INFLUENCE OF INTELLECTUAL CAPITAL ON THE GROWTH OF SMALL AND MEDIUM ENTERPRISES IN KENYA

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Influence of Intellectual Capital on the Growth of Small and Medium Enterprises in Kenya

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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 ……..

John Karanja Ngugi.

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

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DEDICATION

To my son Mighel.

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LIST OF ABBREVIATIONS & ACCRONYMS

CDF Constituency Development Funds

IC Intelectual Capital

ILO International Labor Organization

KLGRP Kenya Local Government Reform Programme

LATF Local Authority Transfer Fund

RoK Republic of Kenya

SBP Single Business Permit

USA United States of Africa

YEDF Youth Enterprise Development Fund

ABSTRACT

Small and medium enterprises (SMEs) in Kenya represent a vital part of the economy, being the source of various economic contributions through the generation of income via exporting, providing new job opportunities, introducing innovations, stimulating competition, and engine for employment. Present economy is known as a knowledge-based economy where, knowledge, information and soft assets have more importance rather than the physical assets. The role and importance of SMEs in a knowledge-based economy has been highly appreciated and acknowledged. Moreover, in the present economy, SMEs are facing tremendous challenges and threats to survive in a competitive environment.

The study examined the influence of Intellectual Capital (IC) and growth of SMEs in Kenya. The study was guided by the following research objectives which include; finding out to what extent managerial skills, entrepreneurial skills; innovativeness, structural capital and customer capital influence the growth of SMEs in Kenya.

The study adopted descriptive survey and exploratory design. The study targeted 4560 SMEs in Nairobi County who are registered by Ministry of Industrialization and Ministry of Trade. Regression models was used to examine the influence of intellectual capital on growth of SMEs in Kenya. The study found that intellectual capital components (managerial skills, entrepreneurial skills, innovativeness, structural capital, and customer capital) have a great positive influence on the growth of SMEs. Managerial skills was

most significant with correlation coefficient of 78.9% elements of intellectual capital influencing growth of small and medium enterprises in Kenya.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

1.1.1General Overview

The study sought to explore the influence of intellectual capital on the growth of Small and Medium Enterprises (SMEs) in Kenya. The world is moving rapidly from a production-based economy to a knowledge-based economy (Huang, Yi-Chun &Wu 2010) and knowledge storage and application are the basis of economic growth and accumulated capital (Hsu& Fang, 2010). In the globalized and knowledge-based economy, SMEs need to develop, manage and monitor their soft assets or intellectual capital (IC) to enhance their growth and competitiveness. Notably, Japan and the USA are the most advanced in terms of the level to which SMEs adopt and use IC in the world (McCord, 2008). SMEs compared to larger firms, develop their relational capital with greater ease and use the available knowledge from their associations more readily in order to achieve higher performance (Desouza & Awazu, 2006). In the same manner, Wong & Aspinwall (2004) argue that SMEs' close proximity to their customers enables them to acquire knowledge in a more direct and faster flow compared to larger firms.

Wealth and growth in today's world economy are primarily driven by intellectual assets (Eberhart, Maxwell, & Sidique, 2004). The rise of new economy has highlighted the fact that the value created depends far less on their physical assets than on their intangible ones. These assets, often described as intellectual capital, are being recognized as the foundation of enterprise growth and competitiveness in the twenty-first century (Wiig, 1997; Bounfour & Edvinsson, 2005).

In the 21th century entrepreneurs are needed to facilitate the delivery of high value-added products and services as well as the competencies to build consumers' confidence and trust (Madrid, 2004). Managerial skills of the entrepreneur are considered the primary element of intellectual capital and the most important source of sustainable competitive advantage (Ashour & Bontis, 2004). Managerial skills are the source of innovation and strategic renewal (Cabrita & Bontis, 2008) and the major source of economic growth (Schultz, 1961). Increased training of employees may lead to higher productivity and enhanced creativity (Bontis, 2002). Managerial skills must be combined with relational and structural elements in the organization, to create value (Cabrita & Bontis, 2008).

IC is transformed to economic value through organizational action (Madrid, 2004). IC is related to the existence of competitive advantage because it enhances the environmental responsiveness of the firm. The ability to manage knowledge for improving environmental responsiveness is associated with organizational learning (Khalique, Shaari &Md. Isa,(2011). IC is everything that cannot be touched but can earn money for the firm. On the same line, Lev (2001) considers that intangible resources are those that can generate value in the future but have no physical or financial form. When reflecting on the value or benefit contributed by intellectual capital, many authors have chosen to determine it as the difference between the market value and the book value of the firm and some even use that difference to define the term (Daley 2001; Lev 2001; Nevado & Lopez 2002; 2003; Roos & Roos, 2007; Sveiby 2000).

1.1.2 Intellectual Capital

IC can be defined as intellectual resources that have been "formalized, captured and leveraged" to create assets of higher value (Prusak, 2008). According to (Bontis, 2000) IC can be classified as human capital, organizational capital and customer capital (Roos

& Roos, 2007). Managerial skills of owners which exemplify some of intellectual capital component, are one of the most important resources which companies rely on to improve their efficacy and efficiency, and hence gain a competitive advantage as argued by (Bontis, 2006).

Nielsen, Bukh, Mouritsen, Johansen and Gormsen (2006) argued that human capital, represented by the company's stock of, for example skilled employees, knowledge and management philosophy helps to improve the company's growth. Managerial skills refers to the accumulated value of investments in employee training, competence, and future. The term focuses on the value of what the individual can produce; human capital thus encompasses individual value in an economic sense (Becker, 2002). Human Capital can be further sub-classified as, the employees' competence, relationship ability and values.

Now the world is moving from a production-based economy to a knowledge-based economy (Drucker 1999; Huang & Wu 2010). In a knowledge-based economy, intellectual capital is a key driver for the success of the organizations. A Knowledge-based economy is transferring the ideas into products and services (Khalique, Shaari, Isa & Agee. 2011). The knowledge workers are prerequisite for the generation of new ideas, products and services to take competitive advantages. Drucker (1999) emphasized that in the 21st century; the knowledge worker productivity will be the biggest managerial challenges for the organizations to achieve the competitive advantages. Knowledge productivity is mainly based on the organizations ability. Knowledge workers are the main sources for the organizations ability. In the same way, Khalique, Shaari, Isa & Agee (2011) stated that in a knowledge-based economy intellectual capital is appeared as the critical factor for the success of organizations.

1.1.3 Firm growth

SMEs have been identified as one of the growth engines for various countries in the world, since SMEs make up over 90 per cent of all enterprises (Daley 2001; Lev 2001; Nevado & López 2002. Besides, Asia-Pacific Economic Cooperation (APEC) (2002) pointed out that SMEs are deemed as supporters to larger enterprises as well as an important foundation in expanding business activities and sustaining economic growth. SMEs even provide more jobs than large companies (APEC, 2002, NSDC, 2009). In sum, SMEs play a vital role in contributing to the economy and are likely to be increasingly important as the economy becomes more global.

Moreover, the contribution of SMEs in emergent economies had also been acknowledged to have played crucial role in the development of economy (Schlogl, 2004). There is no doubt that most of large size businesses start as a small business or at micro level. Many researchers agree that the SMEs are the backbone of economic development and growth.

Daley, (2001) argued that SMEs play a vital role in the development of a country in various ways, such as job creation for growing labor, providing desirable sustainability and innovation in the economy as a whole. Further, they argue that a significant numbers of people rely on the SMEs directly or indirectly for employment. Hall & Harvie (2003) argued that small and medium enterprises play an important role in creating jobs, social uplifting and building a flexible and adaptable base for an internationally competitive economy. In addition, they stipulated that the contribution of SMEs attract significant attention from policy makers in terms of industrial renewal, employment creation, export growth and productivity in the economy of the country. The contribution of SMEs in developed countries is also very important and it considered as the main source of employment and income generation (Shelley, 2004). Similarly, the SMEs also has critical

role in developing countries. In developing countries, a significant proportion of population is directly or indirectly dependent upon the SMEs. Therefore, the contribution of SMEs is highly recognized at the global level and this has alerted authorities around the world to give more focus on SMEs (Eeden, 2004).

1.1.4 Small and Medium Enterprises in Kenya

According to the Global Economic Report (World Economic Forum, 2010) Kenya ranks 98th Country out of 133 in global competitiveness in 2009-2010, a 5 point drop from the 2008-2009 ranking when it was 93rd. Though favorable in the African context, this rating is lower than that of key trading partners in Africa particularly Egypt and South Africa who rank 70th and 45th respectively, (GCI, 2010). The rating is also significantly low from the global perspective. According to World Bank Report an issue of concern for Kenya is low intellectual capital utilization by SMES owners among key comparator countries that impact negatively on Gross domestic Product (WB, 2010).

According to Kenya Economic Survey 2008 (Republic of Kenya, 2008), out of the total new jobs created, micro, small and medium enterprises (MSME)s created 426.9 (89.9%) thousand new jobs out of a total of 474.5 thousand 79.9% new jobs out of 543.3 thousand new jobs created in Kenya (Economic Survey, 2009). In the same year, the sector contributed KSh. 806,170 million of GDP which is 59 percent of total GDP (RoK, 2009). The Kenya Economic Survey 2010 (RoK, 2010) notes that this same sector generated 390.4 thousand new jobs which translated into 87.6 percent of the total jobs generated in 2009.

According to the Economic Survey (RoK, 2012), the SME sector contributed 79.8% of new jobs created in that year in Kenya. Consequently, the Kenya's development plans for the 1989-1993, 1994-1996 and 1997-2001 periods put special emphasis on the

contribution of small and medium size enterprises in the creation of employment in the country (RoK, 2009). Job creation in this sector went up by 5.1 percent in 2011. The increase was 445,900 indicating a higher growth in absolute terms compared to the increase of 437,300 registered in 2010. Analysis by province shows that Nairobi County recorded a 5.4 increase (RoK, 2012). According to the Sessional paper No.2 of 2005 (RoK, 2005), SMEs have high mortality rates with most of them not surviving to see beyond their third anniversaries.

1.1 Statement of the Problem

According to RoK (2012) SMEs contributed to seventy percent of the Gross Domestic Product (GDP) in 2011 in Kenya. In the United States, 99.7 per cent (Heneman, Tansky, and Camp, 2000), China, 99 per cent (Cunningham & Rowley, 2008), Europe, 99 per cent (Daley,2001), Holland, 95 per cent, Philippines, 95 per cent and Taiwan, 96.5 per cent (Lin, 1998) as well as Malaysia, 99.2 per cent (Man & Wafa, 2007; National SME Development Council (NSDC), 2009; Saleh &Ndubisi, 2006). According to World Bank, (2010) countries with over 90% growth of GDP achieved the rate from high utilization of intellectual capital by SME owners. Intellectual capital was identified as the key resource to the growth and survival of small and medium enterprises (WB, 2012).

High utilization of IC yields to growth of SMEs (WB, 2010). Bontis, (2000) show that low utilization leads to poor quality of products and technology. Huang and Wu, (2010) informs that IC is known to contribute to the growth of SMEs. IC has been identified as having capability to innovate, an important effect on the enterprise growth and gives to enterprises a better competitive advantage (Subramanian & Youndt, 2005; Wu, Chang, & Chen, 2008; Zerenler, Hasiloglu, and Mete, 2008).

The information on the background of the study reveals SMEs have very low survival rate. The collapse ratio of SMEs is alarming for developing countries as well as developed countries (Hodgetts & Kuratko 2004). Past studies indentified that a significant number of new SMEs fail within first five years of their business operation (Zimmerer, Searborough and Wilson 2008; Hodgents & Kuratko 2004). Sessional Paper No.2 of 2005 (RoK, 2005) and Ministry of Economic planning report on SMEs (RoK, 2007) show that three out of five SMEs fail within their first three years of operation in Kenya . Several studies from Australia, USA and England showed that approximately 80% to 90% of SMEs fail within 5-10 years (Zimmerer et al. 2008; Hodgetts and Kuratko 2004; Ahmad et al. 2011). SMEs in Kenya are evidence of a "missing middle": a shortage of middle - sized growth - oriented SMEs that could make an important contribution to development (Khalique, Shaari, Bin M Isa & Agee (2011). PWC (2012) show that SMEs employ employees with low education and less motivated that reveal that IC is wanting. This result to low economic development and loss of jobs (RoK, 2012). This implies that SMEs in Kenya are threatened for survival as a competitive enterprise.

Previous studies shows that IC is associated with a firm's innovative performance (Subramanian and Youndt, 2005; Wu, Chang, & Chen, 2008; Zerenler, Hasiloglu, and Mete, 2008). Sufficient IC enables a firm to create innovations (Hermans and Kauren, 2005). Management of a company should improve the IC in order to enhance innovation performance (Narvekar & Jain, 2006). Khalique, Shaari, Isa & Ageel (2011) stipulated that IC is a critical source for organizations to take competitive advantages. In the same way, Collis (1996) argued that inspite of the importance of IC most of the organizations do not grasp the fact on the importance and application of IC in their organizations.

Would lack of utilization of IC be the contributor of this high SME mortality rate in Kenya?

The literature available in chapter two shows that IC is a key ingredient of SMEs growth for production of innovation and creativity (Cabrita & Bontis, 2008). Most of the studies conducted on the role of IC have focused on the developed countries outside Africa; Kenyan SMEs contribute heavily to the GDP. Yet, there is little or no empirical evidence available to this study on role of IC on this important sector of the economy. It is therefore imperative to explore the influence of IC on the growth of SMEs in Kenya actual situation on how this important sector. This study embarked to fill this gap.

1.3 Research Objectives

1.3.1 General Objective

The study sought to investigate influence of intellectual capital on the growth of small and medium enterprises in Kenya.

1.3.2 Specific Objectives

The specific objectives of this study will be as follows:

1) To establish the influence of managerial skills as part of IC on the growth of SMEs in Kenya.
2) To find out the influence of innovativeness as an element of IC on the growth of SMEs in Kenya.
3) To assess the influence of Entrepreneurial skills as constituent of IC on the growth of SMEs in Kenya.
4) To establish the influence of structural capital as factor of IC on the growth of SMEs in Kenya.

5) To find out the influence of customer capital as module of IC on the growth of SMEs in Kenya.

1.4 Research Questions

The study sought to answer the following research questions:

i. To what extent does managerial skills as a component of IC influences the growth of SMEs in Kenya?
ii. What is the influence of innovativeness constituent of IC on the growth of SMEs in Kenya?
iii. How does Entrepreneurial skills an element of IC influence the growth of SMEs in Kenya?
iv. To what extent does structural capital as a module of IC influence the growth of SMEs in Kenya?
v. How does customer capital as a factor of IC influence the growth of SMEs in Kenya?

1.5 Justification of the study

Since SMEs dominate the private sector in most developing countries, a deeper understanding of how intellectual capital contributes to their growth is important. The growth of SMEs is below expectations. This study provides insight and a model that should enable SMEs to be more profitable and achieve sustainable goals and graduation to large enterprises by identifying and employing critical drivers of growth such as intellectual capital (Gathenya, 2012). In globalized economies, there has been increase in challenges such as intense competition and ever changing environmental conditions. Since SMEs are a major contributor to the GDP, they still lack a theoretical

understanding of utilization of intellectual capital for their competitive advantage (Gathenya, 2012). This study will therefore seek to explore the influence of intellectual capital on the growth of small and medium enterprises in Kenya.

1.6 Significance of the Study

Management : The study findings will be of great importance to the management since it will address the most critical factors pertaining to intellectual capital that influence growth of SMEs in Kenya, this will contribute to greater understanding on various challenges SMEs in Kenya go through in trying to attain sustainable growth.

The investors: The study will be important to investors who increasingly rely on services provided by SMEs.

Policy makers: The study findings will be of value is important to the government as it will bring into light various policies which are detrimental to the growth of SMEs in Kenya and address these factors according to the research recommendations.

Researchers and Scholars: The study will be of great importance to the researcher as he will gain both theoretical and practical experience on factors that hinder the growth of SMEs in Kenya.

1.7 Scope of the study

The study focused on the influence of intellectual capital on the growth of SMEs in Kenya. The study concentrated on the owners/entrepreneurs of the SMEs. The study was undertaken to research on activities within the scope of the issues addressed by the research objectives. The study reviewed the past activities and this was explained by the literature review of the study.

1.8 Limitations

The highly expected limitation in this study was that most SMEs consider some information as confidential and hence could not be willing to reveal most of it. The study however overcomed the limitation by having a letter of introduction from the university to assure the respondents that the information provided would be used for academic purpose and would thereby be treated with confidentiality.

1.9 Operational Definition of Terms

Intellectual Capital

Intellectual capital can be defined as innovativeness, possession of entrepreneurial skills, managerial skills, , structural capital and customer capital that have been “formalized, captured and leveraged” to create assets of higher value (Prusak, 2008).

Innovation

Lumpkin & Dess (1996) defined innovation dimension as “the tendency of a firm to engage in and support new ideas, novelty, experimentation and creative processes that may result in new products, services or technological processes.

Entrepreneurial skills

These are skills that enable an entrepreneur to turn their business idea into feasible business opportunities, to start and to grow a business enterprise. It includes creativity, innovation, risk taking, and the ability to take successful entrepreneurial role models and identification of market opportunities (Darroch & Clover 2005).

Managerial skills

Management skills consist of identifiable sets of actions that individuals perform and that lead to certain outcomes. Skills can be observed by others, unlike attributes that are purely mental or are embedded in personality. Whereas people with different styles and personalities may apply the skills differently, there are, nevertheless, a core set of observable attributes in effective skill performance that are common across a range of individual differences (Sullivan & Sheffrin, 2003).

Entrepreneurship

Entrepreneurship is the process of utilization of intellectual capital which involves creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risks, and receiving the resulting rewards of monetary and personal satisfaction and independence, (Robert & Michael,2009).

Structural capital

Bontis (2002) defined structural capital as the knowledge entrenched within the schedules of an organization that includes technological modules and architectural competencies, organization structure, culture and technology.

Customer capital

Customer capital (CC) is the relationship built up with the customers and is a significant part of structural capital (Bontis et al., 2000). Customer capital represents the potential an organization has due to ex-firm intangibles (Bontis, 1999).

Growth

The growth of the SMEs is viewed as an accumulation of assets and it is usually measured as a single phenomenon especially financial or employee growth (Matthews & Human, 2000). The study will measure growth in terms of sales and employees growth, return on assets and return on equity which is consistent with a study carried out by Gatenya, (2012).

The study will adopt horizontal growth which is consistent with to definition by Ax *et al*, (2001) in which horizontal perspective the divisions are divided into a chain of value, where the direction of the financial control is toward the customer. In this perspective the management is focused on processes through the company's organizational functions such as increasing the number of employee and market outreach.

Small and Medium Enterprises

There is no universally used definition of what constitutes small business and by what criteria it should be measured. For the purpose of this study, SMEs will be defined as per the Sessional Paper No.2 of 1992 and national baseline survey of 1999 which cluster Kenyan enterprises in the following categories: Micro Enterprises (1-9 employees), Small Enterprises (10-49 employees), Medium Enterprises (50-99 employees); Large Enterprises which includes 100 and above employees (RoK, 1992).

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews relevant literature on influence of intellectual capital on the growth of SMEs in Kenya. The chapter develops theoretical review, conceptual framework, empirical review that was used in the study in regard to each variable in the study. The review identified research gaps and areas that have been recommended for further research.

2.1 Theoretical Review

Theory

A Theory is a set of statements or principles devised to explain a group of facts or phenomena especially one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena (Popper, 1963). Theories are analytical tools for understanding, explaining, and making predictions about a given subject matter (Hawking, 1996). A formal theory is syntactic in nature and is only meaningful when given a semantic component by applying it to some content (i.e. facts and relationships of the actual historical world as it is unfolding (Zima, 2007). This study will be based on human capital theory, Schumpeterian theory, Psychological theory and Resource based theory which is discussed below.

Theoretical framework

Theoretical frameworks are explanations about the phenomenon. A theoretical framework provides the researcher the lens to view the world.

2.1.1 Human Capital Theory

Human Capital theory was proposed by Schultz (1961) and developed extensively by Becker (1964). Schultz (1961) in an article entitled "Investment in Human Capital" introduces his theory of Human Capital. Schultz argues that both knowledge and skill are a form of capital, and that this capital is a product of deliberate entreprise growth. The concept of human capital implies an investment in people through education and training. Schultz compares the acquisition of knowledge and skills to acquiring the means of production. The difference in earnings between people relates to the differences in access to education and health. Schultz argues that investment in education and training leads to an increase in human productivity, which in turn leads to a positive rate of return and hence of growth of businesses.

This theory emphasizes the value addition that people contribute to an organization. It regards people as assets and stresses that investments by organizations in people will generate worthwhile returns. The theory is associated with the resource based view of strategy developed by **B**arney 1991, the theory proposes that sustainable competitive advantage is attained when the firm as a human resource pool that cannot be imitated or substituted by its rival. For the employer investments in training and developing people is a means of attracting and retaining people. These returns are expected to be improvements in performance, productivity, flexibility and the capacity to innovate that should results from enlarging the skills base and increasing levels of knowledge and competence. Schuler (2000) suggests that the general message in persuasive skills, knowledge and competences are key factors in determining whether organizations and

firms will prosper. According to Hessels and Terjesen (2008), entrepreneurial human capital refers to an individual's knowledge, skills and experiences related to entrepreneurial activity. Entrepreneurial human capital is important to entrepreneurial development.

Previous empirical research have emphasized that human capital is one of the key factor in explaining enterprise growth. Brüderl *et al.* (1992) argues that greater entrepreneurial human capital enhances the productivity of the founder, which results in higher profits and, therefore, lower probability of early exit. Moreover highly educated entrepreneurs may also leverage their knowledge and the social contacts generated through the education system to acquire resources required to create their venture (Shane, 2003)

In addition to education, specific human capital attributes of entrepreneurs, such as capabilities that they can directly apply to the job in the firm, may be of special relevance in explaining enterprise growth (Colombo & Grilli, 2005). The specific human capital can be attained through precise trainings and previous experience. More focused business training can provide entrepreneur with a specific knowledge, compared to a formal education. This kind of specific human capital also includes knowledge of how to manage a firm, that is, entrepreneur-specific human capital (Collombo & Grilli, 2005). In particular, entrepreneurs with great industry-specific and entrepreneur-specific human capital are in an ideal position to seize neglected business opportunities and to take effective strategic decisions that are crucial for the success of the new firm (Collombo & Grilli, 2005). The human capital theory is important in guiding the decision maker in such a case. The above instigated the first research question.

Research Question One

To what extent does managerial skills as a component of IC influences the growth of SMEs in Kenya?

Entrepreneurship Theories

According to Kuratko and Hodgetts (2008), entrepreneurship theories are verifiable and logically coherent formulations of relationships, or underlying principles that either explains entrepreneurship, predict entrepreneurial activities, or provide normative guidance. An entrepreneurial theory of the firm can encompass all the major issues in current debate on the nature of the firm. The synthesizing skills of the entrepreneur are closely linked to the core competencies of the firm (Cabrita & Bontis, 2008). The appropriation of rents from entrepreneurial innovation raises important transaction cost issues, and the way these issues are resolved determines where the boundaries of the firm are drawn (Ashour & Bontis, 2004). The synthesis of information can be affected in different ways, and different types of synthesis lead to different forms of corporate evolution: organic growth, merger and acquisition, diversification, joint ventures, and so on.

Psychological Theories

One of the early psychological studies of entrepreneurship is that of David McClelland (McClelland, 1961). His objective is to identify and to analyze the psychological factors which produce entrepreneurial personalities. In particular, he focuses on the motivational variables affecting the supply of entrepreneurship: namely, the psychological drives underlying the individual's “need for achievement” (or n- Ach). Individuals with a high n Ach are depicted as preferring to be responsible for solving problems and for setting goals to be reached by their own efforts as well as having a strong desire to receive

feedback on their task accomplishment. McClelland hypothesizes that entrepreneurs will have high n Ach because they seem to possess the same characteristics. Thus, according to McClelland (1961), the supply of entrepreneurship depends on individuals' psychic needs for achievement rather than on the desire for money (but monetary rewards may still constitute a symbol of achievement for entrepreneurs).

Psychological theories such as those developed by McClelland pay attention to personal traits, motives and incentives of individuals and conclude that entrepreneurs have a strong need for achievement (McClelland & Winter, 1971). A similar focus is found in locus of control theories that conclude that an entrepreneur will probably have strong internal locus of control (Low & MacMillan 1988, Amit et. al. 1993). This means that an entrepreneur believes in his or her capabilities to commence and complete things and events through his or her own actions.

Brockhaus (1982) suggests that internal locus of control, even if it fails to distinguish entrepreneurs, may serve to distinguish the successful entrepreneur from the unsuccessful one. How do we measure success of entrepreneur? Success is a relative concept that can also be measured differently in different contexts. If success is measured in relation to the fulfillment of the goals and objectives of a particular entrepreneur, self-employed could also be classified as successful if their businesses generate continuously a satisfactory (in relation to their goals) level of living. On the other hand, high-growth ventures may be considered unsuccessful if they are not able to offer high enough ROI to their investors.

From his survey of empirical psychological studies of the entrepreneur (Ashour &Bontis, 2004) concludes that an individual's locus of control is a major factor determining his or her level of entrepreneurial alertness. In particular, internal LOC gives rise to heightened alertness which is necessary for incidental learning (i.e. the recognition of profit

opportunities once they are encountered). Spontaneous learning in turn ultimately results in entrepreneurial behavior. The above psychological theories of David McClelland may be applicable today in the Kenyan context where entrepreneur in pursuit of need to achieve will apply the intellectual capital for the growth of their enterprises. The above instigated the second research question.

Research Question

How does Entrepreneurial skills an element of IC influence the growth of SMEs in Kenya?

2.1.2 Schumpeterian Theory on Innovations

Schumpeter's (1934) theory of innovative profits emphasized the role of entrepreneurship (his term was entrepreneurial profits) and the seeking out of opportunities for novel value and generating activities which would expand (and transform) the circular flow of income through risk taking, pro activity by the enterprise leadership and innovation which aims at fostering identification of opportunities through intellectual capital of entrepreneur to maximize the potential profit and growth.

Schumpeterian growth theory goes beyond economist theory by distinguishing explicitly between physical and intellectual capital, and between saving, which makes physical capital grow, and innovation, which makes intellectual capital grow. It supposes that technological progress comes from innovations carried out by firms motivated by the pursuit of profit, and that it involves what Schumpeter called "creative destruction". That is, each innovation is aimed at creating some new process or product that gives its creator a competitive advantage over its business rivals; it does so by rendering obsolete some

previous innovation; and it is in turn destined to be rendered obsolete by future innovations (Schumpeter, 1934).

Endogenous growth theory challenges this neoclassical view by proposing channels through which the rate of technological progress, and hence the long-run rate of economic growth, can be influenced by economic factors. It starts from the observation that technological progress takes place through innovations, in the form of new products, processes and markets, many of which are the result of economic activities. For example, because firms learn from experience how to produce more efficiently, a higher pace of economic activity can raise the pace of process innovation by giving firms more production experience. Also, because many innovations result from R&D expenditures undertaken by profit-seeking firms, economic policies with respect to trade, competition, education, taxes and intellectual property can influence the rate of innovation by affecting the private costs and benefits of doing R&D (Dinopoulos & Thompson, 1998).

Schumpeter, as cited by Swedberg (2000), pointed out economic behavior is somewhat automatic in nature and more likely to be standardized, while entrepreneurship consists of doing new things in a new manner, innovation being an essential value. As economics focused on the external influences over organizations, he believed that change could occur from the inside, and then go through a form of business cycle to really generate economic change. He set up a new production function where the entrepreneur is seen as making new combinations of already existing materials and forces, in terms of innovation; such as the introduction of a new good, introduction of a new method of production, opening of a new market, conquest of a new source of production input, and a new organization of an industry (Casson, 2002). For Schumpeter, the entrepreneur is motivated by the desire for power and independence, the will to succeed, and the

satisfaction of getting things done (Swedberg, 2000). He conceptualized 'creative destruction' as a process of transformation that accompanies innovation where there is an incessant destruction of old ways of doing things substituted by creative new ways, which lead to constant innovation (Aghion & Howitt, 1992).

The entrepreneur's crucial significance to the dynamics of the capitalist system flows from the fact that it is the entrepreneur's innovations that disrupt the economy and move it forward from one equilibrium to the other. Rather than adapting to external pressures, the entrepreneur destroys the static equilibrium from within the system by inventing new products, processes or behaviors that contrast the routine systems and activities (Andersen, 2004; McDaniel, 2005; Drejer, 2004). The Schumpeterian Theory is important in guiding the entrepreneur in such a case. The above instigated both third and fifth research questions.

Research Question two

What is the influence of innovativeness constituent of IC on the growth of SMEs in Kenya?

Research Question Five

How does customer capital factor of IC influence the growth of SMEs in Kenya?

2.1.3 Resource Based Theory

Resource-based view has become one of the most influential and cited theories in the history of management theorizing. It aspires to explain the internal sources of a firm's sustained competitive advantage (Kraaijenbrink, Spender, & Groen, 2010). It was Penrose who established the foundations of the resourced-based view as a theory (Roos & Roos, 1997). Penrose first provides a logical explanation to the growth rate of the firm

by clarifying the causal relationships among firm resources, production capability and performance. Her concern is mainly on efficient and innovative use of resources. She claimed that bundles of productive resources controlled by firms could vary significantly by firm, that firms in this sense are fundamentally heterogeneous even if they are in the same industry (Barney & Clark, 2007). Wernerfelt (1984) took on a resource perspective to analyze antecedents of products and ultimately organizational performance and believed that "resources and products are two sides of the same coin" and firms diversify based on available resources and continue to accumulate through acquisition behaviors.

The knowledge based literature of the firm fosters and develops the resource based theory in that it considers knowledge to be the most complex of an organization's resources (Alavi & Leidner, 2001). According to resource-based theory, the intellectual capital (IC) is a main source to improve enterprise growth. Therefore, intellectual capital has been studied by many past researchers who investigate the influence of intellectual capital on business performance. However, most past researchers focused on the impact of individual intellectual capital on performance while neglecting the effects of specific elements of intellectual capital.

The currently dominant view of business strategy – resource-based theory or resource-based view (RBV) of firms – is based on the concept of economic rent and the view of the company as a collection of capabilities. This view of strategy has a coherence and integrative role that places it well ahead of other mechanisms of strategic decision making. Ganotakis & Love (2010) used the Resource Based Theory (RBT) to explain the importance of human capital to entrepreneurship. According to RBT, human capital is considered to be a source of competitive advantage for entrepreneurial firms. Ownership of firm-specific assets enables a company to develop a competitive advantage. This leads

to idiosyncratic endowments of proprietary resources (Barney, 1991; Peppard & Rylander, 2001). According to RBT, sustainable competitive advantage results from resources that are inimitable, not substitutable, tacit in nature, and synergistic (Barney, 1991). Therefore, managers need to be able to identify the key resources and drivers of performance and value in their organizations.

The RBT also states that a company's competitive advantage is derived from the company's ability to assemble and exploit an appropriate combination of resources. Such resources can be tangible or intangible, and represent the inputs into a firm's production process; such as capital, equipment, the skills of individual employees, patents, financing, and talented managers. As a company's effectiveness and capabilities increase, the set of available resources tends to become larger. Through continued use, these “capabilities”, defined as the capacity for a set of resources to interactively perform a stretch task or an activity, become stronger and more difficult for competitors to understand and imitate. (R&D expenditures) and can be used to augment future production possibilities. The above information triggered question four.

Research Question Four

To what extent does structural capital module of IC influence the growth of SMEs in Kenya?

2.2. Theories Of Entrepreneurship

According to Kuratko & Hodgetts (2008), entreprenurship theories are verifiable and logically coherent formulations of relationships, or underlying principles that either explain entrepreneurship, predict entrepreneurial activities, or provide normative guidance. Therefore, there are three basic ideas that explain the appearance of

entrepreneurial activity. The first focuses on the individual, in other words, entrepreneurial action is conceived as a human attribute, such as the willingness to face uncertainty (Kihlstrom & Laffont, 1979), accepting risks, the need for achievement (McClelland, 1961), which differentiate entrepreneurs from the rest of society. An entrepreneurial theory of the firm can encompass all the major issues in current debate on the nature of the firm. The synthesizing skills of the entrepreneur are closely linked to the core competencies of the firm.

One of the early psychological studies of entrepreneurship is that of David McClelland (McClelland, 1961). His objective is to identify and to analyze the psychological factors which produce entrepreneurial personalities. In particular, he focuses on the motivational variables affecting the supply of entrepreneurship: namely, the psychological drives underlying the individual's “need for achievement” (or n- Ach). Individuals with a high n Ach are depicted as preferring to be responsible for solving problems and for setting goals to be reached by their own efforts as well as having a strong desire to receive feedback on their task accomplishment. McClelland hypothesizes that entrepreneurs will have high n Ach because they seem to possess the same characteristics. Thus, according to McClelland (1961, 233-7), the supply of entrepreneurship depends on individuals' psychic needs for achievement rather than on the desire for money (but monetary rewards may still constitute a symbol of achievement for entrepreneurs).

Psychological theories such as those developed by McClelland pay attention to personal traits, motives and incentives of individuals and conclude that entrepreneurs have a strong need for achievement (McClelland & Winter, 1971). A similar focus is found in locus of control theories that conclude that an entrepreneur will probably have strong internal locus of control (Low & MacMillan 1988, 147, Amit et. al. 1993, 821). This

means that an entrepreneur believes in his or her capabilities to commence and complete things and events through his or her own actions.

Brockhaus (1982, 42-45) suggests that an internal locus of control, even if it fails to distinguish entrepreneurs, may serve to distinguish the successful entrepreneur from the unsuccessful one. How do we measure success of entrepreneur? Success is a relative concept that can also be measured differently in different contexts. If success is measured in relation to the fulfillment of the goals and objectives of a particular entrepreneur, self-employed could also be classified as successful if their businesses generate continuously a satisfactory (in relation to their goals) level of living. On the other hand, high-growth ventures may be considered unsuccessful if they are not able to offer high enough ROI to their investors.

From his survey of empirical psychological studies of the entrepreneur, Gilad concludes that an individual's locus of control is a major factor determining his or her level of entrepreneurial alertness. In particular, internal LOC gives rise to heightened alertness which is necessary for incidental learning (i.e. the recognition of profit opportunities once they are encountered). Spontaneous learning in turn ultimately results in entrepreneurial behavior. The above psychological theories of David McClelland may be applicable today in the Kenyan context where entrepreneur in pursuit of need to achieve will apply the intellectual capital for the growth of their enterprises.

Entrepreneurship is about the arrangement of resources into productive activities. Entrepreneurs are concerned mainly with identifying opportunities for bringing new products and services to market. Entrepreneurship is a vital factor in the economic

development process. In practice it faces the problem of adequate information regarding the potential opportunities in environment, demand and choice of potential customers, sources of necessary resources for new goods, market penetration strategies, existing and probable competitors, suppliers of raw materials, required technology and expert personnel. Various authors have developed various theories on entrepreneurship.

Sociological theories look at how the environment affects entrepreneurship. These studies began with Marx Weber work on the need for achievement (1961). He felt that the high economic and social growth in some societies fostered entrepreneurship. In his view, this growth was owing to a large segment of these societies having a high need for achievement. Entrepreneurs' interpretations of the macro-level external environment help us to understand the process of founding (Aldrich, 1989). A framework for research in this area has been based on the study of identifiable racial and ethnic groups in the USA and a number of foreign countries. Many of these studies are contradictory. The cultural climate in different areas may lead to higher rates of organizational founding. This may be viewed through the formation of individual value systems. A society with a social system that places a high value on entrepreneurship will have a high founding rate (Shapero & Sokol, 1982). In these societies, individuals in times of transition will be more likely to choose an entrepreneurial venture. Research on family (Borland, 1974), peers (Draheim *et al*., 1966), previous work experience (Cooper, 1971), ethnic groups, classmates, colleagues, and mentors (Shapero and Sokol, 1982), have shown them to have significant effects on the value systems of entrepreneurs.

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. According to Young (2009), conceptual framework is a diagrammatical representation that shows the relationship between dependent variable and independent variables. In the study, the conceptual framework will look at the relationship between intellectual capital and growth of SMEs in Kenya.

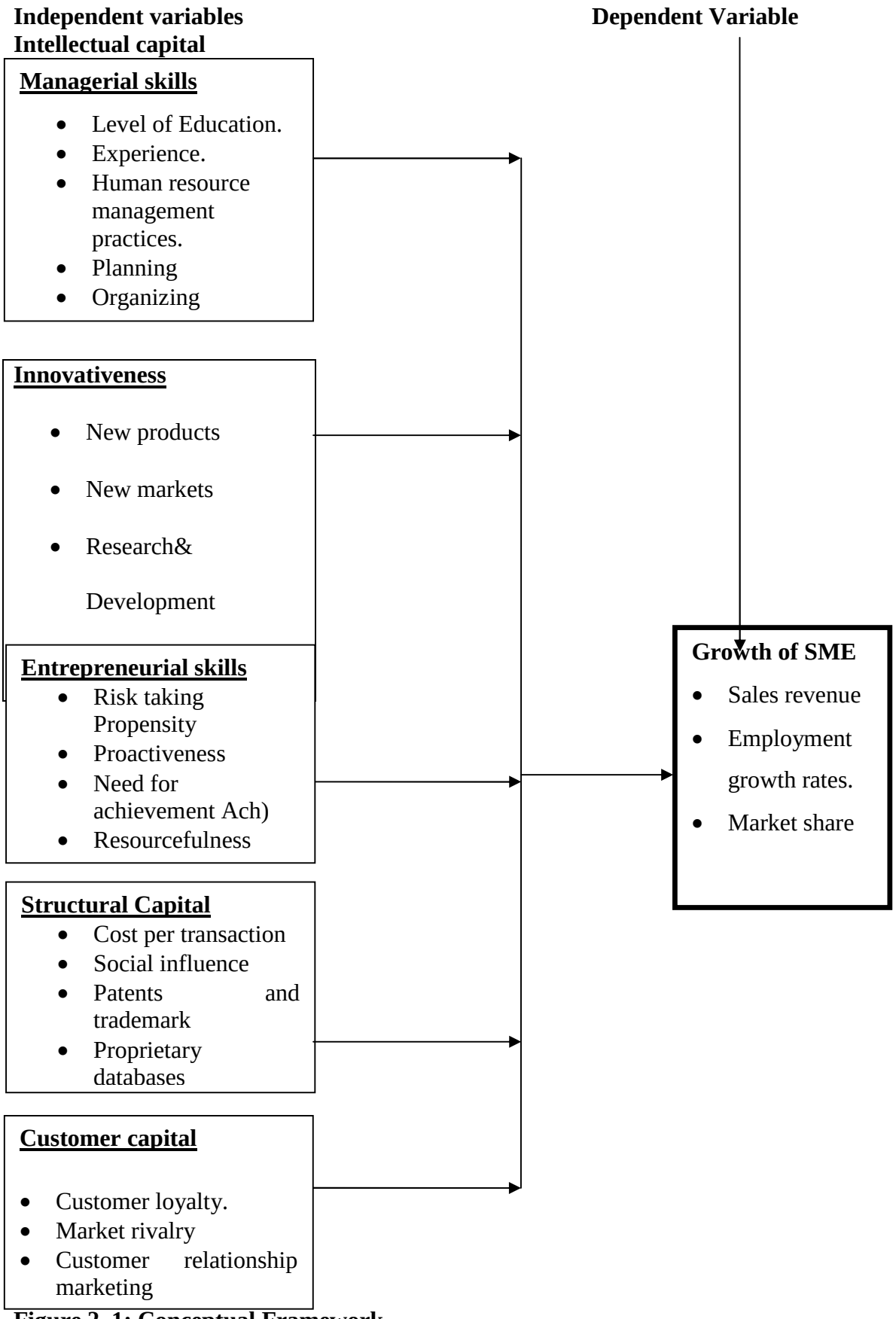


Figure 2. 1: Conceptual Framework

2.3.1 Intellectual Capital

The world is moving quickly from a production-based economy to a knowledge-based Economy (Hisrich & Drnovsek ,2002) and knowledge storage and application are the basis of economic growth and accumulated capital (Delmar ,2006). Intangible assets to be key factors for company success and important levers for value creation (Marr,(2008). One of the essential blocks of this assets Intellectual capital is becoming a crucial factor for a firm's long-term profit and performance that identify their core competence as invisible assets rather than visible assets (Hsu & Fang , 2010). Traditionally, those resources were physical, such as land and machines, or financial capital. More recently the concept of intellectual capital has been identified as a key resource and driver of organizational performance and value creation (Marr, Needly & Schiuma, 2004) .

A profound change has occurred in the way corporate value is generated over the past decade (Young, Tsai & Lee, 2007). Intellectual capital issues have undergone extraordinary development since the beginning of the 1990s (Viedma, 2007). So far, there doesn't exist a thoroughly accepted definition for intellectual capital (Yi-cheng & Chuan-Rui, 2009). The concept of IC will be used in reference to the resource-based view of the firm, as a resource that distinguishes one organization from another (Bornemann & Alwert, 2007).

Stewart (1997) defines intellectual capital as the intellectual material that has been formalized, captured, and leveraged to create wealth by producing a higher-valued asset (Bontis et al., 2010). Lu at el Defines IC as anything an enterprise can use to increase its competitive advantage in the market place, including knowledge, information, intellectual property rights and experience (Lu, Wang& Tung, 2010). Following the work of Edvinsson and Malone (1997), Sveiby(1997), Roos et al.(1997), Bontis (1999), Agendal

and Nilsson (2006) , Cabrita and Bontis (2008) among others, intellectual capital is defined as encompassing: human capital; structural capital; and. Relational capital.

Thus, intellectual capital can be defined as the relationships with customers and partners, innovation efforts, the infrastructure of the firm and the knowledge and skill of the members of the organization (Edvinsson & Malone 1999). Similarly, Sullivan (1999) indicates that intellectual capital is that knowledge that can be converted into future profits and comprises resources such as ideas, inventions, technologies, designs, processes and informatics programs. Stewart (1991) indicates that intellectual capital is everything that cannot be touched but can earn money for the firm. On the same line, Lev (2001) considers that intangible resources are those that can generate value in the future but have no physical or financial form.

The sunrise of a knowledge economy has increased the economic significance of intangible assets for the operational performance of organizations (McGrattan & Prescott, 2007). Initially, research efforts for establishing empirical relationships of intangibles with operational performance and subsequently with market performance focused on specific types of intangibles associated, primarily, with advertising and research and development (R&D) expenses (e.g. Hirschey & Weygandt, 1985; Chauvin & Hirschey, 1993; Sougiannis, 1994; Lev & Sougiannis, 1996; Eberhart *et al.* 2004). Progressively, the relationship of intangibles with operational performance started to be examined under the prism of human capital (Hanson, 2004; Pantzalis & Park, 2009) or organizational capital (Lev-Yadun, Ne'eman, & Shanas, 2009). However, most of these studies are silent on the exact relationship of intellectual capital and SMEs growth.

However, in a knowledge- based economy, knowledge and intellectual capital is re and cognized as the most important source of competitive advantage particularly for SMEs

(Daud & Yusoff (2010); Shaari, Khalique & Isa (2010); Khalique, Shaari, Isa & Ageel (2011). The knowledge-based economy is based on sharing of knowledge and intellectual capital. In this economy competitive advantage will go to those countries that having the capacity to deliver fast and innovation in their work and services (Wickramansinghe & Sharma, (2005). In a Knowledge-based economy intellectual capital appeared as the critical component for the success of organization. Ramezan, (2011) argued that organizational knowledge is the base of intellectual capital therefore, it is considered as the heart of organizational capabilities. Many researchers such as Bernhut, (2001); Luthy (1998); Marr, (2008); Steenkamp & Kashyap, (2010) argued that intellectual capital is one of three critical resources (the other two being physical and financial capital/assets) of organizations. In the same way, previous studies indicated that intellectual capital is positively and significantly associated with the organizational performance (Bontis, 1998; Bontis, Chua & Richardson 2000; Huang & Wu 2010). Ngah & Ibrahim, (2009) found that intellectual capital is the most important resource for the success and survival of SMEs.

2.3.2 Managerial Skills

Managerial skills are the source of innovation (Bontis et al., 2000; Webster, 2000) and improvement; it generates innovation by new products and services or improving business process (Stewart, 1997). Companies should recruit and manage employees who have higher degrees of intellectual capital in exchange for better innovation (Shipton et al., 2005). According to Lefebvre and Lefebvre (2002), innovation, knowledge management and intellectual capital are strongly correlated.

Human capital is considered the primary element of intellectual capital and the most important source of sustainable competitive advantage (Nonaka and Takeuchi, 1995;

Edvinsson and Malone 1997) human capital refers to human capital the source of innovation and strategic renewal (Cabrita & Bontis,2008) and the major source of economic growth (Schultz,1961). Increased training of employees may lead to higher productivity and enhanced creativity (Bontis, 2002). Human capital must be combined with relational and structural elements in the organization, to create value (Cabrita & Bontis, 2008). Our discussion on human capital includes competence, intellectual agility, innovation and creativity, skills, values and experiences and individual's education.

Sullivan & Sheffrin (2003) define human capital as the stock of competences, knowledge and personality attributes embodied in the ability to perform labor so as to produce economic value. Human capital represents the investment people make in themselves or by their organisations that enhance their economic productivity. According to Lefebvre and Lefebvre (2002) innovative and managerial capabilities of the management team are strongly associated enterprise growth. This has also been identified by Martin and Staines (2008) in his study managerial competencies in small firm. The study results showed that lack of managerial experience, skills and personal qualities as well as other factors such as adverse economic conditions, poorly thought out business plans and resource starvation are found as the main reasons why new firms fail. The distinguishing feature of high growth and low growth small firms is the education, training and experience of senior managers.

Lyles (2004), further evaluate managerial competencies as measured by the education of the founder, managerial experience, entrepreneurial experience, start-up experience and functional area experience versus new venture growth. The results show that relative profits tend to be high when an entrepreneur has more education and experience in the line of business. On the other hand, profitability tends to be low when the entrepreneur

has only start up and managerial experience, but lacks an educational background. The results confirm the importance of education to new venture success. Bosma et al. (2004) also find that the endowed level of talent of a small business founder is not the unique determinant of growth. Rather, investment in industry-specific and entrepreneurship specific human capital contributes significantly to the growth of small firm founders. The result shows that human capital appears to influence the entire set of growth measures (profitability, employment and survival). Former experience of the business founder in the industry in which he starts his business appears to improve all growth measures. Moreover, experience in activities relevant to business ownership increases the firm's survival time. Finally, high-educated people make more profits, while those who have experience as an employee create more employment. Other empirical studies, such as Smallbone and Welter (2001) and Hisrich & Drnovsek (2002), find that managerial competencies as measured by education, managerial experience, start-up experience and knowledge of the industry positively impact on the growth of new SMEs.

In a study carried out by Hisrich and Drnovsek (2002) on entrepreneurship and small Business research, findings indicated that lack of education and training has reduced management capacity in SMEs in South Africa. This is one of the reasons for the low level of entrepreneurial creation and the high failure rate of new ventures. Lack of skills, experience and knowledge are also key limiting factors for entrepreneurship in South Africa. SMEs owners in South Africa often lack the expertise, experience and training related to the business they establish. Because of the managerial deficiency, there is the prevalence of necessity (survivalist) compared to opportunity entrepreneurial activity in South Africa.

Leitao and Franco (2008) point out that empirical research has obtained a range of results regarding this relationship between human capital and growth, but those results are not consensual. Empirical literature such as Shiu (2006), Appuhami (2007) and Chan (2009) find insignificant relationship between human capital and firm growth. In view of the evidence provided in the review of empirical literature, this study hypothesizes that owners' human capital is positively associated with the growth of SMEs.

2.3.3 Entrepreneurial Skills

These are skills that enable an entrepreneur to turn their business idea into feasible business opportunities, to start and to grow a business enterprise. It includes creativity, innovation, risk taking, and the ability to take successful entrepreneurial role models and identification of market opportunities (Darroch & Clover 2005).

Entrepreneurship in the 21st century is a fundamental characteristic of knowledge-based economic activity. This is because the potential value of new ideas and knowledge are inherently uncertain. The existing firms will not pursue many new ideas because they have different agendas or simply do not recognize their potential value. If a new firm is not started to pursue such ideas they will simply remain untapped. Thus, the industrial structure of a knowledge-based entrepreneurial economy is very different from one based on the mass-production of relatively known products using established processes. Entrepreneurial skills construct a complex system (Mikko & Jarkko (2008)). The connecting skills are defined both in general (Krueger (2005), Schiebel (2002) and for most economic sectors (Wolf, Schoorlemmer (2007). Up to the present the measurement and comparison of these skills is not solved. The positive connection between entrepreneurial skills and economic growth is only documented generally (Carree &Thurik (2005).

Entrepreneurship Education is about developing people with increased probability to succeed when creating and developing a business (Svendsen, 2006). Entrepreneurship education seeks to provide business owners with the knowledge, skills and motivation to encourage entrepreneurial success in a variety of settings.The success of entrepreneurial activities in a country is to an important extent related to quality

2.3.4 Innovativeness

Innovation is the process of creating a commercial product from an invention (Wolf, Schoorlemmer (2007). Innovation can deliver four types of benefits besides cash: knowledge, brand, ecosystem and culture (Afuah, 2003). But the most important reason for innovation in an organization is to make profit. A firm makes profit by offering products or services at a lower cost than its competitors or by offering differentiated products at premium prices that more than compensate for the extra cost of differentiation (Afuah, 2003).

Lehtimaki (1991) attributed the emergence of new ideas for product innovations in SMEs to entrepreneur. SMEs very actively explored new product ideas and the most frequent way of achieving this included contacts with customers. Chanaron (1998) identified demand placed on business by customers/clients, close working relationships with a key customer and close analysis of competitor products are the major drivers of innovation in SMEs covered in three different countries: UK, France, and Portugal.

Vonortas & Xue (1997), while studying the process innovations of small firms in the USA, observed that economic incentives, internal resources, and technical and organizational competencies that a firm has developed or accumulated over time and a firm's linkage to external sources of expertise for learning about new technological

development were the major forces that influenced these firms in adopting a process innovation. Danneels & Kleinschmidt (2001) in the context of new product development argued that it consists of bringing together two main components: markets and technology. According to them, product innovation requires the firm to have competences relating to technology (enabling the firm to make the product) and relating to customers (enabling the firm to serve certain customers).

Schumpeter (1934) was the first writer who used innovation in explaining entrepreneurship. Lumpkin and Dess (1996, p. 142) defined innovation dimension as "the tendency of a firm to engage in and support new ideas, novelty, experimentation and creative processes that may result in new products, services or technological processes. Beside Covin & Slevin proposed innovation as "the extensiveness and frequency of product innovation and the related tendency toward technological leadership (1991,p.10).

Miller and Friesen (1978) used risk taking as "the degree to which managers are willing to make large and risky resource commitments– i.e., those which have a reasonable chance of costly failures (Dess & Lumpkin, 1996). It largely reflects the organization's willingness to break away from the tried-and true and venture into unknown (Wiklund, 2003). Thus in organizational risk taking behavior, the management will take risk with regard to investment decisions and strategic actions in uncertainty conditions (Covin and Slevin, 1991).

According to Varis & Littunen (2010), innovations are improving the success and performance of the companies. Furthermore, it has been suggested that innovation is essential in order to generate long term stability, growth share holder returns, sustainable performance and remain at the leading edge of the organizations' industry (Cottam, Ensor, & Band, 2001). Innovation is referred to very different kinds of "newness"

regarding products, production methods and technologies, markets and organizational configurations (Vais & Littunen, 2010). Porter (1990) defined innovation as a new way of doing things that is commercialized, the newness being either technological or market related (Narvekar & Jain, 2006).

Internally, firms should be supported by their strategy, structure, system and people (Afuah, 2003). Competences and assets are the function of technological and market knowledge as innovation is the use of new technological and market knowledge to offer a new product or service that customers will want (Afuah, 2003). Motwani et al. (1999) found that the structure of an organization is important to innovation as it supports innovation in SMEs, for both the product and process of innovation.

2.3.5 Intellectual Capital and Innovation

Human capital's "output" is innovation, which is structural capital's efficiency (Stewart 2000). An innovative organization requires an organizational culture that constantly guides its members to strive for innovation and fosters a climate that is conducive to creativity (Ahmed, 1998). It is the task of organizational leaders to provide the culture and climate that nurtures and acknowledges innovation at every level (Ahmed, 1998). This is particularly important for SMEs as owners should lead, encourage, and nurture an innovative culture (Avlonitis & Salavou, 2007). Few studies examine the embeddedness of innovation in SMEs (Oakey 1993, Shaw 1998, Panniccia 1998, Freel 2000, Jensen and Greeve 2002 in Scozzi and Garavelli, 2005), which show that SMEs are capable of engaging in innovation in developing their competitive edge. According to Caputo et al. (2002) the relationship of SMEs and innovation is not an easy one as SMEs have a number of unique features, such as, scarce resources, low market influence and informal communications, which differentiate them from large firms (Hadjimanolis, 2000). The

innovation process traditionally involves huge financial resources and is quite risky (Caputo et al., 2002). Moreover, innovation allowing diversification strategies may be better pursued by large organizations rather than SMEs.

Traditionally, SMEs demonstrated poor ability in innovating products and processes (Caputo et al. 2002). However, based on several cases in a study by the European Union it shows that SMEs appear to be favoured in innovation (Caputo et al, 2002). The innovation of products, processes or services of varying type and degree can be appropriate for different SMEs in different industry sectors or product life cycle stages (Susman, et al.2006), and product innovation is more important for small firms (Damanpour, 1996). SMEs have at some point undertaken some form of incremental innovative initiatives, often supported by local authority grants (Humphreys et al, 2005). Therefore, there is a need for SMEs to increasingly innovate to survive and compete in global and niche markets. Many SMEs focus on project and product development aspects of innovation (Humphreys et al, 2005).

There is a need for studies on how innovation is implemented within the constraints and characteristics of SMEs (Humphreys et al., 2005). 2.7 Innovation and Organizational Performance The innovation type has a significant impact on business performance, especially incremental innovation (Oke et al, 2004). Deshpande et al. (1993) found that innovativeness is an important determinant of organizational performance, even after culture had been controlled.

Previous studies on innovation and organizational relationship indicated mixed results, some positive, some negative and some showed no relationship at all (Capon et al. 10990, Atuahene-Gima, 2001). Damanpour (1991, 1996) argued that the association between innovation and firm performance depends on the performance measurement and the

characteristics of a given organization. Furthermore, different types or different combinations of innovation may also result in divergent organizational performance (Lee & Chen, 2007). The relationship between innovation and organizational performance has been found in many researches (Hurley & Hult, 1998; Kohli & Jaworski, 1993; Keskin, 2006; Atuahene-Gima, 2001; Damanpour; 1991, 1996). Innovation has demonstrated a strong and influential relationship with SMEs performance (Wolff & Pett, 2006; Montequin, 2006).

2.8 Intellectual Capital in SMEs

Man et al (2002) point out that the key factors influencing the competitiveness of SMEs depend on their internal factors, external environment and the influence of the entrepreneur. The internal factors are financial; human and technological resources; organizational structures and systems; productivity; innovation; quality; image and reputation; culture; product/service variety and flexibility; and customer service while external environmentrefers to competitors. According to Desouza and Awazu (2006) the organizational capital in SMEs is primarily developed and maintained by means of their employees. Even though there is a lack of knowledge repositories maintained by the owner, knowledge is created, shared, transferred and applied through the organization's members without the intervention of the automated mechanisms usually found in larger firms. From the perspective of relational capital, SMEs acquire more knowledge from their customers because of the close proximity (Wong & Aspinwall, 2004) and are able to develop their relational capital with reater ease, as well as using the available knowledge from their associations or membership more readily in order to achieve higher performance (Desouza & Awazu, 2006). The entrepreneur's demographic, psychological and behavioural characteristics, as well as his or her managerial skills and technical

know-how, are often cited as the most influential factors related to the performance of SMEs (Man, Lau et al. 2002).

2.3.6 Structural Capital and Enterprise Growth

According to Walsh & Ungson (1991) in their study on the effect of knowledge management practices on firm performance defined Structural capital as the supportive infrastructure that enables human capital to function. This includes hardware, software, databases, organizational structure, process manuals, strategies, routines and anything that is valuable to the organization)_ The structural capital in SMEs is primarily developed and maintained by its employees (Desouza & Awazu, 2006). Nunes et al. (2006) stated that enterprises are faced with a lack of knowledge repositories due to their limited budget. Knowledge is created, shared, transferred and applied through the organization's members without the intervention of automated mechanisms that are usually found in large organizations. Moreover, employees develop common knowledge in order to organize their work and commonly, they engage in two-way communication since their number is small to facilitate enterprise growth.

Wong & Aspinwall (2004) in their study on characterizing knowledge management in the small business environment concluded that structural capital is the set of intangibles of explicit as implicit nature that structure and develop the organizational activity of the firm effective and efficiently to facilitate small enterprise growth. Edvinsson & Malone (2007) indicated that structural capital include rules, norms, routines and organizational culture, that help to form a way of making the aforementioned, and takes to the development of organizational competence. It is the support for the development of other types of capital, without which these cannot unfold.

Bontis (2001) carried out a study on Intellectual capital disclosures in Canadian corporations; he argues that the relationship between structural capital and human capital can be located within social network. The social characteristics interconnect each individual in an organization and thus enhancing enterprise growth. He states that these outlets are the owners of the tacit knowledge within their social networks. Among different components of IC, structural capital is the most difficult as it is related to other capital in terms of definition. He further concluded that structural capital includes technological factors and technical competencies. Hsu (2006) in his study concluded that the main focus of structural capital is to embrace a sound foundation, with views from organizational capital, process capital, even innovation capital and the KM model. This study hypothesizes that structural capital is positively associated with the growth of SMEs.

The importance and contribution of SMEs to achieving macroeconomic goals of nations, especially in developing nations, has attracted the attention of scholars in the entrepreneurship discipline in recent years (Shelley, 2004). A complex global environment in which SMEs survive, grow and thrive is, therefore, considered an important objective of policy makers in both developed and emerging economies around the world. SMEs are generally known for their labour intensive activities and also for use of local resources. However, these factors were also responsible for certain factors that amounted to lack of competitiveness in the light of globalization (Eeden, 2004). Support for SMEs is a common theme because it is recognizes that SMEs contribute to the national and international economic growth.

According to the 1999 MSE Baseline Survey, the sector employed 2.4 million persons. This increased to 5.1 million persons in 2002 as per the 2003 Economic Survey and

translates to 675,000 jobs per year. The level of employment within MSEs in 2002 accounted for over 74.2% of the total number of persons engaged in the country. This is evidence that, with proper development strategies, the sector is capable of providing and surpassing the Government's target of creating 500,000 jobs per year.

Small enterprise baseline survey (Central Bureau of Statistics (CBS) et al, 2004) also indicates that there is high rate of failure and stagnation among many start-up businesses. The survey reveals that only 38% of the businesses are expanding while 58% have not added workers. According to the survey, more enterprises are most likely to close in their first three years of operation. This is confirmed by the recent study conducted by the Institute of Development Studies (IDS, 2003) University of Nairobi. Using a sample of businesses operating in central Kenya, the study revealed that 57% of the small businesses are in stagnation with only 33% showing some level of growth. A study conducted in 1997 by the South African Development Community (SADC) reveal similar trend. This state of affairs has taken place despite the growth in the number of small enterprises as indicated in the Small Business Skill Assessment (2002).

2.3.7 Customer capital and Enterprise Growth

According to Roos et al, (2007) in their study on measuring company's intellectual growth, they stated that customer capital is the relationship between firms and their customers. The study concluded that knowledge of marketing channels and customer relationships is the main theme of customer capital. Frustrated managers often do not recognize that they can tap into a wealth of knowledge from their own clients. Kohli &Jaworski (2000) indicates that understanding what customers want in a product or a service better than anyone else is what makes someone a business leader as opposed to a follower.

According to Crossan et al., (2006) the essence of customer capital is knowledge embedded in relationships external to the firm. Its scope lies external to the firm and external to the human capital nodes. It can be measured (although it is difficult) as a function of longevity (i.e. customer capital becomes more valuable as time goes on). Owing to its external nature, knowledge embedded in customer capital is the most difficult to codify. One manifestation of customer capital that can be leveraged from customers is often referred to as “market orientation”. Hsiu-Yueh (2006) indicate that market orientation involves market intelligence pertaining to current and future needs of customers, dissemination of intelligence horizontally and vertically within the organization, and organization wide action or responsiveness to market intelligence. Wong & Aspinwall (2004) added that youth enterprise’s close proximity to their customers have enabled them to acquire knowledge via a more direct and faster flow than large organizations.

Kamath, (2008) states that customer relationship capital is a value-added capital, Edvinsson and Malone (1997) pointed out that the business relationship with the outside world more closely, the more blurred boundaries, internal and external difference gradually disappears, but also to the management of virtualization stressed the relationship between contacts. Stewart (1997) put forward some guiding principles, including corporate alliances with customers should be to maintain long-term customer loyalty, Johnson (1999) that the relationship between social capital should include stakeholders, customer relations, supplier relations, the company and these external institutions interaction between the long-term profitability for the company and the key to business success. Mei pure definition of customer relationship capital is defined as "organized foreign relations establishment, maintenance and development, including customers, suppliers and strategic partners." In the measure of skills, Bannany (2008),

Kamath (2008, 2006) recommended the use of value-added customer relations intellectual capital as a measure of capital; after all, customer loyalty, customer satisfaction and contribution are of value-added enterprises.

According to Haksever (1996), small enterprise appear to be in an advantageous position in terms of acquiring customers' knowledge, since managers and employees of enterprise's tend to have close and direct contact with customers and some may know them socially and personally. A stronger knowledge channel could be developed to improve their ability to capture such customer knowledge and consequently enhance the growth of the enterprise. In view of the evidence provided in the review of empirical literature, this study hypothesizes that relational capital is positively associated with the growth of youth enterprises.

Achieving competitive advantage requires focused attention on consumer trends and the market. This has become increasingly complex since the globalization of business environments, which has compelled organizations to compete and co-operate internationally (Charles. Egbu, 2001b).

Customer capital encompasses the external intangible assets of an organization. External forces play a part in determining the market position and strength of an organization. Customers are the principal determinants of this position (Smith & Saint-Onge, 1996). This component has been termed as relational capital to characterize the particular relationships an organization has with the external environment, e.g. Kaplan and Norton (1996) argue that there is a casual relationship between employee satisfaction and customer satisfaction, leading to customer royalty and better financial performance.

Narver and Slater (1990) suggested a link between organizational learning and business performance and more recently Sabater et al (2002) have provided some empirical

evidence to support this link. Day (2000) also recognizes the importance of customers because of their direct relationship with financial performance and long term survival and Bueno (1998) suggests that the three key components of relational capital are: Quality, market reputation and customer satisfaction.

According to transaction costs economics Standifird (2001), it seems convincing that a positive reputation contributes to the reduction of transaction costs related to the exchanges in which the firm and its customers take part. Corporate reputation transfers different kinds of information, reducing customer efforts to gather information, making easier the willing to contract, and acting as some kind of guarantee for corporate products or services subject of the transaction. The resource-based view, from its origins, has proposed the treatment of corporate reputation as a strategic asset. In this sense, Hall (1993) argues that managers assess product reputation as one of the most valuable assets.

Other works of Standifird, (2001) show that corporate reputation allows a surge of cross-selling, that it increases the number of loyal customers, or that it makes customers more willing to pay an over-price in acquiring products or services from top corporate reputation firms. If both theoretical frameworks are linked, this over-price will be the translation of the transaction cost reduction produced by the reputation to be involved in the transaction.

A little time after, contributions to the intellectual capital field show a greater interest in the relations that the organization maintains further the customer's line. This way, Stewart (1997) includes alliances and partnerships, and Brooking (1996) identifies market assets, taking into account product branding, corporate image, product portfolio, business partnerships, and alliances. Nevertheless, both proposals keep on with the analysis of the customers as a critical agent for the firm Roberts and Dowling (2002)

point out the value of reputation in differentiating products since reputation gives latent quality of products and customers would pay an overprice for these products.

2.3.8 SMEs Growth

Lumpkin and Dess (1996) point out that it is essential to recognize the multidimensional nature of the performance construct. Thus, research that only considers a single dimension or a narrow range of the performance construct (for example, multiple indicators of profitability) may result in misleading descriptive and normative theory building. Research should include multiple performance measures. Such measures could include traditional accounting measures such as sales growth, market share, and profitability. In addition, factors such as overall satisfaction and non-financial goals of the owners are also very important in evaluating performance, especially among privately held firms. This is consistent with the view of Zahra (1993) that both financial and non-financial measures should be used to assess organisational performance.

Hudson et al. (2001), Phillips et al. (2003) and Chong (2008) assert that SMEs may be differentiated from larger companies by a number of key characteristics such as personalised management, with little devolution of authority, severe resource limitations in terms of management, manpower and finance, reliance on a small number of customers, and operating in limited markets; flat, flexible structures and reactive, firefighting mentality. The significant differences in the structure and philosophy of SMEs indicate a need to assess the performance of SMEs differently from large firms. The resource limitations associated with SMEs indicate that the dimensions of quality and time are critical to ensure that waste levels are kept low, and that a high level of productivity performance is attained.

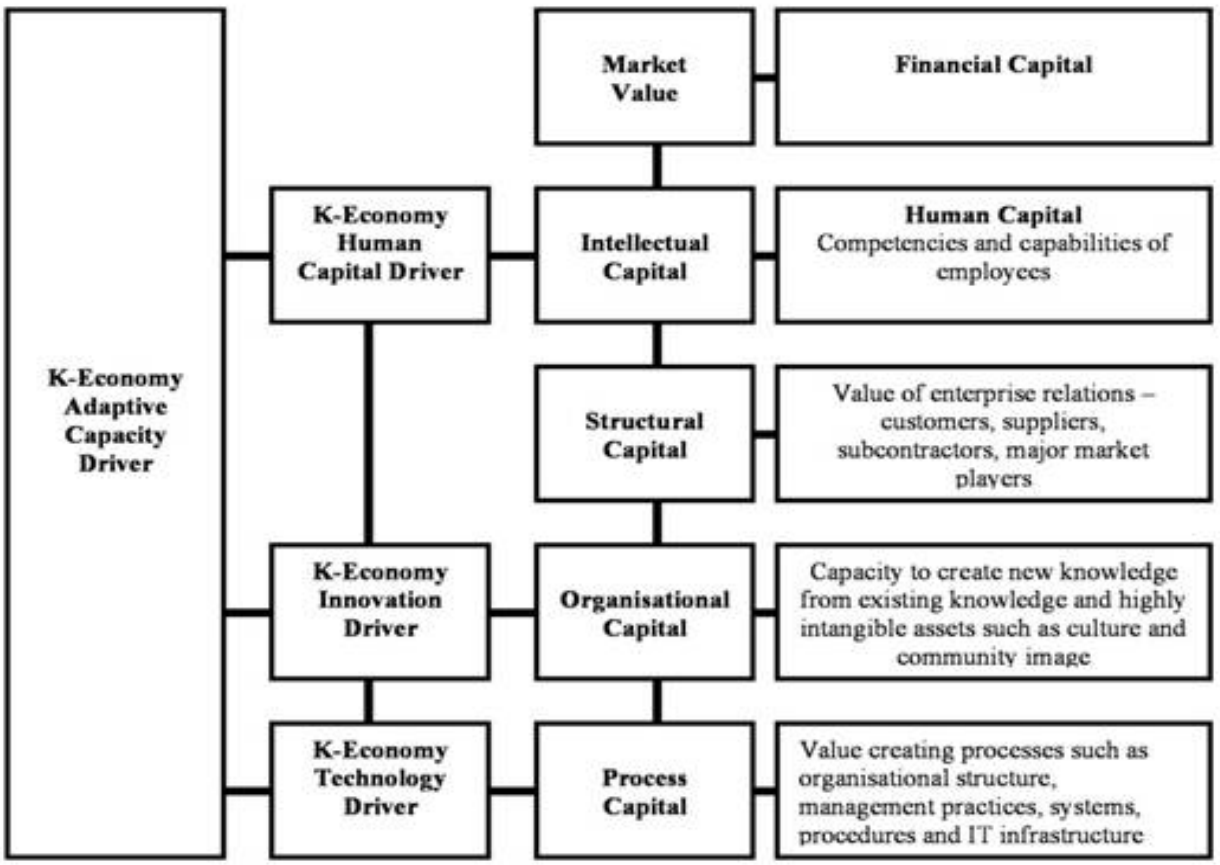
Similarly, the reliance on a small number of customers suggests that to remain competitive, SMEs must ensure that customer satisfaction remains high and that they can be flexible enough to respond rapidly to changes in the market.

Chong (2008) declares that there are four main approaches to measure the performance of organisations. These are the goal approach, sys- tem resource approach, stakeholder approach and competitive value approach. The goal approach measures the extent an organization attains its goals while the system resource approach assesses the ability of an organization obtaining its resources. For the stakeholder approach and the competitive value approach, these evaluate performance of an organization based on its ability to meet the needs and expectations of the external stakeholders including the customers, suppliers, competitors. Among these, goal approach is most commonly used method due to its simplicity, understandability and internally focused. Information is easily accessible by the owners managers for the evaluation process. The goal approach is a better fit for the SMEs where targets are being set internally based on the owners- managers' interests and capability to achieve.

According to Richard et al. (2008), the goal approach directs the owners-managers to focus their attentions on the financial (objective) and non-financial measures (subjective). Financial measures include profits, revenues, returns on investment (ROI), returns on sales and returns on equity, sales growth, and profitability growth. Non-financial measures include overall performance of the firm relative to competitors, employment of additional employees, customer satisfaction, employee satisfaction, customer loyalty, brand awareness and owner's satisfaction with way the business is progressing. Atieno (2009) notes that financial measures are objective, simple and easy to understand and compute. However, financial measures suffer from being historical and are not readily available in the public domain especially for SMEs. In addition,profits are subject to

manipulations and interpretations. The solution to the limitations of financial measures is to apply the non-financial measures, though subjective in nature, as supplements to the financial measures. The combinations of these two measures help the owners-managers to gain a wider perspective on measuring and comparing their performance. Meilan (2010) agrees that this is a holistic approach and Balanced Scorecard approach to performance evaluation for SMEs.

2.3.9 Intellectual Capital Model



Griffiths (2010): An adapted view of the drivers for knowledge and learning in organisations

Organizations are operating in a global economy, characterised by the emergence of intellectual capital, governed by intangible assets, such as knowledge, as a core value driver (Dunning, 2009). The value of intangible resources have dramatically increased

over the last 80 years, rising from a 30% representation of company valuation in 1929, to recent times where companies, such as Google and Microsoft, have declared intangible assets to be worth as much as 90% (Ash, 2004). This is confirmed in research, where Intellectual Capital has been found to account for 78% of the value on the S&P [Standard & Poor's] 500 (Call, 2005). This value creation becomes a driver for the expansion strategies of Multi National Enterprises (MNEs) as they seek improved competitive advantage in new spaces (Dunning, 2009). Value is nourished by the drivers of the knowledge economy, which are seen by the OECD (Organisation for Economic Cooperation and Development) as being human capital, technology, innovation and adaptive capacity. To illustrate this, we have taken work by Diakoulakis et al (2004) on a generic intellectual capital model and trasnformed it to include the drivers of the knowledge economy (Fig. 1). It is hoped that this will provide the practitioner with a clear line of sight between organisational activity and the drivers of the external environment.

Dunning (2009) suggested there to be four key determinants for the spatial expansion of SMEs include: Resource seeking, market seeking, efficiency seeking, strategic asset seeking. Resource seeking looks to exploit financial, quality, availability and knowledge exploitation opportunities. Market seeking looks for growth markets, including, "increased need for presence close to users in knowledge-intensive sectors" . Efficiency seeking is mainly linked to production cost, but can be linked to the need to close the distance between knowledge sources. Strategic asset seeking attempts to develop competitive advantage through relationships with, for example, new cultures, institutions or systems that can enhance existing competitive advantage. Quintiles appeared to have responded primarily to the second and third determinants. First, they were following the pharmaceutical sector in exploiting a region experiencing high growth. Second, they

were efficiency seeking, as many of the drug manufacturers and developers had expanded into the Asia region, which requires Quintiles to narrow the distance between themselves and their key stakeholders. This is typical of the sector, where organisations, such as Novartis and Roche, have set up operations in the region to close the space between their existing operations and the marketplace (O'Riordan, 2008).

Intellectual capital includes customer capital, human capital, intellectual property, and structural capital. However in this study, intellectual capital was measured by human capital, structural capital and capital employed as suggested by Pulic (1998) and Firer and Williams (2003). *Human capital* refers to the collective value of the organization'sintellectual capital - that is competencies, knowledge, and skills. This capital is the organization's constant renewable source of creativity and innovativeness, which is not reflected, in its financial statements. *Structural capital* can be defined as competitive intelligence, formulas, information systems, patents, policies, processes, and etc., resulted from the products or systems the firm has created over time. Structural capital is the intellectual value that remains with the enterprise when people leave. Structural capital includes the content within the enterprise knowledge asset, as well as the intellectual investment that the enterprise has made in the physical, technical and business culture infrastructures that support its activities. *Capital employed* on the other hand can be defined as total capital harnessed in a firm's fixed and current assets. Viewed from the funding side, it equals to stockholders' funds (equity capital) plus long-term liabilities (loan capital). However, if it is viewed from the asset side, it equals to fixed assets plus working capital.

In Malaysia, the role of human capital is pivotal to the development of a world-class capital market. The financial sector is now in a prime position to be more innovative, relying on new technologies and emphasizing on skills and knowledge of their employees

rather than on assets such as plants or machinery. This is due to the intense competitive pressure, which arises from changes in the financial environment, technological advancements and the needs of the consumers in terms of product quality. Therefore, financial sectors need to anticipate and respond to these demands and expectations. Hence, highly skilled individuals are needed to facilitate the delivery of high value-added products and services as well as the competencies to build consumers' confidence and trust (Mavridis, 2004).). Moreover, financial sectors such as banking are a knowledge-intensive, skills-based and relationship-rich industry. In an increasingly complex and more liberal environment, the competitiveness of banking institutions will depend critically on the quality of human intellectual capital and the extent to which the industry is able to leverage on these talents. Although intellectual capital has been recognized as a firm's wealth driver, there are many issues that are still being debated. In addition to the issue of the development of measurement models that best explain the invisible or hidden values of firms, various attempts have been made by companies and countries to develop an intellectual capital disclosure framework to reflect values unexplained by traditional accounting.

Social capital (SC) is defined as the combined value of the relationship with customers, suppliers, industry association and markets, and SC represents the potential an organisation possesses as a result of external intangibles (Bontis, 1999). Malaysian managers of Bursa Saham Malaysia firms suggested that SC comprises customer service and relationship, data on customers and market perspectives (Huang, Luther &Tayles, 2007). The relationships with customers can produce customer contacts, customer loyalty, customer satisfaction, brand awareness and distribution networks (Edvinsson& Malone, 1997; Stewart, 2001; Sullivan, 1998). A study that examined biotechnology SMEs found that those organisations used relational-based capital or SC as one way to

seek competitive advantage (Clarke & Turner, 2003). Social networking was done through industry clustering and industry associations (Clarke & Turner, 2003); government assistance programs (Clarke & Turner, 2003); linkages among government departments, research institutions and universities (Thorburn, 2000); management and sharing of other resources (Thorburn, 2000); and strategic alliances (DeCarolis& Deeds, 1999).

SC may be the most complex IC component because it depends on the combination of the knowledge and experience of various parties to create knowledge. This supports the definition given by Nahapiet and Ghoshal (1998), who stated that SC is "the sum of actual and potential resources embedded within, available through and derived from the network of relationships possessed by a social unit ". It shows that SC encompasses knowledge in relation to what is already established with the environment and the knowledge that is accumulated by the different parties during exchanges. The presence of SC can also enhance knowledge capture, knowledge codification and knowledge transfer because SC can lead to innovation through facilitating the combination and exchange of resources (Kogut& Zander, 1993). Kogut and Zander (1992) argued that organizations can do better by sharing and transferring knowledge embedded in organizational principles and suggested that an organization's innovative capabilities "rest in the organizing principles by which relationships among individuals, within and between groups, and among organizations are structured". Pennings and Harianto (1992) also suggested that new technologies emerge from an organization's accumulated stock of skills and technological networking. The way people communicate with each other in an organization affects the effectiveness of knowledge creation. Constructive and helpful relationships can help to accelerate the communication process that enables employees to

sharetheir knowledge and to discuss their ideas and concerns freely. Thus, good relationships eliminate distrust, fear and dissatisfaction from the knowledge creation process (von Krogh, 1998).

SMEs have an advantage in SC as compared with human capital and structural capital (Cohen &Kaimenakis, 2007; Desouza&Awazu, 2006). SMEs often tend to believe that their development is mainly driven by their employees' competencies and the quality of the relationships with their customers (Cohen &Kaimenakis, 2007). Those organizations develop their social capital more easily than do large organizations and they use the available knowledge from relationships more readily to achieve high performance (Desouza&Awazu, 2006). In addition, Wong and Aspinwall (2004) added that SMEs' proximity to their customers enables them to acquire knowledge through a more direct and faster route than in large organizations. However, SMEs are faced with a lack of knowledge repositories (structural capital) because of their limited budget. The structural capital in SMEs is primarily developed and maintained by their employees (Desouza&Awazu, 2006). Knowledge is created, shared, transferred and applied through the organization’s staff without the intervention of automated mechanisms usually found in large organizations. Moreover, employees (human capital) develop common knowledge to organize their work, and they commonly engage in two-way communication because of their small numbers. Nunes, Annansingh, Eaglestone and Wakefield (2006) reported that informal systems are employed to aid KM activities in SMEs.

2.5 Empirical Review

According to Roos et al, (2007) in their study on measuring company's intellectual growth, they stated that customer capital is the relationship between firms and their customers. The study concluded that knowledge of marketing channels and customer relationships is the main theme of customer capital. Frustrated managers often do not recognize that they can tap into a wealth of knowledge from their own clients. Kohli and Jaworski (2000) indicates that understanding what customers want in a product or a service better than anyone else is what makes someone a business leader as opposed to a follower.

In the longitudinal study of Subramaniam and Youndt (2005), they examined how aspects of intellectual capital which consists of human capital, organizational capital and social capital influenced various innovative capabilities (incremental and radical) in companies. In a longitudinal study of 93 companies in various industries, they found that human capital, organizational capital and social capital and their interrelationships selectively influence incremental and radical innovative capabilities. Organizational capital positively influenced incremental innovative capability, while human capital interacted with social capital and to positively influence radical innovative capability. Human capital itself was negatively associated with radical innovative capability. Social capital played a significant role in both types of innovation, as it positively influenced incremental and radical innovative capabilities. Zerenler,(2008) made a research in the Turkish automotive supplier industry in order to investigate the influence of intellectual capital and its components—Employee capital, structural capital and customer capital- upon their innovation performance. 117 questionnaires were sent to managers of marketing department, R&D department and production department. The response rate of

this study is high (78% or 92 respondents). Main conclusion from this study is: Three components of intellectual capital which are human capital, structural capital and customer capital had significantly positive relationships with innovation performance.

In the study of Wu et al. (2008), they attempted to explore the mediating effect of intellectual capital on innovation. The research was made in Taiwanese manufacture and non-manufacture industries. Seven hundred survey questionnaires were mailed to firms. The response rate of the study is 22.71%. They found that effects of intellectual capital including human capital, customer capital and structural capital, on innovation exist at significant levels, suggesting a perfect mediating effect of intellectual capital on innovation.

Chen, Lee, Tung, & Kao (2008) aimed to explore the influences of innovative activities, intellectual capital towards corporate development in Taiwanese publicly listed IT corporations. During the study, from total of 800 questionnaires, 301 were returned. The response rate of the study is 36.63%. In the study, innovative activities have three sub categories which are Research & Development, managerial innovation and knowledge innovation. Intellectual capital involves human, structure and relationship capital. Corporate development has also three sub-categories as corporate value, corporate growth and corporate sustainability. They found that, there is a mutually positive correlation between innovative activities and intellectual capital. Accumulation of intellectual capital of Taiwanese IT corporations has positive influences on their operation and development. This suggests that the more the intellectual capital, the more added value contributed to corporations.

Ngah & Ibrahim (2009) used questionnaire to survey Malaysian small and medium enterprises in order to determine the relationship of intellectual capital, innovation and

organizational performance. In the preliminary study, they found that human capital, contributes more to innovation and organizational performance than structural and relational capital.

2.6 Summary

The literature reviewed the relationship between intellectual capital and growth of SMEs. This included social capital role, human capital, relational capital and structural capital. Reviewed literature generally agrees that these resources affect the growth of SMEs. Research suggests that Social capital helps SMEs to tap resources in external environment successfully and pave the way to new markets. In addition to this social relationships are crucially important to the entrepreneurial process because the information needed to start and grow a business is passed to the entrepreneur basically through the existing social networks of friends.

Research suggest that human capital is important for a business to grow into a foreseeable future and lack of managerial experience, skills and personal qualities as well as other factors such as adverse economic conditions, poorly thought out business plans and resource starvation are found as the main reasons why new firms fail.

Moreover, research has shown that enterprises with good developed and maintained relationships with customers and the government enhances is key to youth enterprise growth. Literature review also noted the importance of structural capital as supportive infrastructure that enables human capital to function.

2.7 Critical Review

Esteban Lafuente, Rodrigo Rabetino, (2011) carried a study on Human capital and growth in Romanian small firms. The study found out that Human capital matters for explaining small firms' employment growth. An active involvement of the entrepreneur in managerial tasks increases the intensity with which the entrepreneur makes use of his/her human capital, and this leads to higher employment growth rates. However, the study failed to enrich the analysis, therefore future research should attempt to further explore the impact of human capital components on SMEs growth in other transition economies.

Abouzar Zangoueinezhad, Asghar Moshabaki, (2009) carried a study on the role of structural capital on competitive intelligence in Iran the study found out that Information systems (as the structural capital) and the content factors (as the organizational capital) of the structural-organizational intelligence (SOI) are significantly related in attaining CI. However, the companies chosen for the study were mainly large companies thus; the results may not be applicable to SMEs. The survey was limited to one country (Iran).
40 percent of the respondents were from state companies, which because of using state budget and being active at the monopolistic markets inside the country might be a negative effect on the amount of using SOI.

Ann, Ling-Ching Chan, Wen-Ying Wang, (2012) carried a study on Measuring customer capital in China according to the study , the base aspect, customer targeting, significantly influences ability to identify customers' needs and construction and management of a customer information system. In addition, these two aspects directly affect customer service capability, which further improves customer loyalty and market intensity however

the study can be criticized in that it only concentrated on large firms hence a study needs to be carried out in small firms.

Delgado-Verde, López, Jorge Cruz-González,Javier Amores-Salvadó (2011) investigated radical innovation from relations-based knowledge: empirical evidence in Spanish technology-intensive firms. Relations-based intellectual capital can be separated into social and relational capital, with social capital as the main component. Both social and relational capital, have a significantly positive influence on radical innovation developed by firms in the sample although those relationships maintained with external agents seem to have a higher impact. However, the study concentrated in Spanish high and medium-high tech firms. A replica study can be done in developing countries.

Nerdrum & Erikson (2001), did a study on Intellectual capital a human capital perspective in Norway the study found that intellectual capital is a result of either formal education or informal on-the-job training. However Future research should attempt to assess the interrelationship between forms of training with organizational growth. Further, a research should be conducted to investigate into the multiplicative effects and interdependencies of intellectual capital items as well as between intellectual capital and more general human capital.

Hélène Delerue-Vidot (2011) carried out a study on opportunism and commitment: the moderating effect of relational capital in Canada. The study found that unilateral commitments have a positive effect on perceived opportunistic behavior. By creating a basis for exchange, relational capital moderates the relationship between unilateral commitments and the perception of opportunistic behavior. However the study did not focus on SMEs hence a study needed to focus on relational capital on growth of SMEs.

Fatoki (2011) carried a study on the Impact of Human, Social and Financial Capital on the Performance of Small and Medium-Sized Enterprises (SMEs) in South Africa. The study found that SME owners should always ensure that they maintain strong network ties with customers, suppliers, commercial banks and government agencies. However, the study uses human capital a factor of performance not growth.

2.8 Research Gaps

The empirical indicates that it is evident that research in the area of intellectual capital has been done but not in a comprehensive approach. A few studies that have been done but the studies indicate that studies have focused on the intellectual capital on performance other than growth of the firms for instance Do Rosario and Landeiro-Vaz, 2006; and Edvinsson and Malone, 2007 who from their literature review the studies have focused on the intellectual capital on performance other than growth of the firms. Banking industry which is different from the youth enterprise which is under study. Mohammad (2009) did a study on the effect of intellectual capital on firm performance: an investigation of Iran insurance companies. The purpose of this paper was to analyze the role of intellectual capital (IC) and its relationship with financial performance of Iran insurance companies during the period 2005-2007. 39 insurance companies were selected as the sample. The results of the research revealed that value added intellectual capital and its components had a significant positive relationship with companies' profitability. Wang (2011) did a study on Intellectual Capital and Firm Performance. The main purpose of the study was to understand the intellectual capital of the proxy variables on firm performance and the related expenses of the company's contribution to value creation.

The only study that has been done that is close to the current study is Cohen and Kaimenakis (2007) did a study on Social capital, Intellectual capital and corporate performance in knowledge-intensive SMEs. The purpose of the study was to specify the relations among the different categories of intellectual assets that exist in the context of small to medium-sized enterprises (SME), and to determine the way these assets affect financial performance. The findings of the study indicated that the interaction of certain categories of intellectual assets in SMEs is in some aspects different from the pattern evidenced in other surveys that analyze large companies. Also, the empirical data provided supportive evidence that certain categories of intellectual capital positively contributed to corporate performance. Further, Bontis et al. (2000) did a study on Intellectual capital and business performance in Malaysian industries and found a positive relationship between financial performance and structural capital (SC) in Malaysian firms, and observed that investment in human capital has an indirect effect on performance through social capital.

This study therefore intends to fill theses pertinent gaps in literature by studying the selected independent variables on the relationship between the intellectual capital and the growth of SMEs in Kenya. This study will add value to existing literature by providing empirical evidence on the influence of intellectual capital on the growth of SMEs in Kenya and fill the existing contextual and conceptual gaps.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methodology that was used in undertaking the study. It starts by explaining the research design that was adopted; according to Sekaran (2010) a central part of research is to develop an efficient research strategy. Based on the model and variables developed in Chapter two, this chapter covers the research design and research methodology used to test the variables. In particular, issues related to research design, the population, the type of data to be collected, sampling frame, sample and sampling techniques, data collection instrument, data collection procedure, pilot test, validity and reliability of the instrument, and the data analysis and presentation are discussed. Lastly, the analytic techniques used to test the hypotheses are also presented.

3.2 Research Philospophy

3.3 Research Design

The study adopted an exploratory approach using a descriptive survey design. A descriptive research design determines and reports the way things are (Mugenda & Mugenda, 2003). Creswell (2003) observes that a descriptive research design is used when data are collected to describe persons, organizations, settings or phenomena. The design also has enough provision for protection of bias and maximized reliability (Kothari, 2008). Descriptive design uses a preplanned design for analysis (Mugenda and Mugenda, 2003). In this study, inferential statistics and measures of central, dispersion and distribution will be applied. Ngugi, (2012) carried out a similar study to identify challenges hindering sustainability of Small and Medium Family Enterprises after the

exit of the founders in Kenya. Exploratory research design is flexible design that allow the researcher to consider many different aspect of a problem, while descriptive survey is a method of collecting information by interviewing or administering a questionnaire to a sample of individual (Orodho, 2003).

Research design is a roadmap of how one goes about answering the research questions (Bryman & Bell, 2007). Sekaran, (2010) states that a good research design had a clearly defined purpose, and had consistency between the research questions and the proposed research method. Mugenda & Mugenda (2003) define this as simply the framework or blue print for the research, Orodho (2003) define the research design as a framework for the collection and analysis of data that is suited to the research question. Orodho (2003) defines research design as the scheme, outline or plan that is used to generate answers to the research problem.

3.4 Target Population

Population refers to the entire group of people or things of interest that the researcher wishes to investigate, Sekaran (2010). Mugenda & Mugenda, (2003) defines population as an entire group of individual or objects having common observable characteristic.

Data available from the Ministry of Trade and Ministry of Industrialization, (2011) reveal that there are 2500 SMEs in Manufacturing, 1500 SMEs Trading and 560 SMEs in the service industry (RoK, 2012). This makes a total of 4,560 SMEs. Therefore the study targeted 4,560 SMEs in Nairobi County. The study targets this area because of the rural and urban influences.

Table 3. 1: Summary of Respondents' Sectors

Stratum	Target population Enterprises	Percentage Percentage
Manufacturing	2500	55
Trade	1500	33
Services	560	12
Total	**4,560**	**100**

Source: RoK, (2012)

3.5 Sampling Frame and Technique

The sampling frame describes the list of all population units from which the sample was selected (Cooper & Schindler, 2003). It is a physical representation of the target population and comprises all the units that are potential members of a sample (Kothari, 2008). Kerlinger (1986) indicates that a sample size of 10% of the target population is large enough so long as it allows for reliable data analysis and allows testing for significance of differences between estimates. The sample size depends on what one wants to know, the purpose of the inquiry, what is at stake, what was useful, what haad credibility and what can be done with available time and resources (Paton, 2002). Therefore, a proportionate sample size of approximate 456 respondents which is 10% of the population was selected using a stratified random sampling technique from the identified sample in Table 3.1. Orodho (2003) states that stratified sampling are applicable if a population from which a sample is to be drawn does not constitute a homogeneous group. Table 3.2 shows the target population of the three strata Manufacturing, Trade and Services

Table 3. 2: Sampling Frame

Industry	Target population	Frequency	Percent
Manufacturing	2500	250	10%
Trade	1500	150	10%
Services	560	56	10%
Total	**4560**	**456**	10%

3.6 Data Collection Instruments

Creswell (2002) defines data collection as a means by which information is obtained from the selected subjects of an investigation. The primary research data was collected from the owners of the SMEs in Nairobi using a questionnaire and supported by interview guide which was administered through interviews. Interviews are particularly useful for getting the story behind a participant's experiences. The interviewer can pursue in-depth information around the topic. Interviews may be useful as follow-up to certain respondents to questionnaires, e.g, to further investigate their responses (McNamara, 1999). For more insight data collection, the interviewer administered questionnaire have the advantage of the interviews probing for more precise details. The questionnaire used is an amended version of the Bontis, Nick (1998) ,

3.7 Pilot Test

Cooper &Schindler (2010) indicated that a pilot test is conducted to detect weaknesses in design and instrumentation and to provide proxy data for selection of a probability sample. According to Babbie (2004), 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 research 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). A pilot study was undertaken on at least 46 SMEs owners to test the reliability and validity of the questionnaire. The rule of thumb is that 1% of the sample should constitute the pilot test (Cooper & Schilder, 2011, Creswell, 2003). The proposed pilot test was within the recommendation.

Reliability is the consistency of a set of measurement items while validity indicates that the instrument is testing what it should (Cronbach, 1951). Reliability is the consistency of your measurement, or the degree to which an instrument measures the same way each time it is used under the same condition with the same subjects. In short, it is the probability of your measurement. A measure is considered reliable if a person's score on the same test given twice is similar. It is important to remember that reliability is not measured, it is estimated. Reliability does not, however, imply validity because while a scale may be measuring something consistently, it may not necessarily be what it is supposed to be measuring. The researcher will use the most common internal consistency measure known as Cronbach's alpha (α). It indicates the extent to which a set of test items can be treated as measuring a single latent variable (Cronbach, 1951). The recommended value of 0.7 will be used as a cut-off of reliabilities.

Cronbach's alpha is a general form of the Kunder-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 Kunder-Richardson (K-R) 20 is based on the following formula;

$$KR_{20} = \frac{(K)\,(S2 - \square s^2)}{(S^2)\,(K-1)}$$

KR_{20} *Reliability coefficient of internal consistency*

K *Number of item used to measure the concept*

S^2 *Variance of all score*

s^2 *Variance of individual items*

Finally, the pilot survey drew responses from the interviewees on the design and content of the instrument and suggestions for more efficient and practical way of administering it. The pilot testing was re-run until the researcher was satisfied with the data collection instruments.

Validity is used to check whether questionnaire is measuring what it purports to measure (Bryman & Cramer, 1997). Validity is the strength of our conclusions, inferences or propositions. More formally, Patton (2002) define it as the best available approximation to the truth or falsity of a given inference, proposition or conclusion.

3.8 Data Analysis

This section discusses the techniques that were used to analyze data and test the variables. Before processing the responses, data preparation was done on the completed questionnaires by editing, coding, entering and cleaning the data. Data collected was analyzed using descriptive statistics. The descriptive statistical tools helped in describing the data and determining the respondents' degree of agreement with the various statements under each factor. Data analysis was done with the help of software

programme SPSS version 21 which is the most current verion in the market and microsoft excel to generate quantitative reports.

3.8.1 Multiple Regression Analysis.

Growth was to be regressed against five variables of intellectual capital namely (Managerial Skills, Entrepreneurial skills, Innovativeness, Structural capital and Customers capital).

The research model was derived from the theoretical framework of theory of intellectual capital. This hypothesized there is a direct and positive association between intellectual capital and organizational performance (Stewart, 1997). The relationship among the variable are depicted below.

The equation for business performance will be expressed in the following equation:

$Ys = \beta_0 + B_{1X1} + B_{2X2} + B_{3X3} + B_{4X4} + B_{5X5}$, Where,

Ys = Growth of SMES

β_0 = constant (coefficient of intercept)

X_1 = Managerial Skills

X_2 = Entrepreneurial skills

X_3 = Innovativeness

X_4 = Structural capital

X_5 = Customer capital

$B_1 \ldots B_4$ = regression coefficient of four variables.

Inferential statistics such non parametric test which include analysis of variance (ANOVA) were used to test the significance of the overall model at 95% level of significance. According to Mugenda (2008) analysis of variance is used because it makes use of the F – test in terms of sums of squares residual.

The chi square was used to measure association between Managerial Skills, Customer capital, Innovativeness ,Structural capital and Entrepreneurial skills and the growth of SMEs. The mean of the five c measure was used to evaluate the growth of SMEs.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATIONS

4.1 Introduction

The chapter represents the empirical findings and results of the application of the variables using techniques mentioned in chapter three. Specifically, the data analysis was in line with specific objectives where patterns were investigated, interpreted and implications drawn on them.

4.2 Response Rate

From the data collected, out of the 456 questionnaires administered, 320 were filled and returned, which represents 70% response rate. This response rate is considered satisfactory to make conclusions for the study. Mugenda and Mugenda (2003) observed that a 50% response rate is adequate, 60% good and above, while 70% rated very good. This collaborates with Bailey (2000) assertion that a response rate of 50% is adequate, while a response rate greater than 70% is very good. This implies that based on this assertion, the response rate in this case of 70% is therefore very good.

The recorded high response rate can be attributed to the data collection procedures, where the researcher pre-notified the potential participants (business owners/ managers/ directors or business partner) of the intended survey, utilized a self administered questionnaire where the respondents completed and these were picked shortly after and made follow up calls to clarify queries as well as prompt the respondents to fill the questionnaires.

4.3 Reliability Analysis

The reliability of an instrument refers to its ability to produce consistent and stable measurements. Bagozzi (1994) explains that reliability can be seen from two sides: reliability (the extent of accuracy) and unreliability (the extent of inaccuracy). The most common reliability coefficient is the Cronbach's alpha which estimates internal consistency by determining how all items on a test relate to all other items and to the total test - internal coherence of data. The reliability is expressed as a coefficient between 0 and 1.00. The higher the coefficient, the more reliable is the test.

In this study to ensure the reliability of the instrument Cronbach's Alpha was used. Cronbach Alpha value is widely used to verify the reliability of the construct. Therefore, Cronbach Alpha was used to test the reliability of the proposed constructs. The findings indicated that Managerial skills had a coefficient of 0.904, entrepreneurial skills had a coefficient of 0.903, Innovativeness of 0.898, Structural capital of 0.869 and Customer capital of 0.829. All constructs depicted that the value of Cronbach's Alpha are above the suggested value of 0.5 thus the study was reliable (Nunnally & Bernstein, 1994; Nunnally, 1974). On the basis of reliability test it was supposed that the scales used in this study is reliable to capture the constructs. Reliability of the constructs is shown below in table 4.1.

Table 4. 1:Reliability Test of Constructs

Intellectual Capital (IC)	Reliability Cronbach's Alpha	Comments
Managerial skills	0.904	Accepted
Entrepreneurial skills	0.903	Accepted
Innovitiveness	0.898	Accepted
Structural capital	0.869	Accepted
Customer capital	0.821	Accepted

Further Two test namely Kaiser-Mayor-Oklin measures of sampling adequacy(KMO) and Bartlett's test of sphericity has been applied to test whether the relationship among the variables has been significant or not as shown in below in table 4.2.

The Kaiser-Mayor-Oklin measures of sampling adequacy shows the value of test statistic as 0.576 < 0.5. Bartlett's test of sphericity is used to test whether the data is statistically significant or not. With the value of test statistic and the associated significance level, it shows that there exists a high relationship among variables.

Table 4. 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling		0.576
Bartlett's Test of Sphericity	Approx. Chi-Square	1296.428
	Df	190
	Sig.	0

4.4 Demographic Data

The study sought to establish the demographic data of the respondents. The researcher begun by a general analysis on the demographic data got from the respondents which included;- the gender, age, marital status, nature of business, duration of business existence, position held by respondents, academic qualification of the respondents, number of competitors and the type of business ownership. This research targeted 456 participants in regard to establishing the influence of intellectual capital on growth of SMEs and 320 questionnaires were generated.

4.4.1 Gender Distribution

The descriptive statistics of the study indicated that 116 (60.73%) of the respondents were men while the remaining 75 (39.27%) were women as indicated in Figure 4. 1.

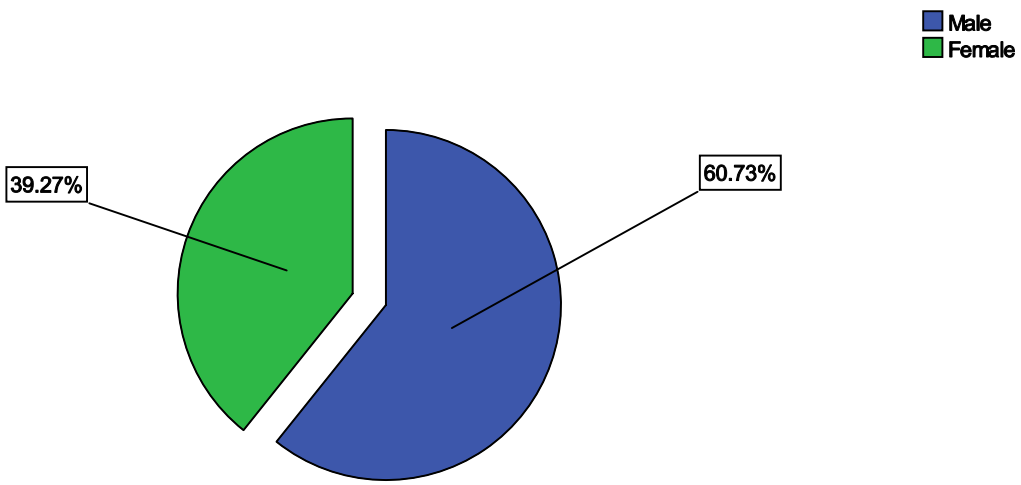


Figure 4. 1: Gender of the respondents

4.4.2 Age bracket of the respondents

In the survey, the respondents were asked to state the age category they were in. Out of the targeted 456 business owners/ managers/ directors or business partners, 89 (46.6%) of the respondents were between 26-36 years of age, 43 (22.5%) of the respondents were between 36-45 years of age, 37 (19.4%) of the respondents were between 18-25 years of age, 17 (8.9%) of them were between 46-55 years of age, while only 5 (2.6%) were over 50 years old. This result illustrates that SME owners are generally active between the ages of 18- 50. It is also in agreement with the findings by Price (2006) who maintained that there are two natural age peaks correlated to entrepreneurship, namely the late twenties and mid-forties. The study findings are almost similar to a study done in America by Muijanack, Vroonhof and Zoetmer (2003) who determined that the optimum age for entrepreneurs was 25-35.

The age of 25-35 is therefore the age at which entrepreneurial capacity of the respondents was active as shown in Table 4.3.

Table 4. 3: Age Bracket Of The Respondents

		Frequency	Percent
Valid	18-25	37	19.4
	26-36	89	46.6
	36-45	43	22.5
	46-55	17	8.9
	Over 56	5	2.6
	Total	**191**	**100.0**

4.4.2 Marital status of the respondents of the respondents

The study also revealed that 59.2% of the entrepreneurs were married, 30% single,10% divorced and only 0.8% was a widower. Marriage or parental obligations may have an effect on an entrepreneur's decision to spend all his/her time in the business. Especially,

marriage can be a possible limitation for women to become economically active, because of the gender-based thought in the society. And also married women or women with children face more problems balancing their work and family. On the other hand, having a partner with an income makes it easier for women to take risks in venture creation than women who's family depend on only them (Aldrich & Cliff, 2003). Winn (2005) found that women are more supportive and active in their spouse's business than men are in the businesses of their wives. Also, despite having a husband who helps with the family responsibilities, women have a tendency for guilt and anxiety when staying long hours away from their families and homes. At the same time lots of mothers are successful entrepreneurs, but difficulties of balancing their family responsibilities with business duties should not be underestimated. It is therefore inferred from this study that marriage was very important especially for women entrepreneurs.

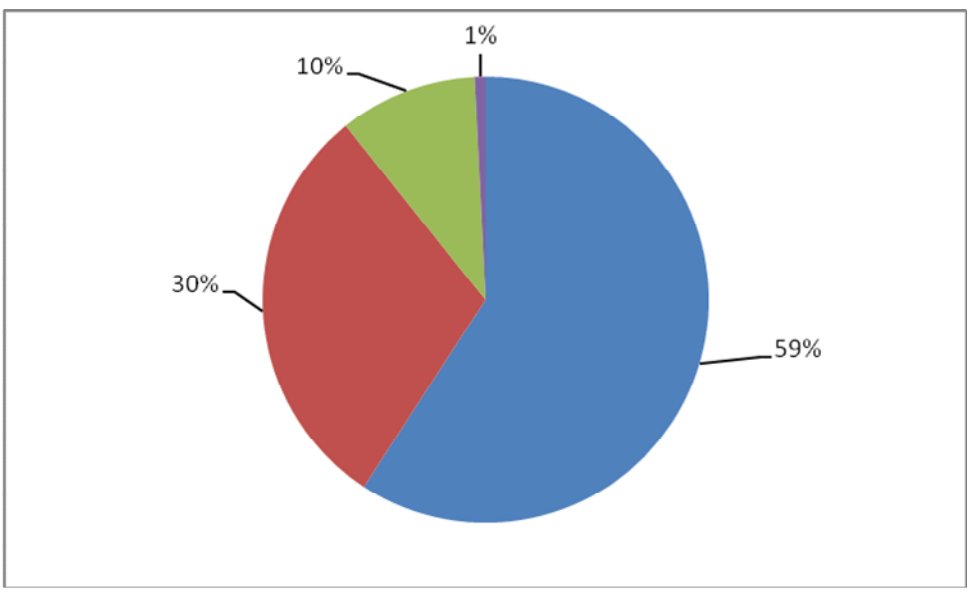


Figure 4. 2: Respondents' Marital Status

4.4.3 Nature of business

The study investigated the nature of the business that the respondents were running.The descriptive statistics also show that majority 96 (50.3%) of the target enterprises were

general trade enterprises, followed by service sector enterprises at 28.8% (20.9%), and manufacturing at 20.9% as shown in figure 4.4 below. This could be attributed to the fact that trade accommodates diverse generalized skills and a relatively lower initial investment capital as compared to manufacturing and service departments thereby reducing barriers to entry (Moore *et al*., 2008).

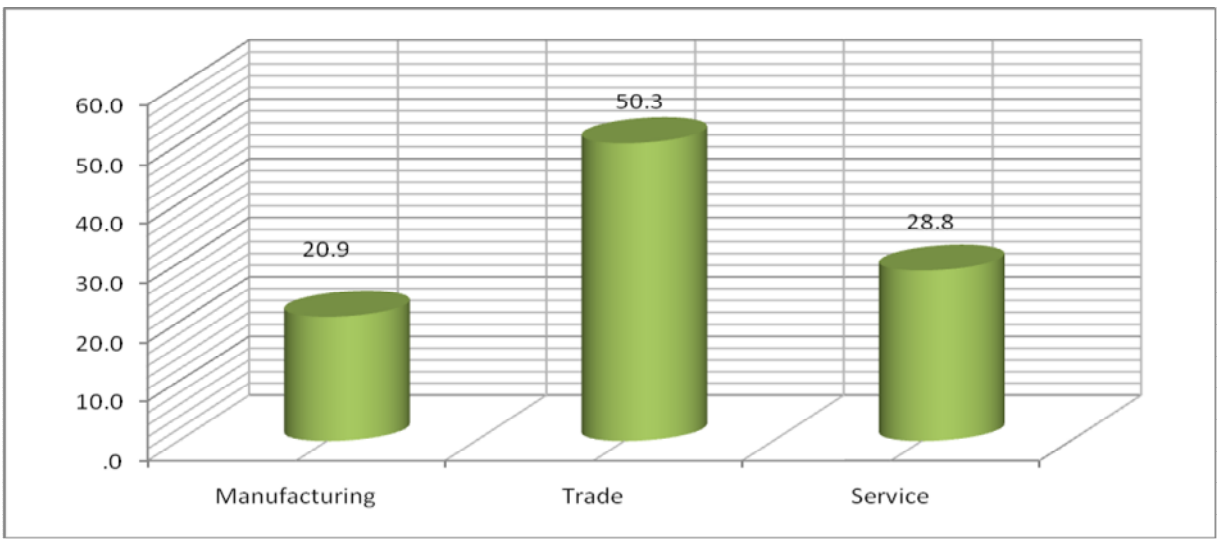


Figure 4. 3: Nature of Business

4.4.4 Duration Of Time Business Has Been In Operation

Eighty seven (87) (45.55%) of the respondents have been in operation for between 5 and 8 years, 58 (30.37%) have been in operation for between 2 and 4 years, 25 (13.09%) have been in operation for less than 2 years, 21 (10.99%) have been in operation for between 8 and 10 years as shown figure 4.4.

This result indicates that the majority of SMEs in the manufacturing and trade industries in Kenya (45.55%) have operated for less than ten years.

This result is consistent with previous empirical studies on the age of SMEs in South Africa by Rwigema and Karungu (1999), in a study of SMEs in Johannesburg, stipulate

that forty seven percent (47%) of enterprises surveyed had operated between one and ten years.

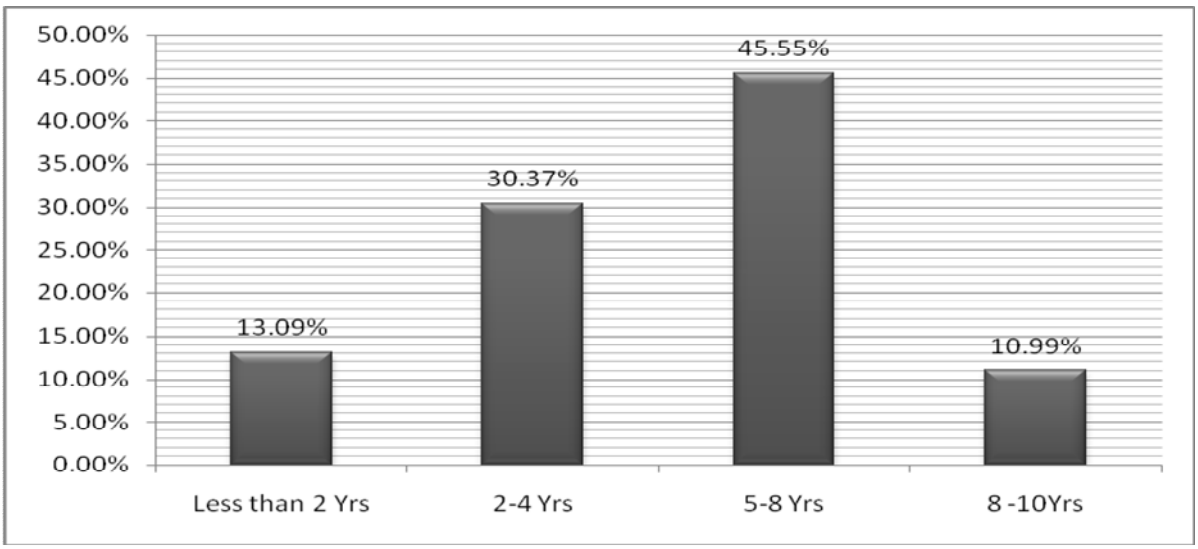


Table 4. 4: Duration Of Time The Respondents' Businesses Has Been in Existence

4.4.5 Current Position of the Respondents in the Business

Seventy six (39.8%) of the respondents indicated that they owned their SMEs. However, 38 (19.9%) of the respondents were partners, 37 (19.4%) were managers, 22 (11.5%) were Co-owners, 12 (6.3%) were executives and only 6 (3.1%) were directors. This result is in agreement to a study that was conducted in Cyprus by Bruce et al. (1998) which showed that more than eighty percent (80%) of small manufacturing enterprises are family operated or managed. This result is also consistent with the National Small Business Act of South Africa of 1996 as amended in 2003 which expects small businesses to be managed by their owners. The study findings are presented on table 4.6 below

Table 4. 5: Current Position of the Respondents in the Business

	Frequency	Percent

Owner	76	39.8
Co-owner	22	11.5
Partner	38	19.9
Manager	37	19.4
Executive	12	6.3
Director	6	3.1
Total	**320**	**100.0**

4.4.6 Academic qualifications of the respondents

From the descriptive statistics shown in figure 4.5, 69 (36.13%) of the respondents were reported to be diploma holders, 68 (35.60%) of them were holders of a first degree, 28 (14.66%) of them had reached secondary school, 21 (10.99%) had a masters degree, 3 (1.57%) were PhD holders, 1 (0.52%) respondent had reached class eight, while the remaining 1 (0.52%) respondent had dropped at class one.

Previous empirical studies appear to be in agreement with this result Marten (2005) in a study on the success of small businesses in Canada, found that the education of the owner is positively related to the success of the business. As per this studies' findings, majority of the respondents were well above diploma level, which supports studies by King and McGrath (2002) who indicated that in today's constantly fluctuating business environment, education is one of the factors that impact positively on growth of firms and that those entrepreneurs with larger stocks of human capital, in terms of education and (or) vocational training, are better placed to adapt their enterprises to such unexpected fluctuations. This shows that the academic qualification affects the growth of Small and medium enterprises in Kenya.

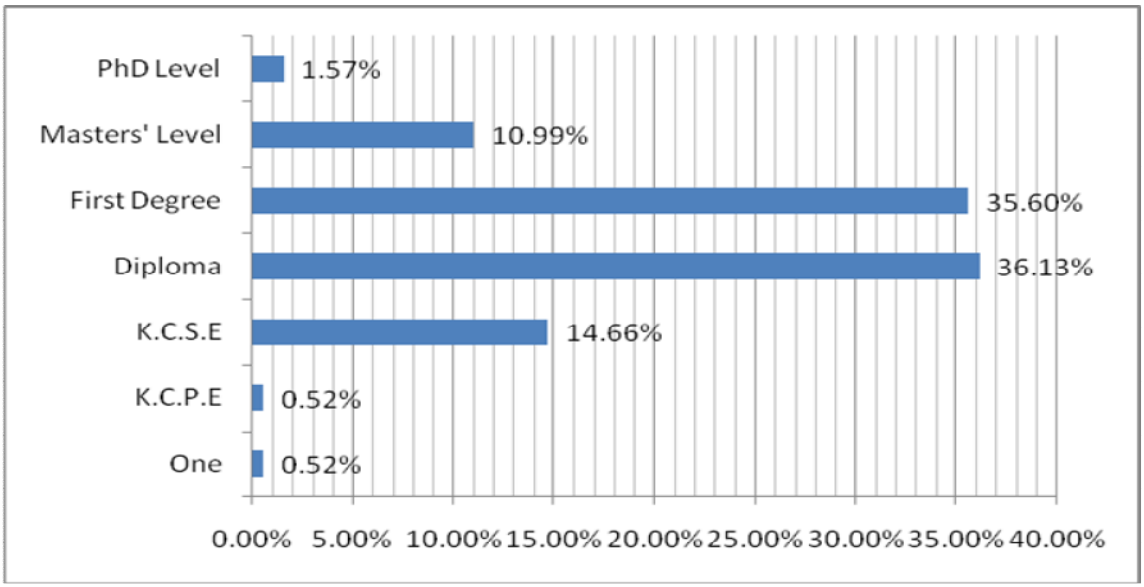


Figure 4. 4: Academic qualifications of the participants of the survey

4.5 Study variables

4.5.1 Managerial Skills

The study sought to investigate the influence of managerial skills on growth of small and medium enterprises. Specifically, the study focused on technical skills, interpersonal skills and the employee's level of education.

i. Technical Skills

The study sought to find out whether technical Skills influence the growth of SMEs. From figure 4.6, 29.3% of the respondents indicated that technical skills influence the growth of SMEs to a very great extent, 17.3% indicated that technical skills influences the growths of SMEs to a great extent, 29.3 % indicated that technical skills influence the growth of SMEs to a moderate extent, 18.8 % indicated that technical skills influence the growth of SMEs to a low extent while 5.8 % indicated that technical skills influence the growth of SMEs to a very low extent.

The findings relate with those of Wyer &Mason (1999) who found that lack of technical skills is a much obstacle to developing a small business. Souder's study also suggests that informal networks and influence are an important success factor for organizational entrepreneurs. In addition to possessing technical and market knowledge, a key to entrepreneurial effectiveness is the extent to which the entrepreneur is known by many others throughout the firm and who is trusted, respected, and influential. In other words, someone who has built a degree of social capital that can be successfully used to build a network of support around the new innovation (Kanter, 1983, 1985; Nahapiet & Ghoshal, 1998).

The findings collaborate with those of Papulova & Mokros (2007) who observed that technical skills are important in businesses that relate to engineering and other technical orientations. Rue & Byers (1992) in their theory of management competencies view technical skills as very important to lower level managers. The study findings show that technical skills contribute to a moderate and to a very great extent on the growth of SMEs in Kenya.

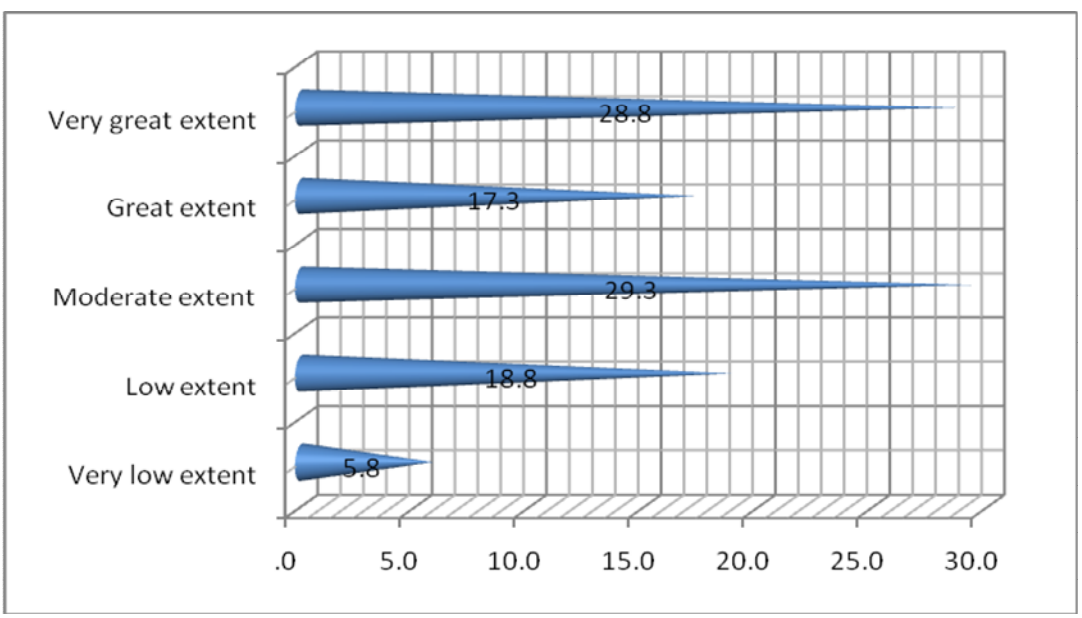


Figure 4. 5: Extent Technical Skills Influence the Growth of SMES

ii. Interpersonal Skills

The study sought to evaluate the extent Interpersonal Skills influence the growth of SMEs. Figure 4.7 indicates that 27.7% of the respondents indicated that Interpersonal Skills influence the growth of SMEs to a very great extent. 26.2% of the respondents indicated that Interpersonal Skills influences the growths of SMEs to a great extent. 30.4 % of the respondents indicated that Interpersonal Skills influence the growth of SMEs to a moderate extent, 12.6 % of the respondents indicated that Interpersonal Skills influence the growth of SMEs to a low extent while 3.1 % of the respondents indicated that Interpersonal Skills influence the growth of SMEs to a very low extent.

The findings relate with the findings of Edvinsson (2000), Stewart (1997), Brooking, (1996) who postulates that interpersonal skills are the foundation of intellectual capital as everything in the current market environment relies on the individual's ideas, knowledge and skills. It is asserted that the interpersonal skills in an organisation are the most important intangible asset, especially in terms of innovation.

According to the findings interpersonal skills are of great essence towards the growth of SMES.

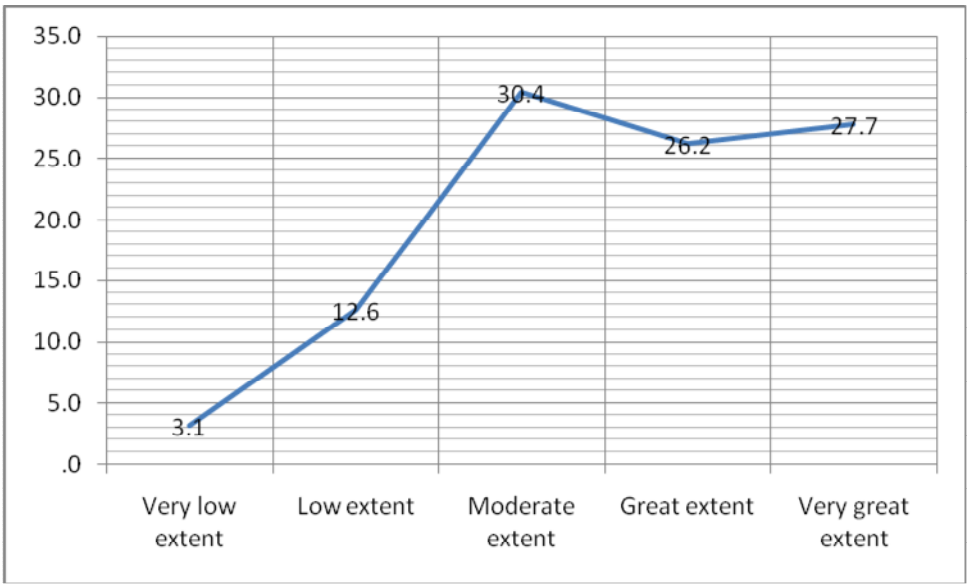


Figure 4. 6: Extent Interpersonal Skills Influence the Growth of SMES

iii. Employees Level of Education

The study sought to establish the extent employees level of education influence the growth of SMEs. 32.5 % of the respondents indicated that employees level of education influence the growth of SMEs to a moderate extent, 27.7% of the respondents indicated that employees level of education influence the growth of SMEs to a very great extent , 19.4% of the respondents indicated that employees level of education influences the growths of SMEs to a great extent, 16.8 % of the respondents indicated that Employees level of education influence the growths of SMEs to a low extent. While 3.7% of the respondents indicated that Employees level of education influence the growth of SMEs to a very low extent.

The findings collaborate with the findings of Svendsen (2006) who found that entrepreneurship education is about developing people with increased probability to succeed when creating and developing a business. Entrepreneurship education seeks to provide business owners with the knowledge, skills and motivation to encourage

entrepreneurial success in a variety of settings. The success of entrepreneurial activities in a country is to a great extent related to quality

These finding are consistent with Nunes et al. (2006) who report that informal systems are developed to aid the SMEs' knowledge management activities. Desouza & Awazu (2006) also state that unlike large companies, human capital in SMEs tends to behave quite differently. Employees rarely depart the organization, but even if such an event happens, this does not result in significant knowledge loss.

The findings show that the level of education is an important factor in the growth of SMES firms.

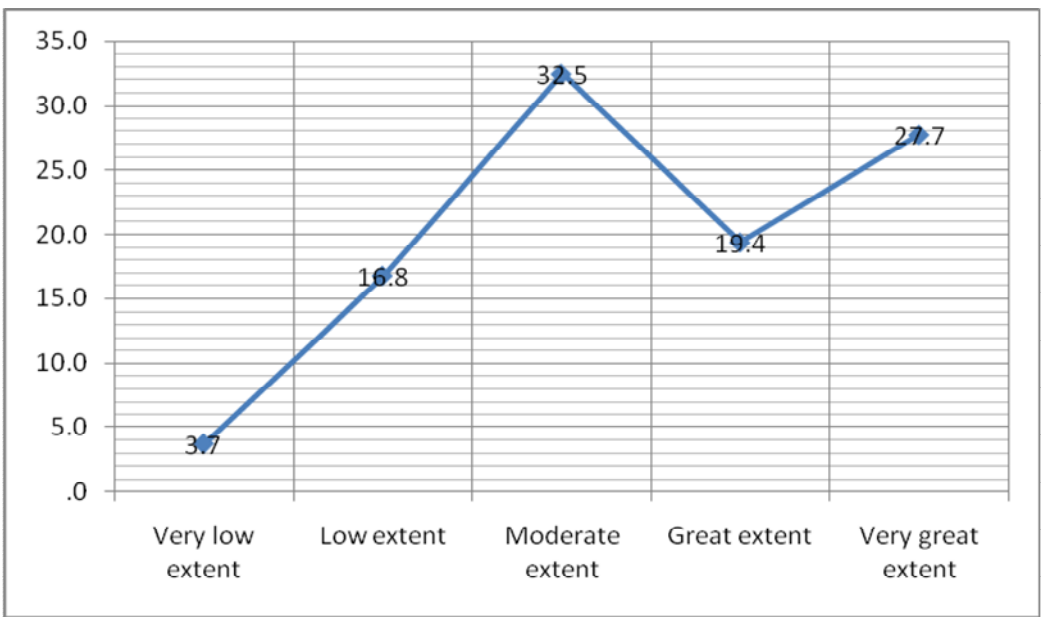


Figure 4. 7: Extent that employees level of education influence the growth of SMEs

4.5.2 Entrepreneurial Skills

The study sought to investigate the influences of entrepreneurial skills on growth of Small and Medium Enterprises. Specifically, the study focused on risk –taking propensity, careful budgeting skills to ensure that financial records, human relation skills,

clear goals and objective setting skills, business operating skills, skills to detect changes in the market, skills to act quickly, skills to provide attractive range of products and skills to obtain market share that suits the size and capability.

i) Risk –Taking Propensity

The study sought to find out the whether risk taking propensity influences the growth of SMEs. As shown in Figure 4.9, 26.2% of the respondents indicated that risk propensity influences the growth of SMEs to a very great extent, 12% of the respondents indicated that risk propensity influences the growth of SMEs to a great extent, majority 27.7% of the respondents indicated that risk propensity influences the growth of SMEs to a moderate extent, 23% of the respondents indicated that risk propensity influences the growth of SMEs to a low extent, While 11% of the respondents indicated that risk propensity influences the growth of SMEs to a very low extent. Therefore, risk taking propensity is one of the factors that influence the growth of firms which should be taken into consideration by the SME owners. Risk taking propensity is the willingness to undertake calculated risk with the opportunity of gaining an increased benefit (Wiklund & Shepherd, 2003). Risk taking propensity is one of the characteristics possessed by successful entrepreneurs (Hursky & Tuunanen, 2006).

These findings correspond with those by Antoncic & Hisrich (2003) that the possibility of loss may be viewed as an inherent characteristic of innovativeness, new business formation and aggressive or proactive actions of existing firms. Hursky & Tuunanen (2006) found that American entrepreneurs have rich entrepreneurial traditions which involve high risk-taking propensity than Finnish entrepreneurs which made American entrepreneurs more successful.

The study concludes that risk taking propensity influences the growth of SMEs in Kenya as depicted by the statistics above. Therefore such risks are important when making hard decisions regarding firm's growth and sustainability.

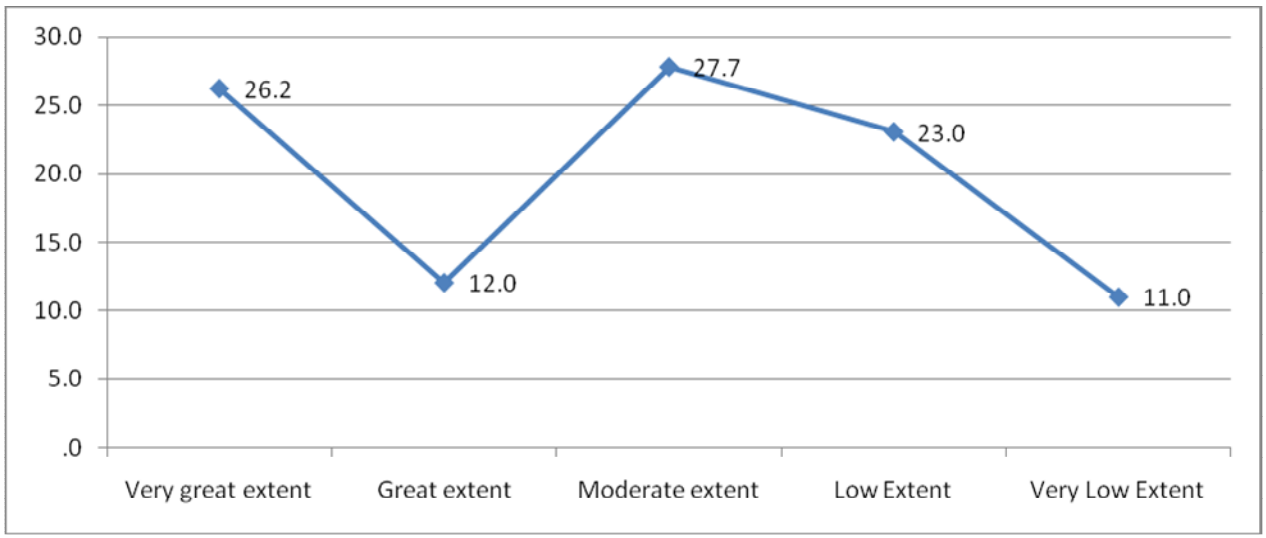


Figure 4. 8: Risk –Taking Propensity

ii) Planning Skills

The study sought to find out the extent to which planning skills influences the growth of SMEs in Kenya. According to Figure 4.10 below shows that 26.2% of the respondents indicated that planning skills influences the growth of SMEs to a very great extent, 20.9% of the respondents indicated that planning skills influences the growth of SMEs to a great extent, 28.8% of the respondents indicated that planning skills influences the growth of SMEs to a moderate extent 16.8% of the respondents indicated that planning skills influences the growth of SMEs to a low extent. While 7.3% of the respondents indicated that planning skills influences the growth of SMEs to a very low extent.

According to Lumpkin & Dess (1996), planning skills involves firm's strategic direction which determines competitiveness and growth of SMEs. According to Wiklund and

Shepherd (2003), planning skills clarifies how a firm organizes knowledge resources in order to discover and exploit market opportunities and product innovations which increases SMEs growth and competitiveness.

Therefore, the inference shows that planning skills is a critical element in the growth of SMEs. This is evident that planning helps the firm in aligning its mission to the vision of the enterprise.

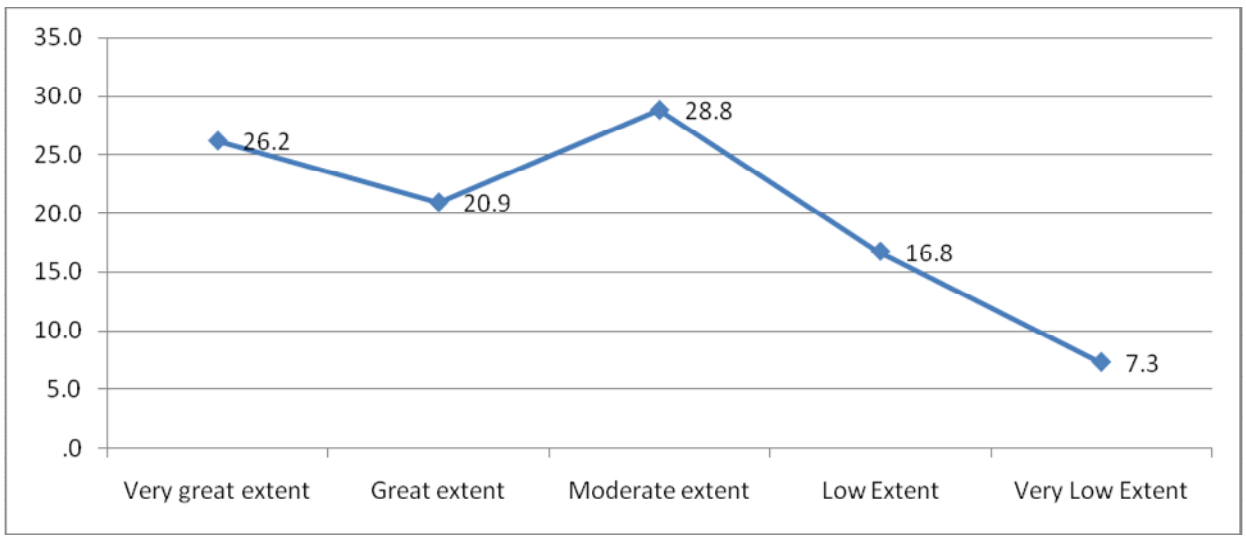


Figure 4. 9: Planning Skills

iii) Budgeting skills

The study sought to find out the extent to which budgeting skills as a component of planning skills on how they influence the growth of SMEs. Figure 4.11 below, depicts that 27.7% of the respondents indicated that budgeting skills influences the growth of SMEs to a very great extent, 30.9% of the respondents indicated that budgeting skills influences the growth of SMEs to a great extent, 17.3% of the respondents indicated that budgeting skills influences the growth of SMEs to a moderate extent, 12.6% of the respondents indicated that budgeting skills influences the growth of SMEs to a very low

extent. While 11.5% of the respondents indicated that budgeting skills influences the growth of SMEs to a low extent.

The findings of this study concurs with those of Drury, (2000) and Joshi, (2003) who found that budgeting skills is an important element in financial decision-making and internal operation of organization which help entrepreneurs to achieve success in business operations .

It can be inferred that the growth of SMEs is characterized by entrepreneurs planning skills such as budgeting skills which helps the SME owners to make economic decision which in turn increases SME competitiveness.

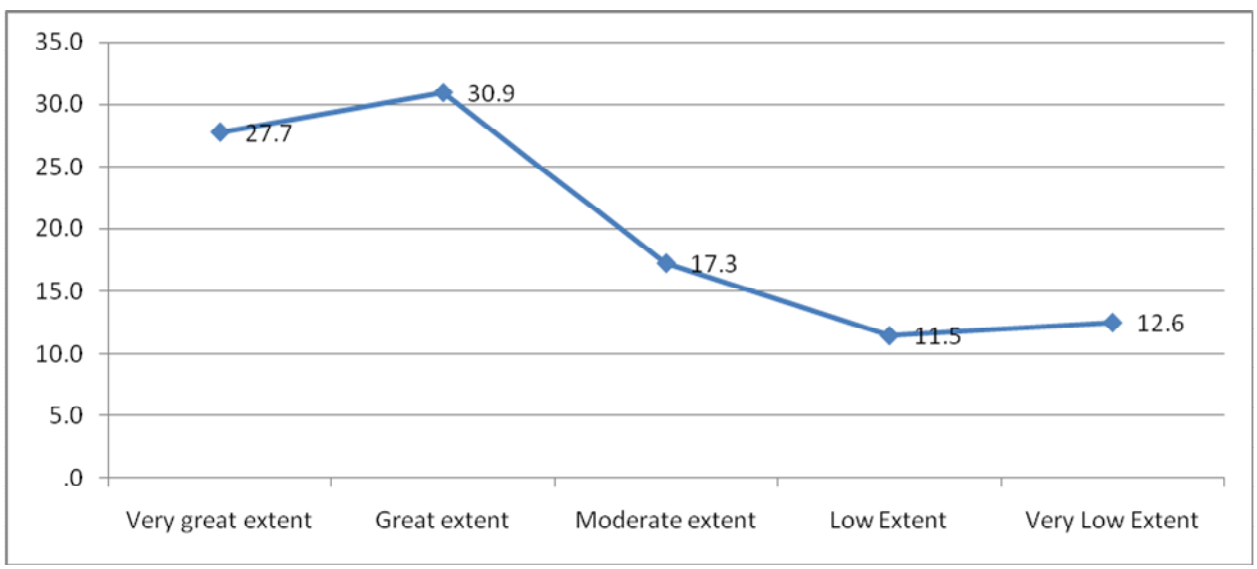


Figure 4. 10: Careful Budgeting Skills

iv) Financial Records

The study sought to find out the extent to which maintenance of financial records influences the growth of SMEs. Figure 4.12 below, depicts that 24% of the respondents indicated that maintainance of financial records influences the growth of SMEs to a very great extent, 27% of the respondents indicated that the maintenance of financial records

influences the growth of SMEs to a great extent, 26% of the respondents indicated that maintenance of financial records influences the growth of SMEs to a moderate extent, 13% of the respondents indicated that it influences the growth of SMEs to a low extent,. While 10% of the respondents indicated it influences the growth of SMEs to a very low extent.

The findings concurs with Hughes and Morgan (2007) who found that to SMEs growth is influenced by the level of entrepreneur maintaining accurate and complete records. Drury (2000) reveal that proper financial records help the SMEs to be in a position of meeting short term obligations.

The inferences from the study shows that the growth of SMEs is influenced by the entrepreneurs capacity to maintain liquidity position of the firm through current ratio and Acid test ratio which helps the entrepreneurs to be in a position to meet short term obligations.

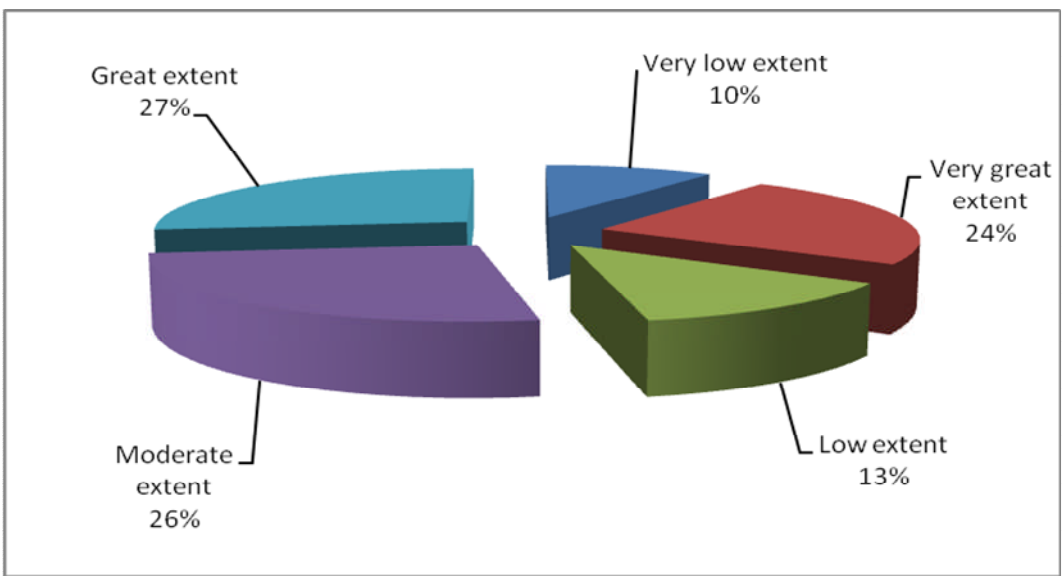


Figure 4. 11: Maintenance of Financial Records

4.5.3 Innovativeness

The study sought to investigate the influences of innovativeness on growth of small and medium enterprises in Kenya. Specifically, the study focused on entrepreneurs support on employees' innovation, number of patents within the enterprise and level of new product sales to total sales.

i) Provision of Incentives for Innovative Employee

The study sought to find out the extent to which incentives for innovative employee influence the growth of SMEs in Kenya. From Figure 4.13, 15.7% of the respondents indicated that incentives for innovative employee influence the growth of SMEs to a very great extent, 24.6% of the respondents indicated that incentives for innovative employee influence the growth of SMEs to a great extent, 28.3% of the respondents indicated that incentives for innovative employee influence the growth of SMEs to a moderate extent,21.5% of the respondents indicated that incentives for innovative employee influence the growth of SMEs to a low extent, while 9.4% of the respondents indicated that incentives for innovative employee influence the growth of SMEs to a very low extent.

These findings correspond with those by Hyrsky and Tuunanen (2006) who found that a creative and innovative employee who is motivated to develop new products and new markets has strong association to the growth of SMEs. Gans & Scott (2000) observed that recognition through incentives to the employees is a crucial component to building a sustained and thriving innovation in the enterprise which is a preliquisite for SMEs growth where compensation is pegged on employees creativity associated with emergence of new markets and new products.

The study infers that incentives for innovative employee influences the growth of SMEs in Kenya as depicted by the comparison of the findings of the study and available literature. This reveals that entrepreneurs who provide incentives to innovative employees is likely to encourage the employees to be creative and thus lead to emergence of new products and new markets and hence influence the growth of SMEs.

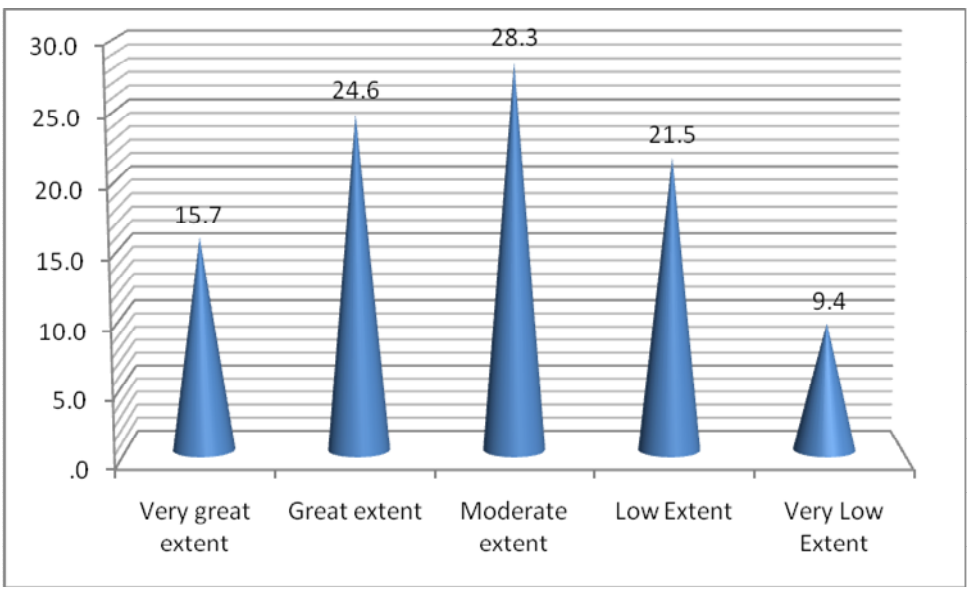


Figure 4. 12: Provision of Incentives for Innovative Employee

ii) Entrepreneurs Support on Employees' Innovation

The study sought to find out the extent entrepreneurs support on employees' innovation influence growth of SMEs. From Figure 4.14, 16.2% of the respondents indicated that entrepreneurs' support on employees' innovation influence growth of SMEs to a very great extent, 19.4% of the respondents indicated that entrepreneurs' support on employees' innovation influence the growth of SMEs to a great extent, 39.3% of the respondents indicated that entrepreneurs' support on employees' innovation influence the growth of SMEs to a moderate extent while 8.9% of the respondents indicated that

entrepreneurs' support on employees' innovation influence the growth of SMEs to a very low extent.

The study contradicts with the findings of Amabile (2003), Hennessey and Amabile (2008) who have disclosed evidence to the contrary indicating that material rewards are detrimental to innovation. The findings concur to those of Baer (1997) who showed that entrepreneurs' support on employees' innovation through material rewards such as bonuses and pay increases encourage innovation.

It can therefore be concluded that entrepreneurs' support on employees innovation through material rewards influence growth of SMEs. This further shows entrepreneurs who provide enabling environment for employees within the enterprise increases growth capacity of the enterprise.

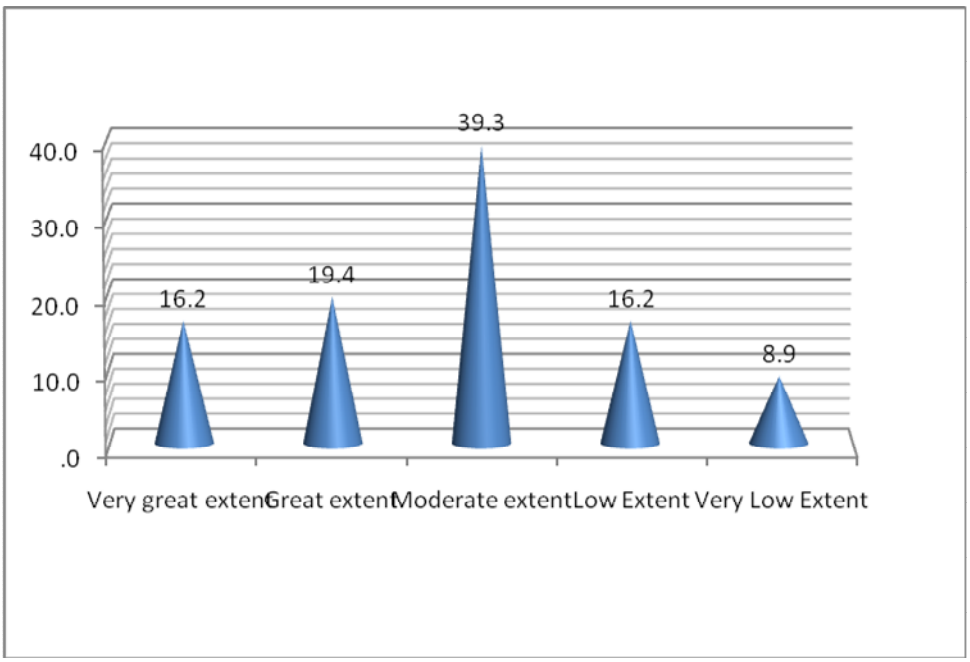


Figure 4. 13: Entrepreneurs Support on Employees' Innovation

iii) Number of patents within the enterprise

The study sought to find out the extent to which number of patents within the enterprise influence the growth of SMEs, 12% of the respondents indicated that number of patents within the enterprise influence the growth of SMEs to a very great extent, 19% of the respondents indicated that number of patents within the enterprise influence the growth of SMEs to a great extent, 43% of the respondents indicated that number of patents within the enterprise influence the growth of SMEs to a moderate extent, 18% of the respondents indicated that number of patents within the enterprise influence the growth of SMEs to a low extent, while 8% of the respondents indicated that number of patents within the enterprise influence the growth of SMEs to a very low extent as shown in the figure 4.15 below.

These findings concur with the findings of König and Licht (1995) who found that inclination to use patents for innovation protection is positively related to the firm's growth. These findings correspond with those by Gambardella (2007) who established that the numbers of patents within the enterprise are beneficial because they generate an incentive to invest in research and development (R&D) and as a consequence increase the likelihood of innovation and firm growth. Bessen and Maskin (2009) also observed that patents grant a temporary monopoly on the exploitation of knowledge which could lead to the translation of invention into successful commercial innovation for a firm and as a result increases firm's growth.

Inference shows that SMEs reliance on patents as a source of competitive advantage has a relationship to the SMEs growth therefore entrepreneurs should encourage the use of patents in order to protect their innovation which is associated with long term sustainability and SMEs growth.

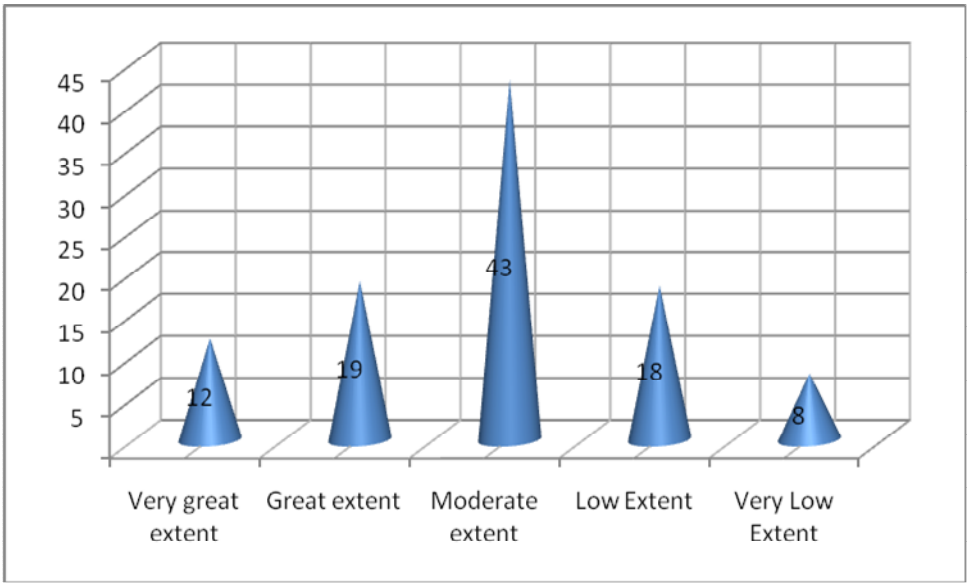


Figure 4.14: Number of patents within the enterprise

iv) The level of new product to total sales

The study sought to find out the extent to which the level of new product sales to total sales influence the growth of SMEs , 17% of the respondents indicated that the level of new product sales to total sales influence the growth of SMEs to a very great extent, 25% of the respondents indicated that percentage of the level of new product sales to total sales influence the growth of SMEs to a great extent, 32% of the respondents indicated that the level of new product sales to total sales the growth of SMEs to a moderate extent,20% of the respondents indicated that the the level of new product sales to total sales influence the growth of SMEs to a low extent, while 6% of the respondents indicated that the level of new product sales to total sales influence the growth of SMEs to a very low extent as shown in the figure 4.16 below.

These findings concur with the findings of Varis and Littunen (2010) who found that introduction of new products in comparison to the revenues of enterprise is a major significance to SMEs growth and competitiveness. The findings are in line with those by

Kusar (2004) who found that SMEs can successfully enter, grow and remain in the global market through investment in research and development which leads to new products and hence competitiveness of the enterprise.

Therefore inferences can be made that entrepreneurs should invest in research and development such as advertisement and getting feedback from customers in order to bring products that are needed in the market. Therefore there is a relationship between the level of new product to total sales and the growth of SMEs.

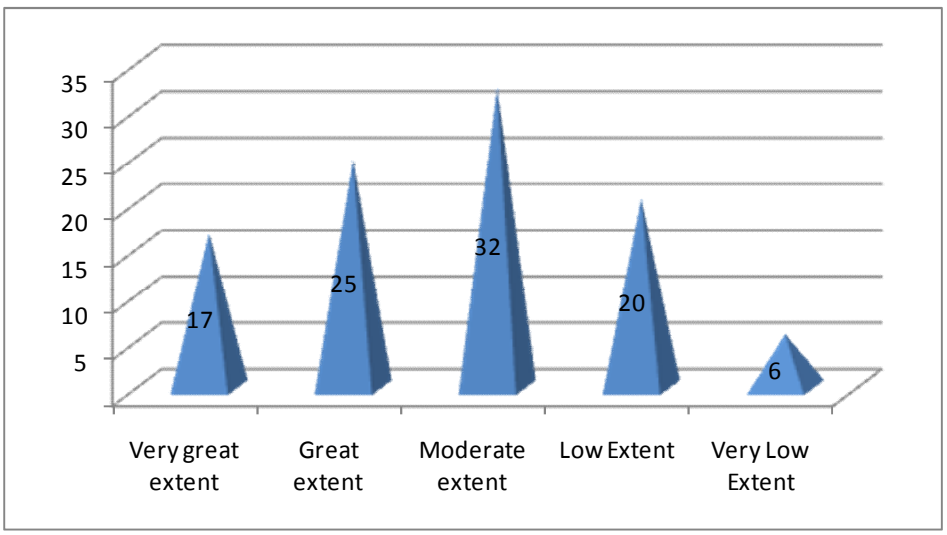


Figure 4. 15: The level of new product to total sales

4.5.4 Structural Capital

The study sought to investigate the influence of structural capital on growth of small and medium enterprises in Kenya. Specifically, the study focused on trademark and proprietary databases, transaction time, revenue per employee, transaction cost and data systems making it easy to access relevant information.

i) Transaction Cost

The study sought to find out the extent to which transaction cost influences the growth of SMEs in Kenya. From the findings shown in Figure 4.17, 25% of the respondents indicated that transaction cost influences the growth of SMEs to a very great extent, 32% of the respondents indicated that transaction cost influences the growth of SMEs to a great extent, 18% of the respondents indicated that transaction cost influences the growth of SMEs to a moderate extent, 11% of the respondents indicated that transaction cost influence the growth of SMEs to a low extent while 25% of the respondents indicated that transaction cost influence the growth of SMEs to a very low extent.

The study findings relate to those of Bontis (2000) who revealed that minimizing transaction cost per unit is associated with effectiveness and efficiency which as a result increases enterprise growth. Hsu (2006) in his study concluded that the main focus of structural capital is to embrace low transaction cost that has a sound foundation, with views from organizational capital, process capital, even innovation capital and the Knowledge Management model. He further argued that this can be achieved whereby the entrepreneur provides social ties with suppliers and customers at a low transaction cost. Shelley (2004) revealed that transaction costs are important to investors because they are one of the key determinants of net returns of the enterprise.

Therefore it can be inferred that entrepreneurs achieve higher growth rate by participating in the market at a lower or no transaction costs such as determining the required good available on the market, bargaining at a lower cost and engaging in agreement with the other party at a low transaction cost. Therefore the discussions reveal that there is a strong association between transaction cost and growth of SMEs in Kenya.

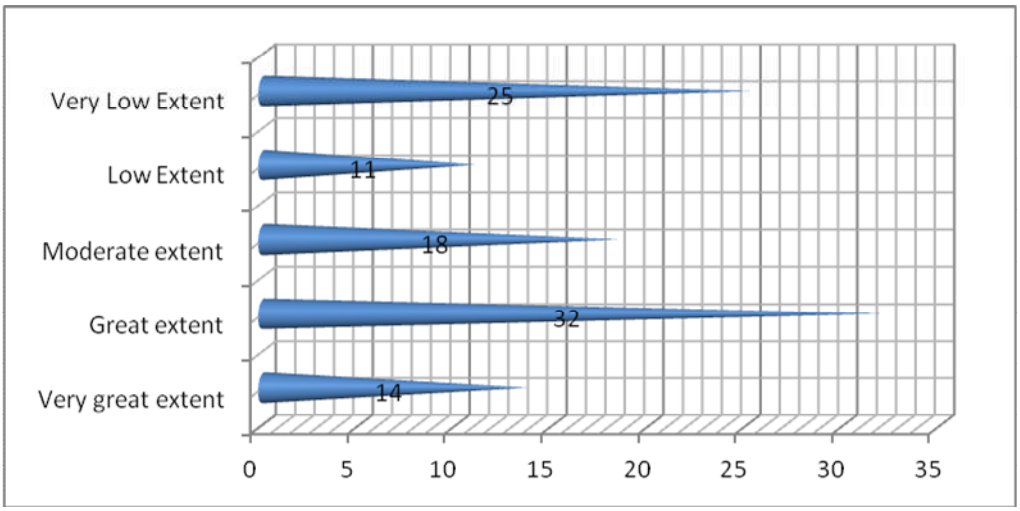


Figure 4.16: Transaction Cost

ii) Transaction Time

From the findings, 8.9% of them agreed that having the transaction time influences the growth of respondents' enterprise to a very great extent, 20.9% of them agreed that having the transaction time influences the growth of respondents' enterprise to a great extent, 25.1% of the respondents agreed that having the transaction time influences the growth of respondents' enterprise to a moderate extent, 24.1% of them agreed that having the transaction time influences the growth of respondents' enterprise to a low extent while 20.9% of them agreed that having the transaction time influences the growth of respondents' enterprise to a very low extent.

The findings correlate with those of Peel and Wilson 1996 who found that long transaction time is hindrance to faster growth of SMEs and concluded that real-time view of inventory and just in time system influences the growth of enterprises. Edvinsson & Malone (2007) indicated that structural capital include reduction of transaction time which is associated with the development of organizational competence.

Inferences from the findings and the available literature shows that entrepreneurs should adopt just in time system that reduces inventory cost and holding cost which are associated with minimization of cost and therefore maximization of the profit and hence the growth of the enterprise.

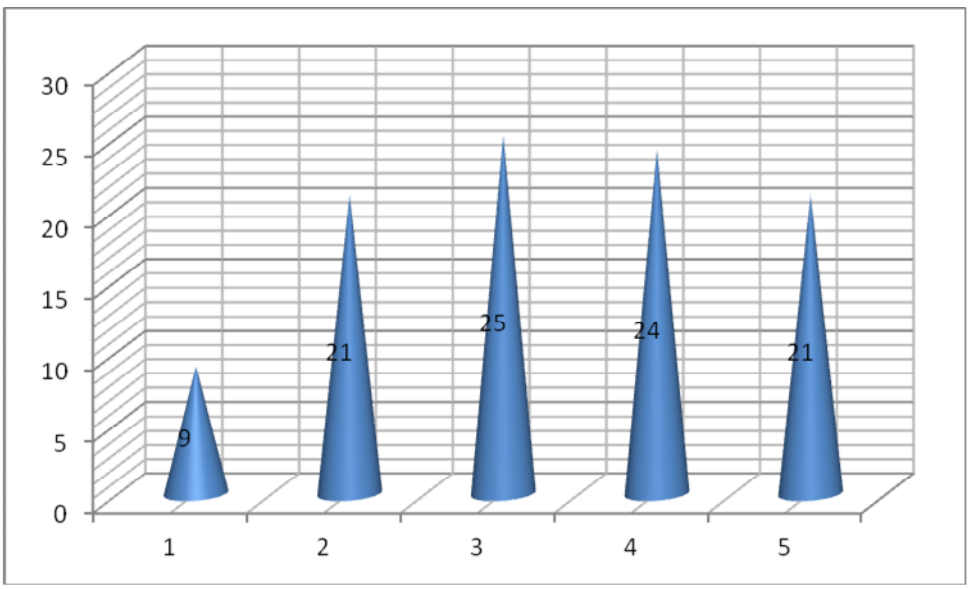


Figure 4.17: Transaction Time

iii) Trademark and Proprietary Databases

The study sought to find out the extent to which trademark and proprietary databases influences the growth of SMEs. From the findings shown in Figure 4.19, 10% of the respondents indicated that trademark and proprietary databases influence the growth of SMEs to a very great extent, 19% of the respondents indicated that trademark and proprietary databases influences the growth of SMEs to a great extent, 34% of the respondents indicated that trademark and proprietary databases influences the growth of SMEs to a moderate extent, 18% of the respondents indicated that trademark and proprietary databases influences the growth of SMEs to a low extent while 19% of the

respondents indicated that trademark and proprietary databases influence the growth of SMEs to a very low extent.

These findings correspond with those of Nunes (2006) who found that trademark and proprietary databases are valuable intellectual assets that can be utilized as a strategic factor and a decisive competitive advantage of the enterprise..

One can therefore infer that sustainability and growth of SMEs is dependent on entrepreneur having proprietary database that have customer contacts that may be used to disseminate information about new products in the market and also feedback from customer. Trademarks can be used by the entrepreneurs to build loyalties within the enterprise.

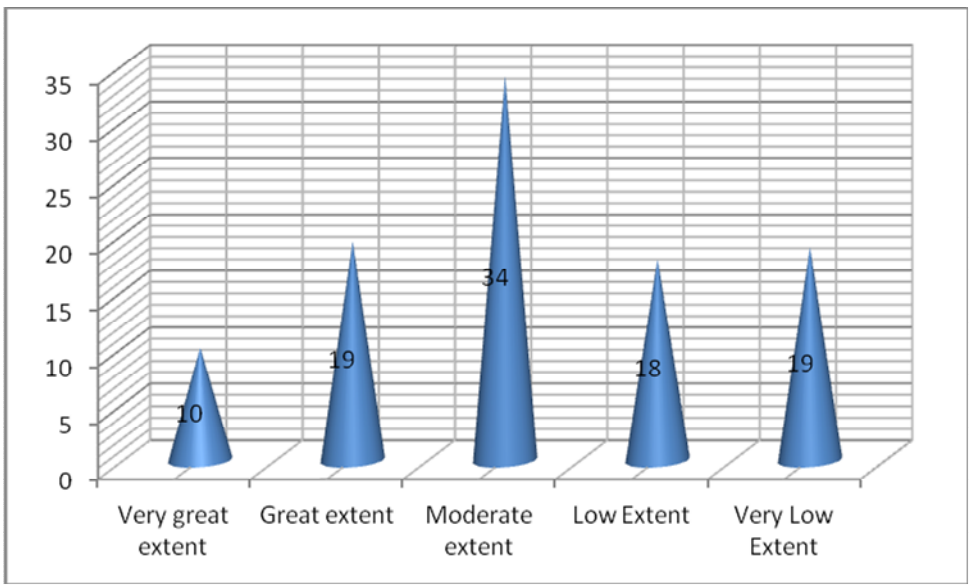


Figure 4. 18: Trademark and Proprietary Databases

iv) Data systems that facilitate access relevant information

From the findings, 8.9% of them agreed that data systems that facilitate access relevant information to a very great extent, 22.0% of them agreed that having the data systems that facilitate access relevant information influences the growth of respondents'

enterprise to a great extent, 20.9% of them agreed that data systems that facilitate access relevant information influences the growth of respondents' enterprise to a moderate extent, 23.6% of the respondents agreed that data systems that facilitate access relevant information to a low extent while 22.0% of them agreed that data systems that facilitate access relevant information to a very low extent.

The study relate to those of Maja (2001) who found that when an enterprise which has a flexible database systems usually facilitates access of relevant information and efficient inter-organizational communication, transform the way that firms gather, produce and transmit products and services and hence increases the competitiveness of the enterprise.

Inferences reveal that an entrepreneur should provide flexible database systems which provides easy access of information to its customers and hence increases SMEs growth.

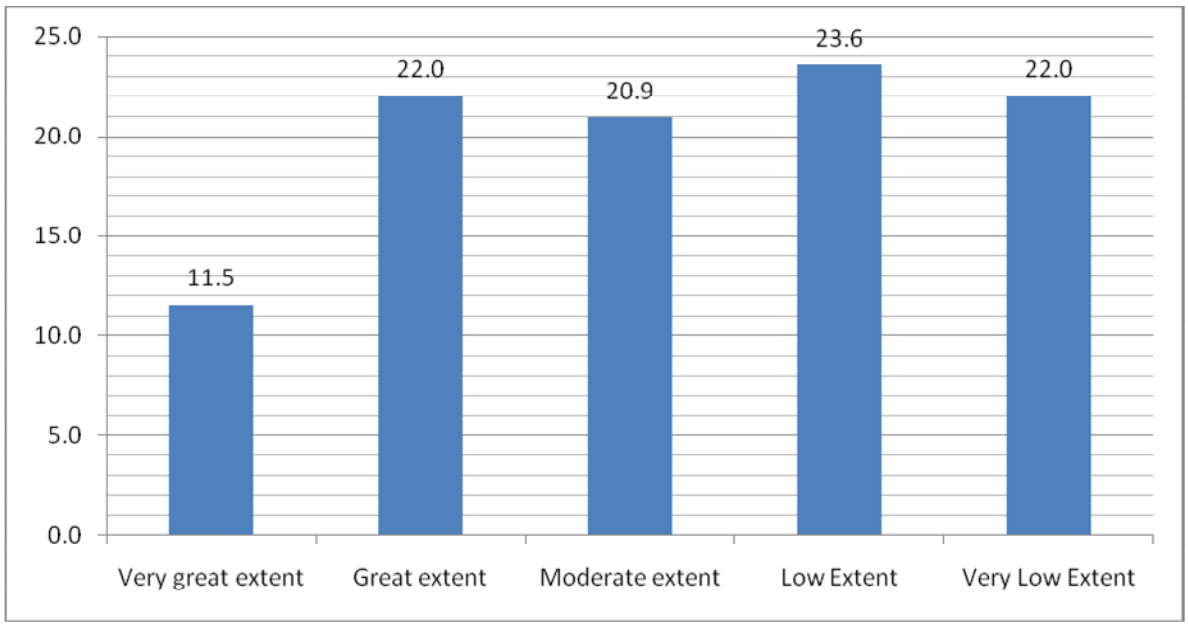


Figure 4. 19: Data systems that facilitate access relevant information

4.5.5 Customer Capital

The study sought to investigate the influence of customer capital on growth of small and medium enterprises in Kenya. Specifically, the study focused on customer satisfaction, time to resolve problem, the longevity of relationships and understanding of the target markets

i) Customer Satisfaction

The study sought to find out the extent to which customer satisfaction influences the growth of SMEs. Figure 4.21, reveal that 37% of the respondents indicated that customer satisfaction influences the growth of SMEs to a very great extent, 7% indicated that customer satisfaction influences the growths of SMEs to a great extent, 18 % indicated that customer satisfaction influences the growth of SMEs to a moderate extent, 28 % indicated that customer satisfaction influences the growth of SMEs to a low extent, while 9% indicated that customer satisfaction influences the growth of SMEs to a very low extent.

These findings concur with those of Bontis (2000) who found that customer satisfaction is associated with repeat business and hence increases the return of the business. In addition, Roos (1997) and Bontis,(1998) found that customer satisfaction is also one of the most important component of intellectual capital which is greatly associated with growth. Bontis (1998) found that customer satisfaction is created through programmes such as marketing campaigns, after sale services and improving customer feedback. Bontis, William and Richardson (2000) found that entrepreneurs should poses customer capital which is a key component of intellectual capital and a key driver for growth of the enterprise.

Inferences made reveal that entrepreneur should develop strategies that lead to building a strong relationship between the enterprise and the customers. This indicates that customer capital is a critical component of intellectual capital which has a great influence on the growth of enterprise.

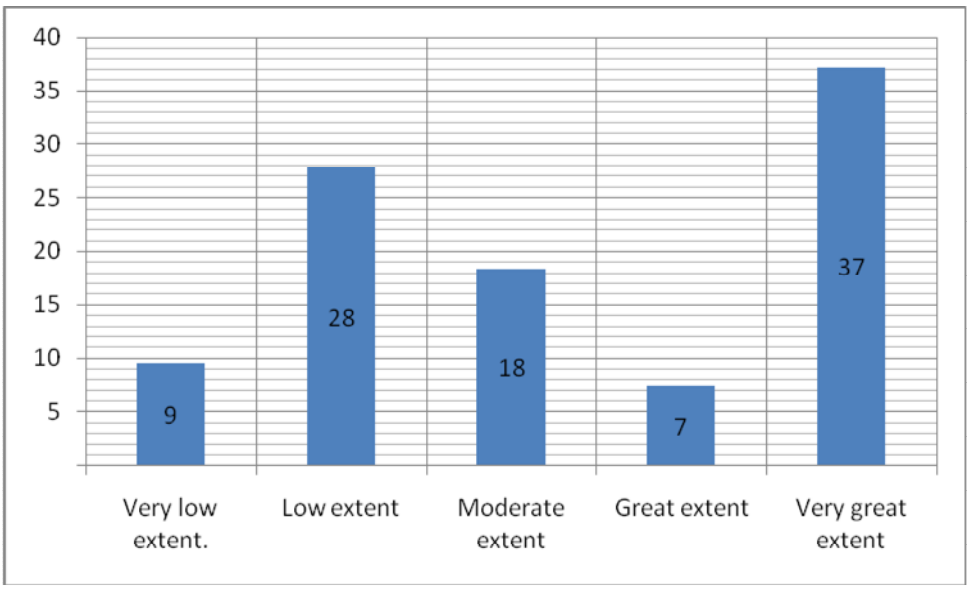


Figure 4. 20: Customer Satisfaction

ii) Time taken to Resolve Problem

The study sought to find out the extent time taken to resolve problem influence the growth of SMEs. Figure 4.22, reveal that 30% of the respondents indicated that time taken to resolve problem influence the growths of SMEs to a very great extent, 13% indicated that time taken to resolve problem influences the growths of SMEs to a great extent, 36 % indicated that time taken to resolve problem influence the growths of SMEs to a moderate extent, 15% indicated that time taken to resolve problem influence the growth of SMEs to a low extent while 6% indicated that time taken to resolve problem influence the growth of SMEs to a very low extent.

These study findings concur with the findings of Standifird (2001) who found that reduced time to resolve problem related to customer complains increases loyalty of customers to the business.

Inferences can therefore be made that entrepreneurs should strive to resolve customer complains within the shortest time to increase efficiency hence the growth of the enterprise. This further indicates that customer capital influences the growth of SMEs.

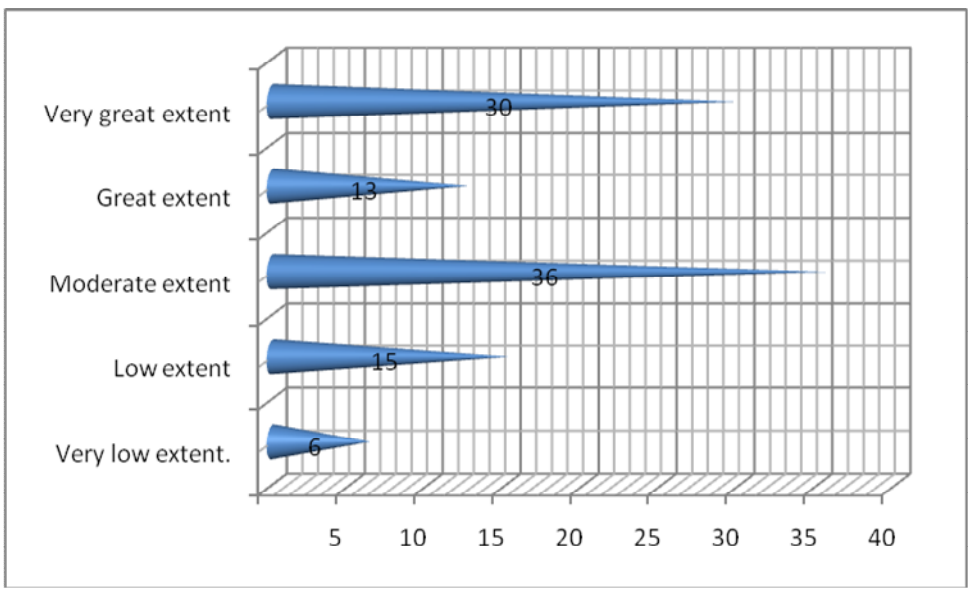


Figure 4.21: Time taken to Resolve Problem

iii) Longevity of relationships

The study sought to find out the extent Longevity of relationships influences the growth of SMEs. Figure 4.23, reveal that 30% of the respondents indicated that longevity of relationships influences the growths of SMEs to a very great extent, 17% indicated that longevity of relationships influences the growths of SMEs to a great extent, 28 % indicated that longevity of relationships influences the growths of SMEs to a moderate extent, 17% indicated that longevity of relationships influences the growth of SMEs to a

low extent, while 7% indicated that longevity of relationships influence the growth of SMEs to a very low extent.

The findings concur with those of Cronin, Brady and Hult, (2000) who found that customer longevity is a critical element for growth of enterprise and therefore entrepreneurs should understand how to strengthen the customer relationship and achieve desired loyalty outcomes.

The findings also relate with Crossan, White, Lane and Klus (2006) who assert that longevity of relationships contributed the most to growth of SMEs. Crossan et al. (2006) found the essence of customer capital to be the knowledge embedded in relationships external to the firm and that the scope lies external to the firm and external to the human capital nodes. In view of the evidence provided, this study hypothesizes that longevity of relationships is positively associated with the growth of SMEs. Inferences can therefore be made that growth of SMEs is embedded in relationships external to the firm.

Inferences reveal that entrepreneurs who have stronger knowledge of market channels could improve their ability to capture customer knowledge and consequently enhance the growth of the enterprise. It can further be inferred that creation of customer relationship leads to longevity of relationship with the customer.

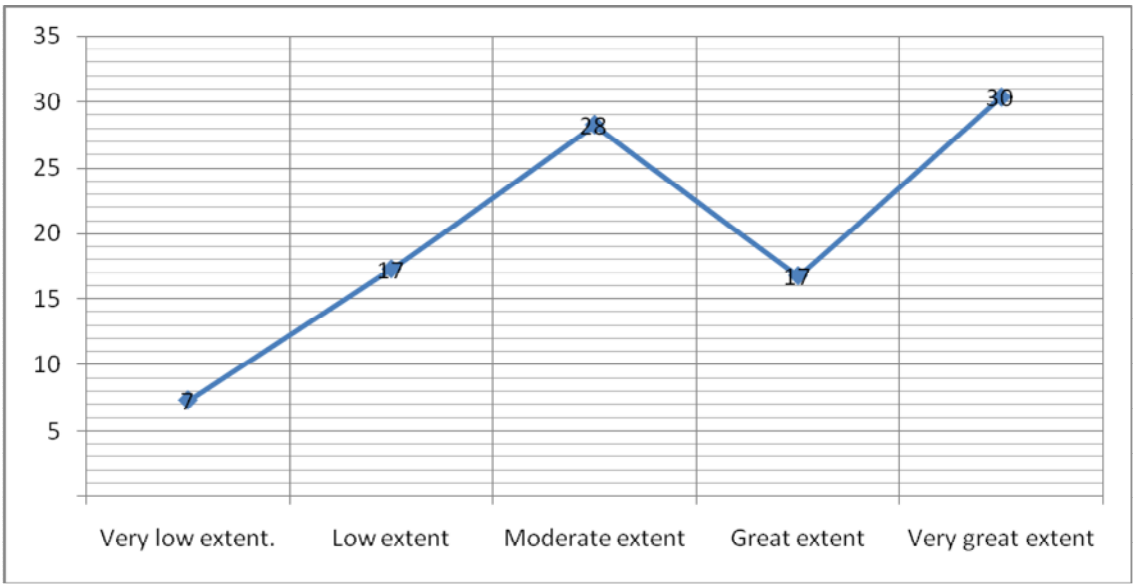


Figure 4. 22: Longevity of relationships

iv) Understand target markets

The study sought to find out the extent understanding of target markets influence the growth of SMEs. Figure 4.24, reveal that 31% of the respondents indicated that understanding of target markets influence the growths of SMEs to a very great extent, 17% indicated that understanding of target markets influences the growths of SMEs to a great extent, 29 % indicated that understanding of target markets influence the growths of SMEs to a moderate extent, 17% indicated that understand target markets influence the growth of SMEs to a low extent, while 6% indicated that understanding of target markets influence the growth of SMEs to a very low extent.

The findings concurs with those of Kohli and Jaworski (2000) who found that understanding what customers want in a product or a service better than anyone else is what makes someone a business leader as opposed to a follower and hence greater customer satisfaction.

Hsiu-Yueh (2006) found that understanding of target market involves market intelligence pertaining to current and future needs of customers, dissemination of intelligence horizontally and vertically within the organization, and organization wide action or responsiveness to market intelligence.

It can therefore be inferred that entrepreneurs should have a clear understanding of the target market which can be created through social network between the enterprise and the customer. This shows that understanding the target market reveal an important knowledge channel that is crucial component of intellectual capital which has great significance on the growth of SMEs.

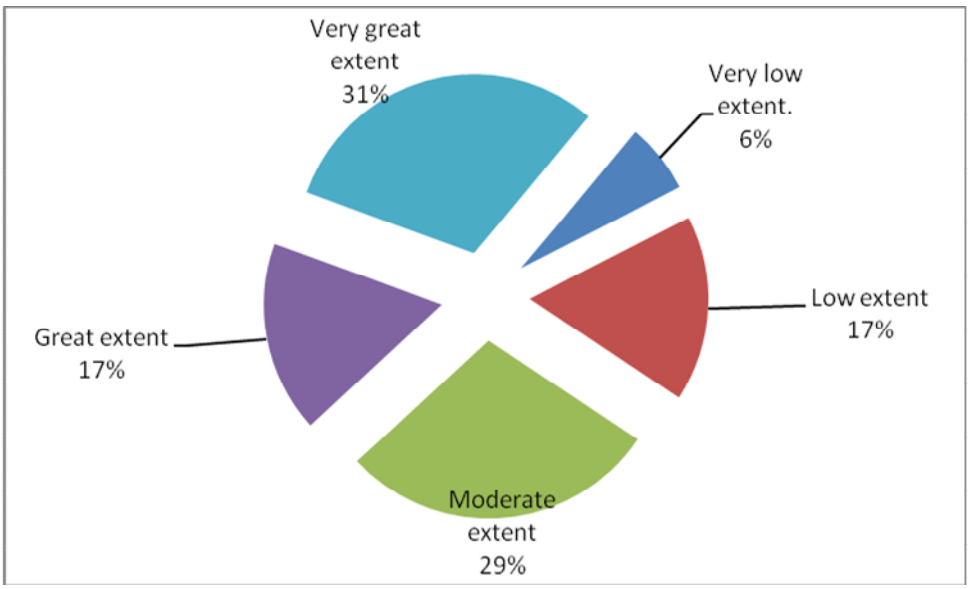


Figure 4. 23: Understand target markets

4.6 Regression Analysis

4.6.1 Linear regression model of growth of SMES/Managerial skills

The linear regression analysis models the relationship between the dependent variable which is growth and independent variable which is managerial skills. The coefficient of determination (R^2) and correlation coefficient (R) shows the degree of association between managerial competencies and growth of SMES in Kenya. The results of the linear regression indicate that R^2=.789 and R= .888 this is an indication that there is a strong linear relationship between managerial skills and growth of SMES in Kenya.

This implies that an increase in managerial skills such as education and experience leads to an increase in growth of SMEs. Smallbone and Welter (2001) and Hisrich and Drnovsek (2002), found that managerial competencies as measured by education, managerial experience, start-up experience and knowledge of the industry positively impact on the growth of SMEs.

Cohen and Kaimnenakis (2007) found that managerial skills is an important element of intellectual capital in SMEs growth as found by. Surviving on a small scale, SMEs tend to be creative, aggressive in exploiting the opportunity and produce more products compared to their competitors. Size gives SMEs an advantage to create a friendly atmosphere, be creative and have a close network to nurture cooperation of the employees.

Desouza and Awazu (2006) reveals that SMEs are likely to be creative, aggressive in exploiting the opportunity and produce more products upon realization that intellectual capital is on important lever for the growth of businesses.

It can be inferred that growth of SMEs is associated by the level; of experience and education of the entrepreneurs. Knowledge of the entrepreneurs regarding markets and products is a key factor for the growth of SMEs.

Table 4. 6: Model Of Growth Of SMES/ Managerial Skills

Model Summary	
R	R Square
.789	.888

The independent variable is Managerial Skills.

Table 4.7 shows the results of ANOVA test which reveal that managerial skills have significant effect on growth of SMEs.Since the P value is actual 0.045 which is less than 5% level of significance.This is depicted by linear regression model $Y=B0+B_1X_{1+}E$ where X1 is the managerial skills the P value was 0.045 implying that the model $Y=B0+B_1X_{1+}E$ was significant .

Table 4. 7:ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.131	1	6.131	4.063	.045[b]
	Residual	285.199	189	1.509		
	Total	291.330	190			

a. Dependent Variable: Entreprise Growth

b. Predictors: (Constant), Managerial Skills

The table 4.8 indicates there was positive gradient which reveals that an increase in managerial skills lead to increased growth of SMEs. Cabrita and Bontis, (2008) indicate that managerial skills includes aspects such as competence, intellectual agility, innovation

and creativity, skills, values and experiences and individual's education. Inferences can be drawn from the findings and literature that entrepreneur should be innovative creative regarding the management of SMEs.

Table 4.8 : Model

Model		Coefficients		Sig.
		B	Std. Error	
1	(Constant)	3.332	.165	.000
	Managerial Skills	.072	.036	.045

Figure 4.25 shows the results of managerial skills on the growth of SMEs in Kenya. In a scatter diagram. The scatter diagram indicates a positive gradient which is an indicative that managerial influence the growth of SMEs.

Scatter Diagram growth of SMES/ Managerial Skills

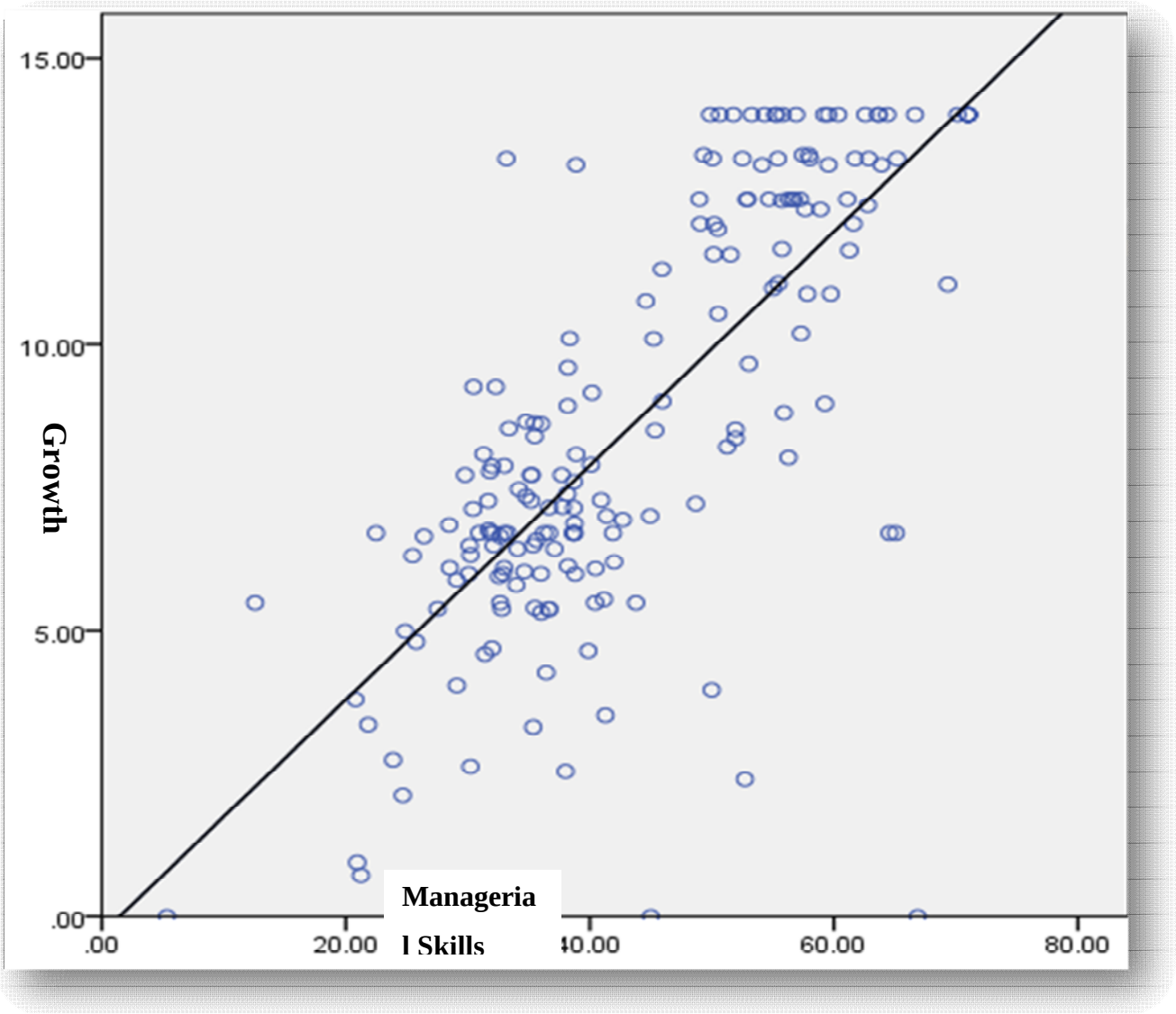


Figure 4. 24: Scatter Diagram on Managerial Skills

4.6.2 Linear regression Model of growth of SMES/Entrepreneurial Skills

Table 4.10 presents summary of regression model result. The value of R and R^2 are 0.753 and 0.568 respectively. The R value of 0.753 represents the strong positive linear relationship between entrepreneurial skills and the growth since it is close to 1. The R^2 indicates that explanatory power of the independent variables is 0.568. This means that about 56.8% of the variation in growth is explained by the model $Y=\beta_0+ \beta_2X_2+E$. The R^2 value as revealed by the result which means that about 43.2% of the variation in the

dependent variable is unexplained by the model, denoting a strong relationship between the entrepreneurial skills and growth of SME. These findings concur with Hisrich and Drnovsek (2002) who found that managerial skills such as conceptual skills, technoical skills as a major factor on the growth of SMEs.

It can be infered that entrepreneurs that entrepreneurs should have technical and conceptual skills as important intellectual capital on the growth of SMEs in Kenya.

Table 4. 9: Model

Model	R	R Square	Adjusted R Square
1	0.753	0.568	.740

Table 4.11 shows the results of ANOVA test which reveal that Entrepreneurial Skills have significant effect on growth of SMEs.Since the P value is actual 0.003 which is less than 5% level of significance.This is depicted by linear regression model $Y=B0+B_2X_{2+}E$ where X_2 is the Entrepreneurial Skills the P value was 0.003 implying that the model $Y=B0+ B_2X_{2+}E$ was significant.

Table 4. 10:ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.041	1	13.041	8.856	.003
	Residual	278.289	189	1.472		
	Total	291.330	190			

a. Dependent Variable: Enterprise Growth

b. Predictors: (Constant), Entrepreneurial skills

Model		Coefficients	Sig.
		B	
1	Constant	3.915	.000
	Entrepreneurial skills	.102	.003

a. Dependent variable: Enterprise Growth

Scatter Diagram growth of SMES/ Entrepreneurial Skills

Figure 4.26 shows the results of entrepreneurial skills on the growth of SMEs in Kenya. In a scatter diagram. The scatter diagram indicates a positive gradient which is an indicative that entrepreneurial skills influence the growth of SMEs.

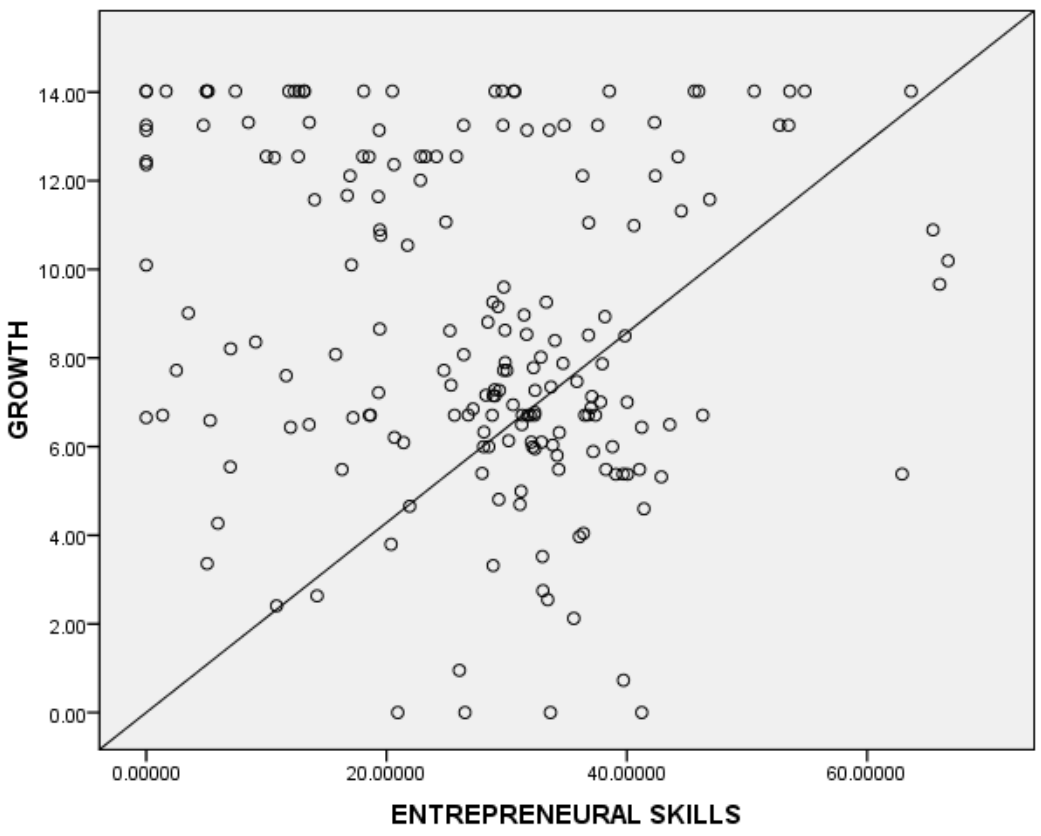


Figure 4. 25: Scatter Diagram on Entrepreneurial Skills

4.6.3 Linear Regression model of growth of SMES/Innovativeness

The linear regression analysis shows a relationship between the dependent variable which is growth and independent variable which is innovativeness. The coefficient of determination R^2 and correlation coefficient r shows the degree of association between managerial skills and growth of SMEs in Kenya. The results of the linear regression $Y=\beta_0+\beta_3X_3+E$ indicate that $r^2=.746$ and R= .864 this is an indication that there is a strong linear relationship between innovativeness and growth of SMES in Kenya.

The findings concur with those of Wu, Chang and Chen (2008) who found that effects of intellectual capital including human capital, customer capital and structural capital, on innovation exist at significant levels, suggesting a perfect mediating effect of intellectual capital on innovation.

Inferences can therefore be made that tendency of a firm to engage in and support new ideas, novelty, experimentation and creative processes results in new products, services or technological processes. Product innovation requires the firm to have competences relating to technology and relating to customers.

Table 4. 11 : Model

Model	R	R Square	Adjusted R Square
1	.864	.746	.662

Table 4.13 shows the results of ANOVA test which reveal that innovativeness have significant effect on growth of SMEs.Since the P value is actual 0.007 which is less than 5% level of significance.This is depicted by linear regression model $Y=B0+B_3X_{3+}E$

where X_3 is the innovativeness the P value was 0.007 implying that the model $Y=B0+B_3X_{3+}E$ was significant.

Table 4. 12: ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.067	1	2.067	1.351	.007
	Residual	289.263	189	1.530		
	Total	291.330	190			

a. Dependent Variable: Entreprise Growth

b. Predictors: (Constant), Innovativeness

Table 4. 13 Step Wise Regression

Model		Coefficients	Sig.
		B	
1	(Constant)	3.514	.000
	Innovativeness	.033	.007

a. Dependent Variable: Entreprise Growth

Figure 4.27 shows the results of innovativeness on the growth of SMEs in Kenya. In a scatter diagram. The scatter diagram indicates a positive gradient which is an indicative that innovativeness influence the growth of SMEs.

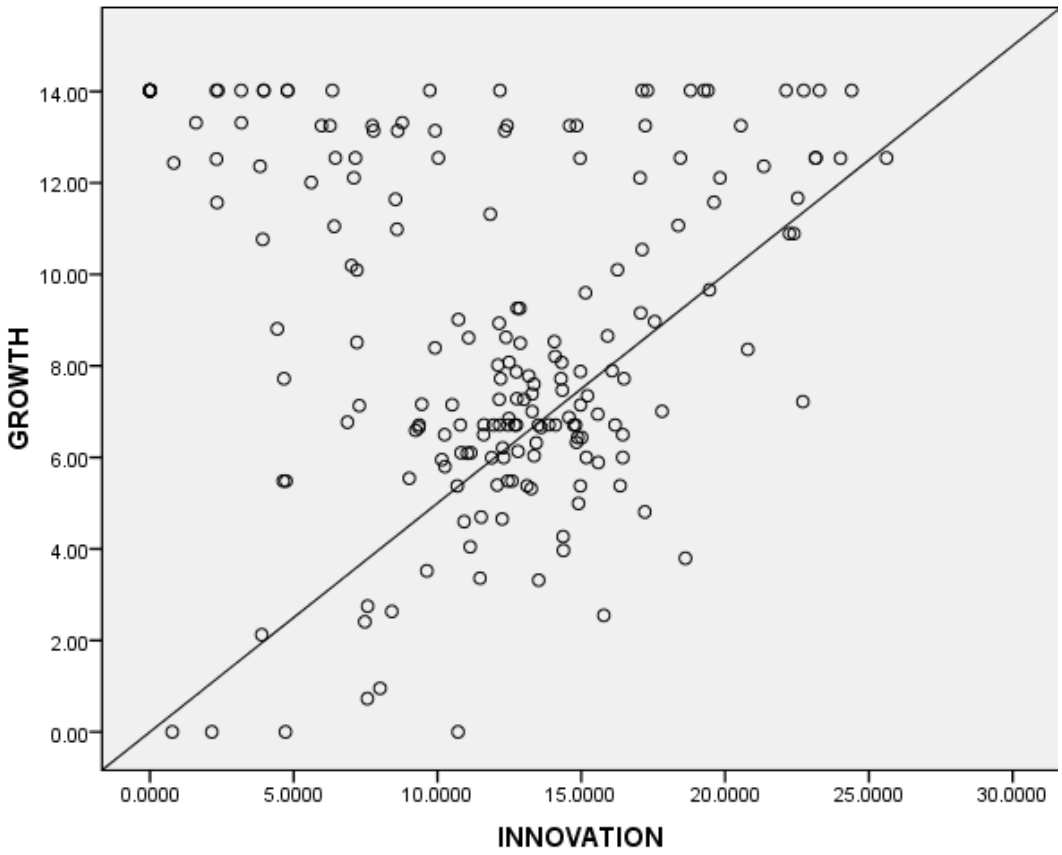


Figure 4. 26: Scatter Diagram on Innovativeness

4.6.4 Linear regression model of growth of SMES/Structural Capital

The linear regression analysis $Y=\beta_0+ \beta_4X_4+E$ shows a relationship between the dependent variable which is growth and independent variable which is structural capital. Where X_4 is the Structural capital. The coefficient of determination (R^2) and correlation coefficient (r) shows the degree of association between structural capital and growth of SMES in Kenya. The results of the linear regression indicate that R=.724 and R^2=.524 this is an indication that there is a strong relationship between innovativeness and growth of SMES in Kenya.

This findings concur with those of Hsu (2006) found that the main focus of structural capital is to embrace a sound foundation, with views from organizational capital and

process capital. Therefore, structural capital is positively associated with the growth of SMEs.

Inferences can therefore be made that the social characteristics interconnect each individual in an organization and thus enhancing enterprise growth.

Table 4. 14: Model

Model	R	R Square	Adjusted R Square
1	.724	.524	.178

Table 4.16 shows the results of ANOVA test which reveal that structural capital have significant effect on growth of SMEs. Since the P value is actual 0.000 which is less than 5% level of significance.This is depicted by linear regression model $Y=B0+B_4X_{4+}E$ where X_2 is the structural capital the P value was 0.000 implying that the model $Y=B0+B_3X_{3+}E$ was significant

Table 4. 15: ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	53.071	1	53.071	42.099	.000
	Residual	238.259	189	1.261		
	Total	291.330	190			

a. Dependent Variable: Entreprise Growth

b. Predictors: (Constant), Structural Capital

Table 4. 16: Coefficients

Model		Unstandardized Coefficients		Sig.
		B	Std. Error	
1	(Constant)	2.236	.227	.000
	Structural Capital	.421	.065	.000

Figure 4.28 shows the results of structural capital on the growth of SMEs in Kenya in a scatter diagram. The scatter diagram indicates a positive gradient which is an indication that structural capital influence the growth of SMEs.

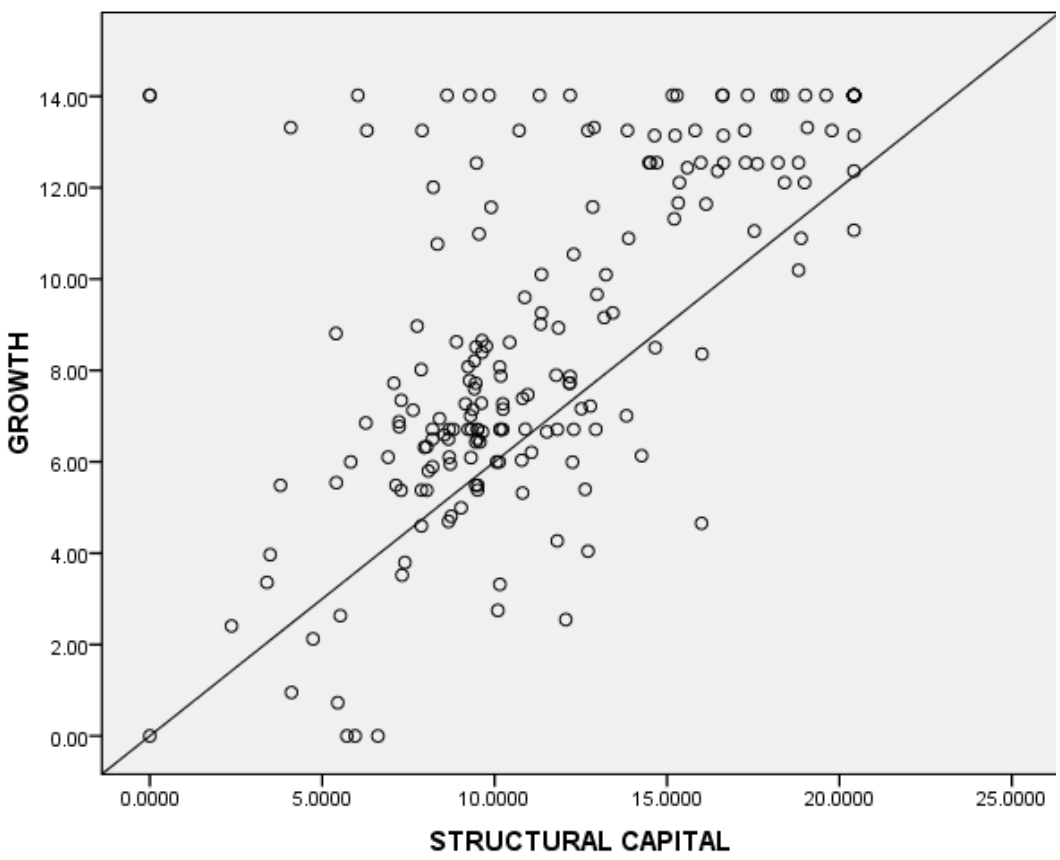


Figure 4. 27: Structural Capital Influence the Growth Of SMEs

4.6.5 Linear regression model of growth of SMES/Customer Capital

The table 4.18 presents summary of regression model $Y=\beta_0+\beta_5X_5+ E$ result. The value of R and R^2 are of 0.798 and 0.636 respectively. The R value of 0.798 represents the correlation between Customer Capital and the Growth. The R^2 which indicates the explanatory power of the independent variables is .636. This means that about seventy six percent of the variation in growth is explained by the independent variable. The R^2 value as revealed by the result is high which means about 36% of the variation in the dependent variable is unexplained by the model, denoting a strong relationship between the explanatory variable and Customer Capital. The standard error of the estimate is 1.213, which explains how representative the sample is likely to be of the population.

The findings concur with those of Chu, Lin, Hsiung,and Liu (2006) who found that relational capital includes relationships with customers and the government and refers to development and maintenance of important relationships such as those with customers and suppliers of goods and services, as well as the degree of partner satisfaction and customer loyalty.

Inferences can therefore be made that customer orientation is very important in SMEs. Limited in financial and expertise, SMEs are very focused on their target market. Compared to large organizations,SMEs are closer to their customers, and, therefore, are able to capture information on customers and market as their source of expertise and know-how. Therefore SMEs are mostly customer-focussed and aware of their competitors' actions.

Table 4. 17: Model

Model	R	R Square

1	.798[a]	.636

Table 4.19 shows the results of ANOVA test which reveal that customer capital have significant effect on growth of SMEs. Since the P value is actual 0.000 which is less than 5% level of significance.This is depicted by linear regression model $Y=B0+B_5X_{5+}E$ where X_2 is the customer capital the P value was 0.000 implying that the model $Y=B0+B_5X_{5+}E$ was significant

Table 4. 18: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.655	1	30.655	22.227	.000[b]
	Residual	260.674	319	1.379		
	Total	291.330	320			

a. Dependent Variable: Entreprise Growth

b. Predictors: (Constant), Customer Capital

Table 4. 19:Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.027	.151		20.112	.000
	Customer Capital	.163	.034	.324	4.715	.000

a. Dependent Variable: Entreprise Growth

Figure 4.29 shows the results of customer capital on the growth of SMEs in Kenya. In a scatter diagram. The scatter diagram indicates a positive gradient which is an indicative that customer capital influence the growth of SMEs.

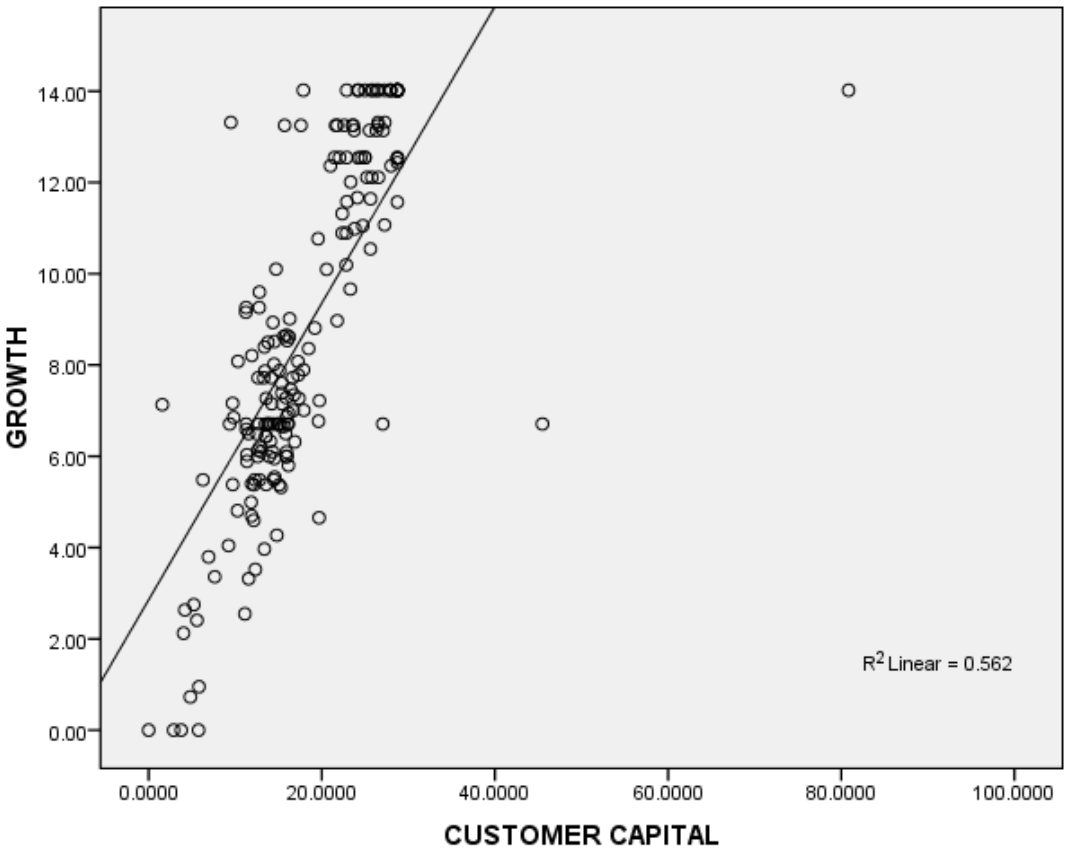


Figure 4. 28: Customer Capital Influence the Growth of SMEs.

4.7 Overall regression analysis

The linear regression analysis models the linear relationship between the dependent variable which is growth of SMEs and independent variables which are Managerial skills, Customer Capital, Innovation, Entrepreneurial Skills, and Structural Capital. The coefficient of determination R^2 and correlation coefficient (r) shows the degree of association between Variables and growth of SMES in Kenya. The results of the linear regression indicate that R^2=.704 and R= .839 this is an indication that there is a strong relationship between managerial skills, entrepreneurial skills,innovativeness, structural capital and customer capital and the growth of SMEs in Kenya.

The findings concurs with those of Marr, (2008) who postulates that intellectual capital to be key factors for company success and important levers for value creation. their core competence as invisible assets rather than visible assets. Hsu and Fang , (2010) revealed that intellectual capital is becoming a crucial factor for a firm's long-term profit and performance that identify their core competence as invisible assets rather than visible assets.

Table 4. 20: Model Summary

Model	R	R Square
1	.839	.704

Table 4.22 indicates that P value = 0.000 which is less than 5%. This shows that the overall model is significant. It further implies that managerial skills, entrepreneurial skills, innovativeness, structural capital and customer capital have a significant effect on the growth of SMES in Kenya.

According to Daud and Yusoff (2010) indicated that intellectual capital in a knowledge-based economy are recognized as the most important source of competitive advantage particulary for SMEs.

Table 4. 21: ANOVA

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	1809.028	5	361.806	87.391	.000
	Residual	761.775	315	4.140		
	Total	2570.803	320			

a. Dependent Variable: Growth

b. Predictors: (Constant), Customer Capital, Innovation, Entrepreneurial Skills, Structural Capital, Managerial Skills

Table 4. 22: Coefficients

Model		**Unstandardized Coefficients**	**T**	**p – Value**
1	Constant	0.119		
	Managerial Skills	0.413	6.855	0.018
	Entrepreneurial Skills	0.219	5.749	0.031
	Innovativeness	0.319	6.610	0.019
	Structural Capital	0.111	4.114	0.045
	Customer capital	0.301	6.414	0.021

Dependent variable; GROWTH

Interpretation

Reserach question one : To what extent does managerial skills as component of Intellectual Capital influences on the growth of SMEs in Kenya.

The results shown in table 4.22 above indicate that managerial Skills have a significant positive influence on SMEs growth. This is shown by the regression analysis value of t – Calculated which is greater than 2 (i.e 6.855) and P Value is 0.018 at 95% level of significance that is less than 5%.

Objective 2; How does Entrepreneurial skills an element of IC influence the growth of SMEs in Kenya?

The results indicate that entrepreneurial skills also positively influences the growth of SMEs, but less than managerial skills, customer capital and innovativeness as shown by the unstandardized beta coefficients.The above table of regression analysis shows that entrepreneurial skills have a positive and significant influence on growth of SMEs as shown by a t value of 5.749 (greater than 2) and a p value of 0.031 which is less than 0.05.

Objective 3; What is the influence of innovativeness constituent of IC on the growth of SMEs in Kenya?

The results also show that innovativeness has a significant positive association with the growth of SMEs as shown by a p value of 0.019 at 95% level of significance which is less than 0,05 and a t value of 6.610, which is greater than 2. It is therefore conclusive to indicate that innovativeness is positively correlated to growth of SMEs.

Objective 4; To what extent does structural capital as a module of IC influence the growth of SMEs in Kenya?

Regression analysis results for structural capital showed that the t value was 4.114, which is more than 2. Structural capital as a module of intellectual capital therefore has a significant positive relationship with SMEs growth as shown by a p value of 0.045(less than 0.05) at 95% level of significance.

Objective 5; How does customer capital as a factor of IC influence the growth of SMEs in Kenya?

The results from the Stepwise regression showed that customer capital has a significant positive influence on the dependent variable (SMEs growth). This was revealed by a t value of 6.414 which is greater than 2 and a p value of 0.021 which is less than 0.05 at 95% level of significance.

From the results, managerial skills as a component of intellectual capital contributes most to the growth of SMEs is managerial skills, which has the greatest t value of 6.855, while the contributes the least is structural capital which has the smallest t value of 0.414.

4.8 Factor Analysis

Factor analysis was performed to identify the patterns in data and to reduce data to manageable levels (Field, 2006). The factor analysis analyzed the factors that measured business relational capital, social relational capital and firm performance. The results were generated using the rotational Varimax methods to explore the variables contained in each component for further analysis. Factors with Eigen values (total variance) greater than 0.5 were extracted and coefficients below 0.49 were deleted from the matrix because they were considered to be of no importance. The factor loadings are the correlation coefficients between the variables and factors (Farrar & glauber, 1967).

Principal components analysis

Factor analysis is a multivariate statistical method whose primary purpose is data reduction and summarization (Hair et al., 1987). By using factor analysis, a factor loading for each item and its corresponding construct was determined. In order to verify that the items tapped into their stipulated constructs, a principal components analysis with a VARIMAX rotation was executed. The items were forced into three factors and the output was sorted and ranked based on a 0.5 loading cutoff.

Typically, loadings of 0.5 or greater are considered very significant (Hair et al., 1987). The VARIMAX rotation was used because it centers on simplifying the columns of the factor matrix. With the VARIMAX rotational approach, there tends to be some high loadings (i.e. closer to 1) and some loadings near 0 in each column of the matrix. The logic is that interpretation is easiest when the variable-factor correlations are either closer to 1, thus indicating a clear association between the variable and the factor, or 0 indicating a clear lack of association (Hair et al., 1987).

Only the items that loaded on their corresponding factors at levels of 0.5 or greater were retained for the rest of the analysis. These items are highlighted in the last column. Items were not retained because they did not load on any factor with a value of 0.5 or greater; loaded on the wrong factor; or had cross-loadings on two factors.

4.9 Test On Normality

A further test on normality on normality using the Shapiro-Wilk test produced results in table 4.23 below.

Table 4. 23: Tests of Normality on SMEs Growth/Managerial Skills

	Statistic	Shapiro-Wilk Df	Sig.
Standardized Multiple Regression	0.997	320	0.673

On the normality test, the Shapiro-Wilk test shows that the Standardized residuals are significantly normally ditributed with a significance of 0.552 which is greater than 0.05.

A further test on normality using the Shapiro-Wilk test produced results in table 4.24 below.

Table 4. 24: Tests of Normality on SMEs Growth/Entrepreneurial Skills

	Statistic	Shapiro-Wilk Df	Sig.
Standardized Multiple Regression	0.872	320	0.166

The test for normality, the Shapiro-Wilk test now shows that the Standardized residuals are significantly normally ditributed with a significance of 0.166 which is greater than 0.05. These findings are a proof that the independent variable, entrepreneurial skills has a strong influence on SMEs growth.

A further test on normality on normality using the Shapiro-Wilk test produced results in table 4.25 below.

Table 4. 25: Tests of Normality on SMEs Growth/Innovativeness

	Statistic	Shapiro-Wilk Df	Sig.
Standardized Multiple Regression	0.985	320	0.236

The test for normality, the Shapiro-Wilk test now shows that the Standardized residuals are significantly normally ditributed with a significance of 0.236 which is greater than 0.05. This shows that the independent variable influences SMEs growth.

A normality test was also done and the results are as in table 4.26 below.

Table 4. 26: Tests of Normality on SMEs Growth/Structural capital

	Statistic	Shapiro-Wilk Df	Sig.
Standardized Multiple Regression	0.890	320	0.479

In the further test for normality, the Shapiro-Wilk test shows that the Standardized residuals are significantly normally ditributed with a significance of 0.479 which is greater than 0.05.

A normality test was also done and the results are as in table 4.27 below.

Table 4. 27: Tests of Normality on SMEs Growth/customer Capital

	Statistic	Shapiro-Wilk Df	Sig.
Standardized Multiple Regression	0.759	320	0.605

In the further test for normality, the Shapiro-Wilk test shows that the Standardized residuals are significantly normally ditributed with a significance of 0.605 which is greater than 0.05.

The stepwise regression model was aimed at determining how Intellectual capital influences the growth of SMEs. The results showed that IC explained 70.4% of the variation in SMEs growth. The model was significant with an F-statistic = 87.391 and a significant p-value = 0.000. All unstandardised beta coefficients were significant, showing a positive contribution to growth of SMEs. The unstandardised beta coefficients also showed that management skills (β = 0.413) contributes the most to growth of SMEs, followed by innovativeness (β = 0.319), customer capital (β = 0.301), entrepreneurial Skills (β = 0.219), and structural Capital (β = 0.111). All of those variables were significant with p-values < 0.05. Managerial skills as a component of intellectual capital is the main contributor to growth of SMEs in Kenya, compared with the other independent variables. A management team that utilises intellectual capital in the present knowledge economy and imparts knowledge on the employees, reconfigures the intangible assets of their SMEs to seize new opportunities and develop new products. This leads to expansion and growth of the SMEs (Bontis et al., 2000; Webster, 2000).

4.10 Checks for Multicollinearity and Heteroscedasticity

A situation in which there is a high degree of association between independent variables is said to be a problem of multicollinearity. This problem was solved by ensuring that there was a large enough sample as multicollinearity is not known to exist in large samples. Multicollinearity can also be solved by deleting one of the highly correlated variables. Heteroscedasticity means that previous error terms are influencing other error terms and this violates the statistical assumption that the error terms have a constant

variance. This was checked using normal P plots and scatter diagrams and there was no evidence of heteroscedasticity. The Variance inflation factor (VIF) was checked in all the analysis and it ranged from above 1 to 4 which is not a cause of concern according to Myers (1990) who indicated that a VIF greater than 10 is a cause of concern.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter summarizes the findings of the study done with specific to the objectives and research questions of the study were used as units of analysis. Data was interpreted and the results of the findings were correlated with both empirical and theoretical literature available. The conclusion relates directly to the specific objectives/research questions. The recommendations were deduced from conclusion and discussion of the findings.

5.2 Summary of the Findings

The study sought to investigate the influence of IC on the growth of SMEs in Kenya. Specifically, the study investigated managerial skills, entrepreneurial skills, innovativeness, structural capital and customer capital. The empirical literature showed that IC is a key ingredient of SMEs growth for production of innovation and creativity in both developed and emerging economies all over the world. Other literature revealed that SMEs have very low survival rate whereby the collapse ratio of SMEs is alarming for developing countries as well as developed countries.

A pilot study was undertaken with 46 SMEs owners/entrepreneurs to test the reliability and validity of the questionnaire. The stratification was based on the type of business that the 46 SMEs owners were operating. This comprised of trade, manufacturing and other services.

5.2.1 To what extent does managerial skills as a component of IC influences the growth of SMEs in Kenya?

The finding of the study revealed that managerial skills of the owner/managers positively influence the growth of Small and Medium sized Enterprises in Kenya (SMEs) in Kenya. Results of the inferential statistics such as ANOVA show that managerial skill which is a component of IC has a major positive significance contributionhe to the growth of SMEs in Kenya. This further indicates that owner/manager utilization of high managerial skills as a component of IC has a significant effect on the growth of Small and Medium sized Enterprises in Kenya.

5.2.2 How does Entrepreneurial skills an element of IC influence the growth of SMEs in Kenya?

The study found out that entrepreneurial skills have a great positive influence the growth of SMEs in Kenya. According to the findings of the study, Entrepreneurial skills which is an element of IC can be a key lever for the growth of SMEs in Kenya. Entrepreneurship skills of the owner/manager has been revealed to be part of intellectual capital which include knowledge management that helps an entrepreneur in undertaking risk-taking propensity initiatives that is a crucial characteristics an entrepreneur should possess for the growth of SMEs.

5.2.3 What is the influence of innovativeness constituent of IC on the growth of SMEs in Kenya?

The finding of the study indicate that innovativeness influences the growth of SMEs in Kenya. According to the findings of the study, innovativeness which is constituent of IC on the growth revealed that it has a significant influence on the growth of SMEs. One can therefore, deduce that 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 growth of SMEs.

5.2.4 To what extent does structural capital as module of IC influence the growth of SMEs in Kenya?

According to the findings of the study, structural capital as module of IC influence the growth of SMEs in Kenya. The findings are a pointer to the critical role that structural capital such as reduction in transaction cost have great influence on the growth of SMEs in Kenya.

5.2.5 How does customer capital as a factor of IC influence the growth of SMEs in Kenya?

The study found out that customer capital as a factor of IC influences the growth of SMEs in Kenya. According to the findings, customer capital as a factor of IC influences significantly positively the growth of SMEs in Kenya. This indicates that customer capital which entails a solid stock of connections, interactions, relationships, linkages, closeness, goodwill, and loyalty between a firm and its customers, downstream clients, strategic partners or other external stakeholders is an important element of intellectual capital that has a positive and significant influence on the growth of SMEs in Kenya.

5.3 The overall effect of the variables

The study findings showed a great influence of all the five variables to the growth of SMEs. The study found out that there was 83.9% of corresponding change in the growth of SMEs for every change in all the five predictor variables jointly. Test of overall significance of all the five variables jointly, managerial skills, entrepreneurial skills, structural capital, customer capital, and innovativeness using ANOVA, at 0.05 level of significance found the model to be significant

5.4 Conclusions

The crux of this study was to explore the influence of IC on growth of SMEs in Kenya. Based on previous studies, the components of IC were expected to have positive relation with growth of SMEs in Kenya. The output given from the findings indicate that there is a significant positive relationship between the components of IC namely Managerial skills (MS), Entrepreneurial skills (ES), Innovativeness(IN), structural capital and Customer capital(CUS) with growth of SMEs.

The findings also indicated that managerial skills have been a major contributor towards the growth of SMEs in Kenya. This is in line with Kamath (2008) who found that managerial skills appeared as the major contributor towards the growth of SMEs in Kenya. The results also revealed that the entrepreneurial skills, innovativeness, structural capital and customer capital have positive relationship with growth of SMEs in Kenya. The findings demonstrated that IC can be used to mobilize, assemble, and manage all intangible resources in order to enhance growth of SMEs in Kenya and this concur with the findings of other studies (Bontis*et al*., 2000; Salina and Wan Fadzilah, 2008; Chen *etal*.,2005; Kamath, 2008;). Undoubtedly, IC has contribution towards the growth of SMEs in Kenya .

5.4 Recommendations

The study is a justification of the fact that an entrepreneur with good managerial skills, excellent entrepreneurial skills, sufficient structural capital and is well innovative has a positive significant influence on the growth of small and medium enterprises in Kenya. Specifically, the study recommends:

1) The owner/managers should realize that in the present knowledge economy, IC forms an important element of intangible assets of the SMEs which should be reconfigured to ensure that the enterprises seize opportunities, are proactive in the market place, make new product and process innovations.

2) Entrepreneurial skills of the owner/manager are necessary to impart an entrepreneurial culture in the enterprise which drives the employees into creating new and more competitive products for increased growth of the enterprise. The owner/manager should therefore possess excellent entrepreneurial skills to coordinate employees and guide them to discovering the mission of the enterprise which is growth.

3) Understanding of customer and structural capital is a key ingredient of IC to creating a solid relationship between an enterprise and its customers. The owner managers should therefore seek to understand their clients' background, discover their priorities, know their tastes and likes to ensure they serve them well thus creating a long term business relationship with them, culminating in the SMEs' growth.

4) Owner/managers of small and medium sized enterprises should possess technical, interpersonal, and conceptual skills to effectively plan, lead, organize and control the enterprise effectively leading to increased performance and consequently growth.

5) Owner/manager should promote customer capital which is an important element of IC that entails establishing a solid stock of connections, interactions, relationships, linkages, closeness, goodwill, and loyalty between a firm and its customers, downstream clients, strategic partners or other external stakeholders as

this has a positive and significant influence on the growth of SMEs in Kenya. Owner/managers should therefore maintain a close and direct contact with their customers and may even know them socially and personally through developing a stronger knowledge channel to improve their ability to capture such customer knowledge and consequently enhance the growth of the enterprise.

6) More importantly, the owner/managers should guide their employees towards utilizing the SMEs structural capital which comprises the hardware, software, social capital databases, organizational structure, process manuals, strategies, routines and anything that is valuable to the organization as properly developed structural capital helps develop knowledge among employees.

5.5 Recommendations for Further Research

This study is a millstone for future research in this area, particularly in Kenya. The findings emphasize the importance of the components of IC, which comprise of managerial skills, entrepreneurial skills, innovativeness, structural capital and customer capital in growth of smes in Kenya. As such, in case of IC is expected to influence and enhance growth of SMEs. Available literature indicates that as a future avenue of research there is need to carry out similar research on IC in other industries and countries in order to establish whether the link between IC and performance can be generalized.

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APPENDICES

Appendix 1: Introductory Letter to the Respondents

JOHN KARANJA NGUGI

P.O BOX, 25713,

Nairobi, KENYA.

Dear Respondent,

RE: DATA COLLECTION

I am a student at the Jomo Kenyatta University of Agriculture And Technology persuing Degree of Doctor of Philosophy in Entrepreneurship. I am currently conducting a Research study on **INFLUENCE OF INTELLECTUAL CAPITAL ON THE GROWTH OF SMALL AND MEDIUIM ENTERPRISES IN KENYA** to fulfill the requirements of **AWARD OF DEGREE OF DOCTOR OF PHILOSOPHY 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 co-operation.

Yours Faithfully,

JOHN KARANJA NGUGI

Appendix 2: Questionnaire

This questionnaire is to collect data for purely academic purposes. The study seeks to investigate influence of intellectual capital on the growth of SMEs in Kenya. All information will be treated with strict confidence. Do not put any name or identification on this questionnaire.

Answer all questions as indicated by either filling in the blank or ticking the option that applies.

APPENDIX 1: QUESTIONNAIRE/INTERVIEW GUIDE

This questionnaire is to collect data for purely academic purposes. The study seeks to investigate influence of intellectual capital on the growth of SMEs in Kenya. All information will be treated with strict confidence. Do not put any name or identification on this questionnaire.

Answer all questions as indicated by either filling in the blank or ticking the option that applies.

Please Indicate

DEMOGRAPHIC INFORMATION

SECTION A: GENERAL INFORMATION

GENDER

Male [☐]

Female [☐]

Age Bracket

18-25 [☐]

26-36 [☐]

36-45 [☐]

46-55 [☐]

Over 56 [☐]

Marital Status Married [☐]

Single [☐]

Divorced [☐]

Widower [☐]

Nature of business Manufacturing [☐]

Trade [☐]

Service [☐]

How long has the business been in operation?

Less than 2 yrs [☐]

2–4 yrs [☐]

5-8 yrs [☐]

8-10 yrs [☐]

More than 10 yrs [☐]

Which is your current position?

Owner [☐

Co-owner [☐

Partner [☐

Manager [☐

Executive [☐

Director [☐

Other (specify).....

Academic Qualifications

PhD Level [☐

Masters Level [☐

First Degree [☐

Diploma [☐

KCSE [☐

KCPE [☐

NONE [☐

Number of major competitors	2-10	[☐]
	11-20	[☐]
	21-30	[☐]

31-40 [☐]

41-50 [☐]

51-100 [☐]

Over 100 [☐]

7. Business ownership

Limited company [☐]

Sole proprietorship [☐]

Partnership [☐]

Joint ventures [☐]

Family owned [☐]

Others specify.....

Managerial Skills

Is the level of education important to business venture success?

Yes [☐] No [☐]

If No, explain why?

……

……

……

If yes how?

……

……

Does business experience activities relevant to business ownership increase the firm's survival time?

Yes [☐] No [☐]

To what extent do the following factors influence the growth of SMEs ? Use a scale of 1-5 where 5= Very great extent; 4 Great extent; 3= Moderate extent; 2= Low extent and 1= Very low extent. Tick as appropriate.

	1	2	3	4	5
Technical Skills	☐	☐	☐	☐	☐
Interpersonal skills	☐	☐	☐	☐	☐
Employees level of education	☐	☐	☐	☐	☐

Entrepreneurial skills

To what extent do the following entrepreneurship skills influence the growth of your enterprise? Use a scale of 1-5 where 1= Very great extent; 2 Great extent; 3= Moderate extent; 4= Low Extent and 5= Very Low Extent.

	5	4	3	2	1
Risk-taking propensity	☐	☐	☐	☐	☐
Planning skills	☐	☐	☐	☐	☐
Careful budgeting skills	☐	☐	☐	☐	☐
Skills to ensure that financial records are maintained	☐	☐	☐	☐	☐

How often do you introduce new products to your customers?.....

.....

Do you alone decide on the new products or who participates in the introduction of new products?

.....

.....

How do you finance for the new products?

Personal saving [☐]

Bank loans [☐]

Others: specify……

At what time do you report to your place of work?

.....

At what time do you retire from your place of

work. .....

Innovativeness

To what extent do the following factors of innovativeness influence the growth of your enterprise? **Use a scale of 1-5 where 1= Very great extent; 2 Great extent; 3= Moderate extent; 4= Low Extent and 5= Very Low Extent.**

Factors	☐	☐	☐	☐	☐
Management is supportive to innovation	☐	☐	☐	☐	☐
Average quantity of patents of employees	☐	☐	☐	☐	☐
Incentives for innovative employees	☐	☐	☐	☐	☐
Percentage of new developed product sales in total sales (the last three years)	☐	☐	☐	☐	☐

Structural Capital

To what extent do the following factors of structural capital influence the growth of your enterprise? Use a scale of 1-5 where 5= Very great extent; 4 Great extent; 3= Moderate extent; 2= Low Extent and 1= Very Low Extent.

Factors	1	2	3	4	5
Lowest cost per transaction	☐	☐	☐	☐	☐
Transaction time is best	☐	☐	☐	☐	☐
Patents and trademark and proprietary databases	☐	☐	☐	☐	☐
Our data systems make it easy to access relevant information.	☐	☐	☐	☐	☐

Customer Capital

Please tick customer relation management techniques adopted by the enterprise?

	Yes	No
Suggestion boxes	[☐]	[☐]
Customer care/office desk	[☐]	[☐]
Credit payment	[☐]	[☐]

Others(Specify)

……

……

To what extent do the following factors of customer capital influence the growth of SMEs? Use a scale of 1-5 where 5= Very great extent; 4 Great extent; 3= Moderate extent; 2= Low extent and 1= Very low extent.

Factors	1	2	3	4	5
Customers generally satisfied	☐	☐	☐	☐	☐
Reduce time to resolve problem	☐	☐	☐	☐	☐
Longevity of relationships	☐	☐	☐	☐	☐
Understand target markets	☐	☐	☐	☐	☐

Visionary Performance

To what extent do the following factors of intellectual capital influence the growth of SMEs?

Factors	1	2	3	4	5
Industry leadership	☐	☐	☐	☐	☐
Future outlook	☐	☐	☐	☐	☐
Profit	☐	☐	☐	☐	☐
Profit growth	☐	☐	☐	☐	☐
Sales growth	☐	☐	☐	☐	☐

Measures of Enterprise Growth

Please indicate the growth or decline experienced by your organization in the last five years in terms of revenue, profitability ,customer base and number of employees that is related to social capital, relational capital, structural capital and human capital by taking year 2007 as the base year. Compute the growth or decline as a percentage of the previous year. For example assuming year 2007 at 100%, if the firm has experienced growth or decline of 5% in year 2008, then the annual growth is 105% and 95% respectively.

Indicators	**Annual growth or decline in year (%)**				
Year	1	2	3	4	5
Revenue	☐	☐	☐	☐	☐
Profitability	☐	☐	☐	☐	☐
Customer base	☐	☐	☐	☐	☐
Number of staff	☐	☐	☐	☐	☐
Product diversification	☐	☐	☐	☐	☐
Assets growth	☐	☐	☐	☐	☐
Market share	☐	☐	☐	☐	☐

END OF QUESTIONNAIRE

Thank you for taking your time to fill it.

Appendix 3: Interview Schedule Guide

Managerial Skills

Are Managerial skills the source of innovation in your enterprise?

How do you recruit and manage employees who have higher degrees of intellectual capital in exchange for better innovation?

Does training of employees lead to higher productivity in your enterprise?

Entrepreneurial Skills

Are Entrepreneurial Skillsthe source of innovation in your enterprise?

Do you have inner Discipline when transacting business?

What is the level of risk taking by the business owner in this enterprise?

Are Change-oriented?

How persistent is your enterprise when it comes to products and services?

Innovativeness

Do you encourage innovation?

What are the major sources of innovation in your organization?

Does innovation contribute to the growth of your enterprise?

Does your organization consider Incentives for innovative employees?

Structural Capital

Do the systems in your organization make it easy to access relevant information?

Does your firm engage more ideas in industry?

How is the firm's atmosphere supportive on the growth of this enterprise

Does this enterprise Support development of ideas?

Customer Capital

Are the Customers in your firm generally satisfied?

Does the enterprise understand target markets?

Are Customers are loyal to this enterprise?

Is this firm is market-oriented?

Does the staff in this enterprise meet with customers?