instrument**

Reliability refers to the extent to which a measuring instrument contains variable errors that appear in consistency from observation during any one measurement attempt or that does not vary each time a given unit is measured by the same instrument. If the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable. A measure is considered reliable if a person's score on the same test given twice is similar. Reliability estimates are used to evaluate the stability of measures administered at different times to the same individuals or using the same standard or the equivalence of sets of items from the same test or of different observers scoring a behavior or event using the same instrument (Walliman, 2011). The most important aspect to note is that reliability is not measured but estimated. When a measure is reliability, it does not necessarily mean it is also valid because while a scale may be measuring something consistently, that might not be what it is required to measure. To test reliability, the researcher used Cronbach's Alpha ( $\alpha$ ) which the most common internal consistency measure.

According to Tavakol and Dennick (2011) Alpha which is generally expressed as a number between 0 and 1 was developed by Lee Cronbach in 1951 basically to provide a measure of the internal consistency of a test or scale. Internal consistency describes the extent to which the various items in a test measure the similar or identical concepts or constructs and so it is associated to the inter-relatedness of the items within the test. Where a low value of alpha is realized, this could either be due to a low number of questions, poor interrelatedness between items or just heterogeneous constructs. For example, if it poor correlation between items that makes alpha low then some should be revised or discarded all together. The get such poor correlations easily is to compute the correlation of each test item with the total score test then delete items with low correlations approaching zero. Where alpha values are too high it may as well mean that some items are repetitive and so are testing the same question but in a different guise. In this respect, the recommended values of 0.7 to 0.9 were used as a cut-off of reliabilities in this study.

Cronbach's alpha is a general form of the Kuder-Richardson (K-R)20 formulas used to access internal consistency of an instrument based on split-half reliabilities of data from all possible halves of the instrument. It reduces time required to compute a reliability coefficient in other methods (Mugenda & Mugenda, 2003).

The Kuder-Richardson (K-R) 20 is based on the following formula: -

$$KR_{20} = \frac{(K) (S^2 - \sum s^2)}{(S^2) (K-1)}$$

<b>KR<sub>20</sub></b>	<i>Reliability coefficient of internal consistency</i>
<b>K</b>	<i>Number of item used to measure the concept</i>
<b>S<sup>2</sup></b>	<i>Variance of all score</i>
<b>s<sup>2</sup></b>	<i>Variance of individual items</i>

### 3.7.2 Validity of research instrument

Validity determines whether the research instrument truly measures that which it was intended to measure or how truthful the research results are (Walliman, 2011). Validity requires that an instrument is reliable, but an instrument can be reliable without being valid. Researchers generally determine validity by asking a series of questions and the answers to such questions is often sought in the researches of others in related fields. The questionnaire was tested against content validity. This refers to the degree that the instrument covers the content that it is supposed to measure. It also refers to 'the adequacy of the sampling of the content that should be measured (Yaghmale, 2009). Content validity therefore measures the inclusiveness and representativeness of the data collection instrument. Content validity was estimated by approaching individuals of

subject matter experts (SMEs) and my supervisors to review the questionnaire items. They were requested to review whether each item is appropriately matched to the content area indicated. Any items that they identified as being inadequately matched, or flawed in any other way, was either revised or dropped from the questionnaire.

### **3.7.3 Diagnostic tests**

Diagnostic tests in research are usually carried out to address the various forms of bias that may occur in research aiming to evaluate the accuracy of the final results (Okeh & Ogbonna, 2013). The results and inferences are precise only if proper statistical tests are used. The researcher conducted various Diagnostic tests to ensure that the assumptions of Classical Linear Regression Model (CLRM) were not violated and appropriate model chosen for analysis in the event that CLRM assumption was not compromised. Estimating the probit models when the CLRM assumptions are violated would result in inefficient, inconsistent parameter estimates (Ali & Bhaskar, 2016). In this regard the researcher carried out the following diagnostic tests: linearity test, homoscedasticity test, multicollinearity test, autocorrelation test, and normality test.

#### **Linearity**

Linearity refers to a situation where a dependent variable has a linear relationship with one or more independent variables and, thus, can be computed as the linear function of the independent variable(s). It is the characteristic of data such that a straight line provides as good a fit (using the least-squares criterion) as any other mathematical function, as a description of the relationship between the dependent variable and the independent variable(s) (Cuestas & Regis, 2013). As a test for linearity, Pearson correlation coefficient was applied. This is a measure of the strength of a linear association between two variables. The standard method that statisticians use to measure the significance of their empirical analyses is the P-value. Comparison is then made with the 0.05 level of significance. Should the P-value be less than the level of significance then a linear relationship is assumed to exist.

## **Homoscedasticity**

Homoscedasticity means the relationship under investigation is the same for the entire range of the dependent variable. The test here is by graphical examination of the squared residuals. When the homoscedasticity assumption is met, residuals will form a patternless cloud of dots. Lack of homoscedasticity is most easily seen in a standardized scatterplot. When a scatterplot of the standardized predicted dependent variable is regressed against the standardized residuals in a scatter plot, it should show a random pattern across the entire range of the dependent variable (David, 2012). In this regard a scatter plot was used to check the pattern.

## **Multicollinearity**

One of the assumptions of linear regression analysis is that the independent variables are not correlated with each other meaning there is no linear relationship among the explanatory variables (Damodar, 2010). Multicollinearity is a statistical phenomenon in which there exists a perfect or exact relationship between the predictor variables making it difficult to come up with reliable estimates of their individual coefficients (Joshi, Kulkarni & Deshpande, 2012). It commonly occurs when a large number of independent variables are incorporated in a regression model. It is because some of them may measure the same concepts or phenomena. Only existence of multicollinearity is not a violation of the OLS assumption. However, a perfect multicollinearity violates the assumption that X matrix is full ranked, making OLS impossible. Symptoms of multicollinearity may be observed in situations where: (1) small changes in the data produce wide swings in the parameter estimates; (2) coefficients may have very high standard errors and low significance levels even though they are jointly significant and the  $R^2$  for the regression is quite high; (3) coefficients may have the “wrong” sign or implausible magnitude.

One way to estimate multicollinearity is the variance inflation factor (VIF), which assesses how much the variance of an estimated regression coefficient increases when predictors are correlated and the tolerance value, which is simply the reciprocal of VIF. However, there is no formal criterion for determining the bottom line of the tolerance value or VIF. The rule of thumb is that a tolerance value less than 0.1 or VIF greater than 10 roughly indicates significant multicollinearity. A VIF between 5 and 10 indicates high correlation that may be problematic and that would require the researcher to remove highly correlated predictors from the model (David, 2012). In the study VIF less than 5 and tolerance greater than 0.2 were recommended to be the acceptable range.

### **Autocorrelation**

According to Damodar (2010), autocorrelation can be defined as correlation between members of observations ordered in time. One of the basic assumptions in linear regression model is that the random error components or disturbances are identically and independently distributed. So, in a regression model it is assumed that the correlation between the successive disturbances is zero. The study used Durbin-Watson (DW) test to test autocorrelation. The DW statistic is the most practiced test for autocorrelation which is based on OLS residuals with values ranging from 0 to 4. If the D value is 4 then there is negative autocorrelation, 2 means no autocorrelation and 0 means positive autocorrelation. In the event of autocorrelation, there is need to transform the model so that in the transformed model the error term is serially independent, then apply OLS to the transformed model to give the usual Best Linear Unbiased Estimator (BLUE).

### **Normality**

A normal distribution is assumed by many statistical procedures. Normal distributions take the form of a symmetric bell-shaped curve. The quantile-quantile plot (Q-Q plot) was used to check normality. This compare ordered values of a variable with quantiles of a specific theoretical normal distribution. If two distributions match, the points on the plot will form a linear pattern passing through the origin with a unit slope. Correlation,

least-squares regression and factor analysis are relatively robust against non-extreme deviations from normality provided errors are not severely asymmetric. Severe asymmetry might arise due to strong outliers. Log-linear analysis, logistic regression, and related techniques using maximum likelihood estimation are even more robust against moderate departures from normality (David, 2012).

### **3.8 Data analysis and presentation**

The completed questionnaires were first perused to check their completeness and consistency. The data was then coded to enable the responses to be categorized accordingly and the dummy variables assigned numerical figures. A descriptive analysis was then employed. Descriptive statistics such as percentages and frequencies were used to summarize the data. All quantitative data were measured in real values by normalizing. Both linear and multiple regression analysis were used to measure the quantitative data which was then analyzed using the statistical package for social sciences (SPSS) version 24 which is the most current version in the market and Microsoft excel. Tables and other graphical presentations as appropriate were also used to present the data collected for ease of understanding and analysis. These generated quantitative reports through tabulations, percentages and measure of central tendency. Cooper and Schindler (2003) notes that the use of percentages is important due to the fact that they simplify data by reducing all the numbers to range between 0 and 100 and also translate the data into standard form with a base of 100 for relative comparisons.

#### **3.8.1 Hypothesis testing**

Hypothesis is a formal statement about anticipated relationship between an independent and dependent variable (Haber, 2010). It is an assumption about a population parameter that is to be proved or disapproved by the observations upon analysis. It is also a conjecture used to guide the investigations or accepted as highly probable in the light of established facts. Such should be clear and precise, capable of being tested, capture the relationship between the variables, limited in scope and consistent with a substantial

body of facts (Kothari, 2004). The researcher developed research hypotheses that needed substantiation or verification and this called for hypothesis testing. The testing of a statistical hypothesis is the application of an explicit set of rules for deciding whether to accept the hypothesis or to reject it.

The main goal in many research studies, this included, is to check whether the data collected support certain statements or predictions. The intention is to want to reject the null hypothesis so one assumes it is true and look for enough evidence to conclude it is incorrect. One tends to want to accept the alternative hypothesis. If the null hypothesis is rejected, then one must accept that the alternative hypothesis is true. To prove that a hypothesis is true, or false, with absolute certainty calls for hypothesis testing and so one would need absolute knowledge about the population so as to judge if there is enough evidence that supports or not the hypothesis.

For testing each of the individual independent variables (innovation competency, leadership competency, networking competency and risk-taking competency) against the dependent variable (survival of SMEs in Kenya), a linear regression model was used at a significance level (typically denoted by  $\alpha$ ) of 0.05 and a  $P$ -value derived therefrom compared with half of the level of significance in order to make a decision on whether or not to reject the null hypothesis. As for the overall (all the independent variables together) against the dependent variable, a multiple regression model was used again at significance level 0.05 and a  $P$ -value derived therefrom compared with half of the level of significance in order to make a decision on whether or not to reject the null hypothesis. Since the research hypotheses are non-directional, they were rejected if the  $P$ -value is less than or equal to half of the defined significance level ( $P\text{-value} \leq \alpha/2$ ). The researcher can safely assume that the observed data are inconsistent with the assumption that the null hypothesis is true, meaning that the null hypothesis, or premise that there is no relationship between the tested variables, can be rejected. The lower the  $P$ -value in comparison to  $\alpha/2$ , the more evidence there is in favor of rejecting the null hypothesis.

### 3.8.2 Multiple regression analysis.

The dependent variable (Survival of SMEs in Kenya) was regressed against the four variables of entrepreneurial competencies namely: innovation competency, leadership competency, networking competency and risk-taking competency. The research model was as derived from the theoretical framework. The relationship among the variables was then depicted as below:

$$Y_s = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4, \text{ Where,}$$

$$Y_s = \text{Survival of SMES}$$

$$\beta_0 = \text{constant (coefficient of intercept)}$$

$$X_1 = \text{Innovation competency}$$

$$X_2 = \text{Leadership competency}$$

$$X_3 = \text{Networking competency}$$

$$X_4 = \text{Risk taking competency}$$

$$\beta_1 \dots \beta_4 = \text{regression coefficient of the four variables.}$$

Analysis of variance (ANOVA) was used to test the significance of the overall model at 0.05 level of significance.

## **CHAPTER FOUR**

### **RESEARCH FINDINGS AND DISCUSSION**

#### **4.1 Introduction**

The section presents the analysis of findings and the discussion of the study borrowing from the research methodology. The discussions here are centered on the results of the pilot study, the response rate, demographic information as an appreciation of inclusivity and analysis of the various study variables. The presentation of the main findings are done to take cognizance of the overall objective of this study which was to examine the effect of entrepreneurial competencies on survival of SMEs in Kenya.

#### **4.2 Results of the pilot study**

A pilot test as a preliminary study was carried out to establish the reliability and validity of the data collection tools. The pilot test aims at establishing reliability and content validity of the data collection instruments (Cooper & Schindler, 2011). A total of 40 respondents took part in the pilot study being 10% of the sample size of 400 respondents. This was in line with the general rule of thumb and qualitative research design methodology employed in this research project.

##### **4.2.1 Reliability test**

To ensure the reliability of the data collection instrument for the study, a test of Cronbach's Alpha was undertaken. The results had it that all constructs had Cronbach's Alpha values falling within the suggested range of between 0.7 and 0.9 thus the data collection tool was sufficiently reliable for the measurement (Tavakol & Dennick, 2011; Walliman, 2011). Findings of the reliability test are shown in Table 4.1 indicating that innovation competency had a coefficient of 0.766, leadership competency had a coefficient of 0.847, networking competency had a coefficient of 0.789 and risk-taking

competency had a coefficient of 0.781. On the basis of reliability test it was supposed that the scales used in this study is reliable to capture the constructs.

**Table 4.1: Reliability results**

<b>Construct</b>	<b>Cronbach's Alpha Value</b>	<b>Number of Items</b>	<b>Comment</b>
Innovation competency	0.766	3	Accepted
Leadership competency	0.847	3	Accepted
Networking competency	0.789	3	Accepted
Risk taking competency	0.781	4	Accepted

#### **4.2.2 Validity**

Validity requires that an instrument is able to measure the intended subject as per the researcher's intentions. Since the questionnaire passed the reliability test, expert judgment was applied to test for content validity of the questionnaire. In this view, the judgment of SME experts and the supervisors on the items contained in the questionnaire on the study variables was sought and their proposed changes noted and worked upon. In the end the supervisors counter checked and confirmed the accuracy of the concepts being measured.

#### **4.3 Diagnostic tests**

The researcher conducted various Diagnostic tests to ensure that the assumptions of Classical Linear Regression Model (CLRM) were not violated and appropriate model chosen for analysis in the event that CLRM assumption was not compromised. Estimating the probit models when the CLRM assumptions are violated would result in inefficient, inconsistent parameters estimates. This section presents the results of the

following diagnostic tests: linearity test, homoscedasticity test, multicollinearity test, autocorrelation test, and normality test.

### 4.3.1 Test for linearity

Pearson correlation coefficient was applied to test for the linearity between the variables. The results as shown in Table 4.2 indicate that innovation competency, leadership competency, networking competency and risk-taking competency have a significant linearity since they have a P-value less than the standard P-value of 0.05 in relation to SME survival.

**Table 4.2: Linearity test**

		SME Survival	Innovation Competency	Leadership Competency	Networking Competency	Risk Taking Competency
SME Survival	Pearson Correlation	1	.385*	.445**	.449**	.384*
	Sig. (2-tailed)		.014	.004	.004	.015
	N	40	40	40	40	40
Innovation Competency	Pearson Correlation	.385*	1	.417**	.279	.285
	Sig. (2-tailed)	.014		.007	.081	.075
	N	40	40	40	40	40
Leadership Competency	Pearson Correlation	.445**	.417**	1	.311	.235
	Sig. (2-tailed)	.004	.007		.051	.145
	N	40	40	40	40	40
Networking Competency	Pearson Correlation	.449**	.279	.311	1	.567**
	Sig. (2-tailed)	.004	.081	.051		.000
	N	40	40	40	40	40
Risk-taking Competency	Pearson Correlation	.384*	.285	.235	.567**	1
	Sig. (2-tailed)	.015	.075	.145	.000	
	N	40	40	40	40	40

\*. Correlation is significant at the 0.05 level (2-tailed as being non-directional).

\*\* . Correlation is significant at the 0.01 level (2-tailed as being non-directional).

### 4.3.2 Test for homoscedasticity

The study further conducted homoscedasticity test to test the assumption that the residuals have a constant variance (they should be homoscedastic). In this case, the null hypothesis of the test is that error terms have a constant variance (i.e. should be Homoscedastic). The study failed to reject the null hypothesis given that the residuals form a patternless cloud of dots. The scatterplot of the standardized predicted dependent variable against the standardized residuals showed a random pattern across the entire range when, in regression, error is homoscedastic -- that is, when the regression model is equally accurate across the range of the dependent variable (see Figure 4.1)

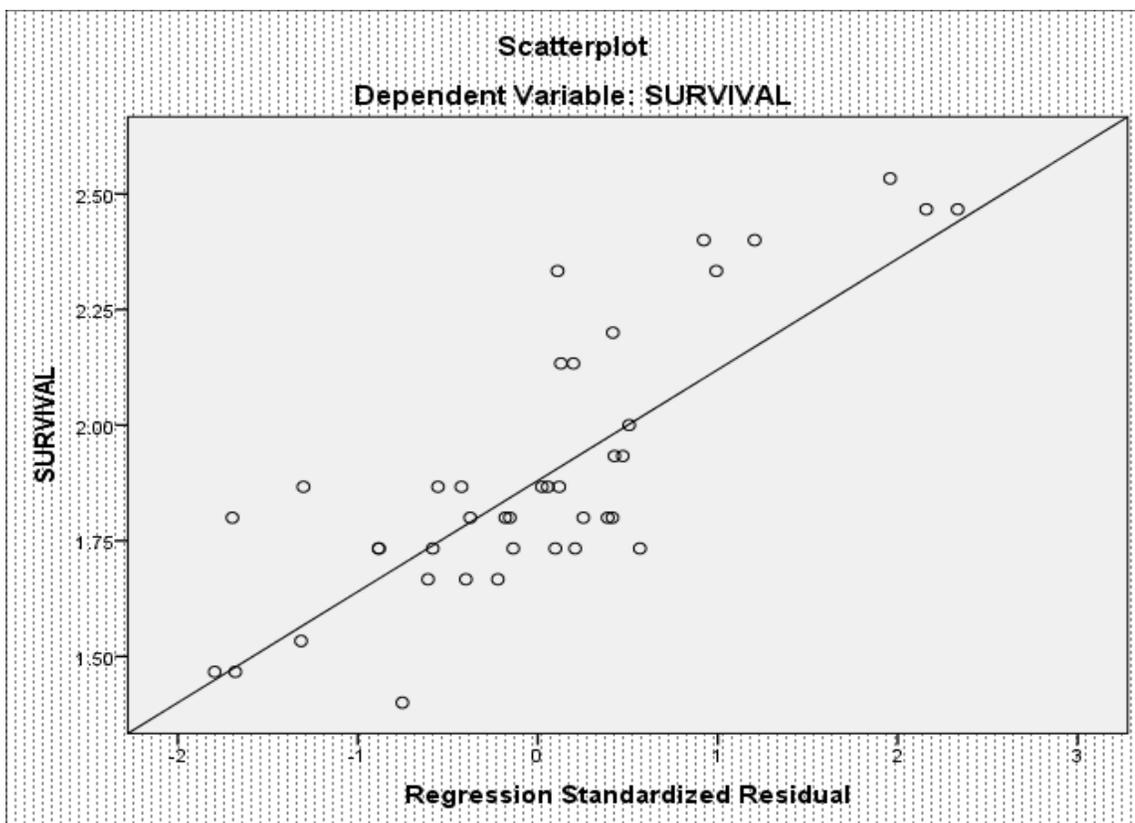


Figure 4.1: Test for homoscedasticity

### 4.3.3 Test for multicollinearity

To test for multicollinearity the study used variance inflation factor (VIF). This study adopted the rule of thumb for VIF value of 5 as the threshold. In normal circumstances a VIF less than 5 and tolerance greater than 0.2 are recommended and in the study, values for tolerance and VIF are within acceptable range as shown in Table 4.3. These results indicated that the VIF values of the independent variables were within the threshold of 5. The tolerance value was greater than 0.2 ruling out the possibility of multicollinearity (David, 2012). The results, therefore implied non- existence of a multicollinearity problem among the independent variables and hence the level of multicollinearity, if any, in the model could be tolerated. The multicollinearity diagnosis indicated that there was no threat of multicollinearity problem and therefore, all the independent variables could be used in further analysis using the regression model.

**Table 4.3: Results for multicollinearity test**

	Tolerance	VIF
Innovation competency	0.785	1.275
Leadership competency	0.785	1.274
Networking competency	0.642	1.558
Risk taking competency	0.661	1.513

### 4.3.4 Autocorrelation

The test for autocorrelation was performed to establish whether residuals are correlated across time. Regression analysis assumptions require that residuals should not be correlated across time and thus the Wooldridge test for autocorrelation which is also an LM test was adopted in this study to test for autocorrelation. The null hypothesis being: No first order serial /auto correlation exists. The results indicated that we failed to reject

the null hypothesis that there is no serial autocorrelation of any order and that residuals are not auto correlated given that Durbin-Watson (D) = 2.269 (see Table 4.4).

**Table 4.4: Autocorrelation tests results**

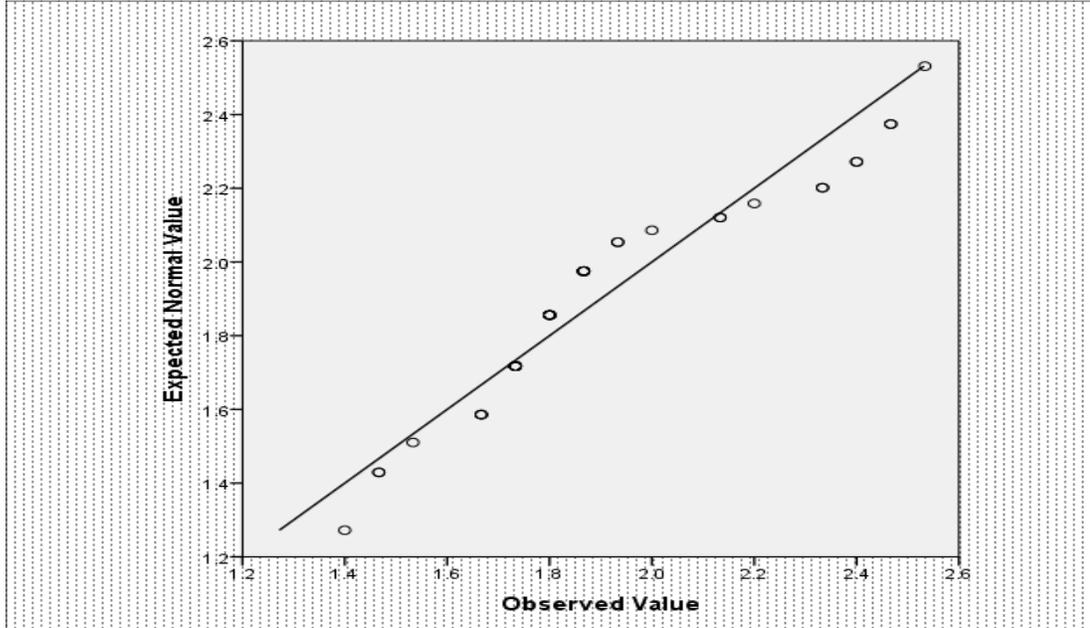
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Autocorrelation tests
Wooldridge test for autocorrelation in panel data
H0: no first order autocorrelation
Prob > D = 2.269

---

#### 4.3.5 Normality test

Q-Q Plot was used to test for the normality distribution in the study variables. The findings as shown in Figure 4.2 indicated that the points on the plots formed a linear pattern passing through the origin with a unit slope. This therefore implies that the variables in the study were normally distributed thus giving a go-ahead for the analysis. We therefore failed to reject the null hypothesis and thus the conclusion that the residuals are normally distributed. It's clear that the residuals were normally distributed and therefore, the model could be applied in the analysis.



**Figure 4.2: Q-Q Plot for normality test**

#### **4.4 Response rate**

The percentage of people who respond to a survey is considered as the response rate. In general, response rate is the number of actual respondents or participants divided by the total number of targeted participants as per the sample size (Draugalis, Coons & Plaza, 2008). The probability of nonresponse bias decreases as response rate increases thus increasing the ability to generalize findings to the original target population (Draugalis & Plaza, 2009). A high survey response rate helps to ensure that the survey results are representative of the survey population.

The study sought to find out the overall percentage of respondents who participated in the study against the targeted respondents. This therefore helped to determine whether the study attained a reliable number of respondents to make conclusions and recommendations. The study had a sample of 400 respondents who were surveyed using a structured questionnaire. From the data collected, out of the 400 questionnaires 256

were successfully administered face-to-face and 144 left with respondents and collected later out of which 56 were filled and returned. This means that in total 312 questionnaires were administered which represents 78% response rate. However, for the individual industry categories, manufacturing had 89.6% response rate, wholesale and trade 71.8% response rate and service 87.5% response rate. These response rates are considered satisfactory to make conclusions for the study. Mugenda and Mugenda (2003) observed that response rates of 50%, 60% and above 70% are respectively adequate, good and very good. The implication derived therefrom is that 78% as realised here is very good. This high response rate can be attributed to self-administered questionnaires and follow up phone calls that prompted the respondents to fill the questionnaires that were left behind. The response rate is as shown in Table 4.5.

**Table 4.5: Response rate**

Industry	Sample size	Face-to-face	Left behind	Returned	Total administered	Response rate
Manufacturing	48	33	15	10	43	89.6%
Wholesale & Trade	248	151	97	27	178	71.8%
Service	104	72	32	19	91	87.5%
Total	400	256	144	56	312	78%

#### 4.5 Demographic information

To enhance the feasibility of a study, it is a prerequisite to ask the respondents the background information as a way of developing a concrete relationship between the respondents and the researcher (Axinn, Link & Groves, 2011; Kvale, 2007). In this regard, the study at hand also asked the respondents the demographic information which

included gender, age bracket, marital status, level of education as well as nature of the business. These are presented in tables 4.6 and 4.7, and figures 4.3 and 4.4.

#### 4.5.1 Gender

The study sought to establish the gender of the respondents. Table 4.6 indicates that majority of the respondents were male comprising 70% while 30% were female. The findings imply that both genders were represented in the study but again it affirms the argument that majority of SMEs are owned and/or managed by males. This concurs with a study by Malach, Lerner and Schwartz (2010) about gender differences in entrepreneurship which indicated that the rates of women's entrepreneurship are lower than men's. Globally, women and men are not on a 'level playing field' in terms of access to resources, which continues to impact women's ability to start and grow businesses.

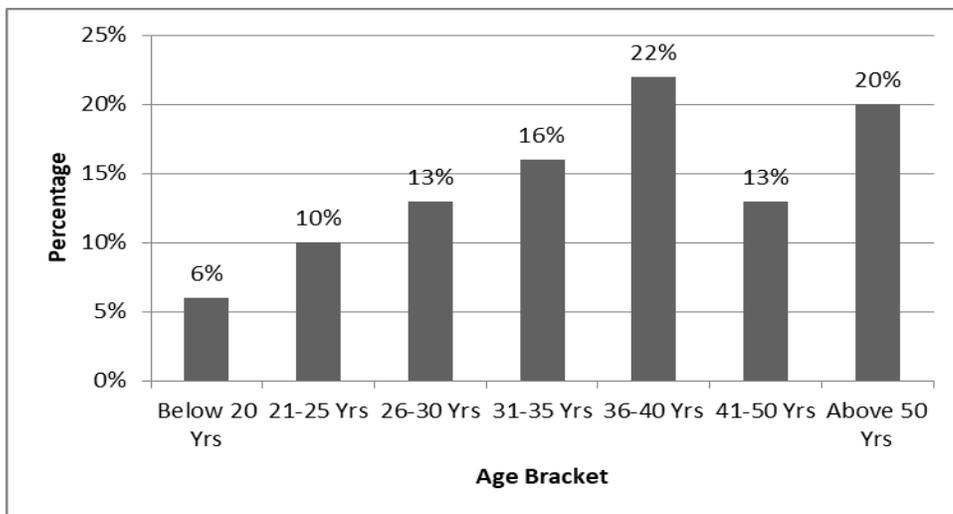
**Table 4.6: Gender**

Select	Frequency	Percent
Male	220	70.5
Female	92	29.5
<b>Total</b>	<b>312</b>	<b>100</b>

#### 4.5.2 Age bracket

The study sought to establish the respondents' age bracket. The study found out that age cuts across all business. Starting and operating a business knows no age limit. The rationale of the positive impact of age on self-employment is based on the view that the quantity of the financial and human capital that one possesses and that are necessary for starting and conducting the business increases with age. Furthermore, social and business networks that older people have developed can ease the realisation of their

entrepreneurial venture. Since self-employment offers greater ability to control the content and pace of the work, this may be preferable working option for older people this theoretical argument is supported by studies that find that the probability of self-employment increases with age. However, given the fact that self-employment is assessed as a riskier employment option and as an option that often means longer working hours it can be assumed that self-employment can also be the less desirable option for older people. Namely, it is estimated that the risk aversion increases with age (Kautonen, Down & Minniti, 2014). The results shown in Figure 4.3 portray that a majority of the respondents comprising of 22% were of the age bracket of 36-40 years, closely followed by above 50 years respondents who comprised 20%. A further 16% of the respondents were aged between 31-35 years, 13% of the respondents were aged between 26-30 years and 41-50 years. Only 6% of the respondents were aged below 20 years.



**Figure 4.3: Age bracket**

### 4.5.3 Marital status

The study sought to establish the respondents' marital status. In the questionnaire, the respondents were asked to indicate their current marital status as to whether they are married, single, divorced or widowed. Table 4.7 presents findings to the effect that a majority of the respondents comprising 55% were married, 23% of the respondents were single, 13% were divorced while 9% of the respondents were widowed. The results imply that all the categories were represented in the study whilst hinging on the findings of Özcan (2011) which demonstrated that marriage is an important determinant into entrepreneurial migration. It is construed as an institution that reduces labour income risks via risk-pooling. Since entry into self-employment implies facing such risks more directly, marriage may provide individuals with greater flexibility for job or career changes because they believe that they can trust their spouses' earning potential, whether they are in the labour market or not.

**Table 4.7: Marital status**

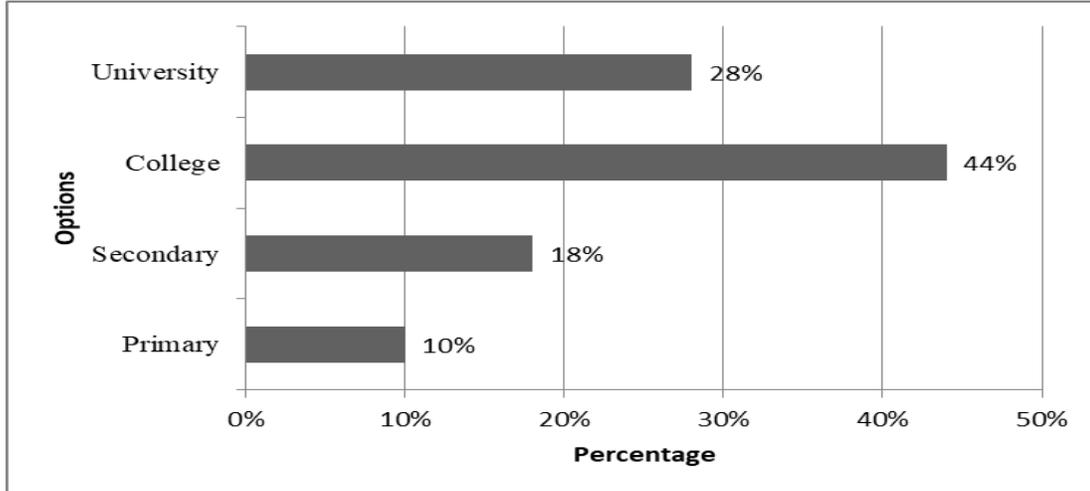
<b>Category</b>	<b>Frequency</b>	<b>Percent</b>
Married	172	55
Single	72	23
Divorced	39	13
Widowed	29	9
<b>Total</b>	<b>312</b>	<b>100</b>

### 4.5.4 Highest level of education

The study sought to find out the respondents' distribution with respect their education background as to their highest level of schooling. SME owners are a varied group when it comes to education. It is extremely difficult to categorize them based on the

educational qualifications they possess that make their businesses a success. However, Kolstad and Wiig (2015) looked at education from a primary level perspective and concluded a positive link between a primary level of formal education and entrepreneurship. They also highlighted the theoretical arguments that ‘generalized knowledge of the kind provided through primary education’ is important for entrepreneurs to acquire the diverse skills to run a business successfully. Primary education provides basic skills of literacy and numeracy required to acquire and use a number of other skills necessary to become a successful entrepreneur, returns are likely to be positive and economically substantial for entrepreneurs. This only suggests a positive link between formal education and entrepreneurship although it is not clear if the link creates entrepreneurs or enables entrepreneurship. In general education is commonly believed to be important for the success of entrepreneurial activity noting that the effect of education on profits is sizeable for at least some groups of entrepreneurs. More importantly, entrepreneurship education is crucial for boosting economic growth as it unleashes the entrepreneurial potential of young people, helping them to develop a keener eye for entrepreneurial opportunities, skills to realize projects, and an aptitude for taking responsibility (Moberg, Vestergaard, Fayolle, Redford, Cooney, Singer, & Filip, 2014).

The results shown in Figure 4.4 indicate that a majority of the respondents had a college level of education comprising 44%, closely followed by 28% who had a university level of education. The respondents with secondary education level comprised of 18% of the total respondents while 10% had only primary level of education. The findings imply that all the respondents had a background education thus responding to the study questions was easier and more reliable. However, the results contradict the argument by Ardic et al. (2011) that many SMEs are owned by individuals with minimal education background based on the fact that many of them do not land into the job markets thus create their own businesses.



**Figure 4.4: Level of education**

## **4.6 Business details**

The study sought to establish the details regarding the businesses operated by the respondents. Among the details sought as per the questionnaire included nature of the business, ownership of the business, number of employees in the business as well as the establishment of the business.

### **4.6.1 Nature of business**

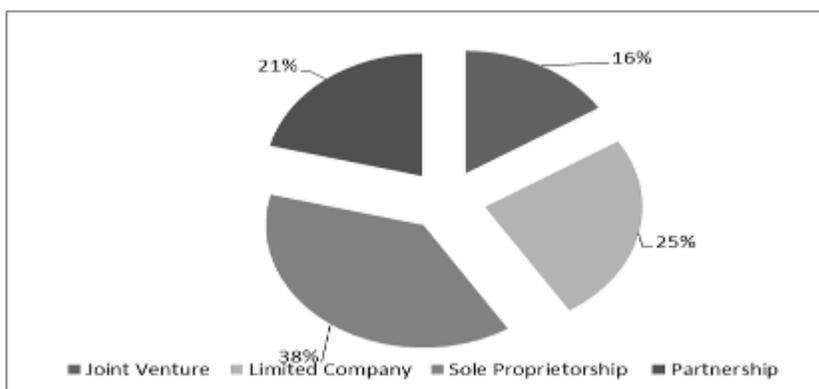
The study sought to find out the respondents' nature of the businesses as to ownership or management. The respondents were to indicate whether their firms were operating manufacturing, trading or service business. Data presented in Table 4.8 revealed that majority of the respondents were in the trade business comprising 57%, 29% were in the service business whilst 14% were in the manufacturing type of business. The results imply that all the sectors were represented in the study thus giving an opportunity for the study to obtain diverse views and opinions on the study questions. The findings also compare with those by Madatta (2011) that most of the SMEs are based on trading sector which is easier to start and has a wider market but also require minimal qualifications.

**Table 4.8: Nature of the business**

<b>Category</b>	<b>Frequency</b>	<b>Percent</b>
Manufacturing	43	13.8
Trade	178	57.1
Service	91	29.2
<b>Total</b>	<b>312</b>	<b>100</b>

#### **4.6.2 Business ownership**

The study sought to establish the ownership of the businesses ran by the respondents. The respondents were required to indicate whether their businesses were jointly owned, limited liability companies, partnership or sole proprietorship. The results depicted in Figure 4.5 showed that a majority of the businesses were sole proprietorships comprising 38%. A further 25% of the businesses were limited companies, 21% of the businesses were partnerships while 16% were joint ventures. The findings imply that all the different SME ownership categories were represented in the study thus giving room for extensive views for the study. This concurs with Amoako (2013) who found out that most SMEs are not registered as corporate bodies but as sole proprietorship.



**Figure 4.5: Business ownership**

### 4.6.3 Number of employees

The study sought to establish the number of employees in various respondents' businesses as one method of gauging the sizes of their businesses. The respondents were required to indicate the bracket to which best depicted the number of employees in their establishments. The results as presented in Table 4.9 revealed that most respondents had employed between 11-50 employees comprising 46% whilst 35% of the respondents had employed less than 10 employees. On the other hand, 19% of the total respondents had employed 50-100 employees.

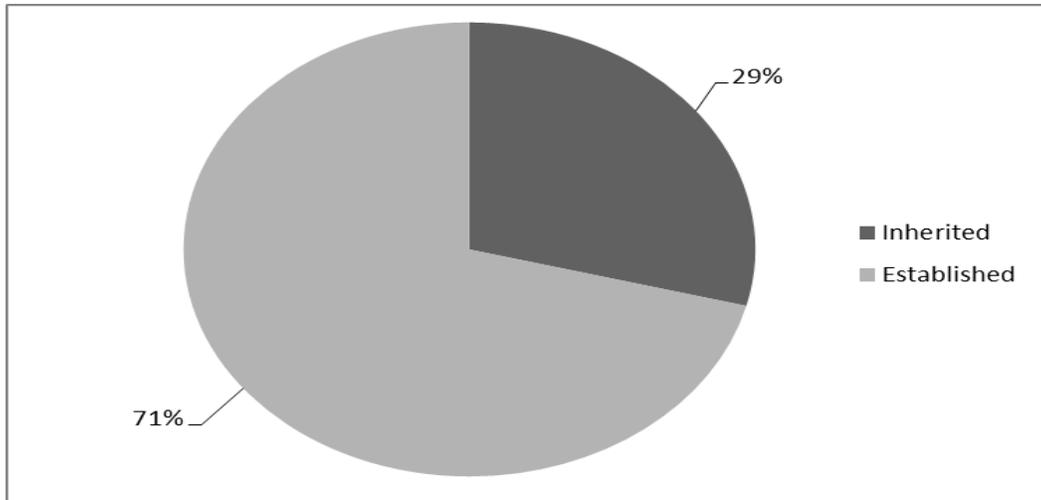
**Table 4.9: Number of employees**

<b>Category</b>	<b>Frequency</b>	<b>Percent</b>
Less than 10	110	35
11 to 50	143	46
50-100	59	19
<b>Total</b>	<b>312</b>	<b>100</b>

### 4.6.4 Origin of the business

The study sought to find out the origin of the businesses owned/ran by the respondents. The respondents were required to indicate whether they inherited their businesses or they established them. As Kochadai (2012) contends, SMEs can be owned through inheritance or establishment where in many cases those that own through establishment may be more interested with the businesses and prolong its existence as compared to those who inherit. Parker and Van Praag (2012) also concur that individuals can become entrepreneurs by taking over established businesses or starting up new ventures from scratch. The results as presented in Figure 4.6 revealed that most of the respondents had

established their businesses on their own comprising 71% of the total respondents while 29% had inherited their businesses. The findings imply that many SMEs are established by the current owners.



**Figure 4.6: Origin of the business**

#### **4.7 Analysis of the study variables**

The study was guided by four independent variables and one dependent variable. The independent variables included: innovation competency, leadership competency, networking competency and risk-taking competency. The dependent variable was survival of SMEs which was measured by liquidity, profitability as well as diversification. The findings are hereby presented as per the variables where respondents were asked specific questions based on their knowledge on the variables.

#### **4.7.1 Innovation competency**

The first objective of the study was to establish how innovation competency affects the survival of SMEs in Kenya. The study sought to establish the respondents' views on the given questions on their ability to innovate in coming up with new ideas/ways in running their businesses, new solutions, new markets and new products/services.

#### **Descriptive analysis of innovation competency**

##### **Frequency of coming up with new ideas**

The respondents' opinion was sought on the frequency of them coming up with new ideas in running their businesses. The respondents were asked to indicate the frequency based on weekly basis, monthly basis, twice a year or once a year. The results depicted in Table 4.10 showed that a majority of the respondents developed new ideas twice a year (32%) while 29% of the respondents came up with new ideas every month. A further 22% developed new ideas on a weekly basis whilst 3% never developed any new idea. The findings compare with those by Ngugi et al, (2013) who established that in many occasions entrepreneurs will take longer time to develop new ideas and this eventually limit their survival prospects. They argued that new ideas introduce something new into the business which could be in the form of improving or replacing business processes to increase efficiency and productivity, or to enable the business to extend the range or quality of existing products and/or services; developing entirely new and improved products and services - often to meet rapidly changing customer or consumer demands or needs; adding value to existing products, services or markets to differentiate the business from its competitors and increase the perceived value to the customers and markets.

**Table 4.10: Frequency of developing new Ideas**

<b>Category</b>	<b>Frequency</b>	<b>Percent</b>
Weekly	67	22
Monthly	91	29
Twice a year	100	32
Once a year	44	14
Never	10	3
<b>Total</b>	<b>312</b>	<b>100</b>

### **Embracing innovation technology in the business**

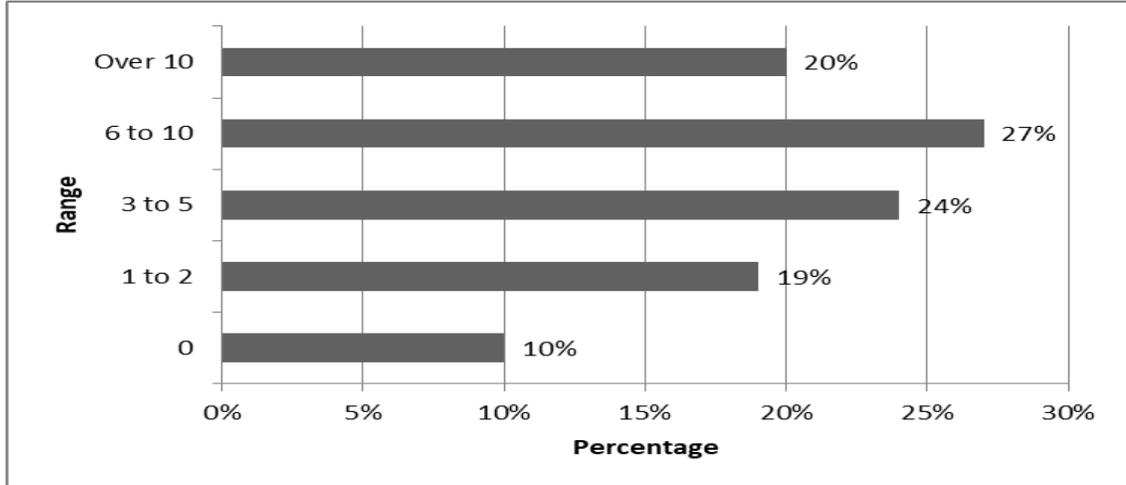
The respondents' views were sought on the different types of innovation technologies that they had adopted in their businesses. The respondents were asked to choose amongst the given options of innovation technologies that they had adopted. The results as depicted in Table 4.11 revealed that majority of the respondents had embraced various innovations in their business which included Mobile Banking-Mshwari, KCB-Mpesa (88%), Mobile payments (M-Pesa paybill, Lipana M-Pesa) comprising 76%, Online/Social Media Marketing (73%) and Innovative Delivery systems (vans, motorbikes, messengers) consist of 68%. The findings compared with the arguments by Martin and Namusonge (2014) that SMEs mainly use the easily available technological innovation to enhance their survival. SMEs face tremendous challenges in their efforts to pursue technological innovations and their survival depends often on the use they make of innovation technology to develop new organizational models, compete in new markets or enhance their internal and external communication relationships.

**Table 4.11: Innovation technology adopted**

Category	Yes		No	
	Frequency	Percentage	Frequency	Percentage
Mobile Banking-Mshwari, KCB-Mpesa	275	88	37	12
Mobile payments (M-Pesa pay bill, Lipa na M-Pesa)	239	76	73	24
E-commerce (Jumia, OLX)	197	63	115	37
Online/Social Media Marketing	229	73	83	27
SMS banking	211	67	101	33
Automation services	195	63	117	37
Innovative Delivery systems (vans, motorbikes, messengers)	212	68	200	32

**Penetration of markets in the past 5 years**

The respondents' views were sought on the total number of markets they have penetrated in the past five years prior to the study period. The results as depicted in Figure 4.7 showed that most of the businesses had penetrated 6 to 10 new markets for the past 5 years as was shown by 27%, whilst 24% had penetrated 3-5 markets for the last 5 years. In addition, 20% and 19% had penetrated over 10 markets and 1 to 2 markets respectively. According to Colombelli et al. (2016) market penetration is one way of measuring how far innovation has been done through establishment of new markets as well as better ways of entering into the new markets. Market penetration can be both a measurement, and a projection of how successful newcomer businesses have been, or will be, against the established competition.



**Figure 4.7: Penetration of markets in the past 5 years**

### **Online marketing**

The study sought to find out the respondents' views on whether they have embraced online marketing for the last five years prior to the time of the research. As the findings in Table 4.12 portray that 67% of the total respondents agreed that they embraced online marketing whereas 33% said that they did not embrace online marketing. The findings compare with those by Goksoy et al. (2013) who established that most organizations in the 21<sup>st</sup> century were turning to online marketing as their competitive strategy.

**Table 4.12: Online marketing**

<b>Option</b>	<b>Frequency</b>	<b>Percent</b>
Yes	209	67%
No	103	33%
<b>Total</b>	<b>312</b>	<b>100%</b>

### **New products and services**

The respondents' views on the new products and services they had initiated for a period of 5 years prior to the time of the study were sought. The findings as shown in Table 4.13 revealed that 7% of the respondents hadn't initiated any new products, 21% had initiated 1 and 2 products/services, 39% had initiated between 3 to 5 products, 25% had initiated 6 to 10 products whereas 7% had initiated over 10 products/services. The findings concur with those by Colombelli et al. (2016) who found that instigation of new products and services was a key innovation aspect that enabled modern organizations to become competitive.

**Table 4.13: New products and services**

<b>Option</b>	<b>Frequency</b>	<b>Percent</b>
0	22	7.1
1-2	66	21.2
3-5	122	39.1
6-10	79	25.3
Above 10	23	7.4
<b>Total</b>	<b>312</b>	<b>100.0</b>

### **Rebranding to suit market needs**

The study sought to establish the respondents' views on the number of times that they had rebranded their businesses to attract new customers as well as regaining more market penetration. Rebranding is simply an exercise of changing the way that a business or product appears to the public and is made up of a combination of emotional and physical experiences that are created every time a person comes into contact with the product. The results shown in Table 4.14 revealed that most of the businesses had

rebranded only one time as was shown by 58% while 32% had rebranded two times. The results further had it that 4.5% of the total respondents had rebranded three times, 4.8% had rebranded four times whereas 0.6% of the total respondents had rebranded five times. The findings imply that rebranding was not fully embraced by the SMEs which portray their diminished vitality in adopting and promoting innovation. The findings concur with those by Colombelli, et al. (2016) that among the major causes of SME underperformance is failure to innovate and embrace rebranding as a way of attracting new customers and retaining the existing ones.

**Table 4.14: Times rebranded to suit market needs**

<b>Number of Times</b>	<b>Frequency</b>	<b>Percent</b>
1	182	58.3%
2	99	31.7%
3	14	4.5%
4	15	4.8%
5	2	0.6%
<b>Total</b>	<b>312</b>	<b>100%</b>

### **Inferential analysis of innovation competency**

***Ha<sub>1</sub>: Innovation competency has significant effect on the survival of SMEs in Kenya***

The study sought to establish the relationship between the variable; innovation competency and survival of the SMEs. Regression model was used to determine this relationship as shown in Tables 4.15, 4.16 and 4.17. In table 4.15 R<sup>2</sup> (coefficient of determination) is 0.12 an indication that the explanatory power of innovation competency on the survival of SMEs in Kenya is 12%. Table 4.16 shows that the P-value = 0.000 and this when compared to half the level of significance ( $\alpha/2$ ) for decision

making then we find that  $P\text{-value} = 0.000 < 0.025$  implying that it falls within the rejection region and so the verdict is to reject the null hypothesis ( $H_0$ ) and conclude that innovation competency positively and significantly affect the survival of SMEs in Kenya. The model for the variable was:  $Y_s = \beta_0 + \beta_1 X_1$ . From the findings, the new model now becomes  $Y_s = 1.225_0 + 0.463_1 X_1$  as derived from Table 4.17. This means that at a confident level of 0.95, survival is pegged at 1.225 without innovation competency and a unit change in innovation competency increases survival of SMEs in Kenya by 0.463. The Scatter plot shown in Figure 4.8 also reveals that the model is fit to make conclusions for the study since most of the gradients fall under the positive side of the model line. The findings compare with those by Al-Ansari and Pervan (2014) who established that innovation correlated to a great extent with the business survival citing aspects such as coming up with new markets and processes.

**Table 4.15: Model summary of innovation competency and SME survival**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.347 <sup>a</sup>	.120	.117	.35278

a. Predictors: (Constant), INNOVATION

**Table 4.16: ANOVA of Innovation competency and SME survival**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.252	1	5.252	42.198	.000 <sup>b</sup>
	Residual	38.456	309	.124		
	Total	43.708	310			

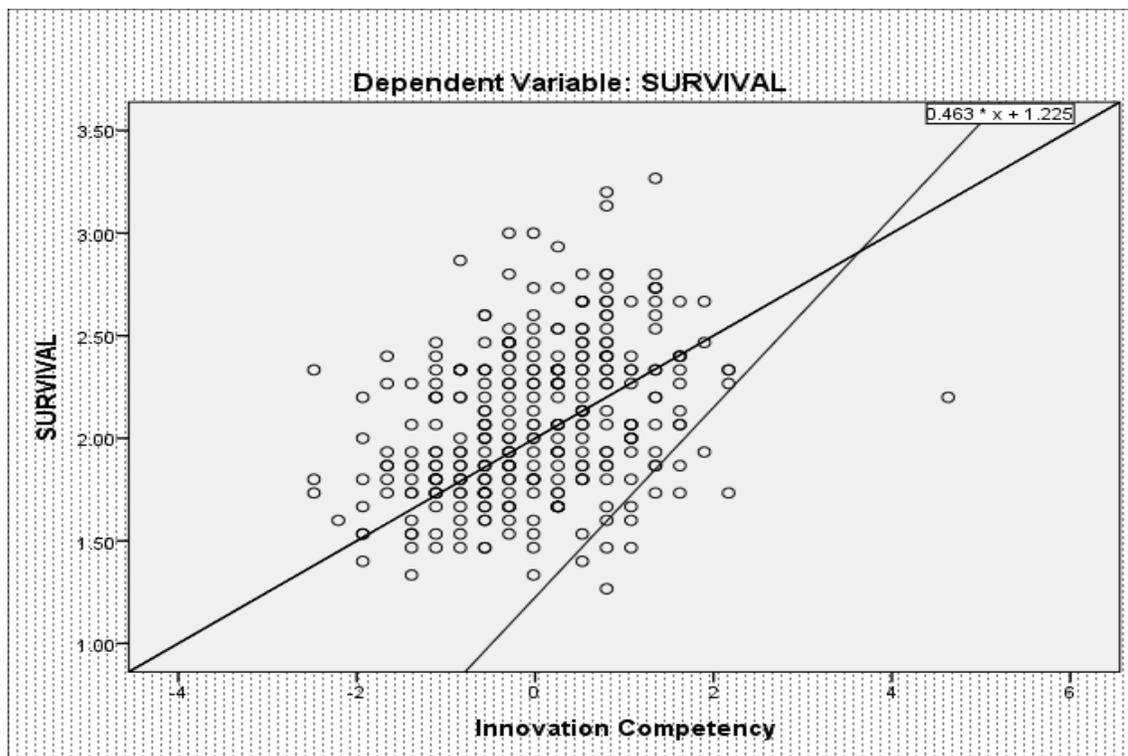
a. Dependent Variable: SURVIVAL

b. Predictors: (Constant), INNOVATION

**Table 4.17: Coefficients of innovation competency and SME survival**

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	1.225	.133		9.185	.000
	Innovation	.463	.071	.347	6.496	.000

a. Dependent Variable: SURVIVAL



**Figure 4.8: Scatterplot for innovation competency and SME survival**

#### **4.7.2 Leadership competency**

The second objective of the study was to examine the effect of entrepreneurs' leadership competency on the survival of SMEs in Kenya. The study measured the variable by the ability of the entrepreneurs to influence followers, control and command, role model, and direction establishment. The respondents were asked specific questions on the study variable and the results are as presented.

#### **Descriptive analysis of leadership competency**

##### **Embracing leadership competency aspects**

The respondents' views were sought on their ability to embrace leadership competency aspects in their businesses. Results portrayed in Table 4.18 showed that most of the respondents had embraced various leadership competency aspects including results and Performance Driven characteristics, listening and communicating to the employees, employee motivation (Rewarding and promoting their wellness), encouraging staff teamwork, and prevention of unethical behaviours (drugs, alcohol abuse) as was shown by 88%, 81%, 77% and 76% respectively. The findings imply that leadership is upheld in most of the SMEs through encouraging of ethical behaviours among the employees, driving the employees towards achievement of better results, and encouraging teamwork at the work stations. These aspects as put across by Ng, et al. (2016) enable the employees as well as the managers to be steady and have ample time to concentrate on the objectives of the firm thus enhancing firm performance and eventual survival.

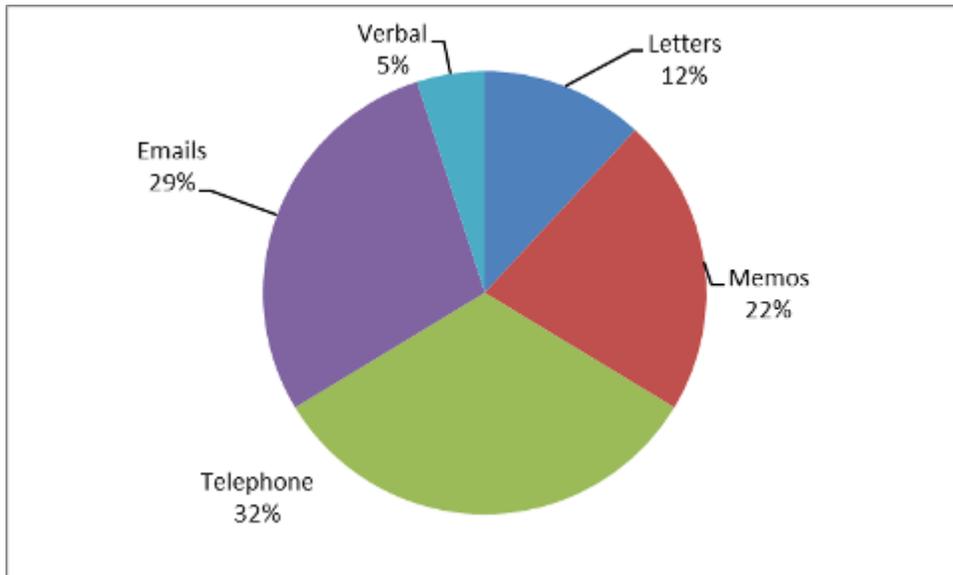
**Table 4.18: Embracing leadership competency**

	Yes		No	
	Frequency	Percentage	Frequency	Percentage
Results and Performance Driven	274	88	38	12
Encouraging staff teamwork	236	76	76	24
Listening and communicating to the employees	253	81	59	19
Employee motivation (Rewarding and promoting their wellness)	239	77	73	23
Prevention of unethical behaviours (drugs, alcohol abuse)	236	76	75	24

### **Mode of communication**

Communication is very essential as far as providing leadership in an organization is concerned. The one golden thread tying the six basic functions of management (leading, planning, organizing, staffing, controlling, and communicating) is clear communication. The study therefore sought to find out the mode of communication adopted by the firms as a way of establishing the effectiveness of communication. The results as presented in Figure 4.9 revealed that most businesses employed telephones (32%), emails (29%) and memos (22%) as methods of communication. However verbal communication and letters were least used as was shown by 12% and 5% respectively. The findings imply that SMEs are turning to technological advancement avenues thus even the mode of communication used is mainly technology-channelled which results to efficiency and effectiveness. According to Dola (2015) in the modern business market, Small businesses as well as the large enterprises have turned to technological based communication platforms as a way of enhancing their communication which is among the major competitive strategies currently. This compares with what was observed in the

study where majority of the respondents indicated that they used technology-based communication channels such as emails and telephones.



**Figure 4.9: Mode of communication**

### **Frequency of delegating duties**

Good leaders delegate duties as a way of enhancing their succession as well as training other employees to carry on with the businesses especially when they are not available. Delegating is a great way to ensure that more tasks get done in less time, and it also builds team capacity. As a team leader, you possess important skills and abilities that you can pass on to your team members. In fact, this is one of the major strategies that enhance the survival of businesses when the owner is not around. The study therefore sought to establish the frequency at which the respondents delegated their duties to the employees or to any other trusted party. The findings as shown in Table 4.19 revealed that most of the respondents delegated duties only once and often as was shown by 42% and 33% respectively. On the other hand, 16% of the respondents' hardly delegated duties, 4.8% delegated the duties very often while 4.2% did not delegate their duties at

all. The findings imply that while the respondents delegated the duties, very few of them delegated frequently whereas others delegated once. The findings compare with those by Karodia, et al. (2014) who found that many SME owners delegated duties very rarely and the main reason for their delegation was not to train but out of unavoidable circumstances that forced them to do so.

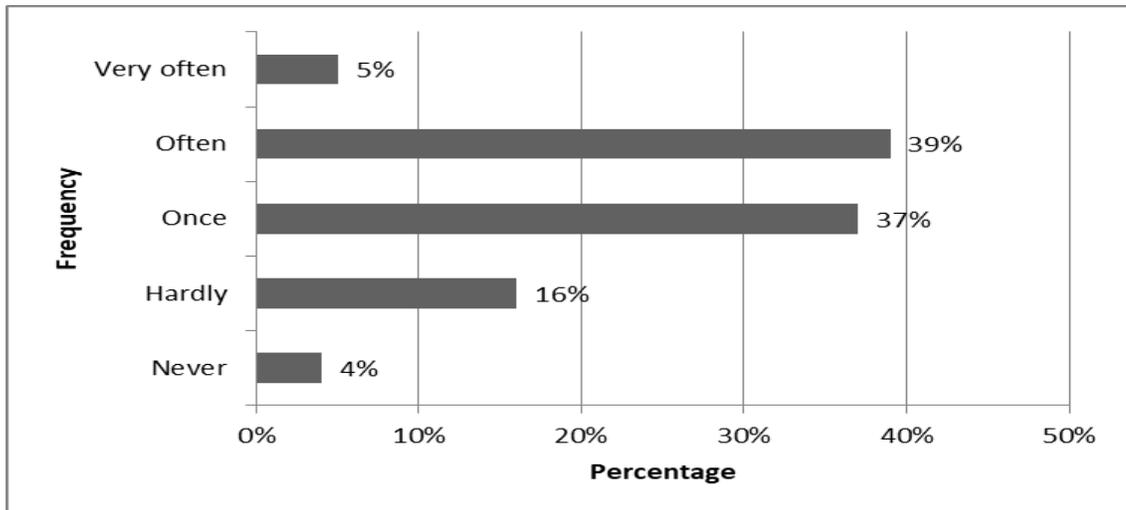
**Table 4.19: Frequency of duty delegation**

<b>Frequency</b>	<b>Frequency</b>	<b>Percent</b>
Never	13	4.2
Hardly	49	15.7
Once	132	42.3
Often	103	33
Very often	15	4.8
<b>Total</b>	<b>312</b>	<b>100</b>

### **Frequency of rewarding effective performance**

Effective performance is worthy rewarding as a way of promoting and encouraging continual improvement by the employees. A good manager can encourage an employee to work harder and better from time to time, but a reward can go a long way towards building employee self-motivation. Employees who see the rewards as worth the effort will be more motivated to work hard to obtain them. In this regard therefore, the study sought to find out the frequency to which the respondents' rewarded the employees on effective performance. As depicted by the findings on Figure 4.10 the results revealed that most of the respondents rewarded effective performance of their employees once and often as was shown by 39% and 37% respectively. A low number of the respondents never (4%) rewarded effective performance of their employees. On the other hand, 5% of the respondents indicated that they rewarded the employees very often while 16% of the total respondents said that they hardly rewarded the effective performing employees. The findings compare with those by Pasmore et al. (2009) who established that SMEs in

many cases underperform due to lack of rewarding of the best talents which make them lose such talents to the competitors. However, Shrestha (2012) notes, most SMEs especially in the modern business environment will reward their employees that perform better severally as a way of making them work more and remain loyal.



**Figure 4.10: Frequency of rewarding effective performance**

### **Number of leadership trainings attended**

A good leader will seek training to enhance his or her skills. A leaders' own motivation to acquire additional skills will be apparent to employees and inspire them to also seek training. On this basis therefore, the study sought to establish the number of times that the respondents had attended leadership trainings. The results depicted in Table 4.20 show that majority of the respondents had attended 3-5 leadership trainings (33%), closely followed by 28% who had attended 6 to 10 leadership trainings. A further 25% had attended 1 to 2 leadership trainings while 6% of the respondents had not attended any leadership training. The findings imply that even if the major portion of the respondents attended several leadership training sessions, there was still a number of those that did not attend any which again poses a big threat to the continual performance

of such SMEs. As noted by Obiwuru, et al. (2014), training enhances the ability of an individual to solve issues and determines how far one increases the yesterday's knowledge. This therefore means that from time to time training enables one to grow as a better leader thus serving the best interests of the firm.

**Table 4.20: Frequency of leadership training**

<b>Frequency</b>	<b>Frequency</b>	<b>Percent</b>
0	20	6.4
1 to 2	77	24.7
3 to 5	104	33.3
6 to 10	88	28.2
Above 10	23	7.4
<b>Total</b>	<b>312</b>	<b>100</b>

#### **Effectiveness of embracing various leadership styles**

The study sought to find out the respondents' views on the effectiveness of embracing leadership styles such as inspiring followers, total command and control, role modelling as well as direction establishment. The findings as presented in Table 4.21 revealed that most of the respondents cited that establishing direction, role modelling and total command and control was very effective. A further 55% cited that inspiring followers was moderately effective. However, 10% had not embraced role modelling. The findings imply that SMEs are fairly run by the effective leadership styles where follower inspiration, total command and control, role modelling and direction establishment are moderately employed. This compares to the argument by Szczepańska-Woszczyzna and Kurowska-Pysz (2016) that SMEs may a times develop proper leadership mechanisms through the managers which steers their performance for the given time.

**Table 4.21: Effectiveness of embracing leadership styles**

Aspect	Very effective	Moderately effective	Not effective	Not embraced
Inspiring Followers	17%	55%	19%	8%
Total command and control	30%	45%	17%	8%
Role modelling	32%	46%	13%	10%
Establishing direction	44%	41%	8%	8%

### **Inferential analysis of leadership competency**

*H<sub>a2</sub>: Leadership competency has significant effect on the survival of SMEs in Kenya*

The study sought to examine the relationship between leadership competency and survival of SMEs in Kenya. On this background therefore, an inferential analysis was conducted as per the study model. This was to enable the conclusion on whether leadership competency enhances the survival of the SMEs or not. The results of the linear regression as shown in Table 4.22 indicate that  $R^2 = .089$  which is an indication that the explanatory power of innovation competency on the survival of SMEs in Kenya is 8.9%. The results of ANOVA test as shown in Table 4.23 reveal that leadership competency has significant positive effect on survival of SMEs since the P-value is 0.003 which is less than  $\alpha/2$  (0.025). This is because it falls within the rejection region and so the verdict is to reject the null hypothesis (**H<sub>0</sub>**). The model for the study was  $Y_s = \beta_0 + \beta_2 X_2$  which becomes  $Y_s = 1.641_0 + 0.216 X_2$  as derived from Table 4.24. This implies that a unit change in leadership competency increases survival prospects of SMEs in Kenya by 0.216 but when leadership competency is zero then survival is 1.641. The Scatter diagram in Figure 4.11 shows the relationship between leadership competency and survival of SMEs in Kenya. This reveals a positive gradient which is an

indication that leadership competency influences the survival of SMEs. The findings concur with those of Jing and Avery (2011) who found out that the main focus of leadership competency is to embrace a sound foundation, with views from employees and other key stakeholders to streamline single focused amplitude within the organization. Therefore, structural capital is positively associated with the growth of SMEs. Inferences can therefore be made that the leadership characteristics extorted by the SME managers/owners play a key role in enhancing the survival of their enterprises.

**Table 4.22: Model Summary of leadership competency and SME survival**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.298 <sup>a</sup>	.089	.085	.37068

a. Predictors: (Constant), LEADERSHIP

b. Dependent Variable: SURVIVAL

**Table 4.23: ANOVA of leadership competency and SME survival**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.251	1	1.251	9.103	.003 <sup>b</sup>
	Residual	42.457	309	.137		
	Total	43.708	310			

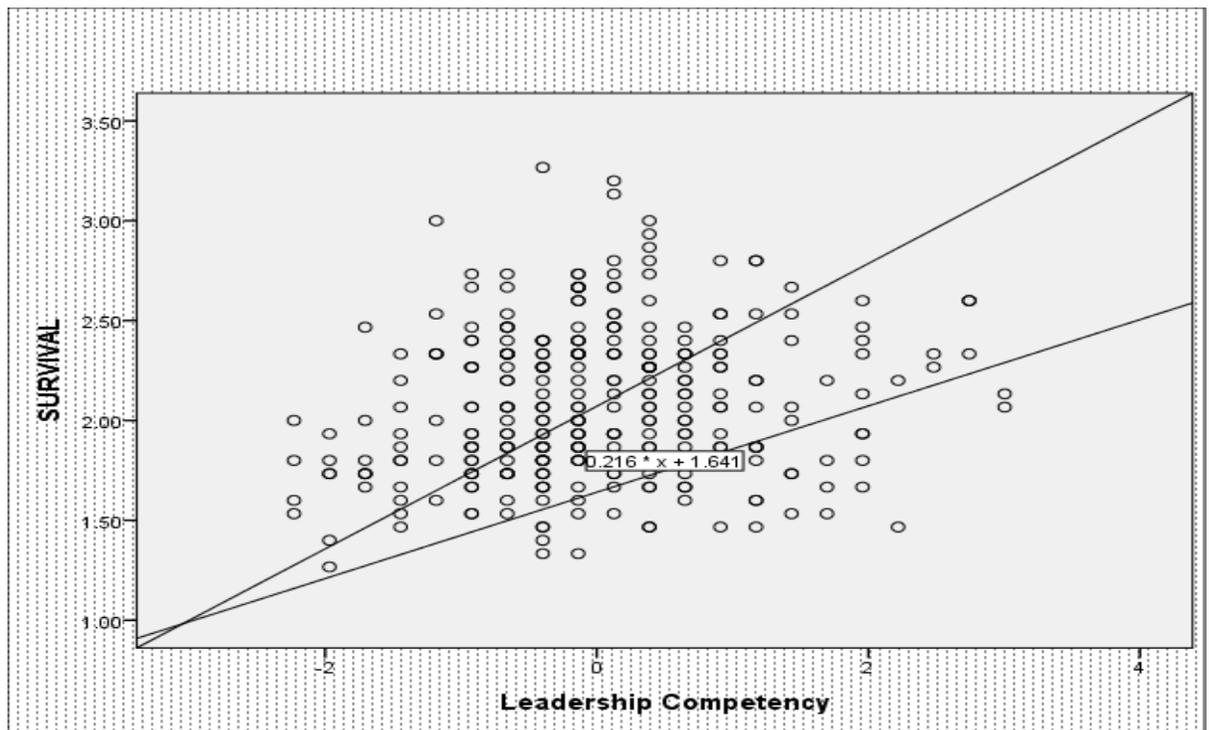
a. Dependent Variable: SURVIVAL

b. Predictors: (Constant), LEADERSHIP

**Table 4.24: Coefficients of leadership competency and SME survival**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.641	.148		11.114	.000
	Leadership	.216	.072	.298	3.017	.003

a. Dependent Variable: SURVIVAL



**Figure 4.11: A scatter plot on leadership competency and SME survival**

### **4.7.3 Networking competency**

The third objective of the study was to explore the effect of networking competency on the survival of SMEs in Kenya. The study aimed at establishing the extent to which the ability of the entrepreneurs to find new networks and strengthen the existing ones enhanced the survival of their enterprises. The variable was measured by the ability of the entrepreneurs to develop contacts and relationships, strategic alliances, ability to share resources as well as ability to have streamlined market transactions. The respondents' views on these issues were sought and hereby presented systematically.

#### **Descriptive analysis of networking competency**

##### **Embracing of various networking strategies**

Networking strategies determine how effective an entrepreneur gets larger market and continues to operate within the market. Business networking plays a vital role in increasing the competitiveness of SMEs as well as a useful way for SME owner/managers to expand marketing expertise and improve their performance. On this basis therefore, the study sought to find out the networking strategies that were embraced by the respondents and as presented in Table 4.25, the results showed that most of the respondents had teamed-up with other vendors for joint sales, contacted former customers and developed multiple revenue streams as network strategies as was shown by 81%, 79% and 76% respectively. On the other hand, 19%, 24% and 21% of the total respondents did not embrace teaming up with other vendor for joint sales, developing multiple revenue systems and contacting former customers for the purpose of keeping networks respectively. This, as argued by Maina et al. (2016) could to a great extent affect the survival and performance of such SMEs since their customer base which relies on the networking strategies applied is limited.

**Table 4.25: Embrace of networking strategies**

	Yes		No	
	Frequency	Percentage	Frequency	Percentage
Team-up with other vendors for joint sales	252	81	60	19
Developing multiple revenue streams	236	76	76	24
Contacting former customers	245	79	66	21

**Social forums attended in the last five years**

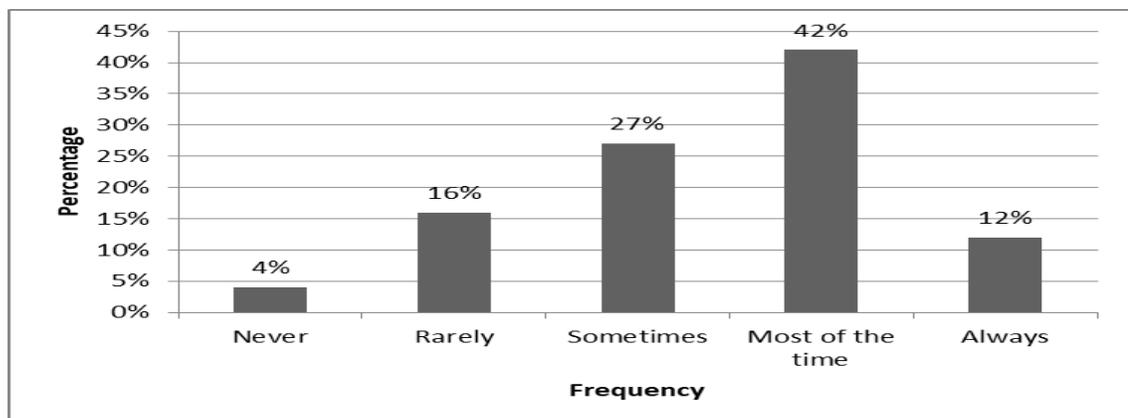
Social forums play a key role in enhancing the networking competency of an entrepreneur. It is about meeting people, sharing who you are and what you do, and gaining some valuable contacts and information that you can use immediately or in the future. It is not just about showing up, grabbing some free snacks, and passing out business cards. In this view therefore, the study sought to find out the number of forums that the respondents had attended in a move to enlarge their network. The findings as shown in Table 4.26 showed that most of the respondents had attended 6-10 social forums comprising 35%. A further 33% of the total respondents had attended 3 to 5 social forums. On the other hand, 21% had attended 1-2 social forums while 5% of the total respondents had not attended any social forum. The findings compare with those by Ogunnaike and Kehinde (2013) who established that many SME owners choose to attend social forums and other society-based gatherings as a way of developing more network and relationships which in turn enlarge their market as well as generating more exposure for their businesses.

**Table 4.26: Social forums attended in the last five years**

<b>Range</b>	<b>Frequency</b>	<b>Percent</b>
0	15	4.8
1-2	64	20.5
3-5	104	33.3
6-10	110	35.3
Above 10	19	6.1
<b>Total</b>	<b>312</b>	<b>100.0</b>

### **Availability for firm management**

The respondents' views were sought on their availability for the management of the firm. The findings as shown in Figure 4.12 showed that a majority of the respondents were available for firm management most of the time as was shown by 42% of the total respondents, while 27% were available for firm management sometimes. On the other hand, 16% of the total respondents were rarely available for firm management. The findings which relate to that of Omar (2015) imply that as much as majority of the entrepreneurs avail themselves for management of their firms, there is still a notable number that do not avail themselves which portrays the threshold for underperformance due to poor networking.



**Figure 4.12: Availability for firm management**

### **Frequency of using recreational time in pursuing the business**

The study sought to find out the respondents' views on their ability to use their recreational and free time to pursue the interests of the businesses. The findings as depicted in Table 4.27 indicate that most of the respondents most of the time used recreational time in pursuing the business comprising 37%. A further 29% indicated that they sometimes used recreational time in pursuing the business activities while 4% of the total respondents said that they never used recreational time in pursuing the business. The findings concur with those by Partanen, et al. (2008) who established that majority of the SMEs that underperform blame the lack of adequate time to carry on the business operations whereas the owners give the businesses very limited time and much of the time is wasted in recreational and other leisure activities.

**Table 4.27: Use of recreational time to pursue businesses interests**

<b>Select</b>	<b>Frequency</b>	<b>Percent</b>
Never	13	4.2
Rarely	48	15.4
Sometimes	91	29.2
Most of the time	114	36.5
Always	46	14.7
Total	312	100.0

### **Participation of promotion forums**

Participating in promotional forums is an effective low-cost marketing method for developing sales opportunities and contacts, based on referrals and introductions that are gotten face-to-face at meetings and gatherings. The study sought to find out the promotion forums that the entrepreneurs participated in as a way of enhancing their network. The respondents were required to choose from the list and give the one which

they mainly participated in. As the findings in Table 4.28 depict, a majority of the respondents attended business seminars, workshops, exhibitions and focus group discussions as was shown by 37%, 29%, and 14% respectively. On the other hand, 5% of the total respondents indicated that they never attended any promotion forum. The findings imply that participation in the social forums by the entrepreneurs is majorly overlooked despite it being a key strategy to enhance the network creation by the SME owners (Taneja & Toombs, 2014).

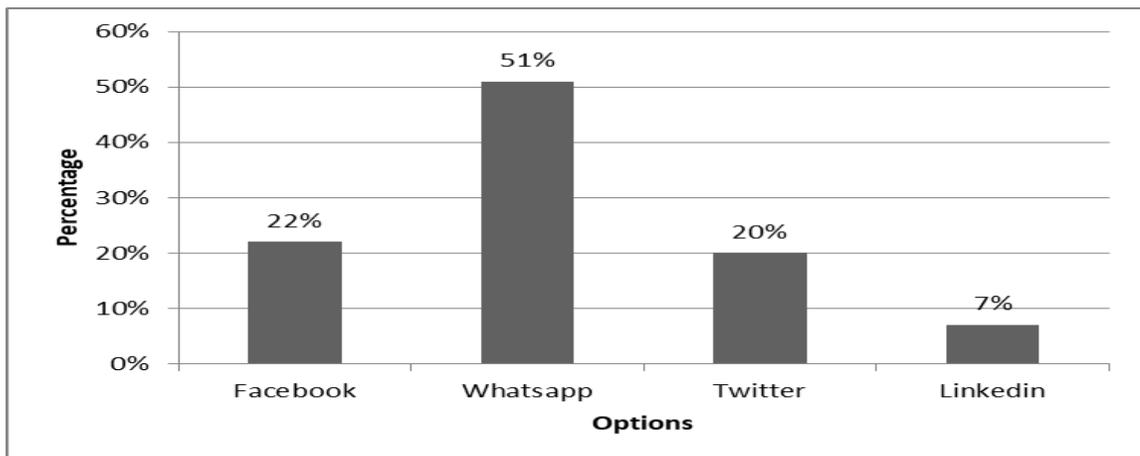
**Table 4.28: Participation in promotion forums**

<b>Forums</b>	<b>Frequency</b>	<b>Percent</b>
Exhibitions	46	14.7
Business seminars	114	36.5
Workshops	91	29.2
Focus group discussions	46	14.7
None	15	4.8
<b>Total</b>	<b>312</b>	<b>100.0</b>

### **Social media platforms used**

In the current modern business environment, social media is one of the major network creators that enhance business performance and growth within a finger click. Social media may change, but they aren't going away. They show significant potential as the means to enhance communication and eventual networking. The study therefore sought to find out the social media platform used by the entrepreneurs to steer up their businesses as a way of enhancing the network. The findings as shown in Figure 4.13 revealed that most of the respondents used WhatsApp as the main preferred social media

platform comprising 51%. A further 22% and 20% respectively used Facebook and twitter as the social media platform. The findings which are in line with that of Turyakira and Mbidde (2015) imply that modern SMEs are greatly adopting the social media platforms as a way of enhancing their network which depicts their chance to enhance their survival and performance.



**Figure 4.13: Social media platforms used**

### **New networking groups**

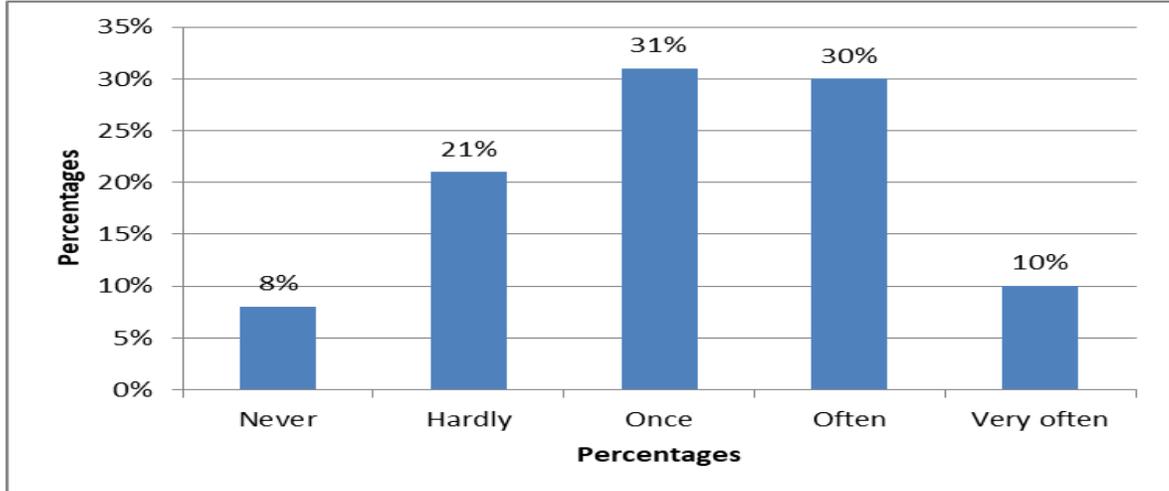
The study sought to establish the new networking groups that the respondents' belonged to as a way of establishing and enhancing their business network. The findings as shown in Table 4.29 indicate that 9% of the respondents did not belong to any networking group, 34% belonged to 1 to 2 groups, 32% belonged to 3 to 5 groups, 19% belonged to 6 to 10 groups whereas 6% belonged to more than 10 groups. The findings compare with the argument by Rathwell and Peterson (2012) who contend that as part of networking, it is equally important for an organizational manager (entrepreneur) to join networking groups as a way of establishing additional networks for the business.

**Table 4.29: Networking groups**

<b>Option</b>	<b>Frequency</b>	<b>Percent</b>
0	27	8.7
1-2	107	34.3
3-5	100	32.1
6-10	59	18.9
Above 10	19	6.1
<b>Total</b>	<b>312</b>	<b>100.0</b>

#### **Referrals of new customers from networking groups**

One of the measures of how far networking enhances performance is through the customers that come as a result of referrals from the networks created. It is on this merit that the study sought to find out the respondents' views on the frequency of referrals from the networks. The results as presented in Figure 4.14 revealed that most of the respondents got referrals once from networking groups as was shown by 31% while 30% of the total respondents indicated that they got referrals often. On the other hand, 21% of the respondents said that they hardly got any referrals from networking groups while 8% said that they never got referrals from the networking groups. The rest 10% got referrals from network groups very often. The findings imply that networking enhances custom base thus promoting firm performance based on the fact that the bigger portion of the respondents affirmed that they got referrals from the networking groups. This compares with the arguments by Watson (2007) that the groupings and other networks that business owners create play a major role in promoting firm performance through enhancement of the businesses' customer base.



**Figure 4.14: Referrals of new customers from networking groups**

#### **Extent into which networking avenues affects the survival of a business**

There are always lots of opportunities that come from networking. Networking allows an entrepreneur to create new avenues for their business that the original model might not have considered or allowed for. The study therefore sought to find out the extent to which networking channels affects the business survival. The respondents were required to give their views based on a five Likert's scale of 1 to 5 where 1 is the lowest and 5 the highest. The findings as shown in Table 4.30 revealed that the bigger portion of the respondents agreed to a great extent that sharing resources, sharing market information and transaction costs and making strategic alliances affects the survival of a business as was shown by 30%, 27% and 26% respectively. Further, 33% were uncertain that creating new contacts and relationships affects the survival of a business. The findings compare with the arguments by Martinez and Aldrich (2011) that networking competencies enhance firm survival through enhancement of the exposure by the business operators as well as increase in customer base as a result of marketing through the networks.

**Table 4.30: Extent of agreement with aspects on networking and firm survival**

<b>Statements</b>	<b>Very low extent</b>	<b>Low extent</b>	<b>Uncertain</b>	<b>Great extent</b>	<b>Very great extent</b>
Creating new contacts and relationships	9%	25%	33%	25%	8%
Making strategic alliances	10%	23%	28%	26%	13%
Sharing resources	10%	20%	28%	30%	11%
Sharing market information and transaction costs	10%	23%	25%	27%	15%

### **Inferential analysis of networking competency**

*H<sub>a3</sub>: Networking competency has significant effect on the survival of SMEs in Kenya*

To explore the relationship between the variable networking competency and survival of SMEs in Kenya, inferential analysis was carried out. Table 4.31 presents summary of regression model result between the two variables. The  $R^2$  indicates that explanatory power of the independent variable is 35.8%. The results of ANOVA in Table 4.32 reveal that the P-value = 0.000 and this when compared to half the level of significance ( $\alpha/2$ ) for decision making then we find that P-value = 0.000 < 0.025 implying that it falls within the rejection region and so the verdict is to reject the null hypothesis ( $H_0$ ) and conclude that networking competency positively and significantly affect the survival of SMEs in Kenya. The model for the variable was  $Y_s = \beta_0 + \beta_3 X_3$  which now becomes  $Y_s = 0.711_0 + 0.524 X_3$  as derived from Table 4.33. This means that at a confident level of 0.95, survival is pegged at 0.711 when networking competency is zero and a unit change in networking competency increases survival of SMEs in Kenya by 0.524. To further explore the relationship between networking competency and survival of SMEs in Kenya, a Scatter diagram was generated as shown in Figure 4.15. The results reveal a

positive gradient which is an indication that networking competency positively and significantly influences the survival of SMEs in Kenya. These findings concur with that of Peprah (2013) who found that networking competency through aspects such as resource sharing and strategic alliances has a major factor on the survival and growth of SMEs. It can therefore be inferred that entrepreneurs should have better relationships with customers and other entrepreneurs as well as possess the ability to network as a way of enhancing their firms' survival and growth prospects.

**Table 4.31: Model summary of networking competency and SME survival**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.599 <sup>a</sup>	.358	.356	.30128

a. Predictors: (Constant), NETWORKING

b. Dependent Variable: SURVIVAL

**Table 4.32: ANOVA of networking competency and SME survival**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.660	1	15.660	172.524	.000 <sup>b</sup>
	Residual	28.048	309	.091		
	Total	43.708	310			

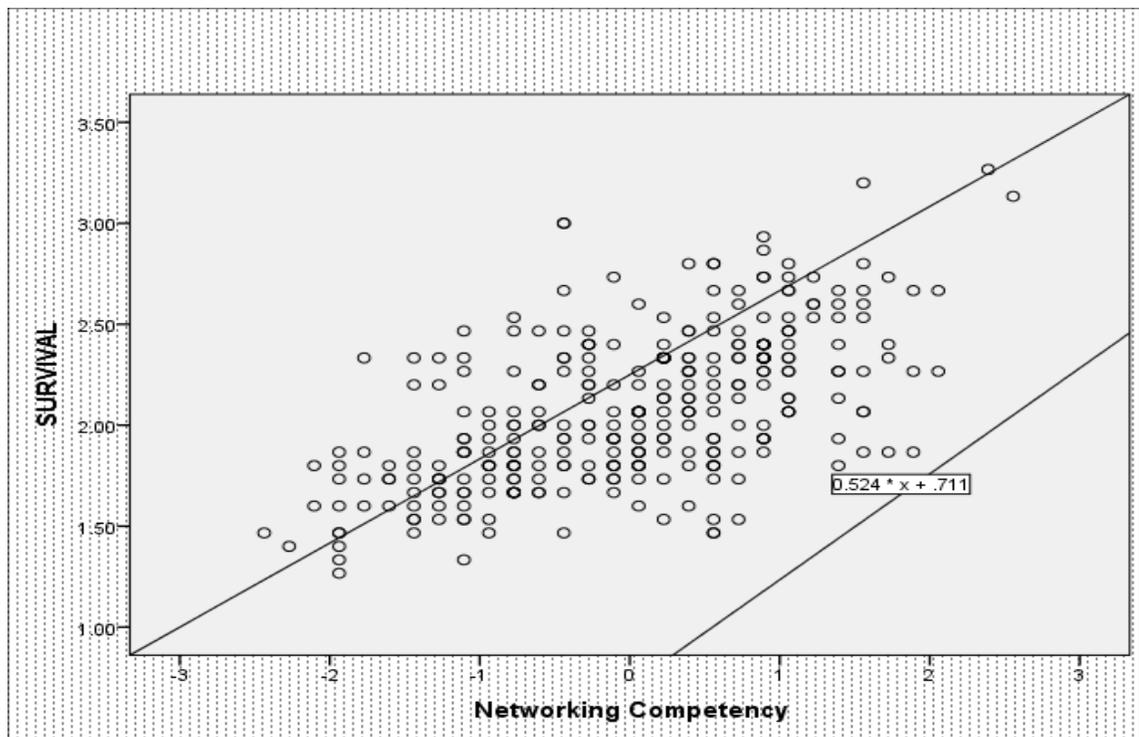
a. Dependent Variable: SURVIVAL

b. Predictors: (Constant), NETWORKING

**Table 4.33: Coefficients of networking competency and SME survival**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.711	.106		6.722	.000
	Networking Competency	.524	.040	.599	13.135	.000

a. Dependent Variable: SURVIVAL



**Figure 4.15: Scatter diagram on the networking competency and SME survival**

#### 4.7.4 Risk taking competency

The fourth objective of the study was to determine the effect of risk-taking competency on the survival of SMEs in Kenya. The study sought to establish the extent to which the ability of the entrepreneurs to take calculated moves, carry out careful analysis as well as make careful and manageable decisions enhanced the survival of SMEs. The respondents were asked specific questions based on the variable and their responses presented herein.

#### Descriptive analysis of risk taking competency

##### Taking risks and risk assessments

The respondents' views were sought on their essence to take risks as well as conduct risk assessment. The findings as presented in Table 4.34 revealed that a bigger portion of the respondents (57%) said that they had not taken any major risk that justified the current position of the enterprises. On the other hand, the findings had it that most of the respondents carried out risk assessment for their businesses as was shown by 69% of the total respondents. The findings compare with the arguments by Penchev and Salopaju (2011) that SMEs in many occasions tend to leave out the risk-taking prospect and become comfortable with their current position which often diminish their performance.

**Table 4.34: Risk taking and risk assessments**

Statement	Yes		No	
	Frequency	Percentage	Frequency	Percentage
Have you taken any major risk that justifies the current position of the enterprises	133	43	179	57
Do you carry out risk assessment for your business	216	69	96	31

### Frequency of taking risks

Taking risks frequently determines how far an entrepreneur steers up the income channels which eventually turn to enhance the performance of the enterprise. In this view, the study sought to find out the respondents' views on their frequency of taking risks in a bid to establish the essence of risk taking on firm survival and performance. The results as presented in Figure 4.16 revealed that a bigger portion of the respondents had taken risks once comprising 36% of the total respondents while 26% of the total respondents indicated that they had taken risks often. On the other hand, 21% of the respondents said that they hardly undertook any risks whilst 14% of the respondents said that they had never taken any risk. The findings imply that risk taking among the SMEs is still not well embraced thus linking this to the argument by Caliendo, et al. (2010) that SMEs may be performing but due to failure by the bigger number of them through the owners or the managers to take frequent risks they result in underperforming and even collapsing with time.

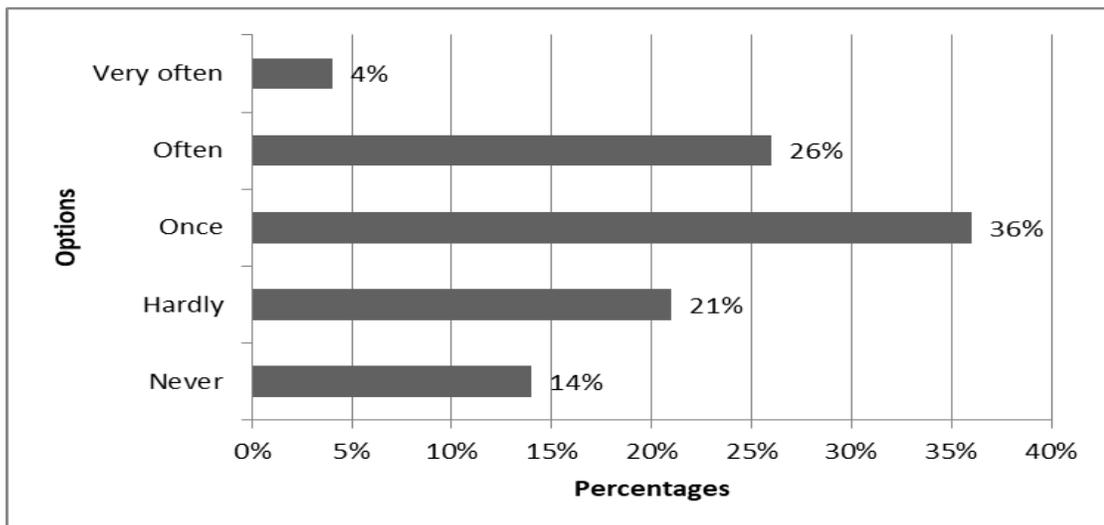


Figure 4.16: Frequency of taking risks

### **Risk assessment evaluations carried out**

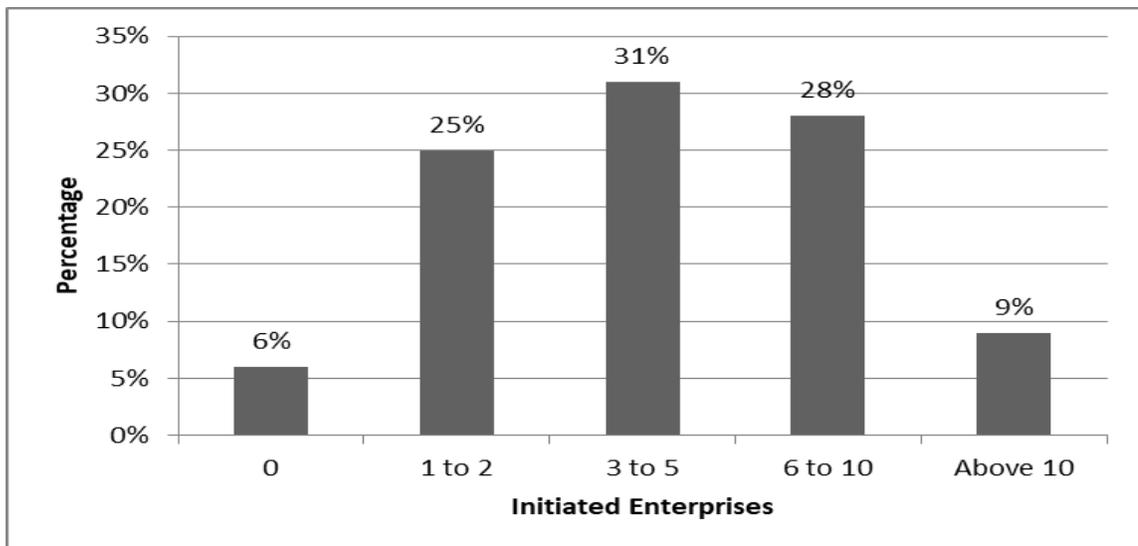
Investors and business managers use risk assessments to determine things like whether to undertake a particular venture, what rate of return they require to make a particular investment and how to mitigate an activity's potential losses. The respondents' views on the number of risk assessment evaluations carried out in a period of five years were sought. The findings as presented in Table 4.35 revealed that the respondents had undertaken 3 to 5 and 6 to 10 risk assessment evaluations in the last 5 years as was shown by 37% and 32% respectively while 21% of the total respondents indicated that they had undertaken risk assessment evaluations once or twice in the last 5 years. A total of 8 (2.6%) respondents had taken more than 10 risk assessment evaluations in the given period of 5 years prior to the research year. The findings corresponded with those by Kinyua et al. (2015) that risk assessment is a key to enhance firm performance since it helps the firm to mitigate the given threatening risks as well as enhance the channels that best suit to enhance their survival.

**Table 4.35: Risk assessment evaluations carried out**

<b>Range</b>	<b>Frequency</b>	<b>Percent</b>
0	23	7.4
1-2	66	21.2
3-5	115	36.9
6-10	100	32.1
Above 10	8	2.6
<b>Total</b>	<b>312</b>	<b>100.0</b>

### Other enterprises initiated

Undertaking other enterprises alongside the main one is a way of determining how risk-taking an entrepreneur is. The respondents' views were sought on the number of enterprises they had initiated in period of five years prior to the study period. This was as an attempt to establish their levels of risk taking and maximize on the ideas that were best fit for their interests. The findings as presented in Figure 4.17 revealed that 31% of the total respondents had initiated 3 to 5 enterprises in a period of 5 years. A further 28% of the total respondents indicated that they had initiated 6 to 10 enterprises in same 5 years, whereas 25% of the total respondents said that they had initiated 1 to 2 enterprises in a period of 5 years. According to Gerli et al. (2011), entrepreneurs who are known to be best in risk taking will always start several enterprises which a times may fail while others prosper. This however, strengthens their ability to take more risks as well as run the businesses efficiently due to increased exposure and learning experience.



**Figure 4.17: Enterprises initiated in the last 5 years**

### **Extent of various risk-taking elements and how they affect the survival of business**

Risk-taking is an integral part of entrepreneurship. Some people may view it as a challenge that may lead to improvement or success, while others see it as a reckless activity. In business, entrepreneurs associate risk with potential danger or loss but true entrepreneurs take risks not because they are reckless but because it's the only step to take to move forward. The study sought to establish the respondents' views on the extent to which they embraced given risk-taking aspects. The findings as presented in Table 4.36 revealed that a majority of the respondents agreed to a great extent that careful decision making, taking manageable risk, careful analysis of the risks and taking calculated moves affect the survival of business as was shown by 32%, 30% and 28% respectively. The findings compare with those by Penchev and Salopaju (2011) that risk taking is a major factor of firm performance and sustainability but put a crossword that the risks taken by the entrepreneurs should be manageable and have effects that can be cured if they turn otherwise.

**Table 4.36: Risk taking aspects and SME survival**

<b>Aspect</b>	<b>Very low extent</b>	<b>Low extent</b>	<b>Uncertain</b>	<b>Great extent</b>	<b>Very great extent</b>
Taking calculated move	7%	22%	38%	28%	5%
Careful analysis of the risks	7%	22%	31%	28%	12%
Careful decision making	8%	20%	32%	32%	8%
Taking manageable risk	12%	17%	30%	30%	11%

## **Inferential analysis of risk taking competency**

*H<sub>a4</sub>: Risk-taking competency has significant effect on the survival of SMEs in Kenya*

The study carried out inferential analysis in a bid to determine the relationship between the variable risk-taking competency and survival of SMEs in Kenya. The linear regression analysis shows a relationship between the dependent variable which is SME survival and independent variable which is risk taking competency. The results of the linear regression in Table 4.37 indicate that  $R^2=0.285$  which is an indication that the explanatory power of innovation competency on the survival of SMEs in Kenya is 28.5%. The results of ANOVA test in Table 4.38 reveal that risk-taking competency has a positive and significant effect on survival of SMEs since the P-value is 0.000 which is less than the standard  $\alpha/2$  (0.025) given a level of significance of 0.05. This is because it falls within the rejection region and so the verdict is to reject the null hypothesis (**H<sub>0</sub>**). The model for the variable was  $Y_s = \beta_0 + \beta_4 X_4$  which now becomes  $Y_s = 1.257_0 + 0.300 X_4$ , as derived from Table 4.39. This implies that a unit change in risk taking competency increases survival prospects of SMEs in Kenya by 0.300 but when risk taking competency is zero then survival is 1.257. The regression analysis between risk taking competency and survival of SMEs in Kenya is also shown in the form of a scatter diagram (see Figure 4.18). The Scatter diagram depicts a positive gradient which is an indication that risk-taking competency positively and significantly influences the survival of SMEs. The findings concur with those by Caliendo, et al. (2010) who found that risk taking competency among the entrepreneurs influences firm survival and growth positively. Inferences can therefore be made that tendency of a firm to engage in and support careful decision making and take calculated moves enhances their ability to continue operating for a longer period of time.

**Table 4.37: Model summary of risk taking competency and SME survival**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.534 <sup>a</sup>	.285	.283	.31650

a. Predictors: (Constant), RISK-TAKING

b. Dependent Variable: SURVIVAL

**Table 4.38: ANOVA of risk taking competency and SME survival**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.248	1	12.248	122.269	.000 <sup>b</sup>
	Residual	30.653	306	.100		
	Total	42.901	307			

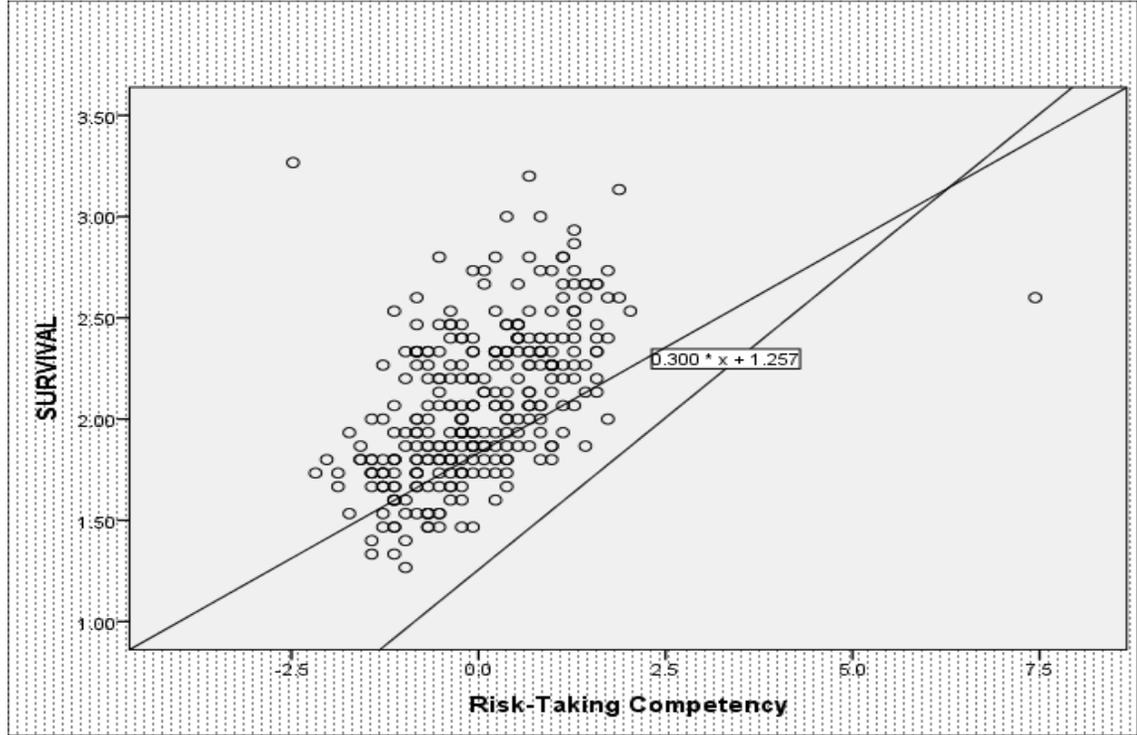
a. Dependent Variable: SURVIVAL

b. Predictors: (Constant), RISK-TAKING

**Table 4.39: Coefficients of risk taking competency and SME survival**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.257	.077		16.364	.000
	Risk Taking	.300	.027	.534	11.058	.000

a. Dependent Variable: SURVIVAL



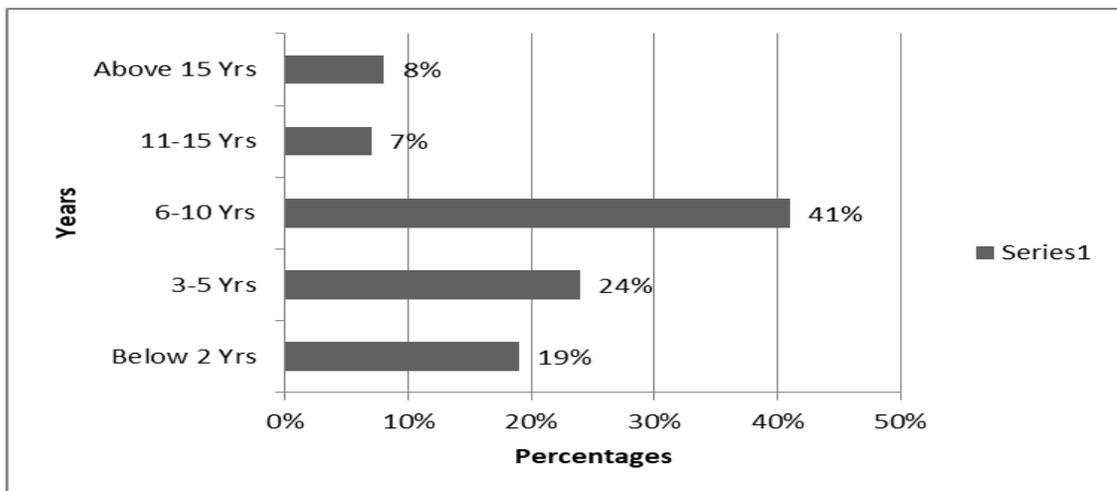
**Figure 4.18: A scatter diagram on risk taking competency and SME survival**

#### **4.7.5 Survival of SMEs in Kenya**

The dependent variable for the study was the survival of SMEs in Kenya. The study sought to examine how innovation competency, leadership competency, networking competency and risk-taking competency affected survival of SMEs in Kenya. Survival was measured by profitability, liquidity and ability to diversify to other forms of businesses. Basically, these are the appliances that enhance the ability of the business to remain operational in the market for a longer period through lay out of stronger roots in the said market. The respondents' views were therefore sought on their projections on the survival of their businesses in future whereby specific questions were asked on SME survival.

### Number of years in operation

The study sought to find out the number of years that the SMEs had been in operation in a bid to establish their previous history. This would enable the development of an estimate of their expected survival. The findings as shown in Figure 4.19 revealed that 41% of the total respondents indicated that their enterprises had been in operation for a period of 6-10 years prior to the period of this study. A further 24% of the total respondents indicated that their firms had been operational for a period of between 3 to 5 years. In addition, 19% of the respondents said that their respective firms had been in operation for less than 2 years while 7% and 8% of the total respondents replied that their firms had been in operation for a period of 11 to 15 years and above 15 years respectively. The findings imply that a bigger portion of the SMEs had been in operation for a reasonable period of time while very few had met the threshold of 10 years. This reinforces the argument by Ruhui, et al. (2014) that in Kenya, just like in many developing countries, the survival rate of SMEs is only 10-20%. However, as noted by Barbosa (2016), the past operational years cannot necessarily determine how far an organization goes in future but rather the strategies put in place to sustain growth, performance and eventual survival.



**Figure 4.19: Number of years in operation**

### **Plan to close business in near future**

Based on the turn of events, entrepreneurs might decide to close their businesses but will not do it immediately opting to wait until things are too hot to handle then quit the enterprise. In this regard therefore, the study sought to find out the views of the respondents on their possibility to close their businesses. The responses presented in Table 4.40 revealed that 53% of the respondents had plans to close their businesses in the near future whilst 47% did not have plans to close their businesses in the near future. The respondents were asked to state the reasons as to why they were planning to close their enterprises. They cited reasons such as declining profit margins, lack of capacity to continue doing the business, commitment to do other things and focus on other business.

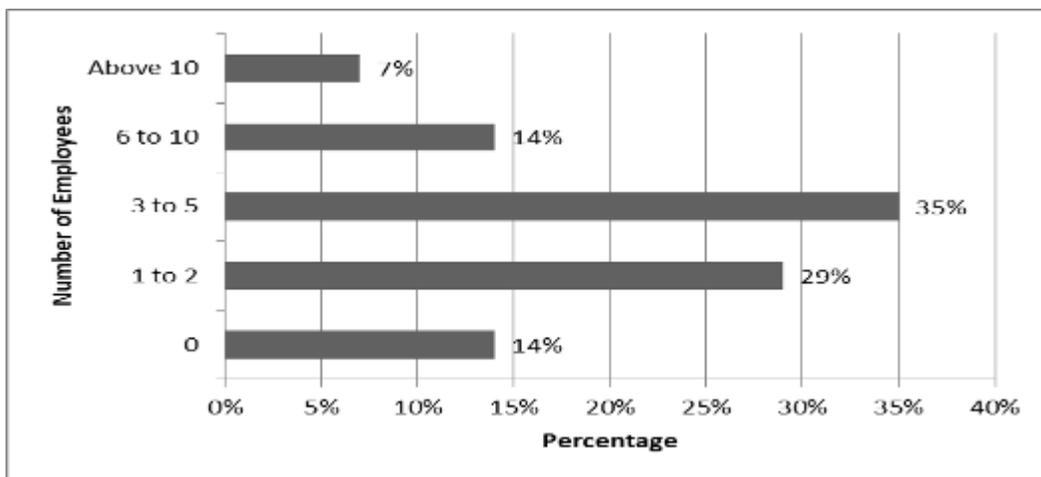
**Table 4.40: Plans to close the enterprise**

<b>Select</b>	<b>Frequency</b>	<b>Percent</b>
Yes	165	52.9
No	147	47.1
<b>Total</b>	<b>312</b>	<b>100.0</b>

### **Employee turnover**

Employee turnover refers to the number or percentage of workers who leave an organization and are replaced by new employees. This is a major determinant of how far an organization intends to go in future as far as survival and performance are concerned. In such cases, employees will leave an organization where they feel that their jobs are not secure or not adequately remunerated and seek better places. In fact, this is the main indicator of an underperforming organization where no one will lay his or her trust in such a firm. The study therefore sought to establish the employee turnover in the respondents' respective firms and as the findings in Figure 4.20 indicated, 35% of the total respondents indicated that their firms had an employee turnover of between 3 to 5

employees in a period of 5 years, 29% indicated that they had an employee turnover of between 1 and 2 employees, 14% said they had a turnover of between 6 to 10 employees, 7% said they had a turnover of more than 10 employees while 14% of the total respondents said that they had no employee turnover for the given period. The findings imply that employee turnover among the bigger portion of the SMEs is quite high based on the number of the employees in those SMEs as noted earlier thus posing the threat of survival and performance of the enterprises (D’Amato, et al., 2009).



**Figure 4.20: Employee turnover**

### **Number of branches opened**

The study sought to find out the number of branches opened by the entrepreneurs in a period of 5 years prior to the period of the study. The findings as presented in Table 4.41 revealed the bigger portion of the businesses had opened 3 to 5 (28%) branches and 1 to 2 branches (23%) in the last five years. A further 21% had opened 6 to 10 branches in the last 5 years. On the other hand, 8% of the respondents indicated that they had opened above 10 branches in a period of five years. The findings compare with those by Iorun

(2014) that SMEs with brighter future open more branches as a result of expanding customer base and market share as well.

**Table 4.41: Branches opened**

<b>Range</b>	<b>Frequency</b>	<b>Percent</b>
0	63	20.2
1-2	73	23.4
3-5	86	27.6
6-10	64	20.5
Above 10	25	8.0
<b>Total</b>	<b>312</b>	<b>100</b>

#### **Branches/product lines closed**

The study sought to find out the number of branches or product lines that the entrepreneurs had closed in a period of 5 years prior to the period of the research. The findings as presented in Table 4.42 revealed that 25% of the respondents indicated that they had closed 6 to 10 branches/product lines the same to those that had not closed any branches/product lines in the same period of time. A further 23% of the respondents indicated that they had closed 3 to 5 branches/product lines in the last 5 years while 4% of the respondents said that they had closed above 10 branches/product lines in the period of five years. The findings compare with those by Okpara (2011) who established that most SMEs tend to remain with one channel of income and operation which is merely meant for sustenance.

**Table 4.42: Branches/product lines closed**

<b>Range</b>	<b>Frequency</b>	<b>Percent</b>
0	79	25.3
1-2	72	23.1
3-5	71	22.8
6-10	78	25.0
Above 10	12	3.8
<b>Total</b>	<b>312</b>	<b>100.0</b>

### **Survival tactics applied**

The study sought to find out the tactics that the entrepreneurs put in place to sustain their businesses and prolong their existence. The respondents were asked to agree or disagree with the given options which included diversification, merging and acquisition, investment of the profits, as well as offering more time to the businesses. The findings as presented in Table 4.43 revealed that the bigger portion of the respondents indicated that they used diversification, merging and acquisition, giving much of the time to the business and strategizing for its growth and investing back the profits to the business as survival tactics as was shown by 80%,74% and 73% respectively. The findings imply that majority of the SMEs are geared towards adopting tactics that are meant to enhance their performance and lengthen their operations in the market. As argued by Sohl (2012), the tactics used by businesses to enhance their growth and performance need to be well strategized as a way of making them fruitful and effective.

**Table 4.43: Survival tactics applied**

Tactic	Yes		No	
	Frequency	Percentage	Frequency	Percentage
Diversification	250	80	62	20
Merging and acquisition	232	74	80	26
Investing back the profits to the business	230	73	82	26
Giving much of the time to the business and strategizing for its growth	230	73	82	27

#### **4.8 Analysis of the overall regression model**

***Ha<sub>5</sub>:** Entrepreneurial competency (combination of innovation, leadership, networking and risk taking) has effect*

*on the survival of SMEs in Kenya.*

The study conducted an analysis of the overall regression model in a bid to examine the combined effect of the independent variables; innovation competency, leadership competency, networking competency and risk-taking competency on the dependent variable; survival of SMEs in Kenya. The model was as shown below:

$$Y_s = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4, \text{ Where,}$$

$$Y_s = \text{Survival of SMES}$$

$$\beta_0 = \text{constant (coefficient of intercept)}$$

$$X_1 = \text{Innovation competency}$$

$X_2$  = Leadership competency

$X_3$  = Networking competency

$X_4$  = Risk taking competency

$\beta_1 \dots \beta_4$  = regression coefficient of the four variables.

The results of the multiple regression in Table 4.44 shows that  $R^2=.626$  which is an indication that the proportion of the variance in the independent variables; innovation competency, leadership competency, networking competency and risk-taking competency on the dependent variable; survival of SMEs in Kenya is at 62.6%. From the ANOVA Table 4.45, it is evident that the regression model has less than 0.000 likelihood of giving erroneous predictions. This therefore goes without saying that the model is appropriate for making a concrete conclusion on the population parameters. The verdict is to reject the null hypothesis ( $H_0$ ) and conclude that entrepreneurial competency (innovation competency, leadership competency, networking competency and risk-taking competency) positively and significantly affect the survival of SMEs in Kenya.

The equation for the study was  $Y_s = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$  which becomes  $Y_s = 0.361 + 0.205X_1 + 0.025X_2 + 0.340X_3 + 0.145X_4$  based on the coefficients of the analysis as shown in Table 4.46. The model extrapolates that when entrepreneurial competency is zero, the survival of SMEs in Kenya is 0.361 but a unit change in innovation competency, leadership competency, networking competency and risk taking competency increases survival of SME in Kenya by 0.205, 0.025, 0.340 and 0.145 respectively. The results from the Scatterplot as shown in Figure 4.21 indicates that most of the variables were significant meaning that innovation, networking competency and risk taking positively and significantly influenced the survival of Small and Medium Enterprises in Kenya. According to Ormiston and Seymour (2011) firm growth and

profitability is enhanced by innovations, proper leadership skills, ability to network as well as practice new things while taking reasonable risks.

**Table 4.44: Model summary- overall**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.791 <sup>a</sup>	.626	.619	.28499

a. Predictors: (Constant), Risk taking, networking, leadership and innovation

b. Dependent Variable: SURVIVAL

**Table 4.45: ANOVA- overall**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	18.292	4	4.573	56.305	.000 <sup>b</sup>
	Residual	24.609	303	.081		
	Total	42.901	307			

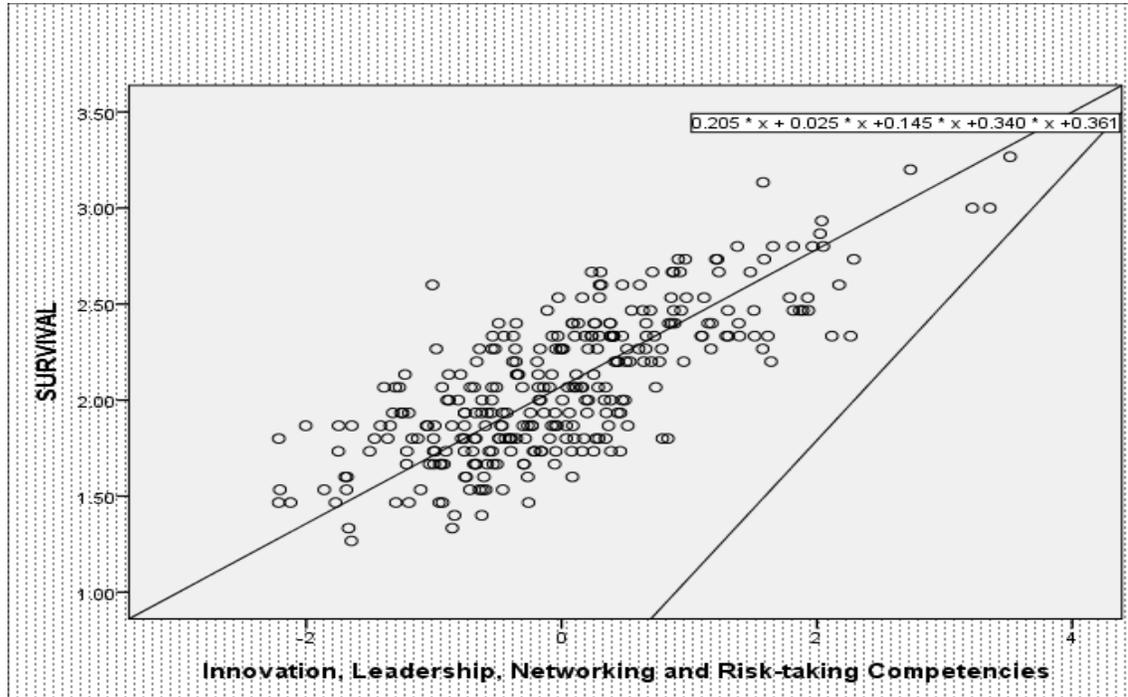
a. Dependent Variable: SURVIVAL

b. Predictors: (Constant), Networking, Leadership, Innovation, Risk-Taking

**Table 4.46: Coefficients- overall**

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	.361	.153		2.363	.019
	Innovation	.205	.062	.153	3.319	.001
	Leadership	.025	.058	.019	.4276	.669
	Networking	.340	.050	.390	6.860	.000
	Risk Taking	.145	.031	.259	4.702	.000

a. Dependent Variable: SURVIVAL



**Figure 4.21: Scatterplot for the overall model**

#### 4.9 Revised conceptual framework

The revised conceptual framework shows the actual presentation of the study variables after the findings of the study are analysed and presented. The findings from the overall model indicated that the variables were significant in the study except for the leadership competency. The model coefficients as shown in Table 4.46 had it that all the variables had significant P-values except for the leadership competency which had a P-value greater than the standard value thus declared insignificant ( $0.669 > 0.025$ ). The variable was therefore omitted from the revised conceptual framework. The variables with the least P-values are the most significant and are arranged as per the significant levels. These are as shown in Figure 4.22.

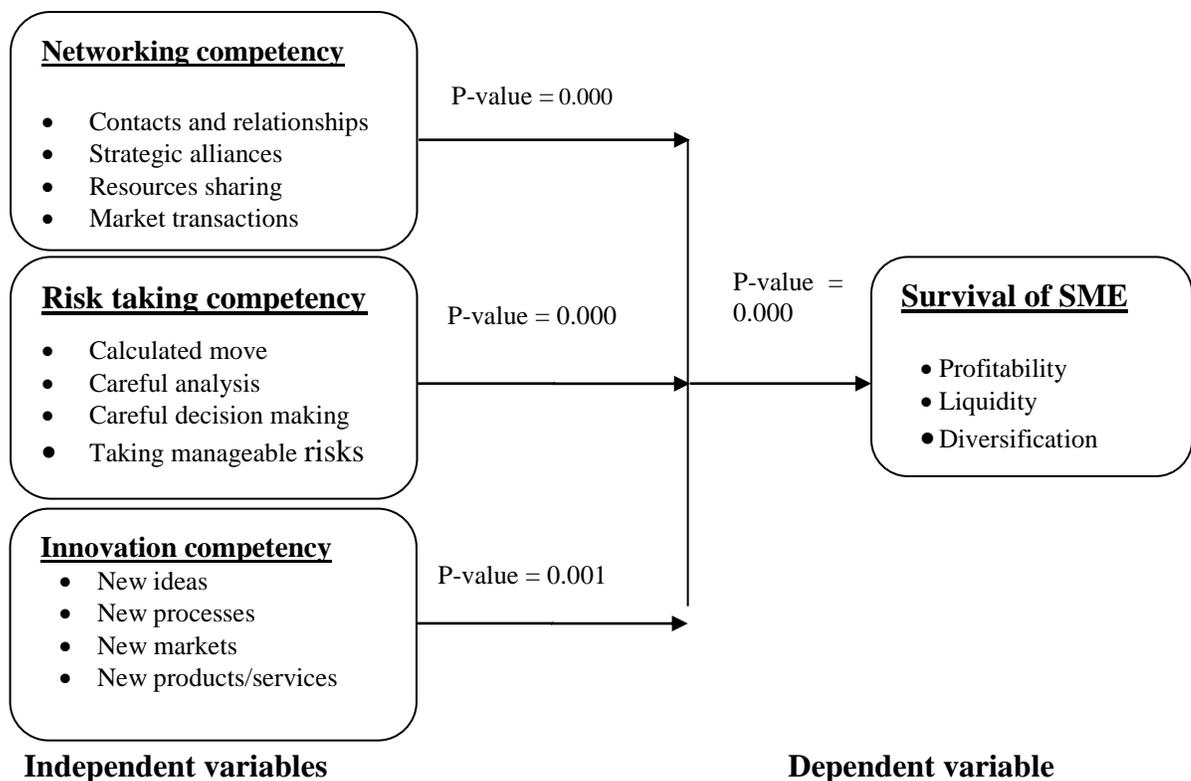


Figure 4.22: Revised conceptual framework

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

The chapter focuses on the discussion of the summary of the study findings, the conclusions and the recommendations based on the findings of the study. The main aim of the study was to examine the effect of entrepreneurial competencies on the survival of SMEs in Kenya. Data was interpreted and the results of the findings were correlated with both empirical and theoretical literature available. The chapter specifically presents the summary, conclusion and recommendations systematically as per the research variables which were: innovation competency, leadership competency, networking competency and risk-taking competency.

#### **5.2 Summary of the research findings**

##### **5.2.1 Innovation competency and survival of SMEs**

The first objective of the study was to establish how innovation competency affects the survival of SMEs in Kenya. On this, the findings had it that a majority of the respondents developed new ideas twice a year (32%). On embracing various innovation technologies in their business, the majority of the respondents (88%) had embraced Mobile Banking technology such as Mshwari and KCB-Mpesa. Innovation technology applications like online marketing, SMS banking and automation services was found to be prevalent amongst several SMEs in Kenya. In Addition, most of the businesses had penetrated at least three new markets for the past five years as evidenced by 71% of the total respondents. In terms of rebranding, most of the businesses (58%) had rebranded only once. The inferential statistics further revealed that innovation competency was positively and significantly related to the survival of SMEs in Kenya. Colombelli et al. (2016) contemplated that innovation is critical in enhancing the ability of the firm to

steer growth and survival through which new products, new processes and new markets are established thus enhancing performance and survival.

### **5.2.2 Leadership competency and survival of SMEs**

The second objective of the study was to examine how entrepreneurs' leadership competency affects the survival of SMEs in Kenya. The study established that most of the SMEs had embraced various leadership competency aspects including Results and Performance Driven characteristics, listening and communicating to the employees, employee motivation (Rewarding and promoting their wellness), prevention of unethical behaviours (drugs, alcohol abuse) and encouraging staff teamwork. The study further revealed that most businesses (61%) used telephones and emails as their preferred mode of communication. Further, the study found out that most of the respondents (75%) delegated duties at least once. Most of the respondents (76%) rewarded effective performance of their employees at least once. On leadership trainings, majority of the respondents (61%) had attended at least three leadership trainings. Further, most of the respondents cited that establishing direction, role modelling and total command and control were effective in their respective firms. On the inferential statistics, the findings revealed that leadership competency significantly influenced survival of SMEs in Kenya. The findings compare with the literature by Pasmore et al. (2009) who argued that leadership capability of business owners creates a possibility for the firm to develop and grow since problem solving is enhanced as well as collective performance among the employees.

### **5.2.3 Networking competency and survival of SMEs**

The third objective of the study was to explore the effect of networking competency on the survival of SMEs in Kenya. The study established that most of the respondents had teamed-up with other vendors for joint sales, contacted former customers and developed multiple revenue streams as network strategies. The findings further revealed that majority of the respondents (68%) had attended at least three social forums. A majority

(54%) of the respondents were most of the time available for firm management while majority used recreational time in pursuing their business interests. Moreover, the study established that a majority of the respondents attended business seminars, workshops, exhibitions and focus group discussions to seek beneficial social networks. As for the preferred social media platform, the study found out that WhatsApp was the most used at 51%. The inferential statistics revealed that networking competency positively and significantly affected the survival of SMEs in Kenya. The findings draw support from Taneja and Toombs (2014) who found that firm performance in the modern business environment relies on how effective networking is done through which better processes and markets are identified and this creates a change for the business to survive tough economic conditions.

#### **5.2.4 Risk taking competency and survival of SMEs**

The fourth objective of the study was to determine the effect of risk-taking competency on the survival of SMEs in Kenya. The study established that a majority of the respondents (57%) had not taken any major risk that justified the current position of their enterprises. However most of the respondents carried out risk assessment for their businesses as was shown by 69% while majority had taken risks at least once. Most of the respondents (69%) had undertaken at least three risk assessment evaluations in the last five years while majority had initiated at least three enterprises in the last five years. The findings further portrayed that majority of the respondents agreed that careful decision making, taking manageable risk, careful analysis of the risks and taking calculated moves affect the survival of business. The inferential statistics revealed that risk-taking competency had a positive and significant effect on survival of SMEs in Kenya. The findings compare with those by Caliendo et.al (2010) who established that risk taking is a crucial aspect in small businesses through which they try new dimensions of handling and diversifying their businesses to other markets and product lines.

### **5.2.5 Survival of SMEs in Kenya**

The study sought to examine the survival of SMEs in Kenya in respect to the respondents' opinions. As for the number of years in operation, majority of the SMEs had been in operation for at least three years as evidenced by 80% of the total respondents but their numbers reduce as the years go by. The findings further revealed that majority of the respondents had plans to close their businesses in the near future comprising 53% citing reasons such as declining profit margins, lack of capacity to continue doing the business, commitment to do other things and focus on other business ventures. Further, most of the businesses (64%) had at least one employee turnover for a period of five years prior to the time of the study. Most of the businesses had opened at least three branches while most of the businesses had also closed at least three branches. Over 70% of the SMEs used diversification, merging and acquisition, giving much of their time to the business and strategizing for its growth and investing back the profits to the business as their main survival tactics. The overall inferential analysis revealed that entrepreneurial competency has a significant positive effect on the survival of SMEs in Kenya. This compares with lessons drawn from Penchev and Salopaju (2011) who instigated that an entrepreneur is expected to interact with environmental forces which require him to be highly competent in different dimensions like intellectual, attitudinal, behavioral, technical and managerial aspects.

## **5.3 Conclusion**

### **5.3.1 Innovation competency**

Innovation competency was found to be important in enhancing survival prospects of SMEs in Kenya. The study, therefore, concludes that entrepreneurs' innovativeness ensures SMEs stay ahead of the competition. In order to survive and thrive in increasingly hypercompetitive market, innovation can be said to be a prerequisite since it has been acknowledged as a key driver of profitability as such ensures SMEs stay ahead of the competition through control of substantial market share and temporary monopoly.

Innovation is the route by which firms create inimitable assets, and so achieve sustainable competitive advantage. For entrepreneurial firms to gain rents through temporary establishment of monopoly, innovation is key as such is likely to ensure long term sustainability. The benefits attributable to innovation may go a long way in helping SMEs successfully compete with well-established incumbents and so stay longer in the market. Most businesses in the developing countries Kenya included continue to fail and unable to sustain their operations due to ineffective measures in innovation. This means that the products offered by the SMEs appear to be similar and very little is done to differentiate them from the competitors', an aspect that is only possible through innovation.

### **5.3.2 Leadership competency**

The study concludes that strong leadership attributes are essential for the survival of SMEs in Kenya as such encompasses goal attainment through supportive, directive, participative and achievement oriented parameters. Effective leadership is a potent source of management development and sustained competitive advantage for longevity. Small and Medium Enterprises can achieve their current objectives more efficiently by linking job performance to valued rewards. As a result of performance driven managers with proper listening and communication skills, SMEs are able to enhance their performance and eventual survival. The business owners/managers are basically the leaders in their firms. Their capacity and capability to lead determines the ability of the firm to make crucial decisions and steps towards gaining competitive advantage and enhancing their growth and survival.

### **5.3.3 Networking competency**

The study found networking as the most important competency that affects survival of SMEs in Kenya. The conclusion arising therefrom is that networking is paramount if SMEs are to survive as such ensures repeated business transactions and beneficial information sharing. Networking in form of clusters, strategic alliances and business

collaborations has become widespread among SMEs as a competitive tool and so facilitate repeated business interactions or transactions. More importantly networking can be a source of information gathering, idea generation and sharing and seeking advice for the betterment of the enterprise which is a recipe for survival. Through team building with other vendors as well as developing multiple revenue streams, many SMEs strengthen their competitive base thus ensuring sustainability and performance. Networks created in business especially by the owners' act as the sources of future benefit to the firm. The study however concluded that the networking dimension used by the SMEs was not very effective in that most had few networks and dedicated little time in business interaction forums.

#### **5.3.4 Risk taking competency**

The study concludes that risk-taking competency has a positive effect on survival of SMEs in Kenya. Continued business survival is hinged on how entrepreneurs perceive and manage risks in their enterprises. The attitude of entrepreneurs is to take risks only after carefully analyzing the situation in hand and therefore go only for those risks they can manage and understand as success in risk-taking is widely acknowledged as being more of design than of luck. In so doing, entrepreneurs are able to exploit the risk to their advantage and generate value which enhances profitability and hence survival. Risk taking stands to be the bridge between business success and stagnation. For a business to grow and sustain their operations, there is need for the managers or owners to take risks but take them keenly for them to steer growth and survival of their enterprises. The study concluded that as much as entrepreneurs are expected to take risks, if such are not properly analyzed then they become sensitive/volatile risks ending up in losses.

## **5.4 Recommendations**

### **5.4.1 Innovation competency**

The study recommends that SMEs through the management could embrace innovation competency as a means of enhancing their survival. Through introduction of new product lines and implementing new ideas, SMEs get to be more competitive thus promoting their performance. To augment the effectiveness of their operations, SMEs should use the ever emerging easily available technological innovations and consider rebranding as a way of attracting new customers as well as regaining more market penetration. The SMEs should invest in new markets and encourage their employees to be more innovative as a way of enhancing performance and eventual survival. The innovative subordinates should not be penalised if the innovation goes wrong.

### **5.4.2 Leadership competency**

In addition, the study also recommends that, SMEs owners should enhance leadership competency which as per the study findings is a key aspect in firm survival and performance. As leaders, the owners should adhere to clear modes of communication preferably technology-based communication channels in a bid to promote cohesion and also frequently delegate duties as a training mechanism to the subordinates. The SME managers should ensure that they influence the employees as followers such that they (managers) lead by example. The study also recommends that the SMEs managers should ensure that clear directions are established as a way of enhancing survival through focusing on one goal. All these are possible if one continuously aspires to improve his/her leadership skills in line with the organisational objectives. Such can include finding a webinar in your field and sign up to improve on your skillset, reading books that offer both insight and inspiration or just enrolling for leadership training courses.

### **5.4.3 Networking competency**

The study further recommends that entrepreneurs should ensure that they embrace networking as a way of gaining competitive advantage and widening their customer base which results from marketing through the networks. Through strategic alliances with other entrepreneurs, market transactions as well as resource sharing with other enterprises, entrepreneurs are able to exploit or explore new entrepreneurial opportunities. These as portrayed in the findings keep the firm stable and enhances its survival probabilities since networking is generally considered as a competitive tool. Once an SME owner has networked with someone, he/she should treat the network as a friend not a business contact i.e. value quality over quantity.

### **5.4.4 Risk taking competency**

The study also recommends that SMEs should adopt risk-taking strategies through taking calculated moves in their operations as well as carefully analysing the available options so as to increase the chances of landing into the best option since success in risk taking is more as a result of design than luck. The firm management should always make careful decisions as well as taking manageable routes which do not put them at more volatile risks. In general, therefore, the study recommends that entrepreneurs should have a template for dealing with risks that give them advantage over the competition.

### **5.4.5 Entrepreneurial competency**

Overall, entrepreneurial competency has a positive significant effect on the survival of SMEs in Kenya. It is, therefore, recommended that SME owners should strive to acquire or improve their ECs through training, education, seminars, workshops and focus group discussions. To instill the culture of training on SMEs, a regulatory body like the Micro and Small Enterprise Authority (MSEA) should be mandated to compulsorily register SMEs, introduce Continuous Professional Development (CPD) points which are earned through attendance of specific trainings tailored towards enhancement of SME survival

and annual renewal of trading licence pegged on some minimum CPD points. This will enable SMEs to attend such trainings thereby improving their entrepreneurial competencies and compete favorably in a competitive market. Again, to stay longer in the market, SMEs should consider diversification, merging and acquisition, and ploughing back profits as viable options.

### **5.5 Contribution of the study to theory/existing knowledge**

This study contributes to the existing stock of knowledge in the literature of entrepreneurial competency and survival of SMEs in a developing country. The study reinforces previous findings in other countries to the effect that survival of SMEs is associated with EC. After scrutinizing the existing literature on survival of SMEs in Kenya, there was little evidence that linked EC to survival. With existence of such a gap, the study has made significant contribution to the body of knowledge capturing the Kenyan scenario by linking EC to SMEs survival. This study is therefore a milestone for future research in this area, particularly in Kenya.

This study can also serve as a self-evaluation aid to be used by aspiring entrepreneurs with a view to gauging their strengths and weaknesses in respect to EC. Business consultants can also tailor their trainings to match the requisite EC. Existing entrepreneurs can re-look at their current competencies and adjust accordingly through training. Policy makers can borrow from this study and formulate policies that are geared towards enhancing EC.

Previous studies have viewed entrepreneurial competency as one variable which has narrowed the analysis of its effects on the firm sustainability/survival/performance. The study, therefore, brings in new knowledge that entrepreneurial competency could be addressed in terms of risk taking competency, innovation competency and networking competency. This has widened the interpretation of entrepreneurial competency and its effect on SME survival. The study also made a contribution as far as ordering and prioritizations of entrepreneurial competencies are concerned noting that networking is

the most significant competency followed by risk-taking and lastly innovation competency.

## **5.6 Recommendations for further studies**

The main motive of the study was to examine the effect of entrepreneurial competencies on the survival of SMEs in Kenya. The study was limited to SMEs in Nairobi County where the highest number of SMEs in Kenya are located but represents an urban setup. A similar study could be carried out focusing on another County with a rural setup and compare the findings.

The study was limited to four entrepreneurial competencies which included leadership competency, innovation competency, networking competency and risk-taking competency. There could be another study carried out on other entrepreneurial competencies e.g. opportunity spotting competency, managerial competency and creativity competency and how they affect survival of SMEs.

The study focused on survival of SMEs which is basically the dimension of how best the SMEs are able to sustain themselves and continue operating for longer time. A similar study could be conducted on how entrepreneurial competencies affect other aspects such as success and performance which are equally essential to the SMEs.

From this study, it is clear that entrepreneurial competencies contributed up to 63% of the survival of SMEs. There could be another study carried out to establish other factors e.g. government policy interventions, financial availability, location, record keeping, marketing skills and economic factors that contribute to survival of SMEs which could be making the 37% remainder.

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## APPENDICES

### Appendix I: Introductory Letter to the Respondents

ABDUL RAMADHAN ODHIAMBO

P.O Box 10724-00400

**Nairobi**

Dear Respondent,

#### **RE: DATA COLLECTION**

I am a final year student at the Jomo Kenyatta University of Agriculture and Technology pursuing PhD in Entrepreneurship. I am carrying out a research study on **EFFECT OF ENTREPRENEURIAL COMPETENCIES ON THE SURVIVAL OF SMALL AND MEDIUM ENTERPRISES IN KENYA** to fulfill the requirements of **AWARD OF DEGREE OF PHD IN ENTREPRENEURSHIP**.

You have been selected to participate in this study and I would highly appreciate if you assisted me by responding to all questions as completely, correctly and honestly as possible. Your response will be treated with utmost confidentiality and will be used only for research purposes of this study only.

Thank you in advance for your anticipated co-operation.

Yours Faithfully,

A handwritten signature in blue ink, appearing to read 'Abdul', with a stylized flourish at the end.

**RAMADHAN O. ABDUL**

## Appendix II: Questionnaire

This questionnaire is to collect data for purely academic purposes. The study seeks to investigate **effect of entrepreneurial competencies on the survival of Small and Medium Enterprises (SMEs) in Kenya**. All information will be treated with strict confidence. Answer all questions as indicated by either filling in the blank or ticking the option that applies.

### SECTION 1: GENERAL

1. Gender

Male  Female

2. Age

Below 20 years  21-25 years   
26- 30 years  30-35 years   
36- 40 years  40- 50 years   
Above 50 years

3. Marital status

Married  Single   
Divorced  Widower

4. Level of education

Primary  Secondary   
College  University

5. What is the nature of your business?

Manufacturing  Trade   
Service

6. Business ownership

Limited company  Sole proprietorship   
Partnership  Joint venture

Others specify.....

7. What is the total number of employees in your Organisation?

Less than 10      [ ]                      10 – 50                      [ ]  
50 – 100                      [ ]

8. What is the origin of your business?

Established                      [ ]                      Inherited                      [ ]  
Others specify.....

## SECTION 2: STUDY VARIABLES

### Innovation competency

1. How frequently have you come up with new ideas in the enterprise?

Weekly                      [ ]  
Monthly                      [ ]  
Twice a Year                      [ ]  
Once a year                      [ ]  
Never                      [ ]

2. Have you embraced the following technology innovations in your enterprise?

		Yes	No
1.	Mobile banking (Mshwari/KCB-Mpesa)		
2.	Mobile payments (M-pesa paybil / lipa na mpesa)		
3.	E-commerce (Buying Via jumia)		
4.	Online/Social media marketing (Facebook, twitter)		
5.	SMS banking Bulk SMS marketing		
6.	Automation services		
7.	Innovative delivery systems (eg. Vans, motorbikes, massagers etc)		

3. Tick (√) or fill appropriately relating to innovation.

Statements					
How many new markets have you penetrated in the last five years?	0	1-2	3-5	6-10	over 10
Have you embraced online marketing (eg. Portals, websites, social media).	Yes		No		
How many new products/services have you introduced in the market in the last five years?	0	1-2	3-5	6-10	over 10
How many times have you rebranded since start of the enterprise to suit market needs	0	1-2	3-5	6-10	Above 10

4. In your opinion, what do you think ought to be done to enhance innovativeness among Small and medium enterprises?

.....

**Leadership competency**

5. Do you embrace the following leadership competency aspects in your enterprise? (Please Tick appropriately)

	Yes	No
Results and Performance Driven		
Encourage staff teamwork		
Listening and communicating to the employees		
Employee motivation (rewarding and promoting their wellness)		
Prevention of unethical behaviors (eg. Drug and alcohol abuse)		

6. Tick (✓) or fill appropriately relating to leadership.

Statements						
What is your mode of communication?	Letters	Memos	Tel	Emails	Verbal	
How often do you delegate your responsibilities?	Never	Hardly	Once	Often	Very often	
How often do you reward effective performance?	Never	Hardly	Once	Often	Very often	
How many leadership trainings have you attended?	0	1-2	3-5	6-8	over 8	
How effective do you embrace the following leadership styles in your enterprise		Very effective	Moderate effective	Not effective	Not embraced	
i.	Inspiring followers					
ii.	Total command and control					
iii.	Role modelling					
iv.	Establishing direction					

6. In your opinion, what do you think can be done to enhance leadership competence among SME owners?

.....

.....

.....

.....

.....

.....

**Networking competency**

8. Have you adopted the following networking strategies in your organization?

	Yes	No
Team-up with other vendors for joint sales		
Developing multiple revenue streams		
Contacting former customers		

9. Tick (✓) or fill appropriately relating to networking competency.

	1	2	3	4	5
a) How many social forums have you attended in the last five years to learn more about enterprise management?	0	1-2	3-5	5-7	Above 8
b) How frequent are you available in management of the enterprise?	Never	Rarely	sometimes	most of the time	Always
c) How often do you use your recreational time to pursue your business(es)?	Never	Rarely	sometimes	most of the time	Always

10. Which of the following business promotion forums have you participated in?

- Exhibitions
- Business Seminars
- Workshops
- Focus group discussions
- None

11. Which social media do you use to market your products?

- Facebook
- Whatsapp
- Twitter
- LinkedIn
- Others (Specify) .....

12. Tick (✓) or fill appropriately relating to networking.

Statements					
How many network groupings do you belong to?	0	1-2	3-5	5-7	Over 8
How often do you get referrals of new customers from your network groupings?	Never	Hardly	Once	Often	Very often
On a scale of 1 (lowest) to 5 (highest) to what extent would consider the following networking avenues affect survival of your enterprise?	1	2	3	4	5
Creating new contacts and relationships					
Making strategic alliances					
Sharing resources					
Market information and transaction cost sharing					

13. In your opinion, what challenges do you face in enhancing your commitment to networking in your enterprise?

.....

**Risk-taking competency**

14. Have you ever taken any major risk that justifies the current position of the enterprise?

No [ ] Yes [ ]

If No, why?

.....

...

.....

...

If yes, explain briefly

.....

...

.....

...

15. Do you carry out risks assessment for your business? Yes [ ] No [ ]

16. Tick (✓) or fill appropriately relating to risk taking.

Statements					
How often do you take risk?	Never	Hardly	Once	Often	Very often
How many risk assessment evaluations have you undertaken in the last five years?	0	1-2	3-5	6-8	Over 8

How many enterprise undertakings have you initiated for the last five years?	0	1-2	3-5	6-8	Over 8
On a scale of 1 (lowest) to 5 (highest) to what extent would consider the following risk-taking elements affect survival of your enterprise?	1	2	3	4	5
Taking a calculated move					
Careful analysis of the risk					
Careful decision making					
Taking a manageable risk					
How often do you use your personal savings to pursue business opportunity	Never	Rarely	Sometimes	Most of the times	Always

**Survival of Small and Medium Enterprises**

17. How long has your business been operating?

- 2 Years & below                          3- 5 Years                        
6 – 10 Years                                            10-15 Years                        
Above 15 Years

18. Are you planning to close the business in the near future?

- Yes                                            No

If yes, why do you plan to close?

- Declining profit margins                        
Focus on other businesses                        
Got committed to other things                        
Lack of capacity to continue doing the business                        
Other (specify) .....

19. Please fill the Table below;

What has been the employee turnover for the last five years?	0	1-2	3-5	5-7	8 & above
How many branches have you opened in the last five years?	0	1-2	3-5	5-7	8 & above
How many branches/product lines have you closed in the last five years	0	1-2	3-5	5-7	8 & above

20. Which of the following survival strategies have you embraced in the last five years?

Strategy	Yes	No
Diversification (Introducing new varieties of products and/or new operational areas)		
Merging and acquisition (collaborating and/or acquiring other enterprises)		
Investing back the profits to the business		
Giving much of the time to the business and strategizing for its growth		

21. How would you comment on the survival possibility of your firm in the coming future?

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

22. Tick (✓) or fill appropriately relating to survival.

Statements					
On a scale of 1 (lowest) to 5 (highest) to what extent would you consider the following competencies influence survival of your enterprise?	1	2	3	4	5
Innovation					
Leadership					
Networking					
Risk taking					

**END OF QUESTIONNAIRE**

**Thank you so much for taking your time to fill it. I really appreciate your support.**

### Appendix III: List of SMES in Nairobi County

1	Aberdares Water Ltd	Manufacturing
2	Atlantic Signs	Manufacturing
3	Bentel Enterprises	Manufacturing
4	Bricamis Enterprises	Manufacturing
5	Conade Business Solutions	Manufacturing
6	Deterpro Enterprises	Manufacturing
7	Distinct Images Ltd	Manufacturing
8	Eazy Auto Solutions	Manufacturing
9	Elitop Agencies	Manufacturing
10	Ephrata Brands	Manufacturing
11	Freshsprings Enterprises	Manufacturing
12	Fuses Limited	Manufacturing
13	Gambino Bottling Ltd	Manufacturing
14	Greid Technicals Enterprises	Manufacturing
15	Hoplaw Kenya	Manufacturing
16	International Leather Limited	Manufacturing
17	Jojiam Creations Ltd	Manufacturing
18	Kazuri Engineers & Contractors	Manufacturing
19	Kestrel Limited	Manufacturing
20	Letique Engineering System	Manufacturing
21	Lizmatt Digital Designers	Manufacturing
22	Lumber Solutions	Manufacturing
23	Mabrie Enterprises Limited	Manufacturing
24	Mambo Interiors Limited	Manufacturing
25	Masken Garments Limited	Manufacturing
26	Mavuno (K) Automasters Limited	Manufacturing
27	Mechatech Engineering Limited	Manufacturing
28	Metric East Africa Limited	Manufacturing
29	Mugitech Engineering & Fabricators	Manufacturing
30	Mutsog Co.Ltd	Manufacturing
31	Patience Furnitures	Manufacturing
32	Piine Chris Furniture Creations	Manufacturing
33	Pretty Ambi Enterprises	Manufacturing
34	Proteq Automation Limited	Manufacturing

35	Reftech Fabrication And Sons	Manufacturing
36	Rimuco Enterprises Limited	Manufacturing
37	Rosadani Enterprises	Manufacturing
38	Sanith Limited	Manufacturing
39	Shade Systems (E.A) Limited	Manufacturing
40	Simba-Mart	Manufacturing
41	Transformative Irrigation Solutions	Manufacturing
42	Ultramac Chemicals Limited	Manufacturing
43	United Paints	Manufacturing
44	Abbz Ventures	Retail/Wholesale
45	Aberdare Global Agencies Limited	Retail/Wholesale
46	Abi Holdings Limited	Retail/Wholesale
47	Abigail Company Limited	Retail/Wholesale
48	Abissi Investments	Retail/Wholesale
49	Acam's Limited	Retail/Wholesale
50	Accuracy Supplies Limited	Retail/Wholesale
51	Ace Logistics Limited	Retail/Wholesale
52	Achela Enterprises	Retail/Wholesale
53	Adams Hardware Stores	Retail/Wholesale
54	Adsolute Systems Limited	Retail/Wholesale
55	Adtek Company Limited	Retail/Wholesale
56	Advent Contractors Limited	Retail/Wholesale
57	Advent Stationers	Retail/Wholesale
58	Afri Majik Company Limited	Retail/Wholesale
59	Afriquad Enterprises	Retail/Wholesale
60	Afro-County Enterprises	Retail/Wholesale
61	Agoshe Enterprises	Retail/Wholesale
62	Ahali Enterprises	Retail/Wholesale
63	Akdar Investment Limited	Retail/Wholesale
64	Akim Consultants And General Supplies	Retail/Wholesale
65	Akita Kenya Enterprises	Retail/Wholesale
66	Akitech General Merchants	Retail/Wholesale
67	Akkad Systems Ltd	Retail/Wholesale
68	Akwany Holdings Ltd	Retail/Wholesale
69	Al Aziz Computer Systems	Retail/Wholesale
70	Albarkah Company Limited	Retail/Wholesale
71	Alexa Stationers And Printers	Retail/Wholesale

72	Alfa Works Enterprise Limited	Retail/Wholesale
73	Alfajiri Kenya Limited	Retail/Wholesale
74	Alfran Agencies	Retail/Wholesale
75	Alicatech Enterprises	Retail/Wholesale
76	Aliwa Enterprises	Retail/Wholesale
77	Alkahfi Investment Limited	Retail/Wholesale
78	Alladins Merchants Company	Retail/Wholesale
79	Al-Lamsa Auto Spares	Retail/Wholesale
80	Almah Suppliers	Retail/Wholesale
81	Alminia Suppliers	Retail/Wholesale
82	Almonds Afrique Limited	Retail/Wholesale
83	Alnami Enterprises	Retail/Wholesale
84	Alooka Enterprises	Retail/Wholesale
85	Alpha Surgicals Suppliers	Retail/Wholesale
86	Alroy Enterprises	Retail/Wholesale
87	Alumwa Enterprises	Retail/Wholesale
88	Amal General Suppliers	Retail/Wholesale
89	Amandasta Supplies	Retail/Wholesale
90	Amaru Construction And General Supplies	Retail/Wholesale
91	Ambrit Holdings Limited	Retail/Wholesale
92	Ami Hope Enterprises	Retail/Wholesale
93	Ammar Agencies	Retail/Wholesale
94	Amo-Tech Services Solutions	Retail/Wholesale
95	Ampath Technique Agencies	Retail/Wholesale
96	Amphikenyra Enterprises Limited	Retail/Wholesale
97	Anchor General Merchant	Retail/Wholesale
98	Andy Motis Enterprises	Retail/Wholesale
99	Aneb Agencies	Retail/Wholesale
100	Angel Winner Supplies	Retail/Wholesale
101	Ark Business Solution	Retail/Wholesale
102	Arpowtech Supplies	Retail/Wholesale
103	Askev Enterprises	Retail/Wholesale
104	Atir Investments	Retail/Wholesale
105	Avalange Trading	Retail/Wholesale
106	Ayen Global Limited	Retail/Wholesale
107	Azzure Investments	Retail/Wholesale
108	Babu Apex &Co	Retail/Wholesale

109	Bald And Golden Eagle Ventures Company Ltd	Retail/Wholesale
110	Base Line Enterprises	Retail/Wholesale
111	Bawa La Tumaini	Retail/Wholesale
112	Behills Enterprises	Retail/Wholesale
113	Beramy Enterprises	Retail/Wholesale
114	Berryline Business Solution	Retail/Wholesale
115	Bestbrands Investments Limited	Retail/Wholesale
116	Betocat Enterprises	Retail/Wholesale
117	Beton Brick Services	Retail/Wholesale
118	Biokem Supplies	Retail/Wholesale
119	Biomedical Essentials	Retail/Wholesale
120	Bizmark Enterprises	Retail/Wholesale
121	Blueline Suppliers	Retail/Wholesale
122	Boliver Enterprises	Retail/Wholesale
123	Bonyted Enterprise	Retail/Wholesale
124	Braca Enterprises	Retail/Wholesale
125	Brandroot Investments	Retail/Wholesale
126	Bulzacky Enterprise Limited	Retail/Wholesale
127	Cattspec Tractor Parts	Retail/Wholesale
128	Chelan Enterprise	Retail/Wholesale
129	Cheroma Communications	Retail/Wholesale
130	Chucha Enterprise	Retail/Wholesale
131	Clarion Pearl Limited	Retail/Wholesale
132	Clay Distributors & Exporters	Retail/Wholesale
133	Crystal Clear Mark	Retail/Wholesale
134	Cumber Investments	Retail/Wholesale
135	Dagona General Supplies	Retail/Wholesale
136	Danvy Supplies	Retail/Wholesale
137	Derby Agencies Limited	Retail/Wholesale
138	Dikon Limited	Retail/Wholesale
139	Donnah Enterprises	Retail/Wholesale
140	Eastever Agencies	Retail/Wholesale
141	Elercy Agencies	Retail/Wholesale
142	Elites Support & Supplies Services	Retail/Wholesale
143	Esre Agencies	Retail/Wholesale
144	Esse Limited	Retail/Wholesale
145	Faab Enterprises Ltd	Retail/Wholesale

146	Fahaz Limited	Retail/Wholesale
147	Failav General Supplies	Retail/Wholesale
148	First Choice Traders	Retail/Wholesale
149	Framis Enterprises Limited	Retail/Wholesale
150	Geomar Traders	Retail/Wholesale
151	Globex Africa Company Limited	Retail/Wholesale
152	Gralan Investments	Retail/Wholesale
153	Green Flow Enterprise	Retail/Wholesale
154	Green Flow Enterprise	Retail/Wholesale
155	Henlex General Supplies	Retail/Wholesale
156	Hillroy Merchants	Retail/Wholesale
157	Hom-Gate Limited	Retail/Wholesale
158	Infinite Services	Retail/Wholesale
159	Innovative Associates	Retail/Wholesale
160	Insight Group Limited	Retail/Wholesale
161	Israeli Enterprises & General Suppliers	Retail/Wholesale
162	Jash Enterprises	Retail/Wholesale
163	Jawalett Agencies	Retail/Wholesale
164	Joally Enterprises	Retail/Wholesale
165	Jomose Enterprises	Retail/Wholesale
166	Joweb Graphic Designers	Retail/Wholesale
167	Junca Cuisine Limited	Retail/Wholesale
168	Kamarai Traders	Retail/Wholesale
169	Kamito General	Retail/Wholesale
170	Kassunton Investment Agencies	Retail/Wholesale
171	Kewaan International Limited	Retail/Wholesale
172	Keynote Office Supplies	Retail/Wholesale
173	Kiburu Holding Comany Limited	Retail/Wholesale
174	Lavaro Enterprises	Retail/Wholesale
175	Legacy Digital Resource And Supply	Retail/Wholesale
176	Lenya Enterprises	Retail/Wholesale
177	Liwen General Supplies	Retail/Wholesale
178	Lymos Management Systems Consultants	Retail/Wholesale
179	Macataby Enterprise	Retail/Wholesale
180	Maela Group Limited	Retail/Wholesale
181	Marbon Solutions	Retail/Wholesale
182	Marsabit Energy And Petroleum (Mepco) Ltd	Retail/Wholesale

183	Matwa General Merchants & Caterer	Retail/Wholesale
184	Meggie Enterprises	Retail/Wholesale
185	Mkenya Ngecha Art Centre Limited	Retail/Wholesale
186	Moharry Supplies And Construction Company Limited	Retail/Wholesale
187	Mwamba Ventures	Retail/Wholesale
188	Naimak Enterprise	Retail/Wholesale
189	Nduwasa	Retail/Wholesale
190	Njash Supplies & Travel Company	Retail/Wholesale
191	Poveria Enterprise	Retail/Wholesale
192	Prime Waive Stationers Enterprises	Retail/Wholesale
193	Qwetu General Supplies	Retail/Wholesale
194	Rakimta Limited	Retail/Wholesale
195	Raymer	Retail/Wholesale
196	Redefine Marketing Limited	Retail/Wholesale
197	Relama Traders	Retail/Wholesale
198	Revida Enterprises	Retail/Wholesale
199	Robtech Enterprise	Retail/Wholesale
200	Ruzuku Enterprises	Retail/Wholesale
201	Sambu Kenya	Retail/Wholesale
202	Sanskrit Agencies	Retail/Wholesale
203	Satbbie General Merchants	Retail/Wholesale
204	Sedan Enterprises	Retail/Wholesale
205	Serenic Systems	Retail/Wholesale
206	Siajit Enterprises	Retail/Wholesale
207	Simans Enterprises	Retail/Wholesale
208	Skaga Kennels Limited	Retail/Wholesale
209	Sonix Suppliers	Retail/Wholesale
210	The Good Diet Enterprises	Retail/Wholesale
211	Tindi Supplies	Retail/Wholesale
212	Tonystar Enterprises	Retail/Wholesale
213	Treasure Collections	Retail/Wholesale
214	Triestan Investments Limited	Retail/Wholesale
215	Tripple M Plus General Supplies	Retail/Wholesale
216	Trueseals Enterprises	Retail/Wholesale
217	Umazitalu Enterprises	Retail/Wholesale
218	Wajibu Wangu Enterprises	Retail/Wholesale

219	Wakuh General Suppliers	Retail/Wholesale
220	Wanmu Enterprises	Retail/Wholesale
221	Xplo Enterprises	Retail/Wholesale
222	Adast Systems	Service
223	Adtech Solutions	Service
224	Africa Escapades Limited	Service
225	African Memories Safaris & Travel	Service
226	African Urban Race	Service
227	Alesha Brands Ltd	Service
228	Amco Link Kenya Ltd	Service
229	Amonex Enterprises Co.	Service
230	Atlantis Consulting	Service
231	Avidity Enterprises	Service
232	Beyond Borders Tours and Travel	Service
233	Biasharahub Limited	Service
234	Bienjay Enterprises	Service
235	Blackmerg Events Company Limited	Service
236	Brajoy Cleaning Services	Service
237	Brisk Marketing Limited	Service
238	Bushtrek Safaris Limited	Service
239	Butterfly Events Kenya	Service
240	Chikom Event Entreprise	Service
241	Chique Events Organizers Ltd	Service
242	Churchlane Gardens	Service
243	Clageor Enterprises	Service
244	Clean Sweep Enterprises	Service
245	Clear Sky Events	Service
246	Compaul Technologies	Service
247	Concept Signs Limited	Service
248	Creative Suppliers	Service
249	Cute Solutions	Service
250	Dagamas Enterprises	Service
251	Dalf Media Limited	Service
252	Destiny World Travel	Service
253	Dhobinet Services	Service
254	Diaz Design Consult Ltd	Service
255	Diligent Vocational College Limited	Service

256	Espouse Enterprise	Service
257	Espouse Enterprise	Service
258	Events Zone Enterprises	Service
259	Eversure Media Productions(Emps)	Service
260	Extreem Cleaning Services	Service
261	Eyeball Entertainment	Service
262	Fab Events	Service
263	Fachimo Florist	Service
264	Finstock Investment Management Limited	Service
265	Flagit Enterprises	Service
266	Frankia Foods	Service
267	Frankia Foods	Service
268	Galina Fresh Produce Limited	Service
269	Gallto Printers	Service
270	Gekam Enterprises	Service
271	Genex Cleaning Services	Service
272	Global Message Solutions	Service
273	Gramus Communications	Service
274	Greenray Bride Ventures	Service
275	Harians Agency	Service
276	Iris Africa Media Services	Service
277	Isaiah Domain Ventures	Service
278	Joplus Services and Renovators	Service
279	Jujayz Events and Decor	Service
280	Julz Investment	Service
281	Kayesh Smart Interior Designers	Service
282	Keltoms Restaurant Consultants and Trainers	Service
283	Kelwin Events Organisers	Service
284	Kevans Enterprises	Service
285	Koyiaki Tours & Travel	Service
286	Lead Time Agencies	Service
287	Leatex Fashions	Service
288	Life Guard Security Services	Service
289	Links World Communications	Service
290	Lyconette General Supplies	Service
291	Magical Solutions	Service
292	Makbiyr Delivery Services	Service

293	Montech Training Centre	Service
294	On Screen Productions Ltd.	Service
295	Powman Ltd	Service
296	Progen Technologies	Service
297	Riskfocus Insurance	Service
298	Roberts Electrical Enterprises	Service
299	Rosa Funtivities and Events	Service
300	Rosena Capital Services	Service
301	Samkan Arts and Frames	Service
302	Sayari Cooling Systems	Service
303	Scepter Tours and Safaris	Service
304	Shape Afrika Limited	Service
305	Shyneflow Enterprises Ltd	Service
306	Slabel Surgical and Laboratory	Service
307	Stretch Supplies	Service
308	Subena Virtual Assistant and Services	Service
309	The Future Technology Training Institute	Service
310	Top Cruise Limited	Service
311	Vermrid Pest Control Services	Service
312	Word of Mouth Marketing	Service

## Appendix IV: Distribution of SMES by County

County	Licenced			Unlicensed ( '000)
	Total ('000)	Micro (%)	Small (%)	
<b>Total</b>	<b>1,560.5</b>	<b>92.2</b>	<b>7.1</b>	<b>0.7</b>
Nairobi	268.1	83.8	14.8	1.4
Nyandarua	17.6	96.1	3.2	0.7
Nyeri	30.5	97.5	1.9	0.6
Kisinyaga	30.3	96.9	2.8	0.3
Muranga	14.2	97.1	2.6	0.4
Kiambu	92.4	91.4	7.9	0.7
Mombasa	41.9	90.6	8.7	0.6
Kwale	14.2	93.5	5.4	1.1
Kitui	29.9	96.6	2.8	0.7
Tana River	1.8	95.9	2.9	1.2
Lamu	9.2	97.0	2.9	0.2
Taita Taveta	22.5	94.2	4.4	1.4
Marsabit	2.2	94.5	5.1	0.3
Isiolo	2.6	94.0	5.3	0.8
Meru	95.1	97.5	2.3	0.2
Tharaka	8.4	96.3	3.7	-
Embu	21.0	95.1	4.6	0.3
Kitui	16.7	97.5	2.5	-
Machakos	39.1	91.8	7.8	0.4
Makueni	27.4	97.7	2.2	0.1
Garissa	3.9	96.8	2.8	0.4
Wajir	1.8	98.3	0.8	0.8
Mandera	23.7	96.7	3.3	-
Siaya	14.2	97.2	2.2	0.6
Kisumu	40.2	84.6	13.2	2.2
Migori	39.7	91.6	8.1	0.3
Homa Bay	48.5	93.6	5.9	0.5
Kitui	27.3	91.2	8.0	0.7
Nyamira	35.7	96.2	3.7	0.5
Turkana	7.3	93.1	6.4	0.4
West Pokot	3.1	97.5	2.5	0.2
Samburu	6.6	94.7	5.1	0.8
Trans-Nzoia	16.3	95.6	6.8	0.6
Baringo	16.9	96.3	6.2	0.6
Uasin Gishu	57.8	94.2	6.6	0.9
Elgeyo Marakwet	5.8	96.8	3.9	0.3
Nandi	12.9	95.0	4.7	0.9
Laikipia	13.8	95.9	3.6	0.5
Nakuru	138.2	92.6	6.6	0.8
Narok	21.6	92.1	7.0	0.9
Kajiado	46.1	92.4	6.7	0.9
Kericho	19.8	85.9	12.7	1.4
Bomet	14.0	95.9	4.1	-
Kakamega	53.0	92.6	6.8	1.0
Vihiga	11.3	96.0	3.9	0.1
Bungoma	17.2	92.8	6.9	0.3
Busia	28.0	97.6	1.5	0.9

Source: RoK, 2016