FIRM CHARACTERISTICS AND GROWTH OF SMALL AND MEDIUM ENTERPRISES IN NYERI COUNTY, KENYA

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D53/NYI/PT/22324/2012

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTEROF BUSINESS ADMINISTRATION (FINANCE OPTION) OF KENYATTA UNIVERSITY

MAY, 2019
DECLARATION

I affirm that this research project is my unique work and has not been submitted in any institution of higher learning for an Academic Award.

Signature: ___________________________ Date: ___________________________

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D53/NYI/PT/22324/2012

DECLARATION BY THE SUPERVISOR

This research project has been submitted to Kenyatta University with my approval as the candidate’s research proposal supervisor.

Signature: ___________________________ Date: ___________________________

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DEDICATION
This Research project is dedicated to my loving wife Jecintah Nyawira, my children Austin Wathegi and Clement Kibuchi and lastly to my mother Mary Wamuyu. You all showed me love, patience; understanding and you have continuously inspired me and supported my efforts throughout this study. I appreciate you for the much needed financial and emotional support that you have always given me. May God bless you in abundance.
ACKNOWLEDGEMENTS

Many people have contributed immensely to the preparation of this proposal. I am indeed grateful to the many who has made me reach this far. I feel greatly indebted to my supervisor Dr. Job Omagwa for his utmost patience, valued ideas, guidance and positive criticism without which the research would not have been a reality.

Secondly I would also like to convey my heartfelt gratitude to my wife, sons and the entire family for their love, understanding and support during the project. Lastly my gratitude also goes to all my friends and colleagues who encouraged me and shared their insights during this project work.
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## ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
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<th>Full Form</th>
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<tbody>
<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>ICT</td>
<td>Information Communication Technology</td>
</tr>
<tr>
<td>NACOSTI:</td>
<td>National Commission for Science, Technology &amp; Innovations</td>
</tr>
<tr>
<td>ROA:</td>
<td>Return on Asset</td>
</tr>
<tr>
<td>ROE:</td>
<td>Return on Equity</td>
</tr>
<tr>
<td>ROI:</td>
<td>Return on Investment</td>
</tr>
<tr>
<td>ROS:</td>
<td>Return on Sales</td>
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<tr>
<td>SME:</td>
<td>Small and Medium Enterprises</td>
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<td>SMEs:</td>
<td>Small and Medium Enterprises</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package of Social Sciences</td>
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<td>ST</td>
<td>Stakeholders Theory</td>
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<tr>
<td>STD. DEV</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
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<tr>
<td>VIF</td>
<td>Variance Inflation Factor</td>
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OPERATIONAL DEFINITION OF TERMS

Age of SME
Refers to the duration of the operation and business exposure of a particular SME

Firm characteristics
The study considered the size, age, management and industry of a particular SME

Firm Size
Refers to number and monetary value of asset base and the composition of capital structure of an SME

Growth
This is the positive progress that is identifiable in an SME or the expansion of various financial components of a business such as increase in assets, capital employed or financial position, return on assets and investment and increase in profit. It’s also measured in other non-financial components such as increase in sales and employees, larger market share and customer satisfaction

Industry Sector
Type of business carried out by the SME in relation to other similar businesses in a given economic region

Management Efficiency
Composition of the managers, their efficiency, education, experience and skills in running the SME

SME
The small and medium enterprises (SME) are those business ventures that are small in the size of capital employed, have low number of employees in a certain economic region
ABSTRACT

Most of small and medium enterprises in Nyeri County are small scale ventures with less than 10 employees, whereas 70% of them are single individual worker or Sole proprietorship. This implies that majority of SME entrepreneurs are working at the economy base, with a huge percentage of them falling amongst the 53% of Kenyans living lower than the poverty line of one USD every day. Growth of small and medium enterprises in firm size, age, industry sector and management efficiency is an area of concern in Nyeri County. As a result of various challenges most small and medium enterprises have not grown in size and collapses within a very short period of time after they start. In addition, several small and medium enterprises in Nyeri County have not appreciated concentrating in one industry sector and advancement in management skills which may be a major contributor to slow growth in the enterprises within the County. The study was guided by the following specific objectives: to determine the relationship between firm size, age, management efficiency, industry sector and growth of Small and medium enterprises in Nyeri County, Kenya. The study was anchored on stakeholder’s theory, resource based theory, agency theory and operating cycle theory. The research design adopted by the study was descriptive design. The study targeted 840 Small and medium enterprises and since the number of Small and medium enterprises is huge, a stratified random sampling was used to arrive at 126 Small and medium enterprises. Semi-structured questionnaires were used for collecting data which was analyzed using descriptive and inferential statistical tools and presented using tables. The study found out that the size of the firm and the age of the firm had positive and statistically significance effect on growth of Small and medium enterprises with p value of 0.01 and 0.03 respectively. In particular, large firms were found to perform better than small firms due to their ability to source for more funds from external sources, increase in sales turnover and value of capital employed leads to growth of firms. Industry sector had positive but statistically insignificance effect on growth of small and medium enterprises with p value of 0.751. Management efficiency had negative and statistically significance effect on the growth of small and medium enterprises with p value of 0.001. The study concludes that the management of the Small and medium enterprises gains experience over time and the longer the time in the operation the more the managers are experienced and efficient in dealing with enterprise challenges. In addition, individuals running the small and medium enterprises need to be trained on entrepreneurship and management skills. The study further concludes that Small and medium enterprises should evaluate how the industry is performing in order to establish whether their business has adapted well in the industry sector.
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

Empirical investigations into small and medium sized enterprises (SMEs) have developed in the recent past. According to Beck and Demirgüç-Kunt, (2006), Most SMEs globally assume a vital function in the county’s economy by contributing to employment and GDP growth more than the large scale firms. SMEs are the upcoming private sector in developing countries and thus form the base for private sector led development (Hallberg & Konishi, 2003). Therefore, the SME sector performance is directly connected with the country’s performance (Fowler, 2008; Lee & Lings, 2008; & Quinlan, 2011). In Kenya, SMEs represent a wide segment of the cumulative foundations in different sectors of the economy. The growth of SMEs has since long ago fascinated scholars, yet the greater part of the research conducted has concentrated on huge organizations. In any case, just a few organizations are successful while others do not succeed.

In Kenya, irrespective of the way several SMEs have been developing and are a success, several others have failed or are dormant (Wanjohi, 2012). Various researches investigating the states of successful business have concentrated on large organizations instead of SMEs. Nevertheless, changes within the business environment have also led to additional vulnerability of SMEs as compared to large organizations in an industry.

SMEs are very important source of resources for the national economic growth (Sadler-Smith & Spicer, 2006). The SMEs contributions as well as role vary from
businesses to business as well as from nation to nation. Like other businesses, SMEs additionally confront various constraints which in some instances might affect their development as well as their returns. It is fundamental to have a well trained and experienced manager for a business to cope and easily adapt to the rapidly changing business environment (Chen, 1995). Considering the above situation, the significant as well as the fascinating subject for a researcher to reflect on, at this phase, would be characteristics that enhance growth and success of the SMEs sector in Kenya.

SMEs inspire entrepreneurial abilities, give rise to private ownership, are adaptable plus can adjust rapidly to varying economic forces of demand and supply, create work for the unemployed citizenry, aid to broaden financial markets, as well as influence trade and export. Indeed, still within the developed market economies, SMEs provide a big share of employment and production of goods and services (UNECE, 2003). Most East African nations has up to this point neglected to expand the advantages got from the SME segment, which would guarantee and promote sustainable industrialization and general economic development (Ahmed, 2003).

The shortcomings of SMEs can be credited to diverse changes and trade evolution measures that have reduced the Government's contribution to business growth. Thus, the private sector needs to guide the economy in an active development way. Majority of the previous investigations paid attention to the large scale firms as opposed to SMEs (Mallak & Sardone, 2006; Kauranek, 2006 & Pelham, 2000). In any case, changes within the business environments result to extra susceptibility of SMEs as compared to huge organizations. Their resources for securing important market information as well as diversification of the business is extra restricted.
SMEs have for some time been accepted to be vital in supporting a nation's GDP increase (Borman, Jawaharlal, Doss, & Theirry, 1999). One of the imperative parts of SMEs in this setting is reduction of poverty levels through employment creation. A few SMEs are progressively observed as creator of new employment opportunities (Swiercee & Hamo, 2003) and Kenyan SMEs sector account for 64% of all workforce. Small and Medium Enterprises is a significant sector for the Kenyan economy just like several other emerging economies since it employs more than eighty-five percent of the Kenyan aggregate labor force (Wahid, 2003).

The present constitutional framework as well as the Small and Medium Enterprise Act 2012 (SME Act 2012) give another avenue of chance via which the SMEs development can be achieved through the framework of devolution. Nevertheless, the devolution effect on growth of SMEs relies upon the institutional and regulatory framework designed to sustain SMEs within an economy. SMEs are by and large considered as the motivating force of economic development, employment creation, and reduce poverty in developing countries. Small business ventures have been the means through which rapid economic growth and increase in industrialization have been realized (Yusuf & Schindehutte, 2000; Arinaitwe, 2002; Sauser, 2005; Hams & Gibson, 2006).

Although the contributions of SMEs to economic growth are generally recognized, entrepreneurs are faced by many challenges that hinder their long-term survival and growth. Research on SME Growth shows that failure rate in developing countries is more than in the developed world (Arinaitwe, 2002). Many Scholars note that starting
a business is a pretty risky undertaking and cautions that the likelihood of SME entrepreneurs succeeding beyond five years is very low (Wanjohi & Mugure, 2008). Both long-term and short-term strategies should be developed and implemented by entrepreneurs in the SME sector to protect against failure (Sauser, 2005; Monk, 2000).

1.1.1 Firm Characteristics

SMEs characteristics refer to the origin of business or the industry sector, length/age/time in operation, business size, managers’ efficiency or attributes and sources of capital which assume vital element on the achievement of a business (Smallgene, Leigh & North, 2005). Large scale business initial origin was from small firms, where management and proprietorship were ordinarily consolidated in one or a few individuals and where business future goals were determined much by individual family and lifestyle factors rather than by business considerations (Malik & Sardine, 2013). Additionally, they found out that the major characteristic which distinguished the most excellent performing organizations from dissimilar organizations was their resolve to development. Additionally, they found another characteristic that distinguished faster growing firms from others was their penchant to get different organizations.

Length in time/age in action may be related with anticipation to absorption of information. Previous players most apparently have achieved a lot from their experiences as compared to novel comers. Kristiansen, Furuhol and Wahid (2009) found that age of the business was significantly associated to success of business. However, organization measure isn't observed to be an essential determinant of operational execution in the greater firms amid the period 1993-1997 (Adamsten
&Buckled, 2000). Similar to the size-productivity of a firm association, the relationship between age of a firm and monetary execution has been broadly contemplated. From one perspective, Sidhu and Bhatia (2013) fight that more youthful organizations will be outperformed by successfully existing organizations. More established organizations have the early mover benefit and might have particular competencies as well as abilities which more youthful organizations might not have created up until at present. In so doing, they can become faster to achieve superior profit.

Moussavi (1988) contends that experience with respect to the proprietor/administrator or the administration abilities is a factor adding to the SMEs survival. In their study of novel little organizations, Duchesneau and Gartner (1990) reported that lead business people within successful organizations will possibly have been brought up by entrepreneurial parents in the business sector in which the SME operates, to have had an extra widespread experience of business and more earlier set up encounter, as well as to trust that they had little control of their achievement within business, than the unaccomplished business ventures. The researchers as well revealed that people of lead business in successful organizations had worked extended periods of time, had individuals who were great communicators and concern in the organization.

Triumphant organizations were those started with determined aims, and lead entrepreneurs had a reasonable as well as extensive knowledge of business (Duchesneau & Gartner, 1990). Organizations with many investor and better management abilities when they established were fundamentally more likely to succeed (Westheap et al., 1995). Prior experience as well as education in business has
been viewed as vital factors of success for small organizations (Yusuf 1995; Wijewardena & Coorey, 1996). The firm characteristics considered by the study were firm size, age of the firm, management efficiency and industry sector to establish whether they had relationship with growth of SMEs.

1.1.2 Growth of the SME

There are several diverse definitions of business growth and ways of measuring this growth (Barringer et al, 2005; Delmar et al, 2003; Delmar & Wiklund, 2008). Business growth is in general defined and measured using absolute or comparative changes in assets, employment, productivity, sales, profits and profits margins (Delmar, 1997; Davidson et al, 2005; Allinson et al, 2006). These measures have a variety of advantages and disadvantages in appreciating the phenomenon of growth (Delmar, 1997). But even if they related, there is no necessary relationship between the different growth measures (Delmar et al, 2003). According to Penrose, (2006) firm growth is a product of an internal process in the development of an enterprise and an increase in quality and /or expansion. He noted that growth varies widely depending on business age, size and industry.

SME growth is generally measured by use of financial and non-financial performance measures. Financial performance entails financial efficiency measures such as return on investment and return on equity, and profit measures such as return on sales and net profit margin. Non-financial measures comprise customer fulfillment, growth in sales, increase in number of employees & market share (Sidik, 2012). Development of SMEs can likewise be measured through profitability proportions. Benefit proportions assess the organizations profit as for a given level of offers, a specific level of advantages, the proprietors speculation are share value (Duchesneau, 2001). The
mainstream ratios that gauge SME performance can be summed up as growth and they include profitability, Liquidity: stock value and operational effectiveness (Carton, 2004).

A large number SMEs use inadequate number of economic performance indicators, this is for the reason that they lack human resources required to establish performance measurement and the suitable method to gather information necessary for making decision (Heilbrunn, Rozenes & Vitner, 2011) and they more likely use biased measures more regularly than objective measures (Dess & Robinson, 1984). SMEs time and again measure their growth by revenue growth and employment growth (Leitner & Gudenberg, 2010).

Evaluating the future benefit potential of the firm is urgent since over the long term, the firm needs to work productively with a specific end goal to survive. The proportions are essential to banks, investors, providers, employees and different partners. The proportions integrate gross net revenue, return on resources, profit for value and net overall revenue (Gartner, 2000). It is vital to recall that over a significant time span money related data are by all account not the only factors influencing firms monetary execution preferably measuring a gathering execution is more critical than concentrating on just a single or two measures at the exclusion of others (Carton, 2004).

1.1.3 Small and Medium Enterprises in Nyeri County, Kenya
SMEs are majorly defined in terms of their characteristics, which include the size of capital investment, the number of employees, the turnover, the management
style, the location and the market share (Kasekende & Opondo, 2003). Small and Medium Enterprises in Kenya are regulated under Small and Medium Enterprises Act No. 55 of 2012. Majority of SMEs in Nyeri can be classified into service businesses and retail shops. SMEs in Nyeri County are faced by exceptional difficulties which influence their development and productivity and subsequently lessen their capacity to contribute viably to sustainable advancement (Wanjohi, 2012). A report by the county administration of Nyeri (2015) identified different difficulties experienced by SMEs including absence of innovative capacity, absence of administrative training and experience, insufficient education and aptitudes, technological change, poor infrastructure, inadequate market data and absence of access to credit.

1.2 Statement of the Problem

Besides SMEs playing an important role in the country’s economic growth they are not as productive as compared to larger firms and they are less able to compete in the markets, as evidenced by their poor survival and low total production factors growth Hallberg & Konishi (2003). As per these findings there is need to investigate the survival rate (age) and growth of SMEs in Nyeri County, Kenya. Majority of SMEs in Nyeri County are of lesser scale ventures having employed less than 10 workers, whereas 70 per cent of them are sole proprietorship or own account laborers (Mugure, 2012).

This means that majority of SME entrepreneurs are small in size and operating at the economy base, with a critical percentage falling amongst the 53% of Kenyans living below the poverty line of USD 1 each day. The latter are to an immense degree for survival and participate in monetarily uncompetitive exercises both in rural as well as urban areas (Kihonge, 2014). Management experience and the size of SME symbolize
competitive advantage of today, enhanced by strong typical abilities in quality, speed, flexibility and efficiency. Growth of SMEs in size, age and management experience play a principal function in shaping the industries future, however according to the Nyeri County Governor, many of the SMEs growth in Nyeri County have become dormant over the last five years, and some have relocated to other counties and some closing down indefinitely (County Voice, 2016).

Vijayakumar and Tamizhselvan (2010) studied the effect of firm characteristics on growth generated varied outcomes ranging from those supporting a positive connection to those opposing it. The study found a positive relationship between firm size and performance. In their study, they used different measures of size (total assets & size) and performance (profit margin and profit on total assets). Majumdar (2012) investigated the impact of firm size on profitability and productivity of a firm and found that Larger firms are less productive but more profitable. In addition, management techniques such as financial analysis, forecasting and project management are rarely used by SMEs (Davis & Craig, 2008).

Kristiansen, Furuhol, and Wahid (2003) studied the relationship between age and performance of SMEs; they established that the length in time in a business activity was considerably related to success of business. Charney and Libecap (2010), studied relationship between entrepreneur’s management education and performance of SMEs and discovered that education on business enterprise management produced independent and effective enterprising individuals. Moreover, the examination found that business enterprise training improves the probability of SMEs victory. Zindiye (2008) did an empirical investigation into the factors affecting the growth of small and medium enterprises in the manufacturing sector of Harare, Zimbabwe. The
findings indicated that high rate of inflation and other economic factors such as foreign currency shortage, interest rate and exchange rate negatively affected the performance SMEs.

Nabintu (2013) carried out a study to establish the factors influencing the growth of small and micro enterprises (SMEs) traders at city park hawker market in Nairobi County, Kenya. The study established that access to finance influence growth of SMEs; that access to business information services affected the performance of the business to a great extent; technology affected the businesses to a very great extent by facilitating communication with both the supplier and customers, by easing the transportation of goods and by easing the marketing of our products. The study however focused on (SMEs) traders at city park hawker market in Nairobi County while the researcher seeks to establish the relationship between firm characteristics and growth of small and medium enterprises (SMEs) in Nyeri County, Kenya.

The above discussion reveals that many studies have been done on the factors influencing the growth of SMEs. However, the studies conducted are in different context and done in more developed nations and economies and may not apply wholesomely to the Kenyan context. Similar studies need to be done in developing nations like Kenya and more specifically to SMEs in Nyeri County, Kenya. From these literature evidences, this study seeks to establish the connection between firms’ characteristics and growth of SMEs in Nyeri County, Kenya.
1.3 Objective of the study

1.3.1 General objectives
The general objective of the study was to establish the relationship between firm characteristic and growth of SMEs in Nyeri County, Kenya.

1.3.2 Specific objectives
The study sought to achieve the following specific objectives:
i. To establish the relationship between firm size and growth of SMEs in Nyeri County, Kenya.

ii. To determine the relationship between age of the firm and growth of SMEs in Nyeri County, Kenya.

iii. To establish the relationship between management efficiency and growth of SMEs in Nyeri County, Kenya.

iv. To establish the relationship between industry sector and growth of SMEs in Nyeri County, Kenya.

1.4 Hypotheses
The study tested the following null hypotheses for each respective specific objective:

H01: Firm size has no significant relationship with growth of SMEs in Nyeri County, Kenya.

H02: Age of the firm has no significant relationship with growth of SMEs in Nyeri County, Kenya.

H03: Management efficiency has no significant relationship with growth of SMEs in Nyeri County, Kenya.

H04: Industry sector has no significant relationship with growth of SMEs in Nyeri County, Kenya.
1.5 Scope of the Study

The research sought to establish the relationship between firm characteristic and growth of SMEs in Nyeri County, Kenya. The study aimed at determining the association between the independent variables; Firm size, age, management efficiency and industry sector with dependent variable growth of SMEs in Nyeri County. The study was undertaken in Selected Sub-Counties in Nyeri County, Kenya. Data was collected from the SME owners licensed by the county government of Nyeri from year 2014 to 2017 and were fully operational. The study was confined to the four research objective.

1.6 Significance of the Study

The research would beneficial to the following entities; the results of this study would help the Nyeri SMEs lay emphasis on how to improve their business growth. This could ensure business survival for longer period and that they may graduate to medium and later to large enterprises. Further, the Nyeri County government could be able to ascertain how various laws and regulations has been effective on achieving set goals and also identify the policy framework that need to be in place so as to support growth of SMEs in the county. The study could also be vital to the management of the SMEs in understanding the management skills available or lacking and how they affect the growth of their SMEs. The study will also significantly aid the national government to access relevant information on the expectations the public as regards to SME sector is concerned. This would enable the formulation of customer focused policies and regulations in the Ministry of Devolution in the aim of achieving the goals of Vision 2030 and Sustainable Development Goals.
1.7 Limitations of the Study

The research encountered several limitations which were noteworthy. One limitation of the study was non-response as some of the respondents were unwilling to cooperate perceiving it as a waste of time due to the academic nature of the study. Some respondents were very busy and lacked time to respond to the questions asked. This impeded the data collection process and quality of information. To ensure the success of data collection, the researcher engaged research assistants who were first trained on how to undertake data collection. Also during data collection respondents were assured of the confidentiality of their identities to give the confidence in the process.

1.8 Organization of the Study

The proposal is ordered as follows: the chapter one provides the research background, problem statement, objectives of the research, significance of the study, scope, and limitations encountered in the course of the research. Chapter two presents literature review of existing research on the relationship of firm characteristics on growth of small and medium enterprises and conceptual framework. Chapter three dealt with the methodology employed in the study. It provides explanation and description of the methods and procedures to be used. Chapter four shows data analysis, presentation and interpretation while chapter five is a summary of the research with conclusions and recommendations.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section discusses literature on characteristics of firm and performance of SME. It presents literature on relevant theories on firm characteristics. The discussions seek to identify, evaluate and present relevant empirical information relating to firm characteristics and SMEs growth. The association between dependent and independent variable is depicted in the conceptual framework. Figure 2.1

2.2 Theoretical Review

The study is anchored on theories which are highlighted hereunder.

2.2.1 Stakeholders Theory

The father of Stakeholders Theory (ST) is Friedman (1970) who proposed that the sole responsibility of business is the maximization of profit. He believed that organizations are run with one primary objective in mind which is profit making. Beyond this, he argued that businesses have no other function than to enrich the shareholders. However, SMEs are no longer legal devices through which transactions are conducted to improve the individuals in what is referred to as managerial capitalism (Freeman, 1984).

In its ideological form, stakeholders are made up of groups and individuals who benefit from or are harmed by the actions of the firm or their own actions. In addition, these groups and individuals have rights, which can be respected or violated by the
decisions of the firm. The groups and individuals possess some claim on the firm. The Stakeholders Theory argues that it is the responsibility of many organizations to ensure that they maximize shareholder’s wealth. As advocated by Freeman (1984) and Carroll (1989), ST further purport that an organization is a collection of groups (customers, shareholders, suppliers, employees, creditors, neighbouring communities) who are affected or affect the actions of the organization.

The stakeholder’s theory suggests that the purpose of the firm should be broader than the economic value creation. Instead, it includes the societal interests as well as other players who affect or are affected by the firms’ operations (Hillman & Keim, 2001). This theory is applicable to the growth of the SMEs in that the growth of the particular SME will affect many stakeholders. The motivation behind this theory according to Asher and Mahoney (2005) is the economic value creation and distribution of wealth to multiple benefactors of SMEs. The operationalization of the theory in SMEs compels managers to set ambitious objectives which create value to the stakeholders (Freeman, Wicks & Parmar, 2004) and this may include advancing the management skills and increase investment by means of additional capital.

2.2.2 Resource Based Theory

Chen, 1996; Eisenhardt and Schoonhoven, (1996) argued that resource based theory explains performance differences by application of information asymmetry. A firm’s capability to meet its cost of capital relies on its competitive attractiveness in its industry. Industrial business economics bring out industrial attractiveness as the fundamental base for greater financial performance. The assumption is that management of a business entity are primarily concerned in searching for favorable
business industry environments, looking for prospective business opportunities within the industries and controlling economic forces of the industry by influence industrial organizations and competitors’ actions (Kaguri, 2012).

The resource based theory gives emphasis to the fact that organization’s size of capital and management competence as significant factors of growth and competitiveness. The theory posits two postulates (Barney, 1991 and Peteraf & Barney, 2003). To begin with, this philosophy believes that resource diversity might persist for a time since the mobility of capital used to achieve goals of the firm is not similar across and within firms. Secondly, it implies that organizations within the same industry could be different in regard to the assets that they are in charge of. The resource theory argument is that all firms would enjoy equal opportunities and strategies within the same market if they had similar resources, (Cool, Almeida Costa & Dierickx, 2002). They argued that fixity and diversity are not yet adequate conditions for continuous competitive benefit. In addition, studies have been devoted on non-tangible resources, encompassing material evidences (Sampler, 1998), familiarity (Spender, 1996), and dynamic skills (Teece, Pisano &Shuen, 1997).

Thus, SMEs with better industrial attractiveness in terms of size, time they have operated and good management among other resources will have a positive growth; hence this creates a relationship between firm characteristic and performance of firms. Resource Based Theory was used to give a comprehensive explanation of existing relationship between the industry sector and growth of SMEs.
2.2.3 The Agency Theory

This theory was advanced by Jensen and Meckling (1976). He discussed the costs arising from information asymmetry between owners and managers of a firm. According to this theory, management and owners of a business have different interests. Generally, managers are concerned in attaining their personal targets which might vary from the value of the firm while the shareholders might try to monitor and regulate the management actions. These regulation activities generate agency costs of equity. Similarly, when creditor provides debt to a firm, the finance cost is centered on the risk level of the business while the management may try to transfer value from debt holders to owners of the firm. This will in turn affect performance and growth of the firm value.

Lambert (2001), opined that agency costs will be incurred where firms have separate functions. He concluded that firms with low agency costs are an indication of better performance. This theory is relevant to this study in that, management and size as a firm characteristic will be affected by agency cost for this reason SMEs performance and growth will be affected. It demonstrates who bears these costs, why and how they exist.

2.2.4 Operating Cycle Theory

Richards and Laughlin (1980) developed Operating Cycle Theory and which focuses explicitly on current assets of a firm and this gives income statement measures of firms operating activities on production, distribution and collection. Receivables, for example are directly influenced by debt recovery strategy of the firm and how these receivables are easily and quickly converted to cash for use in
the business (Myhre, 2008). By allowing the clients more liberal credit approach, this affects cash-flow negatively although it may lead to increased profitability.

A similar examination goes for different segments of current assets. In any case, the operating cycle hypothesis has a tendency to be unreliable in that it recommends that current liabilities aren't very important over the span of the business operations. Our comprehension of payables as the source of financing the business activities can be ambushed accordingly (Miller, 1994). Given this deficiency of the working cycle hypothesis, it is important to introduce current liabilities in the picture to improve our analysis and understanding.

This theory is applicable to the study in that assets in an SME are very vital in their day to day operations of the business and increase or decrease in asset has an effect on growth of SME. It is also relevant in that managers of an SME are required to understand how current asset affect their business and the theory would improve their decision making process. Operating Cycle Theory was used to give a comprehensive explanation of existing relationship between the age of the firm and the growth.

2.3 Empirical Review

This section discusses the various variables and their effects on growth of SMEs

2.3.1 Firm Size and Growth of SMEs

Naikuru, Gathenya and Kamaku (2016) studied the influence of firm characteristics on performance of youth led SMEs in Kenya and found out that, firm size is one of
the most acknowledged determinants of a firm’s performance. They concluded that enterprise size is significantly linked to better business performance since the larger enterprises were found to have a higher level of success as opposed to smaller ones.

Sebastian (2010) studied size and performance of SMEs and found out that, smaller firms show larger degrees of data asymmetry amongst insiders and outsiders. What's more, the examination discovered that, these organizations likewise face higher expenses in issuing new value. Bigger firms will probably deal with their working capitals more proficiently than little firms.

Most large scale firms realize economies of scale and accordingly can limit their expenses and enhance their financial growth and performance (Kumar, 2015). There are various ways that can be utilized as a part of estimating the firm size. Sales turnover is one of the measures that can be utilized. Sales turnover (Sales income) is the cash that you get from the sale of items having not deducted the sales expenses. Employees’ population is one of the most straightforward measures of size of the firm. Capital investment by a business also may and can change depending on the business size.

Pandey (2009) studied the effects of capital employed on SMEs performance and found out that, an SME will require less investment to fund its capital, while, a large scale business will require a great deal of money to plan and back the investment. In many studies, it has been discovered that organization size is significantly related to firms’ financial growth and success. Hence bigger firms have more noteworthy ability to managing unfriendly market vacillations than smaller firms, expansive firms can without much of difficulty select capable workers with proficient skills than smaller
firms and they additionally have economies of scale in labour cost, which is the most important factor of production.

Brown Atkinson (2011) studied the company size and financial performance of SMEs and found out that there is a positive relationship between organization size and its growth. However, organization size isn't observed to be a critical determinant of operational performance in the large scale firms in the course of the period 1993-1997 (Adams & Buckle, 2000). Beck, et al (2006) found that size, age and ownership are the most dependable predictors of firms' growth. Schiffer and Weder, (2001) established that SMEs time and again report higher growth challenges than medium-size or large firms

Hannan and Freeman, (2009) study on age and size of SMEs and performance, found out that more established organizations are more impervious to transformations in an aggressive surroundings and fresher innovations which might, because of the want to work throughout a time old institutionalized way, leave extra seasoned organizations dynamically outdated and prompt association disappointment.

Another investigation by Malikat, (2011) analyzed the determinants of Pakistan's organizations' productivity proxies by return on add up to assets. The factors tried were time of organization, organization age, the capital volume, use proportion and misfortune proportion. The outcome demonstrates that there is no connection amongst gainfulness and organization age and there is a positive and huge connection amongst size as well as benefit. Then again, the investigation recommends that use proportion and misfortune proportion negatively affect productivity of insurance agencies in Pakistan.
McMahon, (2001) did an investigation in Australia and reported that high dependence on external support related with enhanced development of business. He discovered that enterprise size was significantly connected to improved implementation of business. Larger enterprises were reported to have an extra superior accomplishment record. In another study, Kristiansen, Furuholtt, and Wahid (2003) conducted a study in Indonesia and revealed that financial ability was altogether related to achievement of business. The SMEs which exploited industry, outsider and family venture experienced larger levels of progress.

2.3.2 Age of the firm and growth of the SMEs

Similar to the size-profitability association of a firm, the relationship between age of firm and economic success has been broadly examined. From one viewpoint, Sidhu and Bhatia (2013) reported that more youthful organizations will be outflanked by ones which are more established. Firms which are more seasoned have the early mover advantage and may have particular capabilities as well as abilities which more youthful organizations might not have created up until at this time. In so doing, they can become quicker to achieve superior profit.

Mwania, (2011) studied the effect of Biashara Boresha Loan (BBL) on Growth of Micro and Small enterprises owned by Kenya Commercial Bank (KCB) Ruiru branch customers and found out that besides BBL, there were other factors believed to have an effect on growth of SMEs. The study found out that infant businesses need support in their initial years when their motivation is high. He also suggested that collateral requirements at KCB Ruiru should be made a bit flexible and repayment period
should be increased to at least a year because SMEs only manage to access a small amount of loan due to short repayment periods. The study also found a positive correlation between BBL and entrepreneurs business performance and concluded that young businesses require more support financially to supplement their working capital to ensure the growth in profitability and are a going concern.

Kristiansen, Furuhol, and Wahid (2013) examined the connection amongst age and growth of SMEs and discovered that operation time span was fundamentally connected to achievement of business. Moussavi, (2010) in his unpublished PhD postulation revealed that experience with respect to the chief proprietor was factor adding to the organizations survival.

In their study of small organizations, Duchesneau and Gartner (2010) found that lead business people in fruitful firms were most probably have been brought up by entrepreneurial guardians, to have had an extra wide experience of business and earlier establishment encounter, as well as to trust that they had limited power of their accomplishment in business, as compared to unproductive business proprietors. These researchers also reported that lead businessmen in successful organizations worked longer periods, had an individual who were excellent communicators and who had interest in the firm. In addition, they reported that successful organizations were those started with aggressive goals, and lead business entrepreneurs had a wide as well as sensible business idea

Reynolds, (2000) studied individuals age on SMEs performance, discovered that those ranging from 25-44 years of age were the most entrepreneurially vibrant. Results from another investigation in India conducted by Sinha, (2006) discovered that efficient
business proprietors were fairly more youthful age wise. In their investigation on Internet bistro business people within Indonesia, Kristiansen, Furuholt and Wahid (2003) on the study of age and entrepreneurial performance, established an important relationship between entrepreneurs’ age and success of the business. The older entrepreneurs that is to say having the age of above 25 years were more victorious as compared to the younger entrepreneurs.

Different age groups of female on SMEs performance was studied and the findings revealed that female were in general less probable to be initiators of novel business as compared to male (Mazzarol et al., 2009). Likewise Kolvereidik, (2016) in the study of gender and age on how they affect SMEs performance, reported that males had considerably superior entrepreneurial intents as compared to females. The research additionally revealed that individual with prior experience of entrepreneurship had in total superior entrepreneurial goals as compared to those with no such experience. Conversely, Mazzarol, et al., (1999) reported that respondents with previous work experience on government employment were not likely to be fruitful entrepreneurs of small private ventures (SMEs).

Age is a key determinant of financial execution of the firm. The time of operation that a firm has been in operation exceptionally decides the money related execution of the firm. Firms that have a huge involvement in the market can pick up economies of scale from the providers and different partners of the firm because of good connections and trust. Such a firm will probably perform superior to anything a firm that is new in a domain. The firm may spend a great deal of cash before it gets to adjust to the environment (Santako& Becerra, 2008).
2.3.3 Management Efficiency of the Firm and growth of SMEs.

Muturi Joanne (2016), studied the factors influencing the performance of SMEs in Kenya: A case of independent petroleum dealers in Nairobi Found out that the skills of the management had a positive impact on the employee motivation, resulting in enhanced service quality thus tricking over to improved sales and business growth. The research found that enterprises require managerial skills capable of positioning businesses efficiently within a complex business environment. She concluded that for the SME to grow it was important for managers to acquire managerial skills and managerial aptitude as they are fundamental for the firm’s enhanced performance.

Mugo (2012), studied the factors affecting women entrepreneurs’ growth in Central Business District (CBD) of the city of Nairobi and found out that the factors affecting growth of women entrepreneurs were; lack of entrepreneurial training and education, outdated technology on women, poor access to markets, mismanagement of resources by women, lack of management skills and fraud. The study recommended that women be offered business training by the government and that there should be well laid out policies to support women entrepreneurs. He concluded that women education should be done through seminars to help improve record-keeping skills which would lead to proper business management, and help them assess the business margins and mark-up to weigh the rate of business growth on their own.

Mbogua (2014) studied on factors affecting the performance of small and micro enterprises in Limuru town market of Kiambu County and found out that access to finance and availability of management experience were the key socio-economic factors affecting the growth of SMEs in Limuru Town Market. The other key factors
found to affect SMEs growth positively were: access to infrastructure, access to business information and government policy and regulations.

Rutherford and Oswald (2010) studied firm characteristics impact on performance of SMEs found out that; success and growth of small business has often been categorized into three classifications of predecessors: the individual proprietor attributes, organization qualities as well as environmental qualities. The qualities of an individual integrate properties such as the training, age, administrative know-how, social aptitudes and industry experience of the owner/manager.

Charnel and Liberal (2002) investigated the effects of education on entrepreneurship performance and found out that education of business enterprise creates independent determined individuals. Moreover, they noted that business related training creates the likelihood to form new ventures; growing new product mix as well as the likelihood of creating self-employment to graduates through business with high-innovations and technology. Similarly, the examination revealed that business enterprise training of employees increases the sales, profit rates, development of graduates and rising firms’ benefits.

Also, Sinha (2006) studied the business entrepreneurial educational foundation and found that 72 percent of the effective business individuals are those who had a specialized technical training at the base level, and the majority (67 percent) of the ineffective business ventures owner didn’t have any technical foundation. The researcher concluded that business visionaries having particular education background in the business are in a better position to examine as well as acknowledge tough
actuality and naturally manage, which appears to presume a basic part in entrepreneurial effectiveness.

Adnan, Abdullah and Ahmad (2012) studied management of human resources on productivity of firms in Malaysia; they discovered that management practices considerably affect Malaysian firms' performance; which demonstrated that management practices utilized are notable factor impacting growth of the business. Keh, Nguyen and Ng (2011) studied management skills and performance of entrepreneurs and found a significant positive relationship between information utilization and performance of the firm.

In their research of factors affecting novel small organizations performance, Duchesneau and Gartner (2010) reported that lead entrepreneurs in victorious organizations were extra probable to have been brought up by entrepreneurial guardians, to have acquired a wide experience of business as well as extra earlier set up experience, and to suppose that they had limited power over their achievement in business, as compared to fruitless entrepreneurs. The researchers as well reported that lead entrepreneurs in victorious organizations worked for longer hours, had an individual investment in the organization, and the individuals were excellent communicators and had a broad as well as clear idea of business.

Ramachandran and Shah (1999) investigated the association between minority entrepreneurship and firm’s growth in sub-Saharan Africa. They found that firm managers with technical training or higher relevant education influenced the firm’s performance. Amongst the SMEs owned by Africans, better growth rate was realized in firms which had managers with secondary or university levels of education.
According to Westhead et al. (1995), organizations with over one shareholder when it was established were considerably more probable to carry on. Earlier experience and education in business have been viewed as vital factors of success for small organizations (Yusuf 1995; Wijewardena and Cooray 1996).

### 2.3.4 Industry Sector and Growth of SMEs

Matovu (2011), observed that industry sector that are concerned with the promotion of small enterprises should examine the impact of its policies and programmes on the small businesses. Owino et al (2013) made similar observation that government regulation about wages; taxation, licensing and others are among the important reasons why informal sector business develops. Without careful attention, government policies could crush the small business sector of any economy. While many countries have acknowledged that small enterprises have an important role in their economies, not much effort has been done to facilitate their growth. They have to compete for finance, markets, personnel, and utilities like any other business unit (Nabintu, 2013). In a few countries especially India, there has been affirmative action to promote small enterprises over a long period.

Kinyua (2014) investigated the factors affecting the performance of small and medium enterprises in the Jua Kali Sector in Nakuru town, Kenya and found out that; the performance of SMEs was positively affected by management skills; that access to finance had the potential to positively affect performance of SMEs; macro environment factors were found to significantly affect performance while Infrastructure did not significantly affect performance of SMEs in the study area; He
concluded that the industry sector did not contribute much to growth of SMEs in Nakuru town

Anghazo (2011) inspected the effect of firm level qualities on US bank net premium edge. The outcomes demonstrated that there was a positive association between bank premium with leverage, default hazard, opportunity cost and administration effectiveness. Neely and Wheelock (2009) investigated the gainfulness determinants of SMEs and reported that benefit decidedly associated with changes in per capita wage. Asimakopoulos, Samitas and Papadogonaz (2009), outlined that organizations productivity is decidedly influenced by measure, deals development and venture whereas use and current resources contrarily associated with benefit on the investigation of effect of industry on development of SMEs.

2.4. Summary of Literature and Research Gaps

The body of theoretical literature mainly emphasized the effects of firm characteristics on financial performance of firms. A review of past studies reveals discussions on firm characteristics and performance of SMEs in developed countries. More ever some of the studies have found a positive correlation while others a negative correlation between the two. The literature shows that there is still a gap for effective ways to increase growth of SMEs. This study aims to contribute in filling the gap by identifying factors affecting SME growth and, hence, their development; and to develop a conceptual framework explaining their relationships. Therefore, this research seeks to determine the association between firm characteristics and growth of SMEs in Nyeri County, Kenya.
2.5 Conceptual framework

Conceptual framework was used to depict the relationship between the independent variables (size of the firm, age, management and industry) and the dependent variable (growth of SMEs) as shown below.

**Independent variables**

- **Firm Size**
  - Number of Assets
  - Capital Investment
  - Asset Size

- **Age of the Firm**
  - Number of years in operation
  - Product Exposure Level
  - Number of product per year

- **Management Efficiency**
  - Management Qualifications
  - Level of Experience
  - Number of Managers

- **Industry Sector**
  - Form of Business
  - Number of Competitors
  - Size of the competitors

**Dependent Variables**

- Growth of SMEs
  - Net Income
  - Sales revenue

*Figure 2.1: Conceptual framework*

*Source: Author, 2018*
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
This chapter comprises of the processes and activities which were assumed to collect data for the work of research. It offers complete information on how the data was gathered as well as processed. The chapter centers on methodology issues such as research design, sample of the research, techniques of sampling, data sources, and instruments of research and data analysis method.

3.2 Research Design
Research design is a plan outlining techniques and strategies on how information is to be gathered for an assessment or evaluation that includes identifying the data gathering method, the instruments to be used, how the instruments would be administrating and how the information would be organized and analysed (Chandran, 2004). The study investigated the relationship between firm characteristics and growth of SMEs in Nyeri County. The study adopted descriptive research design. Orodho, (2004) states that descriptive research is utilized when the problem to be studied has been well designed. This study used descriptive design of survey as it sought to describe and establish the effects among the study variables (Mugenda & Mugenda, 2003). Descriptive design also allows a researcher to determine the research variables by posing questions to the respondents and then probing their effects (O’Connor, 2011).
3.3 Target Population

The target population has been described as a subset of a large population that has similar characteristics of which the general conclusion of the study can be drawn. (Castillo, 2009). The target population of the study comprised of 840 SMEs licensed by the County government of Nyeri in the Year 2017.

Table 3.1 Target Population

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of SMEs Proprietors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>526</td>
</tr>
<tr>
<td>2015</td>
<td>609</td>
</tr>
<tr>
<td>2016</td>
<td>717</td>
</tr>
<tr>
<td>2017</td>
<td>840</td>
</tr>
</tbody>
</table>

Source: Nyeri County SMEs Database, (2018)

3.4 Sampling Design

Sampling was explained by Geteria (2012) as the procedure of selecting the target population units which are to be included in the research in such a manner that the picked elements sample represents the whole population. Since the SMEs were diverse in terms of size, nature of business, industry sector and year of establishment a stratified random sampling was used to arrive at the SMEs to participate in the study. According to Mugenda and Mugenda, (2003) 10 to 30% is a good representation of a population; therefore, the researchers’ sample size was 126 SMEs (15% of 840 SMEs). Stratified random sampling method was used to get the 126 SME proprietors from the selected sub counties in a representative manner.
3.5 Data Collection Instruments

Questionnaires with open and closed ended questions were utilized to gather primary data to accomplish the research objectives. Questionnaires were preferred as it was relatively quick to collect data in a standardized and more objective way certainly more so than interviews (Saunders, Lewis & Thornhill, 2012). The Questionnaires were distributed via drop and pick later technique to the selected sampled population. The study also used secondary data gathered from reports and statements of the SMEs. A secondary data collection sheet was utilized to gather secondary data for the dependent variable.

3.6 Validity and Reliability

3.6.1 Validity of Research Instrument
Mugenda and Mugenda, (2005) defines validity as the extent to which findings acquired from the data analysis really represent the situation or phenomenon under research. To assess the validity, the researcher consulted the supervisor to determine the validity of the instruments and offer suggestions on content. In addition, five SMEs who were not included in the final study were provided with the data collection instruments for the purpose of pre-testing the research instrument to verify whether the questions were clear to the respondents and the entire questionnaire effectively addressed the data needed for the study. Their recommendations were used in the improvement of the final questionnaires.

3.6.2 Reliability of Research Instrument
Research instrument reliability is its internal consistency level in due course (Mwituria, 2012). An instrument that is reliable is the one that continuously generates
the probable findings when utilized more than one time to gather data from two samples picked from the same population. Reliability of the instrument was enhanced through a pilot study as recommended by (Mugenda & Mugenda, 2003). Reliability of the research instrument was enhanced through a pilot study that was done in SMEs by selecting a pilot group of 10 respondents. The pilot study allowed for testing the reliability of research instrument. This reliability estimate was measured using Cronbach Alpha coefficient (α). Cronbach (1951) recommends that instruments used in research should have reliability of about 0.70 and above. A coefficient of 0.7 was considered sufficient in this study.

3.7 Data Analysis and Presentation

Gay (1992), described data analysis as the process that involves organizing, accounting for and explaining the data, i.e. making sense of data in terms of respondents’ definition of the situation noting patterns, themes, categorizes and regularities. Once the questionnaires were gathered, they were investigated to guarantee they are properly filled and are predictable, after which they were numbered. To reduce errors and maintain validity of the data they were all scrutinized to ensure they were answered as per the instructions. The data was coded, and fed into the computer for analysis by use of the SPSS. It was presented in tables and figures form. The data was analyzed using multiple regressions. Prior to running a regression model, normality and multicollinearity tests were conducted to establish whether regression model met the assumptions laid down. The regression model adopted by the study was:

\[ Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \]
Where:

\( Y = \text{Growth of SMEs} \)

\( \beta_0 = \text{Constant} \)

\( \beta_{1o} \beta_4 = \text{Coefficients} \)

\( X_1 = \text{Firm size} \)

\( X_2 = \text{Age of the firm} \)

\( X_3 = \text{Management efficiency} \)

\( X_4 = \text{Industry sector} \)

\( \varepsilon = \text{Error term of the model} \)

The Model measures the co-variation or relationship of two or more dependent variables. The statistical calculation of such correlation was done and expressed in terms of correlation coefficients. The Correlation coefficients provided for the degree and direction of relationships. The \( \gamma \) provided information on the direction and magnitude of an observed correlation between two variables (\( X \) and \( Y \)). Inferential statistics was also conducted to determine the relationship nature that is present between variables. Data was interpreted with the help of significance P-values; if the P-value was less than 0.05 the variables were deemed significant to explain the changes in the dependent variable. The coefficient of determination (\( R^2 \)) was used to analyze the percentage in which the independent variables determine the dependent variable.

### 3.8 Ethical Considerations

According Lewis (2012) Ethics is the moral principles that govern a person's behavior or the conducting of an activity. Before collecting data, the researcher was guided by the University code of ethics and obtained authority from relevant offices and
authorities. This included obtaining research permit from NACOSTI and an 
authorization letter from The University Business School. The researcher equally 
made telephone calls to liaise with the owners of the SMEs under study ensure they 
allowed employees working under them to take part in the research. The questionnaire 
as well included a clause showing data confidentially, information safe custody and 
respondents were not be required to write their names to avoid exposing them.
CHAPTER FOUR
DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction
This chapter presents the research results of the study, interpretation of results in view of the specific objectives, discussion of the findings with other studies and hypothesis testing. The findings were presented in form of pie charts and frequency tables and their implications explained. Multiple linear regression analysis was used to determine the extent of the relationship between the dependent and independent variables.

4.2 Response Rate
Data that was analyzed was obtained from one hundred and four (104) respondents out of the targeted one hundred and twenty-six (126) respondents who operate small and medium enterprise. Thus the response rate achieved was 82.5%, this is a response rate of above 80% which is referred as excellent according to (Mugenda & Mugenda, 2003).

4.3 General Information
The background information of respondents was deemed necessary relating to the form of business ownership and the period the business has been operation.

4.3.1 Period of Operation
With respect to the period the business has been operational, the researcher sought to establish how long the respondents had operated the enterprise. The researcher considered this information relevant given that the longer the period the respondent
operated the business, the more they would be able to establish the relationship between firm’s characteristic and growth of SMEs due to the level of experience and exposure.

**Figure 4.1: Number of years the respondent has operated SMEs**

From Figure 4.1 above, the finding of the study revealed that 5.8% had operated the business for less than 1 year, 34.6% for a period of 1-4 years, 40.4% to a period of 5-8 years while 19.2% for more than 8 years. The indication is that majority of the respondent had operated SMEs for a period between 1 to 8 years which is adequate to establish the impact of firm characteristic on growth of SMEs. Yusuf (1995) stated that prior experience as well as education in business has been viewed as vital factors of success for small organizations. Bulanova, Isaksen and Kolvereid, (2016) revealed that individual with prior experience of entrepreneurship had in total superior entrepreneurial goals as compared to those with no such experience. He concluded that length of time in action may be related with anticipation to absorption of information.
4.3.2 Form of Business Ownership

The study sought to ascertain the form of business ownership. The results were as shown in Figure 4.2

![Figure 4.2: Form of Business Ownership](image)

Based on study findings, majority of the respondents 78.8% operated sole proprietorship business, 13.5% were in partnership business while 7.7% had operate registered private companies. This implies that majority more than three quarter of the respondents operating SMEs prefer owning their business individually as opposed to operating a partnership or private companies. This may be attributed to ease of establishing and running sole proprietor business as well as the need to create self-employment. In addition, the unit of analysis comprised the entrepreneurs operating SMEs which are mostly owned by individuals.

4.3.3 Level of education of the respondent

The study sought to establish the level of education of the respondents in order to ascertain whether they can articulate issues considered in this study.
The study finding indicated that 23.1% had primary education, 38.5% had secondary, 30.8% were diploma holders while 7.7% were degree holders. This implies that respondents had necessary education to establish the effect of the firm characteristics factors considered in the study on the growth of SMEs in Nyeri County. In addition, the level of education had been cited to have a positive effect on success of SME. Wijewardena and Cooray (1996) indicate that education in business is a vital factor of success for small organizations. The finding of the study that more than a third of the respondents had secondary education as the highest level implies that those with high education level tend to focus on employment other than starting and running their own enterprises.
4.3.4 Training on entrepreneurship skills or management course

The study sought to establish whether the respondents have been trained on entrepreneurship skills or management course.

Figure 4.4: Training on entrepreneurship skills or management course

As shown in Figure 4.4 majority of the respondents 69.2% have not been trained on entrepreneurship skills or management course. About a third of the respondents 30.8% eluded that they have been trained on entrepreneurship skills or management course. This implies that there is need for the SME to be trained on entrepreneurship skills or management course to enable them manage their business effectively with a view to enhance performance and growth.

4.3.5 Management skill experience of the respondent

The study sought to ascertain the period the respondents had applied management skill experience.
From Figure 4.5 above, the finding of the study revealed that 17.3% had applied management skill experience for less than 3 years, 44.2% for a period of 3-6 years, 23.1% to a period of 6-9 years while 15.4% indicated that they had no management experience skills. This implies that majority of the respondent need to be trained on management skills with a view to enhance growth of SMEs. The study finding is supported by Moussavi (1988) who contends that experience with respect to the proprietor/administrator or the administration abilities is a factor adding to the SMEs survival.

4.4 Descriptive Analysis

The study analyzed data using descriptive statistics where measures of central tendency such as mean and standard deviation of variables were used to summarized the result of each objective of the study. The results of the findings are discussed below.
4.4.1 Firm Size and Growth of SMEs

Objective one of the study sought to establish the relationship between size of the firm and growth of SMEs in Nyeri County, Kenya. The respondents were required to rank various firm size statements on a scale of 1 to 5 where 1 represented strongly disagree while 5 represented strongly agreed. The results were as shown in Table 4.1

Table 4.1 Descriptive Statistics showing Firm Size Characteristics

<table>
<thead>
<tr>
<th>Firm Size Characteristics</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large firms will probably perform better than small firms due to their ability to source more funds</td>
<td>2.00</td>
<td>5.00</td>
<td>4.4423</td>
<td>.74816</td>
</tr>
<tr>
<td>Increase in sales turnover leads to growth of firms</td>
<td>3.00</td>
<td>5.00</td>
<td>4.5000</td>
<td>.63857</td>
</tr>
<tr>
<td>The total assets acquired by the firm increased over the years</td>
<td>1.00</td>
<td>4.00</td>
<td>2.8654</td>
<td>1.00540</td>
</tr>
<tr>
<td>The value of capital employed leads to growth of the firm</td>
<td>2.00</td>
<td>5.00</td>
<td>4.2500</td>
<td>.85616</td>
</tr>
</tbody>
</table>

As shown in Table 4.1, the study findings indicated that increase in sales turnover leading to growth of firms was highly rated with a mean of 4.500 followed by the notion that large firms will probably perform better than small firms due to their ability to source more funds with a mean of 4.4423. The value of capital employed leads to growth of the firm was also rated high with a mean of 4.2500 while the acquisition of total assets by the firm increased over the years was rated below average. This implies that various strategies put in place to increase sales, size of the firm, capital employed and total assets lead to growth of SME. The finding of the
study supports earlier study by Sebastian (2010) who studied size and performance of SMEs and found out that, smaller firms show larger degrees of data asymmetry amongst insiders and outsiders. According to Kumar (2015), huge firms will probably deal with their working capitals more proficiently than little firms. He noted that most extensive firms appreciate economies of scale and accordingly can limit their expenses and enhance their budgetary execution. The literature review revealed that sales turnover is one of the measures that can be utilized measure the size of the firm.

4.4.2 Age of the firm and growth of SMEs

Objective two of the study sought to determine the relationship between age of the firm and growth of SMEs in Nyeri County, Kenya. The respondents were required to rank various age of the firm statements on a scale of 1 to 5 where 1 represented strongly disagree while 5 represented strongly agreed. The results were as shown in Table 4.2

Table 4.2 Descriptive Statistics showing Age of the firm Characteristics

<table>
<thead>
<tr>
<th>Age of the firm Characteristics</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>The management of the SMEs has gained experience over time</td>
<td>3.00</td>
<td>5.00</td>
<td>4.4038</td>
<td>.59966</td>
</tr>
<tr>
<td>The management gradually improve their control of business all operations with time</td>
<td>3.00</td>
<td>5.00</td>
<td>4.2115</td>
<td>.63358</td>
</tr>
<tr>
<td>The longer the time in the operation the more the managers are experienced in dealing with challenges</td>
<td>3.00</td>
<td>5.00</td>
<td>4.3846</td>
<td>.59623</td>
</tr>
</tbody>
</table>
The business has operated for a long time without changing the mode of operations had a mean of 3.2885. This implies that management experience may be gained with time where managers are exposed to various ways of dealing with challenges.

Table 4.2 indicated that the management of the SMEs has gained experience over time had been rated high with a mean of 4.4038 followed by the longer the time in the operation the more the managers are experienced in dealing with challenges with a mean of 4.3846. The management gradually improve their control of business all operations with time had a mean of 4.2115 while the business has operated for a long time without changing the mode of operations had a mean of 3.2885. This implies that management experience may be gained with time where managers are exposed to various ways of dealing with challenges.

The finding is in line with Hanniah and Freedor (2009) who studied the impact of age and size of SMEs on performance of firms and found out that more established organizations are more impervious to transformations in an aggressive surroundings and Fresher innovations which might, because of the want to work throughout a time old institutionalized way, leave extra seasoned organizations dynamically outdated and prompt association disappointment. Results from another investigation in India conducted by Sinha (2006) discovered that efficient business visionary were fairly more youthful age wise.

4.4.3 Management Efficiency and Growth of SMEs

Objective three of the study sought to establish the relationships between management efficiency and growth of SMEs in Nyeri County, Kenya. The respondents were required to rank various management efficiency statements on a scale of 1 to 5 where
1 represented strongly disagree while 5 represented strongly agreed. The results were as shown in Table 4.3

**Table 4.3 Descriptive Statistics showing Management Efficiency Characteristics**

<table>
<thead>
<tr>
<th>Management Efficiency Characteristics</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers are trained on technical issues regarding the affairs of the SMEs</td>
<td>1.00</td>
<td>4.00</td>
<td>2.3462</td>
<td>1.10400</td>
</tr>
<tr>
<td>Managers of the SMEs has the right experience to manage the businesses</td>
<td>1.00</td>
<td>4.00</td>
<td>2.8654</td>
<td>1.00540</td>
</tr>
<tr>
<td>Managers have the skills and competence aspects in running day today issues</td>
<td>1.00</td>
<td>4.00</td>
<td>3.0192</td>
<td>.99495</td>
</tr>
<tr>
<td>Managers have the ability to control costs and manage finances effectively</td>
<td>2.00</td>
<td>4.00</td>
<td>3.5962</td>
<td>.63121</td>
</tr>
</tbody>
</table>

Based on Table 4.3, manager’s ability to control costs and manage finances effectively had a mean of 3.5962 while manager’s skills and competence aspects in running day today issues had a mean of 3.0192. The respondents were indifferent on whether managers are trained on technical issues regarding the affairs of the SMEs and whether they had the right experience to manage the businesses with a mean of 2.3462 and 2.8654 respectively. This implies that managers acquire skills and competence of running SMEs with time and tries to control cost although they may not have been trained on technical issues. Charnel and Liberal (2002) studied effects of education on entrepreneurship performance found out that education of business enterprise creates independent determined individuals. Moreover, the researchers reported that training on the enterprise creates the arrangement of novel pursuits; the independent work probability, the growing new items probability, as well as the
likelihood of independently employed graduates having a business which is of high- 
innovation.

Rutherford and Oswald (2010) studied firm characteristics impact on performance of 
SMEs and found out that small achievement of business has often been categorized 
into three classifications of predecessors which are the individual proprietor attributes, 
organization qualities as well as environmental qualities. The qualities of an 
individual integrate properties such as the training, age, administrative know-how, 
social aptitudes and industry experience of the owner/manager. In their research of 
factors affecting novel small organizations performance, Duchesneau and Gartner 
(2010) documents that lead entrepreneurs in victorious organizations were extra 
probable to have been brought up by entrepreneurial guardians, to have acquired a 
wide experience of business as well as extra earlier set up experience, and to suppose 
that they had limited power over their achievement in business, as compared to 
fruitless entrepreneurs.

4.4.4 Industry sector and growth of SMEs

Objective four of the study sought to establish the relationship between industry 
sector and growth of SMEs in Nyeri County, Kenya. The respondents were required 
to rank various industry sector statements on a scale of 1 to 5 where 1 represented 
strongly disagree while 5 represented strongly agreed. The results were as shown in 
Table 4.4

<table>
<thead>
<tr>
<th>Industry Sector Characteristics</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
</table>

46
The business has been in the same industry for a long period

<table>
<thead>
<tr>
<th></th>
<th>Value 1</th>
<th>Value 2</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The business has adapted well in the industry</td>
<td>1.00</td>
<td>5.00</td>
<td>3.0385</td>
<td>1.32139</td>
</tr>
<tr>
<td>The business is aware of the government regulations and laws regulating the industry</td>
<td>1.00</td>
<td>5.00</td>
<td>3.3462</td>
<td>1.13008</td>
</tr>
<tr>
<td>On average the industry is performing as expected</td>
<td>1.00</td>
<td>4.00</td>
<td>2.8654</td>
<td>1.00540</td>
</tr>
<tr>
<td>There is high concentration of business of the same industry within the area of operation</td>
<td>1.00</td>
<td>5.00</td>
<td>3.9519</td>
<td>.93870</td>
</tr>
</tbody>
</table>

As Table 4.4 above espouses, the business has been in the same industry for a long period was highly rated with a mean of 4.0769 followed by the presence of high concentration of business of the same industry within the area of operation with a mean of 3.9519. The business is aware of the government regulations and laws regulating the industry had a mean of 3.3462. The business has adapted well in the industry had a mean of 3.3462. However, the respondent could not clearly tell whether the industry is performing as expected with a mean of 2.8654. This implies that SME have remained in the same industry for a long period although there has been high concentration related businesses of the same industry. Anghazo (2011) investigated the effect of firm level qualities on US bank net premium edge. The outcomes demonstrated that bank premium edge emphatically associated with use, opportunity cost, default risk and administration effectiveness.
4.5 Diagnostic Tests

In order for a linear regression model to be usable in practice, the model should conform to the assumptions of linear regression. The regression assumes that the residuals are normally distributed and there is little or no multicollinearity between the independent variables and dependent variables and the model is linear in parameters. Prior to running a regression model, normality and multicollinearity tests were conducted to establish whether regression model met the laid down criteria.

4.5.1 Normality test

Test for normality was performed on the dependent variable (growth of SMEs) using graphical method. The results are presented in Figure 4.6.

![Figure 4.6: Histogram on Growth of SMEs](image)
As shown in Figure 4.6, the graph indicates that the residuals are normally distributed.

4.5.2 Multicollinearity test

The assumption that there is little or no multicollinearity between the independent and dependent variables is tested using Variance Inflation Factor (VIF) of tolerance. The VIF of tolerance is a diagnostic method used to detect how severe the problem of multicollinearity was in a multiple regression model. VIF statistic of a predictor in a model shows how much bigger the error variance is for the exclusive predictor effect (Baguley, 2012). Using the VIF method, a tolerance of less than 0.20 and a VIF of more than 5 indicates a presence of multicollinearity. The results were presented in Figure 4.5.

Table 4.5: Multicollinearity Test Findings

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>Firm Size</td>
<td>.747</td>
</tr>
<tr>
<td>Age of the firm</td>
<td>.914</td>
</tr>
<tr>
<td>Management efficiency</td>
<td>.716</td>
</tr>
<tr>
<td>Industry sector</td>
<td>.886</td>
</tr>
</tbody>
</table>

As indicated in Table 4.5 there is no Tolerance of less than 0.2 and no Variance Inflation Factor with a value above 5 or with value of 5 and therefore absence of multicollinearity.
4.6 Regression Analysis

Regression analysis was conducted to empirically establish whether a firm characteristic was a significant determinant of growth of SMEs in Nyeri County. This was performed using the field data and the results interpreted according to the correlation coefficient (R values), coefficient of determination (R² values), the coefficient beta values and F ratio at the 95% level of significance. Explanation and interpretation of the findings are given.

4.6.1 Model Summary

The regression results in Table 4.6 indicate the goodness of fit for regression between firm characteristic and growth of SMEs

Table 4.6: Regression analysis model summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.518a</td>
<td>.268</td>
<td>.238</td>
<td>.37704</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Growth of SMEs

b. Predictors: (Constant), Size of the firm, Age of the firm, Industry sector, Management efficiency.

From the regression results in Table 4.6, the R value was 0.518 indicating that there is a fairly strong positive relationship between industry sector, age of the firm, size of the firm, management efficiency collectively and Growth of SMEs in Nyeri County. The R squared (R²) value of 0.268 indicates that 26.8 percent of changes in Growth of
SMEs in Nyeri County is explained by firm characteristic variables collectively, all other factors were held constant.

4.6.2 ANOVA Table

The overall model significance was presented in Table 4.7

Table 4.7: Regression analysis ANOVA table

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>5.148</td>
<td>4</td>
<td>1.287</td>
<td>9.053</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>14.073</td>
<td>99</td>
<td>.142</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19.221</td>
<td>103</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: **Growth of SMEs**

b. Predictors: (Constant), **Firm Size, Age of the firm, Industry sector**, **Management efficiency**

In view of the results in Table 4.7 above, a p-value of 0.000 indicates that the model overall is a good fit. Hence, firm characteristics are a good measure of growth of SMEs in Nyeri, Kenya.

4.6.3 Coefficient Table

Table 4.8 displays the regression coefficient of the independent variables size, age, management and industry sector of the firm.
Table 4.8: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Un-standardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.375</td>
<td>.453</td>
</tr>
<tr>
<td>Firm size</td>
<td>.300</td>
<td>.087</td>
</tr>
<tr>
<td>Age of the firm</td>
<td>.276</td>
<td>.089</td>
</tr>
<tr>
<td>Management</td>
<td>-.207</td>
<td>.061</td>
</tr>
<tr>
<td>Industry sector</td>
<td>.020</td>
<td>.064</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Growth of SMEs

The regression model for the study is as summarized below: -

\[ Y = 2.375 + 0.300X_1 + 0.276X_2 - 0.207X_3 + 0.020X_4 \]

Where \( Y \) = the dependent variable (growth of SMEs), \( X_1 \) = size of the firm, \( X_2 \) = age of the firm, \( X_3 \) = management, \( X_4 \) = industry sector. This implies that if all other factors (SME size, Age of the SME, Industry of the SME and Management of the SME) were held constant the growth of SMEs in Nyeri County would be 2.375.

The results revealed that size of the firm, age of the firm and industry sector had a positive effect on the growth of SMEs with \( \beta_1 = 0.300 \), \( \beta_2 = 0.276 \) and \( B_4 = 0.020 \) respectively. The positive beta implies that an increase in the size of the firm, the age of the firm and the industry sector lead to growth of SMEs in Nyeri County. Consequently, management of SMEs in Nyeri County had a negative effect on the growth of SMEs with \( \beta_3 = -0.207 \). The negative beta implies that the growth of SMEs
tends to go down due to the current management of SMEs. The finding indicates that the way SMEs are managed currently adversely affect their growth hence there is need to ensure SMEs are efficiently managed.

**4.6.4 Hypothesis Testing and Discussion**

Regression results in Table 4.8 indicated the relationship between firm size and growth of SMEs was positive and significant with $\beta_1 = 0.300$. This is an indication that a unit increase in size of the firm increases growth of SMEs by 0.300. At 5% level of significance firm size ($\beta_1$) had a p value of 0.001 which is less than 0.05. It is on this basis we reject the null hypothesis that firm size does not have a significant relationship with growth of SMEs in Nyeri County, Kenya. This study finding is consistent with Kristiansek, Furuhart, and Wahid, (2009) who found that size of the business was significantly associated to success of business. McMahon (2001) discovered that enterprise size was significantly connected to improved implementation of business. He opined that larger activities were reported to have an extra superior accomplishment amount.

Atkinson & Brown (2011) studied the company size and financial performance of SMEs and found out that organization size is emphatically identified with the financial performance of the organizations. According to Santako and Becerra (2008), firms that have a huge involvement in the market can pick up economies of scale from the providers and different partners of the firm because of good connections and trust. Such a firm will probably perform superior to anything a firm that is new in a domain.
The study findings further indicate that the age of the firm had positive and significant relationship with growth of SMEs with $\beta_1 = 0.276$. This indicates that a unit increase in the age of the firm increases growth of SMEs by 0.276. At 5\% level of significance firm age ($\beta_2$) had a p value of 0.003 which is less than 0.05. It is on this basis we reject the null hypothesis that age of the firm does not have a significant relationship with growth of SMEs in Nyeri County, Kenya. The finding of the study assert earlier findings by Sidhu and Bhatia (2013) who found that more youthful organizations will be outperformed by effectively existing organizations. They noted that more established organizations have the early mover benefit and might have particular capabilities as well as abilities which more youthful organizations might not have created up until at present. In so doing, such organizations can become faster to achieve superior profit. Sidhu and Bhatia (2013) reported that more youthful organizations will be outflanked by ones which are more established. Firms which are more seasoned have the early mover advantage and may have particular capabilities as well as abilities which more youthful organizations might not have created up until at this time. In so doing, they can become quicker to achieve superior profit.

Kristiansen, Furuholt, & Wahid (2013) studied the relationship between age of the firm and performance of SMEs, reported that time of length in action was considerably related to success of business. The finding of this study is also inconsistent with Malikat, (2011) who analyzed the determinants of Pakistan's organizations' productivity proxies by return on add up to assets. The factors tried were time of organization, organization age, the capital volume, use proportion and misfortune proportion. The outcome demonstrated that there is no connection amongst gainfulness and organization age and there is a positive and huge connection.
amongst size as well as benefit. Their findings were contrary to Kristiansen, Furuholt, & Wahid (2013) who examined the connection amongst age and execution of SMEs and reported that time of length in function was fundamentally connected to achievement of business. They concluded that age is a key determinant of financial execution of the firm.

The findings further indicate that the relationship between management efficiency and growth of SMEs was negative and significant with $\beta_1 = -0.207$. This is an indication that a unit increase in the manner SMEs are managed leads to reductions of growth of SMEs by 0.207. At 5% level of significance management efficiency ($\beta_3$) had a p value of 0.001 which is less than 0.05. It is on this basis we reject the null hypothesis that management efficiency does not have a significant relationship with growth of SMEs in Nyeri County, Kenya. The study finding is contrary to Keh, Nguyen and Ng (2011) who studied management skills and performance of entrepreneurs and found a significant positive relationship between information utilization and performance of the firm. The findings could differ depending on the management skills and the level of education of the personnel leading the organization.

In this study descriptive analysis findings indicate that the respondents were indifferent on whether managers are trained on technical issues regarding the affairs of the SMEs while the rating on whether management had right experience to manage the businesses was rated below average. Sinha (1996) dissected the business individual instructive foundation and found that 72 percent of the effective business individual who had a specialized ability base level, which enables them to manage their business effectively. He noted that businesses that were ineffective managed
their managers didn’t have any particular foundation on management skills. According to Kihonge (2014), management experience and the size of SME symbolizes competitive advantage of today, enhanced by strong typical abilities in quality, speed, flexibility and efficiency.

The study findings on the relationship between the industry sector and growth of SMEs was positive but insignificant with $\beta_1=0.020$. This was an indication that a unit improvement of the industry sector increase growth of SMEs by 0.020. At 5% level of significance industry sector ($\beta_4$) had a p value of 0.751 which is greater than 0.05. It is on this basis we accept the null hypothesis that industry sector does not have a significant relationship with growth of SMEs in Nyeri County, Kenya. The study findings indicate as the industry sector performance improves growth of SMEs, it may increase but the level of growth may not be statistically significant. This may be associated with unique characteristic of individual SME in terms of range of products, geographical location and population size among other demographic considerations.

The evaluation of SMEs in relation to industry sector was supported by Duchesneau, (2001) who opined that evaluating the future benefit potential of the firm is urgent since over the long term, the firm needs to work productively with a specific end goal to survive. The proportions are essential to banks, investors, suppliers, employees and different partners. Asimakopoulos, Samitas and Papadogonaz (2009), outlined that organizations productivity is decidedly influenced by measure, deals development and venture whereas use and current resources contrarily associated with benefit on the investigation of effect of industry on development of SMEs.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction
This chapter presents the summary of major findings of the study, conclusions necessary recommendations and the suggested areas for further studies. The general objective of the study was to determine the effects of firm characteristics and growth of small and medium enterprises in Nyeri County, Kenya.

5.2 Summary
The summary is done in line with the objective of the study based on the output of the descriptive and inferential statistical analysis guided to test the research hypothesis of the study.

5.2.1 Firm Size and Growth of SMEs
The first objective of the study sought to establish the relationship between size of the firm and growth of SMEs. The study had hypothesized that size of the firm has no relationship with growth of SMEs in Nyeri County. The results indicate that size of the firm is statistically significant in explaining the growth of SMEs in Nyeri County at 5% level of significance with p value of 0.001. This is an indication that the study failed to support the null hypothesis. Descriptive statistic indicated that increase in sales turnover and value of capital employed leads to growth of firms. In addition, there is a notion that large firms will probably perform better than small firms due to their ability to source for more funds from external sources.
5.2.2 Age of the Firm and Growth of SMEs

The second objective of the study sought to determine the relationship between age of the firm and growth of SMEs. The study had hypothesized that age has no relationship with growth of SMEs in Nyeri County, Kenya. The results indicate that age of the firm is statistically significant in explaining the growth of SMEs in Nyeri County at 5% level of significance with p value of 0.003. This is an indication that the study failed to support the null hypothesis. Descriptive statistic indicated that management of the SMEs has gained experience over time and the longer the time in the operation the more the managers are experienced in dealing with challenges. Moreover, the management was found to gradually improve their control of business operations which for a long time operated without changing the mode of operations.

5.2.3 Management Efficiency and Growth of SMEs

The third objective of the study sought to establish the relationships between management and growth of SMEs. The study had hypothesized that management has no relationship with growth of SMEs in Nyeri County, Kenya. The results indicate that management of the firm is statistically significant in explaining the growth of SMEs in Nyeri County at 5% level of significance with p value of 0.001. This is an indication that the study failed to support the null hypothesis. Descriptive statistics revealed that managers were found to have ability to control costs and manage finances effectively although the respondents were indifference on whether managers possess skills and competence aspects in running day today issues. In addition, it was not possible to establish whether managers are trained on technical issues regarding the affairs of the SMEs since their technical knowhow was averagely rated.
5.2.4 Industry Sector and Growth of SMEs

The fourth objective of the study sought to establish the relationship between industry sector and growth of SMEs. The study had hypothesized that size has no relationship with growth of SMEs in Nyeri County, Kenya. The results indicate that size of the firm is statistically significant in explaining the growth of SMEs in Nyeri County at 5% level of significance with p value of 0.751. This is an indication that the study supported the null hypothesis. Descriptive statistics revealed that the business has been operating in the same industry for a long period and there is presence of high concentration of business of the same industry within the area of operation. Further the findings indicated that the business has adapted well in the industry but the respondent could not clearly tell whether the industry is performing as expected.

5.3 Conclusion

In view of the study findings, conclusions are derived thereof. The study found that the size of the firm was positively and statistically significant in determining the growth of SMEs in Nyeri County. Hence, the study concludes that the growth of SMEs is highly dependent on the size of the firm. In addition, large firms were opined to perform better than small firms due to their ability to source for more funds from external sources, increase in sales turnover and value of capital employed leads to growth of firms.

The study further found that age of the firm was positively and significantly associated with growth of SMEs in Nyeri County. Hence, the study concludes that the
longer the period the SMEs has been existence the more effective it would focus on growth. In addition, the management of the SMEs gain experience over time and the longer the time in the operation the more the managers are experienced in dealing with enterprise challenges.

The study findings indicate that management is negatively and significantly associated with growth of SMEs in Nyeri County, Kenya. Hence, the study concludes that the way the SMEs are currently management inefficiencies has leads to stagnation or reduction of growth of SMEs in Nyeri County. This is an indication that for SMEs to growth there is need to train the entrepreneurs on management skills. In addition, the study concludes that managers running SMEs do not possess adequate skills and competence of running day the enterprise and as a result they need to be trained on general management and technical issues regarding the affairs of the SMEs.

The study further found that industry sector was positively but insignificantly associated with growth of SMEs in Nyeri County. Hence, the study concludes that Improvement of industry sector would improve growth of SMEs but the study concluded that SMEs were indifferent on how the firms were performing in relation to the industry performance hence they are not in a position to establish whether their business has adapted well in the industry

5.4 Recommendation
From the study findings, it is recommended that the SMEs should come with strategies of increasing the size of the firm since it is positively and significantly
associated with growth. The firms should also focus on increasing sales turnover, total assets and value of capital employed as they lead to the growth of the firm. The reviewed literature opined that larger firms are able to perform better in terms of sales turnover, asset based and capital employed which leads to growth.

In addition, management of SMEs should ensure that SMEs going concern is not at stake since the longer the SMEs operate the more it is capable to address challenges facing enterprises and eventually lead to growth due to experiences gained and exposure. The management should also ensure that they control all the operations of the firm and should adjust the mode of operation to meet the ever changing customer taste and preferences and technological advancements.

Management of SMEs should be trained on general management skills and technical skills to enable them operate their enterprise effectively since the way the SMEs are currently managed had an adverse impact on growth of SMEs. The management of SME should also have the ability to manage finances effectively by controlling the cost and making product financial decision as pertaining to working capital management. From the literature, effective and efficient management of SMEs has positive and significant effect on performance and growth.

The study further recommends that even though industry sector is insignificantly associated with growth of SMEs, the improvement of the industry has a role on growth of SMEs. Therefore, the study recommends that SMEs should evaluate how the sector is performing in order to strategically position themselves with a view to enhance performance and growth. In addition, the management should be aware of the
government regulations and laws regulating the industry in order to ensure compliance with relevant legal framework which may affect business operations. Moreover due to the high concentration of business of the same industry within the area of operation the SMEs should conduct frequent marketing intelligent to enable them gather information related to business environment which drive to better decision on market opportunities which could lead to growth of their firms.

5.5 Contribution to Knowledge
The results of the study contribute to finance theory by establishing the model that can depict the relationship between the firm characteristic and growth of SMEs in Nyeri County, Kenya. Based on the findings it will enable future researchers understand fully how firm characteristics affects growth of Small and Medium Enterprises. This would further provide basis for future reference to the academician especially on areas pertaining the effect of firm size, age of the firm, management efficiency and industry sector on the growth of SMEs in Nyeri County, Kenya. Especially more desirable, entrepreneurs operating SMEs could focus on the recommendations of the study by coming up with strategies of increasing sales turnover, total assets and value of capital employed as they lead to the growth of the firm. In addition, the study brings out the need for the entrepreneurs to be trained on general management skills and technical skills to enable them operate their enterprise effectively.

5.6 Areas for Further Study
Arising from the study findings, the result of the study indicates that firm characteristic considered in this study collectively explains 26.8% changes in growth of SMEs in Nyeri County, Kenya while the rest can be explained by variables not
considered in this study. This study recommends that further researcher can conduct studies on SMEs in Nyeri County, Kenya to explain the unexplained part of the variations. The same study can be conducted in other areas of the country to establish whether the relationship between the firm characteristic and growth of SMEs in those areas adopt the same or different trend and results.
REFERENCES


Journal of Small Business Management (October), 43(4).


Muturi Joanne, 2016 Factors Influencing the Performance of SMEs in Kenya: A Case of Independent Petroleum Dealers in Nairobi


APPENDIX I: QUESTIONNAIRE

I am a student at Kenyatta University, pursuing a Masters of Business Administration Degree (Finance Option). I am doing a research on the relationship between firm characteristics and growth of Small and Medium Enterprises in Nyeri County. I request that you answer the questionnaire as truthfully as possible. The information gathered will be for academics purposes only and will be treated with confidence. Your participation in facilitating the study is highly appreciated.

Fill in the following questions in the space provided by putting a tick [✔] or a cross[X].

Section A: General Information (Tick one)

1. How long have you operated this business?
   - 5 years or less than [ ]
   - 6 - 10 years [ ]
   - 10 years and above [ ]

2. What is the form of ownership of your enterprise
   - Sole Proprietorship [ ]
   - Partnership [ ]
   - Other…………………………

Section B: Firm Characteristics

Please rank the following statements in each area on firm characteristics ranging from strongly disagree to strongly agree where: 5= Strongly Agree; 4= Agree; 3= Neutral; 2= Disagree; 1= Strongly Disagree
Part I: Firm Size

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i.</td>
<td>The firm frequents borrows from banks and other financial institutions</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ii.</td>
<td>The borrowing ratio has increased over time</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>iii.</td>
<td>The owners of the business have contributed much of the capital</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

4. Kindly indicate the level of Capital investment and debt in your firm

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Level (in Kshs.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Investment (in Kshs.)</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

5. Kindly comment briefly on the strengths of firm size that helped the performance in SMEs in Nyeri

Part II: Age of the Firm

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The management of the SMEs has gained experience over time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managers of the SMEs has the right skills to manage the businesses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The longer the time in the operation the more the experience</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
We have operated the business for a long time without changing the mode of operations

7. How long have you operated your current enterprise?
   - Less than 3 Years [ ]
   - 3 - 6 Years [ ]
   - 6-9 Years [ ]
   - More than 9 Years [ ]

8. Indicate your business experience?
   - Less than 3 Years [ ]
   - 3 - 6 Years [ ]
   - 6-9 Years [ ]
   - More than 9 Years [ ]

Part III: Management Efficiency

9. [5 4 3 2 1]
   Managers are trained on technical issues regarding the affairs of the SMEs
   Managers of the SMEs has the right experience to efficiently manage the businesses
   Managers are trained on social aspects in running day today issues
   Managers are socially responsible

10. Indicate your technical education level? ..........................

11. Specify your social skills level?
    - Less than 3 Years [ ]
    - 3 - 6 Years [ ]
    - 6-9 Years [ ]
    - More than 9 Years [ ]

12. State your management skill experience?
    - Less than 3 Years [ ]
    - 3 - 6 Years [ ]
    - 6-9 Years [ ]
    - More than 9 Years [ ]
13. Kindly comment on the challenges the managers are facing in running the SMEs in Nyeri …………………………………………………………………………………………………………..
………………………………………………………………………………………………………..
Part IV: Industry Sector

14. 

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>The business has been in the same industry sector for a long period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The business has adapted well in the industry sector</td>
<td></td>
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</tr>
<tr>
<td>The is aware of the government regulations and laws regulating the industry sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On average the industry sector is performing as expected</td>
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</tr>
</tbody>
</table>

15. In which industry Sector does your business operate?

- Manufacturing [ ]
- Service [ ]
- Transport [ ]
- Real Estate [ ]
- Health [ ]
- Agriculture [ ]
- Education [ ]
- ICT [ ]
- Security [ ]

16. Indicate the range of numbers of competitors in the market?

- Less than 20 SMEs [ ]
- Between 20-50 SMEs [ ]
- Between 50-100 SMEs [ ]
- More than 100 SMEs [ ]

Section C: Growth of the Firm

17. Please give your assessment of the overall growth between the year 2014 - 2017 in response to the scale below
18. Please rank the following statements in each area on firm growth between the year 2014 - 2017 ranging from strongly disagree to strongly agree where: 5= Strongly Agree; 4= Agree; 3= Neutral; 2= Disagree; 1= Strongly Disagree

<table>
<thead>
<tr>
<th>Area</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Income / Profit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of different products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

i. The size of the firm play a significant role in its growth

ii. The age of the firm play a significant role in its growth

iii. The management efficiency of the firm play a significant role in its growth

iv. The industry Sector in which a firm operates play a significant role in its growth

Thank You for your Participation!
APPENDIX II: RESEARCH PROJECT APPROVAL

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

FROM: Dean, Graduate School
TO: Robert Ngatia Wathegi
     C/o Accounting and Finance Dept.

DATE: 21st May, 2018
REF: D55/NYI/PT/22324/2012

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting of 9th May, 2018 approved your Research Project Proposal for the M.B.A Degree Entitled, “Firm Characteristics and Growth of Small and Medium Enterprises in Nyeri County, Kenya”.

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University’s Website under Graduate School webpage downloads.

Thank you.

HARINET ISABOKE
FOR: DEAN, GRADUATE SCHOOL

cc. Chairman, Accounting and Finance.

Supervisors:

1. Dr. Job Omagwa
   C/o Department of Accounting and Finance
   Kenyatta University

10/11m
APPENDIX III: NACOSTI AUTHORIZATION

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
+254-44-3310771, 2219420
Fax: +254-20-218245, 218209
Email: do@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

Ref No. NACOSTI/P/18/07396/24375

Date: 18th August, 2018

Robert Ngatia Wathegi
Kenyatta University
P.O. Box 43844-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Firm characteristics and growth of Small and Medium Enterprises in Nyeri County, Kenya,” I am pleased to inform you that you have been authorized to undertake research in Nyeri County for the period ending 17th August, 2019.

You are advised to report to the County Commissioner and the County Director of Education, Nyeri County before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a copy of the final research report to the Commission within one year of completion. The soft copy of the same should be submitted through the Online Research Information System.

BONFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nyeri County.

The County Director of Education
Nyeri County.