

**INFLUENCE OF STRATEGIC PLANNING ON  
PERFORMANCE OF SMALL AND MEDIUM SIZED  
MANUFACTURING FIRMS IN KENYA**

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**Influence of strategic planning on Performance of small and medium  
sized manufacturing firms in Kenya**

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## DECLARATION

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

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## **DEDICATION**

To my beloved daughters Joan and Joy

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## **LIST OF ABBREVIATIONS**

<b>CEO:</b>	Chief Executive Officer
<b>GDP:</b>	Gross Domestic Product
<b>GOK:</b>	Government of Kenya
<b>JKUAT:</b>	Jomo Kenyatta University of Agriculture and Technology
<b>MDG:</b>	Millennium Development Goals
<b>NSE:</b>	Nairobi Securities Exchange
<b>ROA:</b>	Return on Assets
<b>ROE:</b>	Return on Equity
<b>ROI:</b>	Return on Investment
<b>R&amp;D:</b>	Research and Development
<b>SME:</b>	Small and Medium Enterprises
<b>SBA:</b>	Small Business Administration
<b>SPSS:</b>	Statistical Package of Social Sciences Software
<b>SWOT:</b>	Strengths, Weaknesses, Opportunities and Threats
<b>UK:</b>	United Kingdom
<b>USA:</b>	United States of America

## DEFINITION OF TERMINOLOGIES

- Adoption:** The action of product acceptance that begins with consumer awareness of a new product or service leading to trial, usage and culminating in full and regular use of the product (The Free Dictionary, 2006)
- Competitive advantage:** A set of capabilities or resources that allow an organization to differentiate its products or services from those of its competitors to increase market share (Wiggins & Ruefli, 2002)
- Goal:** Organizational objective that is made specific with respect to magnitude, time and responsibility (Kotler & Murphy, 1981)
- Implementation:** Translating strategy into action and involves organization of the firm's resources (Programs, budgets and procedures) and motivation of the staff to achieve the firm's objectives (Mintzberg, 2004)
- Logit Model:** A regression model used in research studies when the dependent variable is dichotomous. It assumes independence of the error term (Maddalla, 1983)
- Management:** Planning, organizing, staffing, directing and controlling an organization (a group of one or more people or entities) or effort, for the purpose of accomplishing desired goals and objectives effectively and efficiently (Burns, 2005)

**Multinomial Logit model:** Regression model that is used when regressors vary across alternatives (Maddalla, 1983)

**Strategic Management:** Application of strategic thinking to the job of leading an organization in creation of an organization structure which will deploy resources to successfully carry out its competitive strategy (Alliance online, 2005).

**Strategic Plan:** A step by step guide, created by a business or organization to map out how it will reach its goals and set a foundation for the entire organization in such a way that the organization knows what will happen and what is expected of them (Mintzberg, 2004)

**Strategy:** The direction and scope of an organization over the long-term, which achieves advantage in a changing environment through its configuration of resources and competencies with the aim of fulfilling the vision, goals and stakeholder expectations (Robinson & Scholes, 2007)

## ABSTRACT

The current business world has experienced rapid changes due to the ever changing political, environmental, sociological and political changes that have resulted to provision of innovative products in the market and ever changing customers' needs. This has led to increased competition in the different sectors that has resulted to the closure of many firms that have not been fast in adapting to the versatile environment. In order to survive, firms must constantly improve their performance by reducing costs, enhancing quality and differentiating their products and this can be achieved by laying long term strategies. The study aimed at determining the influence of strategic planning on both small and medium sized manufacturing enterprises in Kenya. Specifically, the study aimed at investigating the status of adoption of strategic planning by the small and medium enterprises in the manufacturing SMEs, compare the performance of the SMEs that had adopted strategic planning against those that had not adopted, compare the firms' performance before and after the adoption as well as establish the factors that determine adoption of the strategic planning tool. The research design that was adopted incorporated both exploratory and descriptive designs. The target population was the 260 small and medium manufacturing firms that had in operation in Thika town for the last three years as at the time of data collection. Data was collected mainly by use of questionnaires and analyzed by SPSS Version 21 and Microsoft Excel software. Stratified random sampling method was the main sampling technique that was adopted for the study. The statistical analysis tools that were used in data processing and analysis included: Logit model, Correlation analysis, Independent samples t- test, Paired t- test and Chi square test. The research study found that the status of adoption of strategic planning in small and medium manufacturing firms in Kenya is low compared to the large firms in Kenya and the manufacturing SMEs in the developed countries. The firms that had adopted strategic planning had adopted it for only a few years and the adoption process was in most cases initiated by the firm owners. In regard to performance of the firms, Independent samples t- test results revealed that the performance of the firms that had adopted strategic planning was higher compared to the ones that had not adopted. Paired t- test results showed that the performance of the manufacturing SMEs was higher after adoption of strategic planning tool. The study found that among the factors that determine adoption of strategic planning include; availability of resources, leadership style adopted by the management, organization culture, globalization of markets, mode of communication and the degree of innovativeness existent in the firms. Multiple regression results showed that the mode of communication used in the manufacturing firms had the overall predictive role in the adoption of strategic planning. Based on the results of the study, it was concluded that the status of adoption of strategic planning in Kenyan manufacturing SMEs was low compared to the large firms in Kenya and the manufacturing SMEs in the developed countries. The manufacturing firms that had adopted strategic planning had better performances compared to the ones that had

not adopted. The findings of this research also showed that the firms' performance after adoption of strategic planning was higher compared to the period before adoption. The study recommends that owners and senior managers in the manufacturing SMEs ought to adopt strategic planning to improve the performance of their firms. Training on strategic planning to the senior management should also be prioritized and manufacturing SMEs should form strategic partnerships with the large and mature firms in the value chain to gain a better understanding of the current management tools such as strategic planning.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Strategic planning can be defined as the process of developing and maintaining consistency between the organization's objectives and resources and its changing opportunities (Robson, 1998). Strategic planning determines where an organization is going over the next three years or more, how it's going to get there and how it will know if it got there or not (Mcnamara, 2005). The term strategic planning originated in the early 1950s but gained popularity from the mid 1960 to 1970's. It was then widely believed to be the answer for all private and public organizational management problems. However it was cast aside during the 1980s as the various planning models did not yield higher returns. It was then again adopted later in the 1990s when different scholars appreciated it as a process with particular benefits in particular contexts (Mintzberg, 1994).

The area of strategic planning has gained much attention in management literature since early 1960s. Many researchers have since then argued that strategic planning is a concept that should be reserved for large corporations with large specialized planning departments. Small and Medium enterprises (SMEs) from this argument are too busy dealing with operational problems and events on a day to day basis and devote no time to strategic planning (Hanlon & Scott, 1995). A clear strategy on the other hand might enhance business performance and is equally crucial to the SMEs as it is to the large corporations.

Strategic planning tool has gained sustained prominence in the management of small and medium enterprises in the past two decades. It is practiced by 81% of the enterprises worldwide while 89% of the firms in the USA alone have adopted it as part of their management tools (O'Regan & Ghobadian, 2007). Comprehensive reviews of the small and medium businesses literature suggest that, *ceteris paribus*, strategic planning is generally more common in better performing enterprises (Hormozi *et al.*, 2002). Gibson and Cassar (2005) argue that small and medium businesses that plan strategically are more likely to be innovative, achieve higher sales growth and higher returns on assets, higher profit margins and higher employee growth and above all gain competitive advantage.

Research studies have been done on the relationship between strategic planning and performance in the USA and the results have showed that strategic planning in small and medium high growth firms has positive influence on the firm's performance (Baker *et al.*, 1999). In connection to this, Kudla (1980) has outlined the characteristics of strategic planning to include: goals and objectives set for at least three years into the future, its relationship with the environment, a formal strategic plan consisting of written plans, identifying future resource requirements, encompassing procedures for on-going monitoring and modification as well as environmental scanning. Strategic planning is not a static product which once set stays as it is (Stopford, 2001). It is rather a constantly evolving process trying to follow the continual changes in the environment implying that change and strategy are inseparable (Delmar & Wiklund, 2008).

While strategic planning in large organizations has been researched extensively, resulting in many prescriptions, models and concepts, the use and application of the planning process in many SMEs is still the subject of on-going debate (Jennings & Beaver, 2000). Gathenya, Bwisa and Kihoro, (2011) have analyzed strategic planning in terms of entrepreneurial orientation, scanning orientation, scanning intensity, planning



flexibility, planning scope and locus of planning. In many of the developing countries, little is known about the strategic management practices in SMEs as only a few studies have been done (Aldehayyat & Twaissi, 2011).

In regard to classification of the SMEs, different methods of clustering have been adopted and some countries such as India, Pakistan, Philippines and Taiwan cluster enterprises according to the invested capital and assets. Other countries such as Mexico and Portugal cluster the enterprises depending with the sales volumes (Prasad, 2004). In Kenya, classification of small and medium enterprises is primarily by the number of employees engaged by the firms (Mandal, 2007). The firms that engage less than five employees are referred to as micro-enterprises, while those that employ 5-49 workers and 50-99 workers are classified as small and medium sized enterprises respectively. Firms with more than one hundred employees are categorized as large scale enterprises.

The small and medium sized sector is increasingly recognized as the prime vehicle for economic development in both the developed and the developing nations (Zacharakis, 2002). From the scholarly works of Kotey and Meredith (1997), SMEs are recognized as a major source of employment, revenue generation, innovation and technological advancement. Therefore, SMEs have become a major asset in most of the world economies. In most of the countries in the world, the level of economic dependence on small and medium enterprises has increased in recent years. In the modern economic macro-environment the individual performances of each of the different enterprises under SMEs determine the overall economic development of most countries.

SMEs are not just considered to be the driving force of economic development but they are also regarded as key contributors of growth in almost all the economies of the world (Garikai, 2011). These small and medium enterprises also contribute significantly to the employment opportunities, generate significant domestic and export earnings, contribute

to the general health and welfare of economies and are key instruments in poverty reduction (Mephokee, 2004). SMEs have grown in importance in the global economy in the last decade. In the USA, SMEs contribute to 99.7% of all employment opportunities while in the European Union the sector contributes 99% of the opportunities available (Peacock, 2004). In Malaysia, SMEs represent 99.2% of all business establishments and account for 65.1% of the workforce in the country (Leong, 2006).

In Japan, in the year 2006, SMEs numbered 4.2 million and accounted for 99.7% of all firms compared to 0.3% of large firms. In this country, SMEs employed 42 million people, which is 78% of the total employment and accounted for 47.7% of the total manufacturing shipment in the year 2006 (Enterprises, 2015). In Kenya, 74% of all employees are employed in the SMEs and this sector contributes over 18% of the country's GDP (Republic of Kenya, 2005). In this country, more than 90% of the businesses are found in this sector and in the year 2011, the Kenya Economic survey (2012) found that out of the 503,000 jobs that were created, 440,400 or 80% were created by the SME sector. It is acknowledged that small and medium scale enterprises including agriculture, manufacturing and ICT have contributed greatly to the country's economic growth (Kombo, 2011).

Despite the crucial role that SMEs play in many economies, research shows that they have a myriad of challenges. Globally, more than one million SMEs are established every year. Out of these, 40% close within one year and statistics indicate that in a span of five years, 80% of them are out of business, while by the tenth year, 96% usually close down their operations (Geber, 2001). In the USA, the SBA found that 24% of all new businesses in the country failed within the first two years and 63% failed within the first six years (Wheelen & Hunger, 2009).

In the business world, the emergence of small and medium manufacturing systems has led to drastic changes in the structure of the world economy and to sustained increases in the growth of labour productivity and economic welfare (Maddison, 2007). Globally, most of the manufacturing firms that are established start as small and medium enterprises and eventually grow to large organizations ultimately becoming the multinational conglomerates that dominate major sectors such as Toyota Motors for the automotives and Coca Cola Inc. for the beverages.

In his seminal contributions Kaldor, (1996) provided the intellectual basis for regarding manufacturing as the leading sector in economic growth in both the developed and the less developed countries. He introduced the concept of “dynamic economies of scale” that postulated that the faster the growth of manufacturing output, the faster the growth of manufacturing productivity which he ascribed to the notion of ‘learning by doing’. The relationship between the rate of growth of manufacturing and that of Gross Domestic Product (GDP) is well captured in his first law that states that the faster the rate of growth of manufacturing in the economy, the faster will be the growth of the GDP. Szirmai and Verspagen (2015) tested the relationship between value added share of the manufacturing sector and growth of GDP and found that manufacturing acts as an “engine of growth” for low and middle income countries, provided that they have sufficient level of human capital.

In a bid to have a niche in their national as well as the international markets through production of world class products, many developing countries such as South Africa, Ethiopia and Kenya have adopted new industrial policies to ensure that they capitalize on their available strengths as well as take advantage of the available opportunities so as to be competitive in the global arena (Perez, 2009). One of the key policies that these countries have adopted is the growth of small and medium manufacturing industries as they have a myriad of advantages that are not existent in large industries. These

advantages include: low capital requirements, support by the local governments and flexibility in regard to their customer requirements. As per the research findings by Bwisa (2011) the seeds of future business performance are sown in the early stages of business life and the understanding of the same have a predictive value. One way SMEs have been sowing the seeds of future business performance is adoption of current management tools such as ISO 9001 and strategic planning.

In Kenya there are many SMEs spread across the different products and services that provide employment to both low and middle level income sectors of the economy and this number has been rising every year. In this country, various studies have highlighted the role of strategic planning as critical to the survival of small and medium business enterprises. Recent scientific developments have indicated that attention towards individual actions in strategic processes has increased in the recent past even though lack of strategic planning in SMEs is often reported (Wang *et al.*, 2005). Kenya has experienced turbulent times in regard to the organizational practices in the last two decades and this has resulted in generally low profits across the economy (Namusonge *et al.*, 2012) and this picture is fairly well articulated in the survival of small and medium enterprises in the country.

Strategic planning has received high rates of adoption by small and medium sized firms in many countries of the developed world. Comprehensive studies of the small and medium businesses literature show that, *ceteris paribus*, strategic planning is more common in better performing SMEs (Song, Bij, & Song, 2011). This is because these firms are able to improve on their internal business processes as well as prepare their action plans well in advance which leads to improved efficiency rates and higher levels of innovation thus enabling the firms to outdo their competitors.

Past studies have generally shown that strategic planning is not only important for large organizations but SMEs as well (Al Ghamdi, 2005). Berman *et al.* (1997) found that firms that practice strategic planning produce better results than firms that do not. Every enterprise regardless of size needs an effective, comprehensive business plan as the process of developing the strategic plan forces the entrepreneur to think about the harsh “reality” of the business world rather than the common dream world (Harrison, French, & Kelly, 2004). Lerner and Almor (2002) contended that planning lays the groundwork for developing the strategic capabilities needed for high performance in organizations. In his scholarly works, Bwisa (2013) asserts that strategic planning when applied even at county levels is of great importance to any country.

Strategic planning is more common in better performing SMEs which as a result enables them achieve high profits, high employee satisfaction, increased sales, high ROA, high innovation levels, high quality products, improved-patented products, enhanced processes, high technological levels, enhanced management practices as well as increased international growth rates (Gibbons & O’Connor, 2005). Pearce and Robinson (2011) found that from a resource-based view, strategic planning can result in strategic change which may increase strategy-environment fit, hence can become a source of sustained competitive advantage especially when it improves flow of products and services between manufacturers and the end users.

While strategic planning has been widely adopted in large organizations in the private sector and more recently in the public sector it appears not to have found much popularity in the SME sector (Bryson, 2011). Past researches have consistently shown that most SMEs do not engage in strategic planning. In most of the SMEs that claim to plan, plans are frequently *ad hoc* and intuitive rather than formally written, and provide little basis upon which business performance can be measured or analyzed (Kelmar & Noy, 1990). Various research studies have over the years found that SMEs that adopt

and engage in strategic planning are less likely to fail in their operations as compared to those ones that do not (Robinson & Pearce, 1984; Sexton & Van Auken, 1985; Gaskill *et al.*, 1993; Perry, 2001; Beaver, 2003; Gibson & Cassar, 2005).

## **1.2 Statement of the Problem**

Strategic planning is a process that successful businesses ought to undertake if they are to work towards their future success paths. Some studies have been done in the past and have found a positive relationship between adoption of strategic planning and improved performance in organizations. Comprehensive review of various SMEs show that a key determinant of business success lies in the presence or absence of strategic planning (McMinn & Lucio, 2002). Gibson and Cassar (2005) found that those SMEs that use strategic planning tool effectively usually perform better than those who merely react to circumstances.

Past studies of manufacturing firms have indicated that strategic planning results in superior financial performance, measured in terms of generally accepted financial measures such as ROA, ROE and ROI (Ansoff *et al.*, 2001; Herold, 2001; Malik & Karger, 2000; Thune & House, 1999). Boyd (1991) found out that the probability of survival is substantially smaller for non-planning enterprises. The seeds of enhanced future business performance are sown in the early stages of business life and the understanding of the same has a predictive value (Bwisa, 2011). Manufacturing sector is the “main engine of fast growth” and is the characteristic of catching-up countries that have experienced rapid, sustained growth (Felipe *et al.*, 2014).

SMEs have formed the base for industrial structures and facilitated the process of industrialization in most developing countries irrespective of their stage of development (Balasundaram, 2009). In spite of the vital role played by strategic planning, there is

evidence that strategic planning is rare in most SMEs in Kenya and that they tend to orientate towards short term operations rather than long term strategic issues, and that decision making in these firms tends to be reactive rather than proactive (Wang *et al.*, 2007). In addition, the small and medium enterprises literature suggests that SMEs have not adopted strategic planning practices as quickly as the large firms (Beaver, 2003; Pearce & Robinson, 2011). In Kenya, SMEs have been the means through which accelerated economic growth and rapid industrialization has been achieved (Harris & Ogbona, 2006). In spite of their importance in the economic development of any given country, SMEs are plagued by high failure rates and high levels of poor performance (Jocumsen, 2004).

On the global front, many governments are increasingly promoting and supporting SME growth as part of their overall national development strategies (Abdullah & bin Bakar, 2000). The Kenya government too in keeping with the global trends has identified SMEs as one of the key economic drivers towards meeting its vision 2030 blueprint as well as attainment of the MDGs (Government of Kenya, 2007). In this regard, the more than 150,000 Kenyans who graduate from the universities and colleges every year are encouraged to establish SMEs and hence help in creating employment and consequently facilitate the government to achieve these objectives (Kaane, 2014).

These key socio-economic objectives are however bound to be grossly affected by the low adoption of strategic planning practices in the Kenyan SMEs. The question that then arises is: why is there low adoption of strategic planning amongst Kenyan SMEs? It is evident that there is hardly any empirical literature that has outlined the specific rate of adoption of strategic planning in the SMEs, compared the performance of SMEs that have adopted/not adopted strategic planning, compared the performances before and after adoption as well as established the factors that affect the adoption of the same in Kenya. This study therefore is intended to fill this pertinent gap.

### **1.3 Objectives of the Study**

The research objectives were general and specific in nature.

#### **1.3.1 General Objective**

This study sought to determine the influence of strategic planning on performance of small and medium sized manufacturing firms in Kenya.

#### **1.3.2 Specific Objectives**

1. To establish status of adoption of strategic planning tool by small and medium manufacturing enterprises in Kenya.
2. To compare the performance of the small and medium manufacturing enterprises that had adopted strategic planning against those that had not adopted.
3. To compare the performance of the small and medium manufacturing enterprises before and after adoption of strategic planning.
4. To establish the factors that determine adoption of strategic planning by small and medium manufacturing enterprises in Kenya.

### **1.4 Research Questions**

1. What is the status of adoption of strategic planning by small and medium manufacturing enterprises in Kenya?
2. How does performance compare between those small and medium manufacturing enterprises that have adopted strategic planning against those that have not adopted?
3. What is the performance of small and medium manufacturing enterprises before and after adoption of strategic planning?



4. What factors determine the adoption of strategic planning by small and medium manufacturing enterprises in Kenya?

### **1.5 Significance of the Study**

Thika town in Kenya has a very high concentration of small and medium sized manufacturing firms that specialize in production of different range of products. These firms employ a big percentage of both Kenyan graduates and non-graduates and provide a source of livelihood to the different entrepreneurs. A good percentage of the SME entrepreneurs in Thika town are the youth- a key group that the government has been trying to assist in establishing small and medium enterprises in order to reduce the current unemployment levels. The entrepreneurs are also diverse and originate from various parts of the world enabling the firms to adopt the latest management tools. In this regard, Thika town has been playing a key role in the socio-economic development of not just Kiambu County but the national government as well.

This study is important in that it will provide an understanding of the status of adoption of strategic planning tool in Kenya, outline the factors that determine the adoption of strategic planning by small and medium manufacturing firms in Kenya besides giving an understanding of the actual effects of the adoption of the management tool. The information obtained will be of great importance to the relevant government ministries such as those concerned with industrialization and devolution who can use the results obtained in coming up with the relevant strategies that will ensure that that the small and medium manufacturing enterprises are encouraged to adopt strategic planning as this has the potential of leading to better firm performances.

Ultimately this can lead to increased jobs creation for the thousands of unemployed Kenyans as well as lead to a surge in the amount of taxes the national and county

governments collect annually. The results will also be very beneficial to the Vision 2030 secretariat whose core mandate is to enable Kenya attain a middle level economic status by the year 2030 providing enhanced level of living to her citizens.

Being the pivotal industry in any country that wants to attain the middle or high industrialization status, the information about factors that determine the adoption of strategic planning by the Kenyan small and medium manufacturing sector will prove to be very beneficial to the policy makers in the different county governments. These county governments have of late been trying to come up with various strategies of elevating their different economic performances and one way of achieving this is establishment of SMEs. These SMEs have the potential of having positive ripple effects on the counties' economies through the relevant value chains.

The findings will also benefit the potential investors who would want to set up businesses in the country. In the recent past, many investors from the USA, UK, China among other countries have expressed interest in setting up capital investments in the country as a result of the stable political, economic and technological environments as well as access to various markets due to the strategic location of the country. Considering the fact that many of the end products that are used in the East and Central African region have their origin in the Kenyan small and medium manufacturing firms, the SME manufacturing sector provides immense opportunities both to the existing as well as new investors.

## **1.6 Scope of the Study**

The study sought to determine the influence of strategic planning on performance of small and medium sized manufacturing firms in Kenya. The scope of the study was the different small and medium manufacturing enterprises that were based in Thika town of

Kenya. The study was limited to the manufacturing SMEs although the aspect of strategic planning applies to many other enterprises outside this scope.

This area was selected because it has one of the fastest growth rates of small and medium manufacturing enterprises mainly as a result of easy access to Nairobi city where most of the key resources are concentrated. The area also has a potential of becoming an even bigger market for many end products as a result of proximity to many upper and middle class consumers who continue to migrate to Thika sub-county (Thika Sub-county, 2014).

### **1.7 Limitations of the Study**

Since it was not possible to study all the variables that indicate performance in manufacturing SMEs, the study relied on only a few variables that show firm performance and this included; sales, profits, market share and employees growth. Other variables such as ROI, ROE, ROA, turn-around times and productivity levels are also available to measure performance and can be used in future studies. Some variables that were used to measure performance such as the amount of cash available in firms and profits are quite sensitive and it was possible that some respondents opted to give information that was not very accurate for fear of the unknown.

The study also relied on self reported measures of performance because there was no other source of such data that was available and there was no formal mechanism to verify the data that was obtained. This was particularly so for some vital data such as the level of profits in the SMEs and amount of cash available. The study also used data from small and medium sized manufacturing firms to come up with the conclusions and did not consider the large manufacturing firms as well as other sectors such as retailing, banking and insurance firms.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter gives a systematic review of the literature starting with the different theories and relevant models applicable to the study. The literature review will assess the already existing body of knowledge. To start with, a review of the theoretical frameworks that are applicable in strategic planning of SMEs are presented followed by identification and justification of the different variables that are expected to influence the adoption of strategic planning in the manufacturing SMEs.

#### **2.2 Theoretical Framework**

The study in an attempt to understand strategic planning and its uptake by the small and medium manufacturing firms discusses several theories such as: Diffusion of innovation theory, Institutional theory and Strategic choice theory. The section also discusses the applications of the theories with specific focus to the different variables outlined in the working hypothesis.

Strategic planning is a continuous and systematic process where in an organization, decisions on intended future outcomes, their accomplishment, measurement and evaluation are made. It includes goal setting and resource allocation that stimulates pro-activity, performance improvement, long term thinking, communication, strategic issues, gaps, priorities and choices that enable an enterprise achieve its objectives (Stonehouse & Pemberton, 2002).

From the scholarly findings of Baum *et al.* (2001), strategic planning plays an important part in a firm's management process. The adopted strategic plan gives the long term direction that the firm wants to take and how the firm will achieve its set objectives. Strategic planning is concerned with the future consequences of the current decisions, how desired outcomes are to be accomplished and how success is to be evaluated (Pearce & Robinson, 2008). Grant (2008) asserts that knowing what customers want and how a firm survives competition are prerequisites for success and that SMEs can use strategic planning tool to develop strategies and gain competitive advantage in their respective segments. To be effective and ensure that the desired results are achieved, strategic planning ought to be more active and interactive with less of arm-chairing (Hamel & Prahalad, 1994).

Strategic planning is an explicit process of identifying the firm's long term-objectives, procedures for generating and evaluating alternative strategies and a system for monitoring the results of the plans that the organization aims at accomplishing (Armstrong, 1982). It is concerned with the setting of long-term organizational goals, the implementation of plans to achieve these goals and the allocation of resources necessary for realizing these goals. In a practical sense, strategic planning is all about competitive advantage (O'Regan & Ghobadian, 2007). Strategic planning involves setting of long term organizational goals, development and implementation of plans to achieve these goals and allocation of resources necessary for realizing them with respect to overall organizational performance (Gibson & Cassar, 2005). From the research findings of Stonehouse and Pemberton (2002) strategic planning links the short, intermediate and long range plans such that all are able to complement each other in the achievement of the organizational goals upon allocation of the resources that are necessary.

From the scholarly works of Pearce and Robinson, (2011) strategic planning works by envisioning the future of the business and developing the necessary plans for interacting

with the competitive environment so as to enable the management achieve the desired future objectives. The primary goals of strategic planning according to Kotter, (1996) thus becomes guiding an organization in setting out its strategic intent and priorities and focusing itself towards realizing the same. An organization operating without a strategic plan will thus have difficulties in achieving growth as it will be impossible to adequately plan for its future.

It has been postulated that all factors held constant, a key determinant of business success lies in strategic planning (Miller & Cardinal, 1994). Without a clearly defined strategy, a business has no sustainable basis for creating and maintaining a competitive edge in the market place (Norman & Thomas, 2006). This thus means that by failing to implement strategic planning, many SMEs may not achieve their full potential and their survival could be at risk. As per the scholarly works of Poister (2010), adoption and implementation of effective strategies are known to improve an organization's performance. This is achieved through ensuring that the requisite resources are procured well in advance such that an organization is able to discharge its core responsibilities at any given time. Strategic planning helps in the deployment of a firm's present and planned resources and indicates how a firm will achieve its objectives or desired level of performance (Knight, 1997). It is reflected in key areas of marketing leadership, quality leadership, product specialization, cost leadership as well as in manufacturing leadership.

A number of studies have been done and have shown that organizations that use formal strategic planning outperform those that do not (Malik & Karger, 2000; Miller & Cardinal, 1994). Carland and Carland (2003) found in their research studies that firms that engage in strategic planning have better financial and non-financial performances than those ones that do not. This according to Pearce and Robinson (2008) is because strategic planning is an organizational process that is vision driven and helps in

developing the future of the organization. Moreover, SMEs that engage in strategic planning are also likely to be more innovative, have more newly patented products that employ new processes and management technologies and that achieve international growth (Stewart, 2002; Beaver & Prince, 2002; Gibbons & O'Connor, 2005). A well conceived strategic plan enhances organizational performance, improves decision making process, catalyzes strategic change and contributes to strategic direction in organizations (Wilson & Eilertsen, 2010).

Being a formal managerial process, strategic planning involves a sequence of analytical and evaluative procedures to formulate the intended strategy. Strategic planning aligns the organization's major objectives, strategies and policies that govern the acquisition and allocation of resources so as to achieve the firm's overall goals (Johnson, Scholes & Whittington, 2008; O'Regan & Ghobadian, 2007). Its benefits include: competitive advantage for a firm through matching firm's capabilities and competencies to the external environment, effective decision making and optimal allocation of resources that ensures long term prosperity of the organization.

Strategic planning is more common in organizations that record enhanced financial and non-financial performances and enables them to achieve high sales, high ROA, increased profit levels as well as high levels of employee satisfaction (Carland & Carland, 2003). It also leads to improved innovations, development of new products, enhanced processes, improved technological levels, improved management practices as well as propels international growth (Upton *et al.*, 2001; Beaver & Prince, 2002). Additionally, the organizations practicing it are less likely to fail or be involuntarily wound up (Perry, 2001). Strategic planning has as a result become an established management tool with many SMEs especially in the developed world adopting it as a result of the benefits that accrue from its uptake.

This kind of planning ensures that the budget allocations done within an organization are based on sound and well thought-out plans as the planning involves the different departmental heads who are able to identify strategic priorities and critical operating needs. It contributes highly in the quality of decisions made by the managers in order to avoid mistakes as they can be in a position to predict where common pitfalls might exist (Karger & Parnell, 1996). It helps in maintaining the existing size and capability of the firm such that it is able to take advantage of the emerging opportunities that lie in the future and to pre-empt any threats to the organization (Balasundaram, 2009).

In all organizations, management gets things done through people (Barret, 2003). It requires technical, political, conceptual, diagnostic and interpersonal skills. It involves planning, organizing, staffing, leading and controlling an organization or effort in pursuit of a defined goal (Gomez-Mejia, Balkin, & Cardy, 2008). Strategic planning anticipates and decides the future, controlling checks, programs against plans, maintaining a competent workforce, leading employees towards a common vision and coordinating individual efforts to group goals (De-Krujif, 2011). Decision making varies across different firms and could be centralized, autonomous and semi-autonomous (Warhurst, Allen, & McDonald, 2008). This to a great extent affects the adoption and diffusion of the different management tools at hand in the organizations.

### **2.2.1 Diffusion of Innovation Theory**

Diffusion of innovations is a theory that seeks to explain how, why and at what rate new ideas and technology spread through different organizational cultures. The theory was postulated by Everett Rogers in the year 1983. According to Rogers (1996), diffusion is the process by which an innovation is communicated through certain channels over time among participants in a social system. An innovation is an idea, practice or object that is perceived as new by the relevant unit of adoption (Zaltman *et al.*, 1973). An innovation



is also defined as any departure from the traditional practices of an organization (Levi, 1980). A widely recognized version of the activity-stage model is developed by Zaltman *et al.* (1973), which divides the innovation process into two stages: initiation and implementation. The division between these two stages is the point of the first adoption of innovation; that is the point at which the organization makes the decision to implement the innovation.

In this regard, strategic planning can be regarded as an innovation; being a new management tool to the adopting units (SMEs) in Kenya. It is also a departure from the traditional practices of managing organizations with a shift from reactive to proactive approach. In any organization, the characteristics of the particular innovation as perceived by the members of a social system determine its rate of adoption. In this theory, Rogers (1996) proposed that four main elements influence the spread of a new idea in the organization and these include: the innovation itself, the communication channels, time involved and the social system in place.

Different theories regardless of the field of specialization have focused on the forces that determine the adoption and diffusion of innovations. The basic tenet is that strategic actions of the organization affect the behavior of the employees and in particular the speed of diffusion of new innovations. This view is particularly relevant to the aspect of strategic planning because it espouses the principle that the speed with which a population within a social system adopts this innovation can be influenced significantly by the management of the organization. Especially crucial are the actions of the top management that may either accelerate or retard the adoption and diffusion of an innovation.

Diffusion of innovation theory is a fundamental approach to investigations of how a new technology is adopted and diffused into the system (Rogers, 1996). It is concerned with

the manner in which a new technological idea, management system, artifact or technique migrates from the point of inception to its use in the firm. Diffusion of innovation theory describes the pattern of adoption of the particular innovation, explains the mechanism of diffusion and assists in predicting whether a new invention will be successful upon being adopted and diffused into the system.

Diffusion of innovation theory posits that a firm's adoption and diffusion of innovations is influenced by innovation characteristics as well as the organizational characteristics. Factors in the innovation characteristics category are the perceived attributes of the new innovation that either encourage the use of innovation in the organization or else inhibit its use. When considering the adoption and diffusion of an innovation, several organizational characteristics can influence the adoption and diffusion of the innovations and these include: the degree of centralization within the organization, the size of the organization, degree of formalization and as well as the interconnectedness of the various departments.

In regard to adoption of strategic planning practices in the SMEs, diffusion of innovation theory is integral because it will endeavor to explain how, why and at what rate a new innovative management tool (such as strategic planning) diffuses through the enterprises. It will also help in investigating how strategic planning is adopted and diffused into the systems of these enterprises and the influence of the top management who can either accelerate or retard the adoption process. The theory has however been criticized by past scholars as its predictive power is low and the results obtained confounding (Hai, 1998). Also many diffusion behaviors have in the past had to be traced relatively long back into the history of social context (Damsgaard & Lyytinen, 1998).

### **2.2.2 Strategic Choice Theory**

The strategic choice theory focuses on the ability of an organization's management to adopt strategic decisions that will enable it to position itself relative to its environment or seek to change its environment in order to accomplish its goals given its internal capabilities, competencies and resources (Shortell & Kaluzny, 2006). A common strategic decision that many SMEs have been pursuing is strategic planning as a management tool in a bid to plan for their firms in the long term. Previous to this theory was a common view that organizations were viewed to be designed along specific operational arrangements based on the external environment and that adoption of new management tools was not necessary. Strategic choice theory provided an alternative that emphasized the role of individuals and groups within organizations to adopt and diffuse new strategic choices that dynamically influence the development of the organizations. These strategic choices form part of an organizational learning process that enables the firm adapt to the external and internal environments of the firms.

In organizations, strategic choice theory describes the role that strategic leaders play in influencing the management through making choices that can lead to adoption of competitive attributes in a dynamic business environment (Child, 1997). Strategic choice theory focuses on the actions that an organization adopts so as to achieve resource transactions with its environment given its internal capabilities (Astley & Van de Ven, 1983). Defining these actions requires that an organization understands its external environment in terms relevant to the organization and to have the cognitive ability to have its external reality translated into internal reality (Miles & Huberman, 1994). With an assessment of external threats and opportunities coupled with the knowledge of internal strengths and weaknesses, specific strategies can be formulated and adopted so as to achieve objectives that are supportive of the organization's missions in accordance with its values (Swayne, Duncan & Ginter, 2009). The strategic choices that are made by

firms and their subsequent adoption leads to adjustment and evolution of organizational structure and processes in response to the perceived environmental factors (Child, 1997).

In regard to adoption of strategic planning by small and medium manufacturing enterprises, strategic choice theory will attempt to describe the role that business owners and senior managers play in influencing the overall leadership team in making choices that can lead to adoption of competitive attributes in a bid to survive in the highly competitive and dynamic business environment. This is because strategic choice theory focuses on the ability of an organization's management to adopt strategic decisions that will enable the firm to position itself relative to its external environment.

Goddard (1997) focused on managerial ideologies that seem to be central in strategic choice theory using four types of variables (ideology, action, outcome and context variables) and suggested that based on the results that context variables play a more important role in managerial strategies towards unions and even in workplace-level innovations although managerial ideologies have statistically significant effects on other variables. The scholar concluded that strategic choice has its own inherent weaknesses and needs to be improved by marrying with structural theories of variation.

### **2.2.3 Institutional Theory**

Institutional theory examines the adoption and diffusion of organizational forms and practices and goes to explain how different organizations understand and interpret social acceptance within the scope of their operations. One organizational practice that many SMEs have been adopting in the recent past is strategic planning. From the scholarly findings of Nauheimer (2007) organizations that adopt and diffuse institutional prescriptions can survive easily and have greater stability as compared to those that do not. This theory holds the view that organizations adapt to their institutional

environment by adopting and diffusing into their systems features that are considered legitimate in the wider institutional environment thereby garnering support. The theory examines the reasons why organizations which are of the same type but operating in different environments resemble in characteristics and why specific structures and practices diffuse through different organizational settings (Rauf, 2007).

In essence, institutional theory postulates that organizational fields become structured by powerful influences amongst other organizations. The adoption of a system such as a formal strategic plan is highly dependent on the extent to which it is institutionalized by legitimacy (Tolbert & Zucker, 1996). Kraatz and Zajac (1996) argued that this legitimacy in turn leads organizations to adopt practices that “conform to the mandate of the institutional environment”. Organizations are narrowed by routines and these are the very essence of any firm and without them they cannot discharge their operations effectively (Zeffane, 1996).

The rules and routines suggest the inherent culture of the organization and they constitute the basis of the evolution of the organizational behavior. From the research findings of Scapens (1994) “the rules and routines are the same for the organization as the genes are for the biological processes and in this sense, evolution is not the creation of an optimum behavior, but purely the reproduction of possible adaptation of the behavior through time”. Oliver, (1997) postulated that under the institutional perspectives, the enterprises operate inside a social structure of laws, values and assumed presuppositions that over time constitute the appropriate or acceptable organizational behavior.

The institutional process does not only hold for the adoption and diffusion of certain practices within organizations. The institutional process continues even after the implementation of the practices, going on until when the employees give value to the

new practices (Kostova, 1998). According to this argument, there are two elements that compose the process of organization practices and these are the “the spread of the rules” and the “transmission or creation of a meaning for these rules”. The implication is that the whole process of establishment of practices would not add any value to the organization if the employees do not adopt the practices and in turn use (diffuse) them to increase value to the operations of the enterprise.

The institutional theory is particularly useful in understanding how other dynamics apart from technical efficiency are useful in explaining an organization’s adoption of an innovation like strategic planning as a management tool. An organization’s interaction with other actors in its environment consequently leads to norms, standards and expectations that the organization seeks to meet in order to attain legitimization and support from the other entities that it deals with in its daily operations. In this study, the institutional theory will give weight to the fact that in the pursuit of adopting features that are considered legitimate in the wider institutional environment so as to garner support, many firms would opt to adopt and diffuse formal and informal procedures, rules, routines, conventions and structures.

One of the management tools at disposal to the managers in SMEs is the adoption of strategic planning as this would ensure that the organization is able to conform to the mandate of the institutional environment and as a result be able to operate inside a social structure of laws, values and assumed presuppositions that constitute the acceptable and relevant organizational behavior. However, the biggest impediment to this theory is that the term “institution” has different meanings to different scholars in different parts of the world and thus some of the alternative approaches are not only different but even contradictory. A central question then is just how much of an impediment these internal differences are and what if anything can be done to generate a more unified approach for institutional theory (Kato, 1996).

### **2.3 Conceptual Framework**

A conceptual framework is a visual or written product, one that explains either graphically or in narrative form the main things that a researcher intends to study, key factors, concepts or variables and the presumed relationships amongst them (Miles & Huberman, 1994). Guba and Lincoln (1994) further define conceptual framework as a network of interlinked concepts that together provide a comprehensive understanding of a phenomenon or phenomena. The concepts that constitute a conceptual framework support one another, articulate their respective phenomena and establish a framework specific philosophy.

A conceptual framework possesses ontological, epistemological and methodological assumptions and each concept within a conceptual framework plays an ontological or epistemological role. The ontological assumptions relate to knowledge of the “way things are” or the “nature of reality”. The epistemological assumptions relate to “how things really are” and “how things really work” in an assumed reality while the methodological assumptions relate to the process of building the conceptual framework and assessing what it tells the research world about the “real” world (Guba & Lincoln, 1994). There are several types of conceptual frameworks (Shields & Rangarjan, 2013) and these include: Working hypothesis- used in exploratory research; Descriptive categories- used in descriptive research; Models of operations research- used in decision making studies; Practical ideal type- used in gauging type of research and Formal hypothesis- used in explanatory or prediction research.

### **2.3.1 Working Hypothesis**

A working hypothesis is constructed to facilitate research enquiry. It is a hypothesis that is provisionally accepted as a basis for further research in the hope that a tenable theory will be produced even if the hypothesis ultimately fails (Shields, 1998). It is constructed as a statement of expectations which can be linked to the exploratory research and is often used as an ideal conceptual framework in qualitative studies. In most exploratory studies, a working hypothesis is used as a means of determining facts and its chief function is the suggestion of the lines of enquiry for the sake of facts. Zimmerman (2014) in his exploratory study on the relationship between leadership and entrepreneurship in Germany has used working hypothesis as the ideal conceptual framework for the study.

This research adopted a multiple working hypothesis whereby several possible outcomes from one research question will be investigated. While using multiple working hypothesis, the researcher open-mindedly tries to envision and list all the possible hypotheses that could account for the phenomenon to be studied. The different variables that were investigated include: the status of adoption of strategic planning, comparison of the organizational performances of firms that had adopted strategic planning against those that had not adopted, comparison of the firms' performance before and after adoption of strategic planning as well as an assessment of the factors that determine the adoption of strategic planning in SMEs. This study is explained by the following multiple working hypotheses:

#### **Q1. What is the status of adoption of strategic planning by small and medium manufacturing enterprises in Kenya?**

H<sub>1</sub>: Small and medium manufacturing enterprises in Kenya do not adopt strategic planning.



H2: The status of adoption of strategic planning in small and medium manufacturing enterprises is low.

**Q2. How does performance compare between those small and medium manufacturing enterprises that have adopted/not adopted strategic planning in Kenya?**

H1: The performance of small and medium manufacturing enterprises that have adopted strategic planning in Kenya is the same as that of those that have not adopted.

H2: The performance of small and medium manufacturing enterprises that have adopted strategic planning in Kenya is lower than those that have not adopted.

H3: The performance of small and medium manufacturing enterprises that have adopted strategic planning in Kenya is higher than those that have not adopted.

**Q3. What is the performance of the small and medium manufacturing enterprises before and after adoption of strategic planning?**

H1: The performance of small and medium manufacturing enterprises in Kenya is the same before and after adoption of strategic planning.

H2: There is an increase in performance of the small and medium sized manufacturing firms after the adoption of strategic planning.

H3: There is a decrease in performance of the small and medium sized manufacturing firms after the adoption of strategic planning.

**Q4. What factors determine the adoption of strategic planning by small and medium manufacturing enterprises in Kenya?**

H1: The education levels of managers and owners determine the adoption of strategic planning in small and medium manufacturing enterprises in Kenya.

H2: The level of organizational resources available determines the adoption of strategic planning in small and medium manufacturing enterprises in Kenya.

H3: The size of the enterprise determines the adoption of strategic planning in small and medium manufacturing enterprises in Kenya.

H4: Motivation of the stakeholders in setting up the SMEs determines the adoption of strategic planning in small and medium manufacturing enterprises in Kenya.

H5: The culture of the organization determines the adoption of strategic planning in small and medium manufacturing enterprises in Kenya.

## **2.4 Empirical Literature**

This section covers past studies that have been done in regard to the different variables under investigation. The past studies provide a summary of key findings as well as research gaps that forms the backbone of this study.

### **2.4.1 The Concept of Strategic Planning**

Strategic planning process includes six main building blocks that include: the vision and mission statements, external analysis, internal analysis, strategy formulation, and implementation and performance evaluation. Vision statements are widely believed to be the antecedents to any strategic planning efforts as they assist in defining the dream of the organization (Thompson & Strickland, 1992; Lyles *et al.*, 1993; Wheelen & Hunger, 2009). Mullane (2002) has argued that not only do the vision and mission statements help an organization to develop their long term plans, but they also help organizations

manage their day to day operations. Most SMEs have a fair strategy formulation practice and this goes to prove that most SMEs have a game plan that they employ in order to attain a competitive advantage. It is the adoption of a well thought out strategic plan that differentiates those SMEs that are able to record enhanced organizational performances and those that are not (Enkai, 2010).

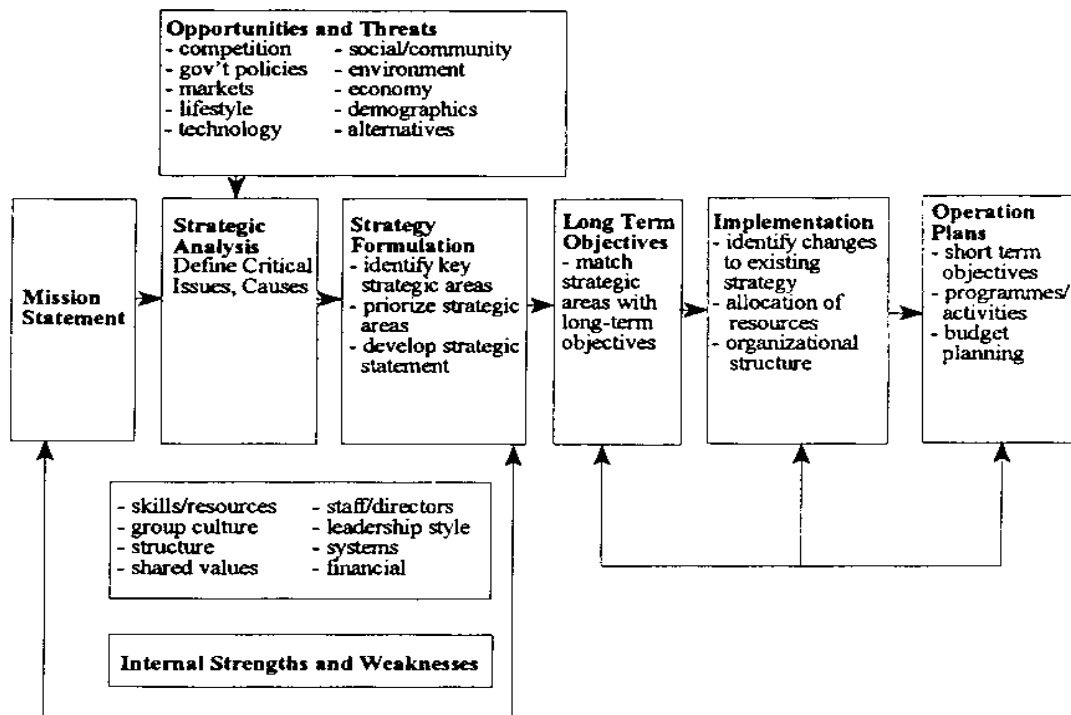


Figure 2.1: Strategic planning model. Source: Omad (1991)

#### 2.4.2 Status of Adoption of Strategic Planning by the SMEs

Various studies have highlighted the adoption of strategic planning as critical in the survival of SMEs in different countries. Recent scientific developments show that attention towards individual actions in regard to strategic planning has increased in these enterprises even though lack of strategic planning in the operations of SMEs is regularly

reported (Wang *et al.*, 2007). According to this study, there exists informal strategic planning in the SMEs with individuals and small groups in regard to their long term objectives but broad and long term planning encompassing the entire firms lacks in many organizations.

While strategic planning in large organizations has been researched extensively, resulting in many prescriptions, models and concepts, the use and application of the strategic planning practices in SMEs is still the subject of an on-going debate (Jennings & Beaver, 2000). Pushpakumari and Wijewickrama (2008) argue that SMEs often do not have the means to ensure continuous successful adoption and implementation of strategic planning as they maintain lower levels of key resources, have limited access to human, financial and customer base as well as a less developed management capacity and administrative systems.

Bryson (2011) carried out studies on strategic planning and found that strategic planning is widely adopted by large manufacturing organizations in the private sector and more recently in the public sector. However, from his research findings, strategic planning practices do not appear to have found much popularity in the SMEs. Several scholars have over the years carried out studies in regard to adoption of strategic planning and their research findings consistently showed that most SMEs do not engage in strategic planning (Robinson & Pearce, 1984; Sexton & Van Auken, 1985; Beaver, 2003). Amongst those SMEs that employ strategic planning tool, Perry (2001) argue that they are less likely to fail in their operations.

Bowen, Morara and Mureithi (2009) in their scholarly studies observed that like many other developing countries, there are few studies carried out about adoption of strategic planning in the small and medium manufacturing sector in Kenya. These findings support suggestions that not as much is known about strategic planning in the

developing countries and in particular its uptake by the SMEs (Aldehayyat & Twaissi, 2011). Okpara and Wynn (2007) carried out an exploratory study to examine the reasons for business failure in Nigeria and the study revealed that SMEs face major obstacles such as insufficient financial resources, lack of training, inadequate book-keeping and failure to adopt strategic management practices. The argument going by the research findings is that SMEs use fewer planning tools, strategic analysis methods, evaluation practices and control systems. From the research findings of Torres (2004) and Wang *et al.* (2007), managers in most SMEs mostly act on vague visions and intuition for decision making as opposed to use of strategic plans.

#### **2.4.3 Comparison of Performance of SMEs that have adopted Strategic Planning against the ones that have not adopted**

The relationship between strategic planning and performance of SMEs has been researched and documented extensively (Meers & Robertson, 2007). Performance measurement is important for organizations as a means of continual improvement and also as a means of determining whether or not an organization is achieving its objectives (Mukulu *et al.*, 2012). This thus means that an organization that does not carry out performance measurement will be operating in a dark environment and can thus not be in a position to accurately project where it will be in a couple of years to come.

The contribution of strategic planning in the SMEs is very important and the breaking down of strategic intentions into actionable components and allocating responsibility for each of the component is considered an important part of successful strategy implementation (Beaver, 2007). In their scholarly studies, Joyce and Woods (2003) concluded that organizations using strategic planning make faster decisions and successfully implement change and innovation to realize growth in their operations. Several other studies have suggested that business failure is largely due to an

enterprise's failure to plan well in advance. As Norman and Thomas (2006) noted: "without a clearly defined strategy, a business has no sustainable basis for creating and maintaining a competitive advantage in the marketplace". Other numerous empirical studies (Bracker *et al.*, 1988; Lyles *et al.*, 1993; Schwenk & Shrader, 1993; Rue & Ibrahim, 1998; Gibson & Cassar, 2002) have over the years found a link between strategic planning and corporate success. Castrogiovanni (1996) found in his scholarly research that the high failure rate among SMEs particularly among start-ups can be attributed to lack of strategic planning.

Some other studies carried out on the relationship between strategic planning and performance in SMEs produced evidence that the choice of business strategy, differentiation and focus have favourable impact on financial performance (Hashim, 2000; Rudd, 2008). According to Wijawardena *et al.* (2004) strategic planning if supported with quality monitoring processes will have favourable impact on business performance. Several other scholars have carried out research on the relationship between adoption of strategic planning and performance and came to the conclusion that planning is positively related to performance (Pleitner, 1989; Shrader, *et al.*, 1993; Andersen, 2000). This can then be inferred to mean that firms that adopt strategic planning perform better than those ones that do not.

Strategic planning leads to better ability to cope with the challenges in the globalized, regionalized and liberalized world order and enables long term survival of both large and small enterprises (Kargar & Parnell 1996). Pearce and Robinson, (2011) found that strategic planning can result in a strategic change that may increase strategy-environmental fit and hence become a source of sustainable competitive advantage. Strategic planning therefore consists of planning processes that are undertaken in firms to develop strategies that might contribute to enhanced business performance (Tapinos *et al.*, 2005).

Volberda, Charlotte and Hitt (2010) found a positive relationship between strategic planning and financial success in their investigation of SMEs as it helps the firms to anticipate future challenges as well as opportunities. Similarly, Baker and Leidecker (2001) found that SME business planners were shown to be more successful when measured by ROA as compared to those not applying strategic planning. Besides, these firms were engaging more in anticipating changes in the market place in order to take advantage of the same. Rue and Ibrahim (1998) in their scholarly studies found that simple strategic planning practices can have a positive influence on the success of small and medium enterprises. A study by Oslon and Bokor (2003) of 442 SMEs in the USA supported the case for formal strategic planning enhancing business performance although this was found to be context dependent. According to these studies, the process of planning itself seems to have a positive effect in that it leads to a better understanding of the business environment and to a broader range of strategic alternatives.

Although majority of the studies have identified a positive relationship between strategic planning and SME success, there are those research studies that have identified no relationship between these two variables. Gibson *et al.* (2001) in a study of 2956 Australian manufacturing SMEs and French *et al.* (2004) in their investigation of 127 Australian service SMEs found no relationship between strategic planning and organizational performance. However even those studies that could not show a positive relationship between strategic planning and performance have put a lot of emphasis on the positive impact of planning (French *et al.*, 2004).

#### **2.4.4 Comparison of Performance Before and After Adoption of Strategic Planning**

Strategic planning has been touted as one of the most effective tools that can help strengthen organizational performance through effective decision making and systematic strategic formulation and implementation. The planning-performance research has been

reviewed extensively by past scholars. Comprehensive studies of the small and medium sized enterprises suggest that *ceteris paribus*, strategic planning is generally more common in better performing enterprises (Miller & Cardinal, 1994).

Several scholars (Bracker *et al.*, 1988; Berman *et al.*, 1997; Carland & Carland, 2003; Gibson & Cassar, 2005) argue that once small and medium businesses begin to practice strategic planning, they are likely to be more innovative, achieve higher sales growth, higher ROA, higher profit margins and higher employee growth as well as gain some competitive advantage. From the argument of Gibson and Cassar (2002) planning in SMEs is mostly adaptive in nature, short term oriented and concerned with the manipulation of scarce resources.

Planning adherents have for a long time found out that formal strategic planning provides benefits that ultimately produce economic value as it generates information, ensures a thorough consideration of all feasible options, it forces the firm to evaluate its environment, it stimulates new ideas, it increases motivation and commitment, it enhances internal communication and interaction, and it has a symbolic value to the stakeholders (Thompson & Strickland, 1992). Without a clearly defined strategy, a business has no sustainable basis for creating and maintaining a competitive edge in the market place (Norman & Thomas, 2006). Aosa (1992) attributes the lack of proper management of resources to the frequent failure to implement well planned and documented strategic plans in most African countries. The benefit of the discipline that develops from the process of strategic planning leads to effective decision making, better selection of tactical options and leads to higher probability of achieving the owners' or stakeholders' goals and objectives.

In their longitudinal analysis, Baker and Leidecker (2001) found that the survival rates of SMEs that apply formal strategic planning are higher than those that do not. Boyd



(1991) found that the probability of survival is substantially smaller for non-planning enterprises. Birley and Niktari (1995) found an association between the failure of SMEs and lack of strategic planning. Castrogiovanni (1996) linked the lack of strategic planning with higher mortality rates of SMEs. Miller and Cardinal (1994) found that strategic planning produces better results compared to lack of it. Michalisk *et al.* (1997) stated that firms can achieve sustainable competitive advantage from resources such as strategic planning. In their scholarly work, Shrader *et al.* (1993) found that there is no systematic relationship between long range planning and firm's performance.

Berry (1998) argues that strategic planning and management, regardless of why public and private organizations engage in it helps the organizations clarify their future direction; think strategically and develop effective strategies; establish priorities; deal effectively with rapidly changing circumstances, build teamwork and expertise as well as solve major organizational problems. By neglecting strategic planning SMEs may not achieve their full performance and growth potentials and their survival could be at risk. Contrary to these findings, Gibson *et al.* (2001) in their investigation of 2956 Australian manufacturing SMEs and French *et al.* (2004) in their investigation of 127 Australian service SMEs found no relationship between strategic planning and performance.

A review of these past studies have been carried out by scholars and found out that the number of scholarly works that have found a positive relationship between planning and performance outnumber the ones that have found either zero or negative relationship. In their broader review of 31 studies, Shrader *et al.* (1993) found that the results that produced positive relationships outnumbered the ones that produced neutral and negative relationships.

#### **2.4.5 Factors that Determine Adoption of Strategic Planning by SMEs**

In the past, various studies have been carried out by different scholars in regard to the aspect of strategic planning and have been able to document various factors that affect the adoption of strategic planning in small and medium firms. However most of these studies have been carried out in the developed world in a bid to understand areas of improvement for their SME sector which forms the biggest GDP contributor to their economies. Iravo *et al.* (2013) state that one of the important questions that business managers need to answer is: why some organizations succeed and why others fail in their operations and this has an influence on the study of the drivers of organizational performance. One of these drivers that have been adopted by many SMEs in different parts of the world is strategic planning.

In his comparative studies, Lee (2008) found that while large firms have over the last decades been developing the capabilities needed to achieve their bottom lines, SMEs often lack the knowledge, expertise skills, finance and human resource skills to make the desired change in their organizations. The approach that the enterprises adopt is narrowly focused to specific features of the production process or the product when the management attempts to make some strategic moves. Thus SMEs often have a limited view on the direction of future organizational stance and tend to tackle competitive issues in an *ad hoc* manner (Nawrocka, 2008).

SMEs are frequently oriented towards serving local niches or developing relatively narrow specializations with the enterprises operating under the constraints of scarce resources, a flat organizational structure, lack of technical expertise, a paucity for innovation as well as reduced intellectual capacity all of which have a great impact on the adoption and success of their strategic planning capabilities (Xiong *et al.*, 2006; Singh, 2011). Often, SMEs operators do not actively engage in strategic planning due to

the many constraints such as lack of time, expertise, resources and the eagerness to centralize their decision making processes (Pearce & Robinson, 2008). In contrast to large firms, SMEs normally maintain lower level of resources, have limited access to human, financial and customer base and lack well developed administration systems and thus the application of strategic planning instrument is thus often missing especially up to a certain critical size (Karagozoglu & Lindell, 1998).

Even though many managers and proprietors in the SME sector acknowledge the importance of strategic planning, many of them do not undertake the process and cite lack of time, lack of familiarity with strategic management techniques and processes, lack of skills and confidence, and lack of trust in internal stakeholders in relations to sharing business information as the reasons why they don't adopt and implement strategic planning (Beaver, 2007). Greater clarity on the issue was provided by Wang *et al.* (2007) where the owner's motivation for being in business; whether for profit or growth maximization compared with personal fulfillment was presented in their findings of SMEs engagement in strategic planning processes. Owner motivation is presented as a key determinant for engaging in strategic planning according to Galloway and Mochrie (2005). Further, in investigating the practice of strategic management in the SMEs, it was found that SMEs had access to fewer strategic planning tools compared to the large enterprises and as a result used fewer tools in their planning programs (Woods & Joyce, 2003).

By their nature, SMEs have limited human, material and financial resources (Vossen, 1998). According to this study, SMEs focus on allocation of resources to achieve their maximum short term advantages, which frequently leaves them to respond to external influences as they occur rather than taking a proactive approach (McAdam, 2002). Hodges and Kent (2007) in their scholarly studies concluded that if SMEs managers

want to be successful in their operations, they must be willing to obtain more knowledge in regard to strategic planning process.

Conventional strategic planning is uncommon in many SMEs in the developing world and this can be attributed to factors that influence its adoption such as: insufficient time as well as financial resources (Okpara & Wynn, 2007; McAdam, 2002), knowledge gaps in the field of strategic planning (King & McGrath, 2002), lack of a well developed administration (Karagozoglu & Lindell, 1998), managerial knowledge deficiency (Macpherson & Holt, 2007), environmental uncertainty or turbulence (Yusuf & Saffu, 2005) and perception that strategic planning is dependent on company size and hence a preserve for large corporate organizations where formalization is the most common dimension of strategic planning (Matthews & Scott, 1995).

In many SMEs, the owners of the enterprises are often personality-driven and are often influenced by individual values and motivations of the entrepreneur. These proprietors often play great roles in the decision making within the enterprises (Culkin & Smith, 2000). Therefore understanding the owner of the enterprise becomes as crucial as understanding the business. Some evidence exists to support a link between adoption of strategic planning and the characteristics of the owner-manager (Meredith & Kotey, 1997). The variables that Meredith and Kotey (1997) studied in regard to the owner-manager that influence the adoption of strategic planning include: age of the owner, education level, gender as well as the age of the business. Boje (2015) carried out scholarly studies in regard to the external factors that determine adoption of strategic planning in SMEs and identified government laws and regulations, globalization of markets and the internationalization of business, occurrence of major political events, technological advancements, customer expectations, suppliers' requirements as well as fluctuations in business cycles.

## **2.5 Critique of the Existing Literature Relevant to the Study**

From the literature reviewed, many scholars who have taken research studies on strategic planning are in agreement that SMEs need to implement strategic planning as one of the core subset of their management tools. However, previous research on adoption and diffusion of strategic planning has lacked theoretical grounding, produced a wide array of contradicting findings, drew heavy criticism for use of inadequate methodologies and had little or no discernible net impact on strategic management research or practice (Shrader *et al.*, 1993). As a result, the research findings on the effects of adoption of strategic planning and performance have presented very mixed results. Most of the studies that have been carried out found a positive correlation between organizational performance and adoption of strategic planning. A study that was carried out by Andersen (2000) found that adoption of strategic planning increases performances in SMEs.

In their studies of adoption of strategic planning tool, Shrader *et al.* (1993) found that there is no systematic relationship between long range planning and organizational performance. Boyd (1991) in his studies on the influence of strategic planning on performance found that whereas the earlier researches suggested a positive relationship between planning and performance, later researches were less reassuring and that the overall effect was at best extremely weak. Yet still others (Berry, 1998; O'Regan & Ghobadian, 2007; Pushpakumari & Wijewickrama, 2008; Aldehayyat & Twaissi, 2011) in their research studies indicate that little attention has been given to the study of adoption of strategic planning in SMEs in the developing countries and that these firms do not have the means to ensure continuous successful implementation of the strategic planning tool.

Other studies have been carried out and found that only a few benefits are realized from adoption of strategic planning in organizations. A study that was carried out by McKiernan and Morris, (1994) in SMEs found that strategic planning provides only a few benefits to the enterprises. O’Gorman & Doran (1999) demonstrated that the presence of a formal mission statement and a strategic planning document does not seem to have any influence on the success of small and medium enterprises. These previous studies have suffered mainly from poor theoretical grounding, blinding them to critical intervening variables, particularly the nature of the strategic planning literature as well as the use of different methods of measurements of the results (Hansen & Wernefelt, 1989). The question that arises then is: is there any concrete documental evidence based on past studies that can necessitate organizational managers to adopt strategic planning in their enterprises? These planning-performance researches has been reviewed by past researchers such as (Ansoff *et al.*, 2001; Herold, 2001; Norman & Thomas, 2006; Gibson & Cassar, 2005; Pearce & Robinson, 2008) and from the different reviews emerged the unanimous conclusion that the various studies were confusing, contradicting and impossible to reconcile.

In regard to the uptake of strategic planning practice, several past research studies have found that there has been lack of its adoption in most of the SME’s in the developing countries (Wang *et al.*, 2007). It is also evident that in the developing countries, little research has been carried out in small and medium manufacturing firms and as a result there is little knowledge on the strategic planning practices that can be applied to ensure success (Aldehayyat & Twaissi, 2011). In the past studies, much attention has also not been given to the specific factors that determine the adoption and diffusion of strategic planning in the SMEs located in the developing countries.

## 2.6 Research Gaps

Studies in regard to the effect of adoption of strategic planning on the performance of small and medium sized enterprises have been done by past scholars and have given varying relationship. In the different research studies, some have indicated that strategic planning leads to improved business performance, others have reported no change while a few have reported negative results. Past studies of manufacturing firms (Thune & House, 1999; Malik & Karger, 2000; Ansoff *et al.*, 2001; Herold, 2001) have indicated that strategic planning results in superior financial performance, measured in terms of generally accepted financial measures such as ROI and ROE.

There are other studies that have been carried out in the past and given different results in regard to the adoption of strategic planning in firms. Gibson *et al.* (2001) in their investigation of 2956 Australian manufacturing SMEs and French *et al.* (2004) in their investigation of 127 Australian service SMEs found no relationship between strategic planning and performance. In his scholarly work, Shrader *et al.* (1993) found that there is no systematic relationship between long range planning and organizational performance. Thompson and Strickland (1992) suggest that strategic planning has no value in and of itself, but takes on value only as committed people infuse it with energy. There is thus a gap as the existing body of knowledge on the effect of adoption of strategic planning in SMEs is confusing and hard to reconcile and more research studies need to be carried out to determine the actual effect of adoption of strategic planning on the performance of small and medium sized manufacturing firms especially in the developing countries.

Pushpakumari and Wijewickrama (2008) have carried out studies in regard to strategic planning in SMEs and argued that SMEs do not have the means to ensure continuous successful implementation of strategic planning as they maintain lower levels of

resources, have limited access to human, financial and customer base as well as less-developed management capacity and administrative systems. The effect of these resources on the adoption of strategic planning in SMEs especially in developing countries is another research gap that future researchers can delve into.

## **2.7 Summary**

The chapter has under theoretical framework reviewed the various theories that explain the adoption of strategic planning as a management tool by SMEs. These theories include: diffusion of innovation theory, strategic choice theory and institutional theory. The section has also outlined several types of conceptual framework that are often used in research works and the specific one that has been chosen for this particular study is the working hypothesis. Under empirical literature, the independent variables in the study have been outlined and include: investigation of the status of adoption of strategic planning by SMEs, comparison of the performances of those SMEs that had adopted strategic planning against those had not adopted, comparison of the performance of the enterprises before and after adoption of the strategic planning as well as an analysis of the factors that affect adoption of strategic planning tool by the manufacturing SMEs.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter will focus on the research methodology that was used in the study including the research design, population, sampling methodology, data collection procedures and instruments, pilot test as well as data processing and analysis. The research study involved administering questionnaires as well as use of interview guides to the senior managers (mainly Managing Directors and Human Resource Managers) and owners of the manufacturing SMEs and adopted both qualitative and quantitative approaches. Data analysis was carried out by means of standardized statistical procedures.

#### **3.2 Research Philosophy**

Research philosophy can be defined as the development of the research background, research knowledge and its nature (Saunders & Thornbill, 2009). In the words of Cohen, Manion, and Morrison, (2007) research philosophy can be defined as the broad framework, which comprises perception, beliefs and understanding of several theories and practices that are used to conduct research. Research philosophy is characterized by its precise procedure which involves various steps through which a researcher creates a relationship between the research objectives and questions.

The research study adopted positivism as its research philosophy. Positivists in research studies believe that the researcher is independent of the whole work and thus the research study can be purely objective. During the research work, the researcher maintains minimum interaction with the respective respondents when carrying out the

research work (Wilson, 2010). Positivism contends that phenomena should be isolated and that observations should be repeatable and this often involves manipulation of reality with variations in only a single independent variable so as to identify regularities in, and to form relationships between some of the constituent elements of the social world.

Positivism belongs to epistemology which can be specified as philosophy of knowing. As a philosophy, positivism adheres to the view that only “factual” knowledge gained through observation that includes the measurement aspect is trustworthy. In positivism studies, the role of the researcher is limited to data collection and interpretation through objective approach and research findings are usually observable and quantifiable. As a philosophy, positivism is in accordance with the empiricist view that knowledge stems from human experience. It has an atomistic, ontological view of the world as comprising discrete, observable elements and events that interact in an observable, determined and regular manner (Collins, 2011). In positivism, the researcher is independent from the study and there are no provisions for human interests within the study (Crowther & Lancaster, 2008). As a general rule, positivism studies usually adopt a deductive approach and relates to the viewpoint that a researcher needs to concentrate on facts.

Compared to other disciplines, positivism paradigm relates to business studies to a greater extent compared to other disciplines. The reason behind this is because, business relationships are justly perceived as an aggregation of relationships between individuals within and between firms and positivism is one of the most suitable approaches to study the nature of relationships. With positivism, predictions can be made on the basis of the previously observed and explained realities and their inter-relationships. It is so embedded in the current research world that knowledge claims not grounded in positivism thought are simply dismissed as not scientific and therefore invalid, (Hirschheim, 1985). In their research work on the influence of management systems on

the relationship between administrative systems and performance of Kenyan public universities, Mokamba, Oloko, and Leting (2014) have used positivism as the research philosophy.

### **3.3 Research Design**

A research design is a presentation of the plan, structure and the strategy of the investigation that seeks to answer various research questions. (Shuttleworth, 2008; Karaevli, 2007; Borg *et al.*, 2008) define research design as a detailed plan of how the research will be carried out. Donald (2006) notes that a research design is the structure of the research, it's the "glue" that holds all the elements in a research project together. The key function of a research design is to ensure that the evidence obtained from the field enables the research study to answer the research questions that had been outlined earlier at the beginning.

The research study used two types of research designs and incorporated both exploratory and descriptive survey research designs. The study also used both qualitative and quantitative approaches as recommended by Thietart *et al.* (2001). A quantitative research refers to the systematic investigation of scientific or mathematical properties and their relationships. A qualitative approach which refers to the in-depth investigation that is more descriptive than numerical was also used in this research study.

Exploratory research is used in research studies when little is known about the issue being investigated (Neuman, 1997). It can for example be used to explore relationships when the different variables are unknown, develop new measurement instruments after conducting initial qualitative analysis, generalize qualitative findings, as well as refine or test a developing theory. Exploratory designs are often employed when qualitative data are only an initial exploration to identify variables, constructs, taxonomies, or

instruments for quantitative studies (Harrison & Reilly, 2011). Exploratory studies are also used when the area of study is new and the researcher wants to do an exploration just to learn something about the dilemma facing the manager or the entrepreneur running an enterprise (Cooper & Schindler, 2006).

On the other hand, a descriptive survey research design is a technique of gathering information by questioning those individuals who are the object of the research and belonging to a representative sample, through a standardized questioning procedure with the aim of studying relationships between variables (Corbetta, 2003). Descriptive survey design was chosen as the most appropriate method that would provide a broad overview of a sample representing small and medium manufacturing firms that can allow for generalization. Additionally, descriptive survey design is flexible enough to provide opportunity for considering different aspects of a problem under study (Kothari, 2004). This research design was appropriate for this study because a descriptive survey research is intended to produce statistical information about the aspects of the research issue that may interest different policy-makers as well as the entrepreneurs (Berg, 2001).

### **3.4 Target Population**

Lumley (1994) defines population as a larger collection of all subjects from where a subject is drawn. It refers to an entire group of individuals, events or objects having common observable characteristics (Mugenda & Mugenda, 2013). Cooper and Schindler (2006) observe that a population is the total collection of elements about which one wants to make inferences. The target population in this study was a total of 260 small and medium manufacturing firms that had been in operation for a minimum of three years in Thika town and its environs (Thika Sub-county, 2014). The population was from the small and medium manufacturing firms that had a workforce of 5-49 and 50-99 employees respectively. The respondents in the study were firm owners and senior

managers and the managers targeted were the Managing Directors and Human Resource Managers. Preference in filling the questionnaires was given to the owners where they were available.

As per the Economic recovery strategy for Employment and Wealth Creation report (2011), the value of the contribution of the corporate organizations in the manufacturing sector in the Kenyan GDP increased from 13% in 2002 to 15.7% in 2007 and as a result attracted a large number of small and medium investors who thrive in these subsectors and this is a good indicator of a country's economic activity. This population was chosen since the different manufacturing enterprises were operating in the same area and hence were exposed to the same business environment. Thika town was chosen because it is a cosmopolitan area with diverse entrepreneurs operating at different levels and engaging in different manufacturing enterprises and thus the findings of the study could thus be replicated to other business environments in Kenya.

The research study used only the small and medium manufacturing firms that had been registered by the County government of Kiambu under which Thika town falls and which had been in operation for the past three years as at the time of data collection. This was to ensure that only *bona fide* manufacturing SMEs that had been able to overcome the challenges experienced during the initial years of business establishment and growth were included in the research study.

### **3.5 Sampling Frame**

Sampling frame is a list of all items where a representative sample is drawn for the purpose of research study. It has in itself the properties that the researcher wants to investigate and can identify every single element and include any that has been picked in the sample (Saunders *et al.*, 2009). In this study, the sampling frame was the list of the

260 small and medium firms that were involved in manufacturing with a specific focus on the enterprises that were located in Thika town and its environs (Thika Sub-county, 2014). The twelve sub-sectors under manufacturing that were considered included: Construction and Mining, Chemical and Allied, Energy, Electrical and Electronics, Food and Beverage, Leather and Foot wear, Metal and Allied, Motor vehicle and Accessories, Paper and board, Pharmaceuticals and Medical Equipment, Plastics and Rubber, Textiles and Apparels as well as Wood and Furniture.

### **3.6 Sample and Sampling Techniques**

#### **3.6.1 Sampling Techniques**

A sample is a portion or part of the population that is of interest to the researcher. Sampling is the part of statistical practice concerned with the selection of individual observations intended to yield some knowledge about a population of concern, especially for purposes of statistical inference (Palit, 2006). Sampling also refers to the process of selecting some elements from a population to represent that population. Sampling provides a means of gaining information about the population without the need to examine the population in its entirety. Collins and Hussey (2003) define the sampling unit as the case to which the variables under study and research problem refer and about which data is collected and analyzed.

In this research study, stratified random sampling method was used. Stratified sampling, a process by which the sample is constrained to include elements from each of the different segments was used. This ensured that the manufacturing SMEs in the different firm sizes and manufacturing segments were included in the study to ensure inclusivity. There are several potential benefits of using stratified random sampling. First, dividing the population into distinct, independent strata based on firm size and products/services

enables the researchers to draw inferences about specific sub-groups that may be lost in a more generalized random sample. Second, the method leads to more efficient statistical estimates (provided that the strata are selected based upon relevance to the criterion in question, instead of availability of the sample). Additionally, it is sometimes the case that data is more readily available for individual, pre-existing strata within a population than for the overall population. In such cases, using a stratified sampling approach may be more convenient than aggregating data across groups.

Finally, since each stratum was treated as an independent population, it was possible to apply different sampling approaches to the different strata, thus enabling the researcher to use the approach best suited (or most cost-effective) for each identified sub-group within the population. In research studies, a stratified sampling approach is most effective when three conditions are met and these are; variability within strata is minimized, variability between strata are maximized and the variables upon which the population is stratified are strongly correlated with the desired dependent variable. In this study, the variable that was used for stratification was the size and operational segments of the manufacturing firms.

### **3.6.2 Sampling**

A good representative sample should constitute at least 20% of the entire population (Orodho, 2005). In this research study, the sample size was determined using the formulae:

$$e = Z_{\alpha} \sqrt{pq/n}$$

This was further simplified to:

$$n = \frac{Z^2 \alpha p q}{e^2} \text{ where } q = 1 - p$$

n= Sample size required

$Z_{\alpha}$ = Confidence level at 95% (Standard normal value at  $\alpha$  level of significance of 1.96)

p = Estimated Strategic planning users

e= Margin of error at 5% (Standard value of 0.05)

The researcher in the study assumed usage of strategic planning of between 70% and 80% with paws assumed to be 75%  $\pm$  5% that is  $p = 0.75 \pm 0.05$

Given that  $\alpha=0.05$ ,  $Z_{\alpha} = 1.96$  and  $e= 0.05$  therefore  $n = \frac{1.96^2 \times 0.75 \times 0.25}{0.05^2} = 288$  firms

As per the calculation, this is the representative sample size of an infinite population but in this study the sampling frame of small and medium manufacturing firms in Thika town as at year 2015 was 260.

Since N is finite the researcher adjusted the sample using the formulae:

$$n = \frac{n_0 N}{N + n_0}$$

$$n = \frac{260 \times 288}{288 + 260}$$

$$n = 135 \text{ firms}$$



Using the standard values and formulae provided a sample of 135 firms that were representative of the small and medium manufacturing firms in Thika town. A three stage sampling technique was then used. In the first stage, the 135 manufacturing firms were stratified into two groups depending with the number of employees with small firms having between 5-49 employees and medium firms having between 50-99 employees. The firms were then categorized according to the specific segments of operation. Simple random sampling technique was applied where each manufacturing firm from each of the two groups was given a serial number that was be picked at random to select the firm after which the firm owners and senior managers were contacted to fill the questionnaires. Social researchers recommend for a sample of 10% of the accessible population and at least 30 cases for statistical data analysis (Mugenda & Mugenda, 2013). For most social studies, at least 100 respondents are enough for the study (Orodho, 2005).

**Table 3.1: Distribution of the respondents**

<b>Sub-Sector</b>	<b>Respondents</b>	<b>Number</b>
Small (85 firms)	Owners	38
	Managers	47
Medium (50 firms)	Owners	16
	Managers	34
<b>Total</b>		<b>135</b>

### **3.7 Data Collection Instruments**

In research, there are many methods of data collection (Ngechu, 2010). The choice of the data collection method to apply in any study depends mainly on the attributes of the

subjects, research topic, problem question, objectives, design, expected data and results (Creswell, 2013). This study applied mixed instruments whereby a combination of more than instrument was used and this is referred to as triangulation. (Sekaran & Bougie, 2010; Nachmias & Nachmias, 2008; Mugenda & Mugenda, 2013) observe that triangulation involves the use of more than one form of data collection methods in a study. The objective of the study was to determine the influence of strategic planning on performance of small and medium sized manufacturing firms and the research instruments that were used included self administered questionnaires, interview guides and secondary data that was available.

A questionnaire is an instrument that gathers data over a large sample and its key objective is to translate the chosen objectives into specific questions so as to elicit the answers for each of the question and provide data for hypothesis testing. The use of a questionnaire with standardized data enables a researcher to collect large amount of data from a sizeable population in a highly economical way and it also allows easy comparison (Namusonge, 2010). The general section (section A) of the questionnaire in the research study aimed at getting the general profile of the respondents and the enterprises including their identity this particular response was optional.

The next part of the questionnaire had both open-ended and closed questions in which the researcher captured the status of adoption of strategic planning tool, established the factors that determine the adoption of strategic planning tool in the manufacturing firms, compared the performances of those SMEs that had adopted strategic planning with those ones that had not as well as compared the firms performances before and after adoption of the management tool. It also employed a 5 point Likert scale that measured the different aspects of the strategic planning practice in the SMEs. The responses that were outlined on the Likert scale ranged from: Strongly agree- (5 points), Agree- (4 points), Neutral- (3 points), Disagree- (2 points) to Strongly disagree- (1 point).

Since not all information in regard to adoption of strategic planning tool in the manufacturing firms could be captured by the questionnaires, the researcher also made use of the interview guides. In research studies, interview guides give the opportunity for eliciting information and to observe both the subject and the total situation to which the interviewee is responding to (Mugenda & Mugenda, 2013). The method of interview guides also tends to give a high degree of flexibility in research works. In each of the small and medium manufacturing firms visited, one senior manager or the business owner was interviewed. To ensure that standard data was collected, the research study involved conducting a structured interview. In addition, the study used some open-ended questions and probes so as to capture more insightful and supplementary information. The main reason for using interview guides was to enable eliciting of enhanced and greater details of strategic planning in the small and medium manufacturing firms.

In this study, secondary data was collected in order to identify appropriate output changes in the manufacturing SMEs and help identify factors that had an influence on the adoption of strategic planning tool. Secondary data also helped in validating the responses obtained as well as in comparison of past studies' results and the ones realized in this study. From the manufacturing firms visited, the researcher reviewed the available strategic planning documents as well as the availed books of entry. Secondary data sources from the manufacturing firms included reports on firm performances before and after adoption of strategic planning tool such as yearly sales and production volumes.

### **3.8 Data Collection Procedure**

A total of 135 questionnaires were administered to the owners and senior managers of the selected manufacturing SMEs. The questionnaire developed was self-administered and use of this method ensured that the respondents answered the questions at their

convenience and also the interviewer did not introduce bias in the way the respondent answered the questions. The researcher delivered the questionnaires with the help of three research assistants to the small and medium manufacturing firms that had been in operation for a minimum of three years and then the filled in questionnaires were collected at an agreed time.

The three research assistants were recruited and trained so as to get quality study results. They were then deployed to help the researcher reach the targeted firms' owners and senior managers and request them to participate in the research study. The self-administration method ensured clarity to the respondents and this also enhanced the validity of the data collected. Since the details of the respondents' contacts had been obtained from Thika sub-county's director of trade office, prior to commencement of data collection process, the target respondents were first contacted by either phone or e-mail during which the intention to drop the questionnaire was explained to them and a date to pick the questionnaires was set after the visit.

### **3.9 Pilot Study**

A pilot test is usually done before embarking on the actual data collection activity (Eriksson & Kovalainen, 2008). Kombo and Tromp (2006) describe a pilot test as a replica and rehearsal of the main survey. Boje (2015) states that pilot testing assists researchers to see if the questionnaire will obtain the required results. Polit and Beck, (2006) describe a pilot study as a small scale version or trial run done in preparation for a major study. Creswell (2013) and Cooper and Schindler (2011) have proposed that the respondents used in pilot test should constitute at least 1% of the sample used in data collection. A proportionate sample size of 15 respondents was used for the pilot study. This represented 10% of the sample size that according to Mugenda and Mugenda (2013) is the percentage recommended for social researchers. Therefore 15

questionnaires were administered to test the degree of accuracy of the research instrument.

In choosing the 15 firms for the pilot study, the researcher used simple random sampling. This method ensures that each unit has an equal probability of being chosen and the random sample is the most representative of the entire population and the one with the least probability of giving biased results (Orodho, 2005). It also has statistical properties that allow the researcher to make inferences about the population based on the results that are obtained from the selected sample. The purpose of a pilot test is to enable validity and reliability of research instruments to be determined (Cooper & Schindler, 2011). After the pilot test, the research instruments were then revised appropriately to capture all the required data and also incorporate the extra feedback that was realized from the respondents. The firms that were included in the pilot test were excluded in the main research study.

### **3.9.1 Validity Test**

Validity is the degree at which data collecting instrument measures what it is supposed to measure (Cooper & Schindler, 2011). Zikmund (2010) describes validity as the accuracy of data collecting instruments. It helps in determining whether the respondents will understand the directions and instructions on the questionnaires (Cooper & Schindler, 2011). The study used content validity to test the accuracy of data collecting instruments. A judgment procedure of assessing whether a tool is likely to provide valid data is to request opinion of an expert in a particular field to review it and give suggestions on content improvement (Mugenda & Mugenda, 2013). Opinions from two experts in research methods was sought to review data collecting instruments. This helped to improve the questionnaires before proceeding to the field for final data

collection in the same location in which the pilot survey took place. The results of the responses were analyzed to establish the percentage of representation.

Content validity formula suggested by Amin (2005) was used. This formula is as;

Content validity = Number of judges declaring item valid/number of items.

### **3.9.2 Reliability Test**

Reliability test was conducted to test whether data collecting instrument would yield the same result on repeated trials. A statistical coefficient- Cronbach's alpha ( $\alpha$ ) was used as a measure of internal reliability (Cronbach, 1975). The SPSS version 21 tool for windows reliability program was used to determine the reliability of the research instruments. In research studies, Cronbach's alpha reliability coefficient ranges between 0 and 1. Reliability coefficient of 0 implies that there is no internal reliability while 1 indicates perfect internal reliability. The recommended value of 0.7 was used as a cut-off point for reliability (Sekaran, 2010) A total of 15 questionnaires were used in the test for reliability of the pilot study instruments. Cronbach's alpha is a generalization of a coefficient introduced by Kuder and Richardson in 1937 (Mugenda & Mugenda, 2013).

### **3.10 Data Processing and Analysis**

According to Sekaran (2003) as cited by Waiganjo (2013) data analysis has three basic objectives which include: testing the goodness of the data, getting a feel of the data and testing the hypothesis developed for the research. The data that was obtained from the questionnaires and interview guides was both qualitative and quantitative. The second objective; testing of goodness of the data led to credibility and reliability of the data that was analyzed and was tested by use of the Cronbach coefficient alpha.

Before processing the responses, every filled-in questionnaire was tallied for every response as per the questions. The completed questionnaires were first edited for completeness and consistency. Descriptive statistics including measures of central tendency such as percentages, mean, mode and median, variance and standard deviation were used to analyze both personal and firms' information. These tools were used to describe and determine the respondent's degree of agreement or disagreement with various statements under each study variable.

SPSS (Statistical Package for Social Sciences) version 21 tool was used to conduct descriptive data analysis of each variable and the same was presented in form of tables and graphs. Quantitative approach involved collecting numerical data and then calculating the response rate by use of descriptive statistics such as mean, median, standard deviation using Microsoft Excel worksheet and SPSS tool. In measurement of the different variables outlined in the conceptual framework (working hypothesis) the following statistical analysis tools were used:

**Objective 1 and General Information:** Descriptive analysis of the firms and respondents' details and the determination of the rate of adoption of strategic planning were analyzed by use of descriptive statistics. From these outcomes, measures of central tendencies like percentages, frequencies, mean, mode, median and standard deviation were generated. Descriptive statistics in form of frequencies was also used in determining the first objective of the study and involved an analysis of the numerical data of both adopters and non-adopters of strategic planning and then presenting them in percentages, mean, mode, and standard deviation.

**Objective 2:** In comparing the performance of the small and medium sized enterprises that had adopted strategic planning against those that had not adopted, the researcher used independent samples t- test as the statistical analysis tool.

### 3.10.1 Independent Samples t- Test

During research studies, if a numerical variable can be divided into two distinct groups using a descriptive variable the researcher can assess the likelihood of these two groups being different using independent samples t-test. This test compares the difference in the means of the two groups using a measure of the spread of scores. If the likelihood of any difference between these two groups occurring by chance is low, this is represented by a large **t** statistic with a probability less than 0.05 and this was termed as being statistically significant in this study.

This test is normally used when the population mean and standard deviation are unknown and two different separate groups are being compared. In this study, independent samples t-test was used to determine if there was a significant difference in performance between adopters and non-adopters of strategic planning amongst the small and medium manufacturing firms. This comparison was done by evaluating the mean differences between the two populations and their respective samples using the formulae:

$$t = \frac{(\bar{X}_1 - \bar{X}_2) - (\mu_1 - \mu_2)}{\sqrt{S_p^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

Where:

$\mu_1$ : Is mean of the population that had not adopted strategic planning



$\mu_2$ : Is mean of the population that had adopted strategic planning

$\bar{X}_1$ : Is mean of the sample from the population that had not adopted strategic planning

$\bar{X}_2$ : Is mean of the sample from the population that had adopted strategic planning

$S_p^2$ : Is pooled variance

$$S_p^2 = \frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}$$

Where  $S_1^2$  and  $S_2^2$  are the variances of the two samples and  $n_1$  and  $n_2$  are the sizes of the two samples.

Halpern (2007) has used this analytical tool in his study on the market orientation and performance of airports in Europe's peripheral areas.

**Objective 3:** In comparing the performance of the small and medium sized enterprises before and after adoption of strategic planning, the researcher used the paired t-test as the statistical analysis tool for the study.

### 3.10.2 The Paired t-Test

The paired t-test is used to compare the values of means from two related samples like in a “before” and “after” situation in research works. In this research study, paired t-test was used to gauge whether there was a significant difference between the means of two groups with a focus on the performance of the firms before and after adoption of strategic planning. The difference between the means of the samples was unlikely to be equal to zero as a result of the sampling variation. The hypothesis test was designed to answer the question: “Is the observed difference sufficiently large enough to indicate that the alternative hypothesis is true?” The answer was realized in the form of a *t*-statistic value given by the formulae:

$$t = \frac{d}{\sqrt{s^2/n}}$$

Where:

*d*: Is the difference between samples (*X* after – *X* before)

*s*<sup>2</sup>: Is the sample variance

*n*: Is the sample size

*t*: Is the paired t-test statistic with *n*-1 degrees of freedom

Suggested null and alternative hypothesis in this study was:

*H*<sub>0</sub>: There is no difference in performance before and after adoption of strategic planning

by the manufacturing SMEs in Kenya.

$H_1$ : There is some difference in performance before and after adoption of strategic planning by the manufacturing SMEs in Kenya.

Matko (2013) has used paired t- test in his scholarly study on the role of organizational culture and leader characteristics in regional competitiveness at the municipalities of the North great plain region in comparing the competitiveness before and after the adoption of specific cultural orientations.

**Objective 4:** In the investigation of the factors that determine the adoption of strategic planning by small and medium sized manufacturing enterprises, the researcher used various statistical analysis tools that include: Logit model, Correlation analysis and Chi-square test.

### **3.10.3 Logit Model**

Logit model also called Logit regression is used to model dichotomous outcome variables. In logit model, the log odds of the outcome are modeled as a linear combination of the predictor variables. The logistic regression equation is used to describe data and to explain the relationship between one dependent binary variable and one or more metric (interval or ratio scale) independent variables. In statistical works, the logistic regression assumes that the dependent variable is a stochastic event. In a stochastic event, the outcomes are only two and in this research study, the outcome was either adoption or lack of adoption of strategic planning in the small and medium manufacturing firms in Kenya.

In current research studies, the logit model has become the workhorse of analyzing discrete choice problems in various disciplines such as finance and business research

works. Logit regression equation deals with cases where the Y variable is an indicator variable taking only 0 or 1 as possible values. The purpose of the logit model is to predict probability ( $Y = 1$ ) for various values of X variables. In the real business world, there are many situations in which a researcher will want to build a model to predict a Y variable that takes only two possible values. For example, many survey questions have only two possible responses such as a “Yes” or “No” or “Agree” or “Disagree”, “Adopt” or “Not adopt”. In such situations, if a researcher wants to know which of the two possible responses will be chosen by an individual in the population and which factors (X variables) affect that choice; a Logit model is usually adopted. To assess the probability that a firm would adopt strategic planning, the dependent variable was a simple dichotomous variable (Y) which was a dummy equal to 1 if the firm adopted strategic planning tool and 0 if it did not adopt.

In this research study, the adoption of strategic planning was the response or dependent data of interest and other variables such as firm size, firm location, education level of the managers, age of the firms among other factors were treated as the predictors and the response had only two possible outcomes; adoption or lack of adoption of strategic planning tool in the manufacturing SMEs. In this study, all predictors were treated as categorical variables but the technique can be applied to both discrete and continuous variables. The basic aim of the analysis was to describe by use of cross tabulation the way in which adoption of strategic planning in the manufacturing SMEs varies by factors such as firm size, age of the firm, owners/ managers’ education level, managers and owners level of training on strategic planning tool among several other outlined factors.

Dayton (1992) argues that logistic regression is useful in situations in which the researcher wants to be able to predict the presence or absence of a characteristic based on the values of a set of predictor variables. It is similar to linear regression model but is

suited to models where the dependent variable is purely dichotomous in nature. Logistic model can be used to estimate odds ratio for each of the independent variables in the model. The model is applicable to a broad range of situations and the final form of the model enables the researcher to predict values for the dichotomous variable when the values of the explanatory variables are given.

In this study, taking the various independent variables that could affect the dependent variable (adoption of strategic planning), the equation thus took the form:

$$\text{Logit (p)} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

for  $I = 1 \dots \dots \dots n$

Where:

p: Denotes probability of realizing the characteristic of interest (adoption of strategic planning)

$\beta_0$ : Is the constant

$\beta_1$  to  $\beta_5$ : Represents the coefficient of  $X_1$  to  $X_5$  ( $i = 1,2,3,4,5$ ) in the model

$X_1$ : Represents the education level of firm managers and owners

$X_2$ : Represents organizational resources

$X_3$ : Represents the size of the firms

$X_4$  : Represents the motivation of the stakeholders

$X_5$  : Represents firm location

In this study, logit model was used to analyze the factors that determine the adoption of strategic planning among manufacturing SMEs in Kenya. It gave the relationship between the various independent variables and the dependent variable (adoption of strategic planning). The model helped in understanding how the adoption of strategic planning in the manufacturing firms changed when other independent variables were varied. Njeru (2013) used logit regression model in her scholarly work on the determinants of choice of source of entrepreneurial finance for small and medium sized enterprises in Thika district.

#### **3.10.4 Correlation Analysis**

In research, correlation analysis tool studies the joint variation of two or more variables to determine the amount of relationship between two or more groups. The effect of various independent variables in the adoption of strategic planning on the firms' performance was analyzed by use of Pearson's correlation coefficient matrix. From the correlation index, it was possible to gauge whether there was any relationship between the performance of the manufacturing SMEs and the adoption of strategic planning as well as define the strength and direction of relationship at different levels of significance. Correlation ( $r$ ) is a statistical measurement of the relationship between different variables. It is an index of strength of the relationship between two variables and ranges between  $- 1.0$  to  $+ 1.0$ . When the value is zero it denotes that there is no relationship between the variables.

A correlation of  $-1.0$  indicates existence of a perfect negative correlation and this implies that the different variables move in different directions. A correlation value of  $+1.0$  indicates that the two variables are moving in the same direction. A correlation of  $0.8$  is usually described as strong whereas a correlation of  $0.5$  is usually described as weak. High values of one variable are perfectly related to high values of the other variable and on the other hand, low values of one variable are related to low values of the other variable. In this study, correlation analysis was used in determining the presence or absence of relationship between various outlined factors and adoption of strategic planning tool in the manufacturing firms.

$$H_0: \rho_{xy} = 0$$

$$H_1: \rho_{xy} \neq 0$$

Arasa (2002) has used correlation analysis in his scholarly work on the relationship between strategic planning and firm performance on SMEs.

### **3.10.5 Chi- Square test**

The chi-square test written  $\chi^2$  is a statistical measure used in the context of sampling analysis for comparing a variance to a theoretical variance. As a non-parametric test, it can be used to determine if categorical data shows some level of dependency or the two classifications are independent. It can also be used to make comparisons between theoretical populations and actual data when categories are used.

Chi-test for independence is applied when the researcher has two categorical variables from a single population. It is used to determine whether there is a significant association between two variables. In a more general sense, it tests to see whether distributions of categorical variables differ from each other. For example, in the adoption of strategic planning tool by the manufacturing firms, the respondents were for example classified by management (owners and managers) and the adoption preference was either adoption or lack of adoption. The test was used to determine whether nature of management (whether by owners or managers) was related to adoption of strategic planning tool.

The Chi-test equation:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where: O: Is the observed frequency

E: Is the expected frequency

A very small chi-test statistic means that the observed data fits the expected data extremely well showing that there is a relationship. In this study, any value less than 0.05 showed that a relationship existed between the variable and adoption of strategic planning tool. A large Chi-Square test statistic on the other hand shows that the data does not fit very well and thus there is no relationship. Any relationship that had a value of more than 0.05 showed that there was no relationship between the specific variable and adoption of strategic planning.



Waithaka (2016) used the Chi square test in her study on the relationship between entrepreneurial orientation and performance of small and medium enterprises in the agro-based manufacturing sector in Kenya.

### **3.10.6 Qualitative Data**

Qualitative data was summarized into various sectors of the manufacturing firms and then analyzed through content analysis so as to make meaning and importance of the research study. Content analysis is a research technique that is used in objective, systematic and quantitative description of manifest content of communications (Berelson, 1952). Content analysis is generally textual or visually based and focuses specifically on analyzing the frequency of particular words or phrases or images (Polonsky & Waller, 2009). It is used to determine the presence of certain words, concepts, themes, phrases, characters or sentences in texts, set of texts so as to quantify their presence in an objective manner.

**Table 3.2: Operationalization of Variables (Objective 4)**

<b>Variable</b>	<b>Operational indicators</b>	<b>Question number on the instrument</b>
<b>Education level of managers/owners</b>	Years of formal education Highest education level Relevant in-house training acquired	Section A (Question 4)
<b>Organizational resources</b>	Fixed assets Skilled manpower Strategic relationships Improved capabilities	Section C 28 (Question 21-24)
<b>Size of the firm</b>	Number of employees Sales volume Number of departments Number of business locations Investment in R&D	Section B (Question 12-18)
<b>Stakeholders motivation</b>	Profits Growth maximization Personal fulfillment Hobby/Interest	Section B (Question 10)
<b>Organizational culture</b>	Communication/symbols Behavior & traditions Employee relationships Reward systems Paucity for innovation	Section C 26 (Question K-O)

## **CHAPTER FOUR**

### **RESEARCH FINDINGS AND DISCUSSION**

#### **4.1 Introduction**

This Chapter presents the results and discussions of the study findings as set out in the research methodology. The chapter starts with an analysis of; the response rate by the manufacturing sub-sectors, respondents' demographics and an analysis of the different attributes of the sampled firms, Data is presented and analyzed according to the general objective of the study which was to determine the influence of strategic planning on performance of small and medium manufacturing firms in Kenya. The specific objectives of the study were; to establish the status of adoption of strategic planning by small and medium manufacturing enterprises, to compare the performance of the small and medium manufacturing enterprises that had adopted strategic planning against those that had not, to compare the performance of small and medium manufacturing firms before and after adoption of strategic planning and to establish the factors that determine adoption of strategic planning tool in the manufacturing firms. In an attempt to address the different objectives, the chapter outlines a detailed description of the descriptive and inferential statistics as well as the research findings and discussions.

## **4.2 General Characteristics of the Study Sample**

### **4.2.1 Response rate**

From a field of the 260 small and medium manufacturing firms that were in operation in Thika town as at the beginning of the year 2016, 52% of the same was drawn to compose a total sample of 135 SMEs. Sampling was done based on stratified sampling methods. The sampling method was used with the aim of ensuring inclusivity of all the different sub-sectors in the manufacturing industry to ensure that the obtained results would be as representative as possible. Data was collected by the researcher visiting the targeted manufacturing firms and interviewing either the business owners or the senior managers mainly the firms' Managing Directors and Human Resource Managers.

The response rate realized was 100% which amounted to a total of 135 manufacturing SMEs as shown in table 4.1. This was a good representation because for most social studies, at least 100 respondents are considered enough for the study (Orodho, 2005). Arora, (1996) in his scholarly works has argued that a research study that produces 75% response rate has done extremely well while Saunders *et al.* (2009) rates the response rate of between 50% to 75% for hand delivered questionnaires as a good response.

The size of the manufacturing firms was determined by considering the number of the full time employees working in the industries. Majority (63%) of the firms that were sampled for this study were small firms that employed between 5 and 49 employees and 37% were medium sized firms that employed between 50 and 99 full time employees as shown in table 4.2. In the field, the small enterprises composed the bigger majority amongst the SMEs and this informed the decision by the researcher to sample a relatively higher percentage of the small firms as compared to the medium sized ones.

**Table 4.1: Response rate**

	<b>Frequency</b>	<b>Percentage</b>
Questionnaires received	135	100
Questionnaires not received	0	0
<b>Total</b>	<b>135</b>	<b>100</b>

**Table 4.2: Response rate by firm size**

	<b>Frequency</b>	<b>Percentage</b>
5 – 49 employees	85	63
50 – 99 employees	50	37
<b>Total</b>	<b>135</b>	<b>100</b>

**a) Response rate by the manufacturing SMEs' sub-sectors**

Data for the study was collected from 135 firms that were distributed in the 10 different sub-sectors that comprise the manufacturing industry (See table 4.3). The different sub-sectors where data for the study was collected from included: Food and beverage (14%), Animal Feeds (25%), Rubber and Plastics (3%), Metal and Allied (21%), Chemicals and Allied (9%), Pharmaceuticals and Medical equipment (4%), Building and Construction (8%), Electrical and Electronics (4%), Motor Vehicle and Accessories (8%) and Textiles and Apparels (5%). In this research study, the animal feeds sub-sector comprised the biggest percentage of the respondents (25%) and Electrical and Electronics sector, Pharmaceuticals and Medicals had the least (4%).

**Table 4.3: Response rate by different sub-sectors**

<b>Sub-sector</b>	<b>Number sampled</b>	<b>Percent</b>
Food and beverage	19	14
Animal Feeds	34	25
Rubber and Plastics	4	3
Metal and Allied	28	21
Chemicals and Allied	12	9
Pharmaceuticals and Medicals	5	4
Building and Construction	11	8
Electrical and Electronics	5	4
Motor Vehicle and Accessories	11	8
Textile and apparels	6	5
<b>Total</b>	<b>135</b>	<b>100</b>

#### **4.2.2 Respondents' demographics**

Various attributes of the sampled respondents' demographics were outlined. In regard to the position held in the sampled firms, majority of the respondents were firm managers who composed 68.1% of the respondents while the business owners contributed 31.9% of the total respondents as shown in table 4.4. The firm managers that the researcher targeted for the study were the senior managers in the manufacturing firms who understood the current and future operations of their firms well and this mainly included the firms' Managing Directors and the Human Resource Managers. When the researcher was able to find the business owners, preference in filling the study questionnaires was

given to them as they were likely to have a better understanding of the firm's current operations and the long term planning strategies.

In regard to gender, the larger percentage of the respondents in the study was males who composed 75% of the respondents while females composed 25% of the sample as shown in table 4.4. This was a good representation as it showed that there was a fairly good representation of both genders in the research study. In regard to age, majority of the respondents were in the age bracket 31-40 years and this represented 30.4% of the informants. Respondents in the age bracket 20-25 years comprised 12.6% of the sample, respondents in the age bracket 26-30 years composed 21.5%, age 41-50 years were 25.2% and respondents who were 51 years and above composed 10.4% of the total sample as table 4.4 shows. In total, 80% of all the respondents in this research study were aged 40 years and below.

As pertains to the respondents' highest level of education, majority of the respondents were holders of a first degree at 33.3%, Diploma holders composed 26.6% of the total sample, Post-graduate degree holders were 15.5%, certificate holders were 11.8% while those with basic secondary school certificate comprised 12.6% of the sample as shown in table 4.4. In total 48.8% of the respondents possessed either a first degree or a post-graduate qualification which is a good indicator of the high literacy levels among the SMEs' owners and managers who were interviewed.

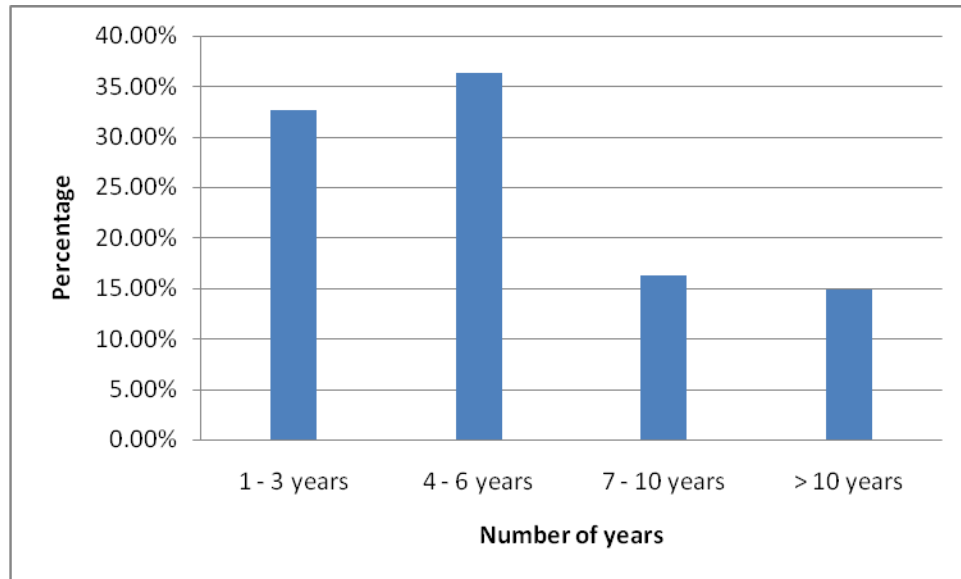
**Table 4.4: Respondents' demographics**

<b>Variable</b>	<b>Factors</b>	<b>Frequency</b>	<b>Percent</b>
Position	Owner	42	31.9
	Manager	90	68.1
Gender	Male	99	75.0
	Female	33	25.0
Respondents Age	20-25 Years	17	12.6
	26-30 Years	29	21.5
	31-40 Years	41	30.4
	41-50 Years	34	25.2
	51 and above years	14	10.4
Level of Education	Secondary	17	12.6
	Certificate	16	11.8
	Diploma	36	26.6
	First degree	45	33.3
	Post-graduate	21	15.5

#### **4.2.3 Respondents length of service**

The respondents in the sampled firms were asked to indicate the number of years that they had worked in their current work stations. Majority (36.3%) had worked in their work stations for a period of 4 to 6 years, 32.6% of the respondents had worked for a period of 1 to 3 years, 16.3% of the respondents had worked for a period of between 7 to 10 years and 14.8% had worked for a period of more than 10 years as shown in figure 4.1. Cumulatively, 67.4% of the respondents had a length of service in their current work stations that spanned more than four years.

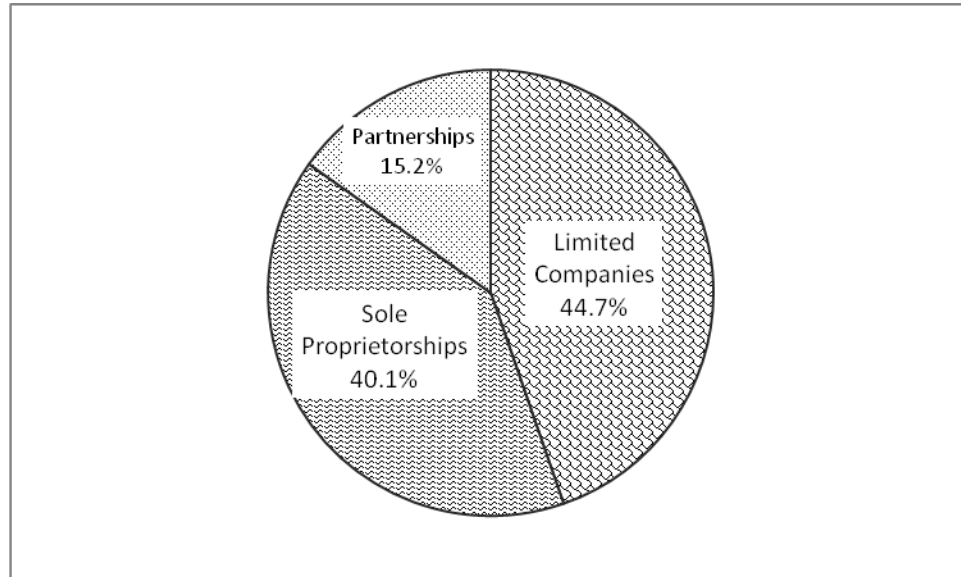




**Figure 4.1: Respondents' length of service**

#### **4.2.4 Legal form of the firms**

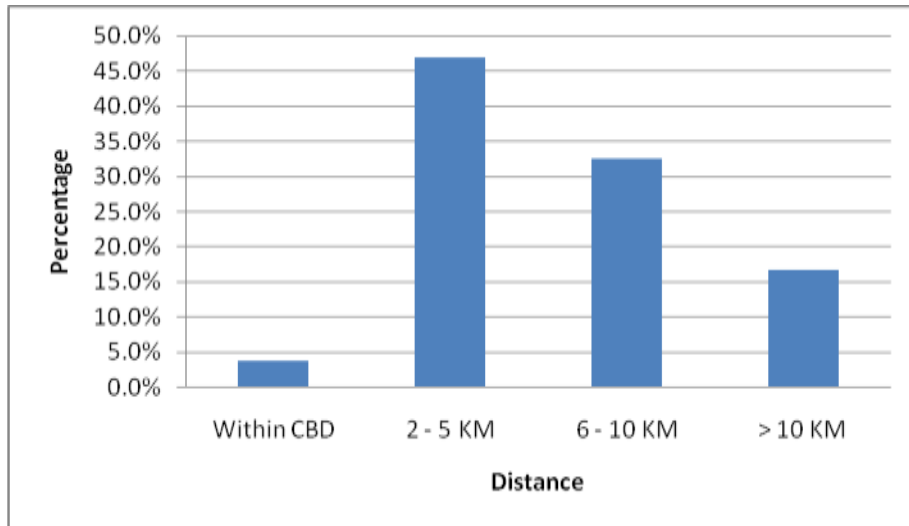
The research study also aimed at establishing the legal forms of the sampled small and medium sized manufacturing firms in order to understand their operating status. The study found that the majority of the firms (44.7%) were limited companies, 40.1% were sole proprietorship firms and 15.2% were partnership businesses as shown in figure 4.2. The research study thus found that the bigger majority of the sampled firms (59.9%) were owned by more than one entrepreneur.



**Figure 4.2: Legal form of the manufacturing firms**

#### **4.2.5 Location of the firms**

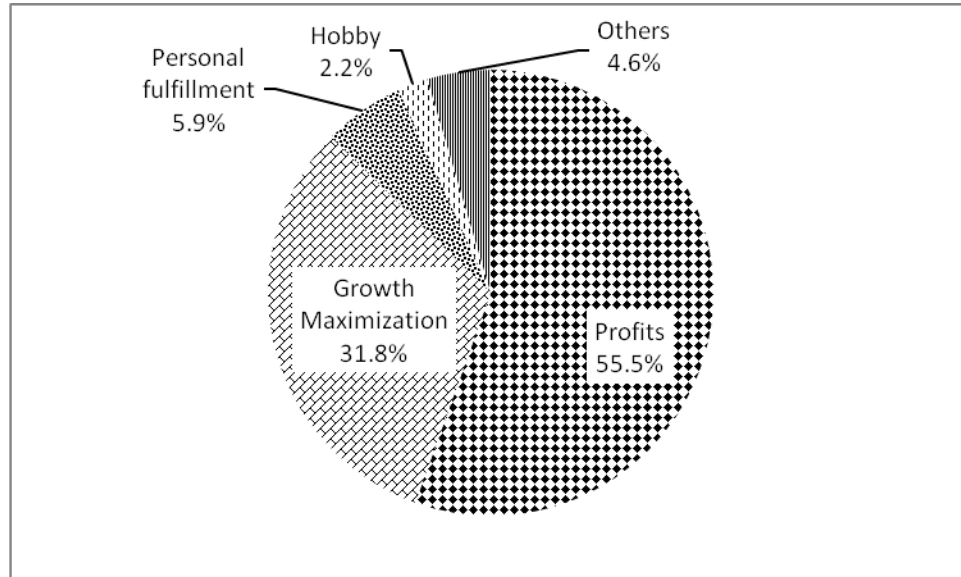
The research study aimed at establishing the location of the sampled firms in reference to the CBD (Thika town) with the aim of establishing whether the location of the firms influenced the adoption of strategic planning tool. In this aspect, the researcher found that 47% of the manufacturing firms were located 2 to 5 Kilometers from the CBD and 32.5% were located between 6 to 10 Kilometers from Thika town. 16.7% of the manufacturing SMEs were located more than 10 kilometers from the CBD and 3.8% were located within CBD area as shown in figure 4.3. In total 83.3% of the manufacturing firms were located less than 10 kilometers from the CBD.



**Figure 4.3: Location of the firms**

#### **4.2.6 Motivation for starting the manufacturing firms**

The informants were asked to indicate the key motivation for starting the different manufacturing firms. From the interviewees' responses, the biggest motivation for starting the manufacturing SMEs was to get profits and this proportion represented 55.5% of the total respondents. 31.8% of the manufacturing SMEs were started because of growth maximization, 5.9% because of personal fulfillment and 2.2% were started with hobby as the prime motive. 4.6% of the manufacturing firms were started because of other factors as shown in figure 4.4. The other factors that the respondents outlined for starting the manufacturing firms included; adopting backward integration, to conserve the environment and to use the finished products for other business opportunities.



**Figure 4.4: Motivation for starting the enterprises**

#### **4.2.7 Training on strategic planning**

The respondents were asked to indicate if they had received relevant training in regard to strategic planning. The study found that a small majority of the respondents (51.7%) had received the relevant training and 48.3% had not received any training as shown in table 4.5. The study found that approximately half of all the informants had not received any training in regard to strategic planning and this thus implied that a good percentage of the respondents were not aware of the benefits that they were bound to realize upon adoption of the long term planning tool.

**Table 4.5: Training in regard to strategic planning**

	<b>Frequency</b>	<b>Percent</b>
Yes	70	51.7
No	65	48.3
<b>Total</b>	<b>135</b>	<b>100</b>

#### **4.2.8 Reliability and validity of the research instruments**

Reliability test was done to determine the goodness of the data that was used in the research study. This in turn was used to test the reliability and validity of the research instrument used for the study. Reliability refers to the extent to which a measuring instrument contains variable errors. Variable errors are the errors that appear inconsistently from observation to observation during any one measurement attempt or those parameters that tend to vary each time a given unit is measured by the same instrument. The reliability of various constructs in the questionnaire was examined to ensure the items collectively measured their intended objectives in a consistent manner as recommended by Saunders, Lewis and Thornbill (2009).

The main purpose of carrying out a pilot test is to enable validity and reliability of research instruments to be determined (Cooper & Schindler, 2011). After the pilot study was carried out, data was analyzed by use of the SPSS tool and the areas that had weaknesses were carefully identified. After this, the research instruments were then revised appropriately to enable efficient capturing of all the required data and incorporate the extra feedback that was realized from the respondents. This practice helped in reducing the probability of realizing variable errors in the main study and the research objectives were thus measured in a consistent manner.

### 4.3 Attributes of the sampled firms

The research study aimed to determine the number of years the manufacturing firms had been in operation. Out of the total firms sampled, the mean number of years the manufacturing firms had been operating was 10 with a standard deviation of 9. The high standard deviation reflects the high pattern of dispersion of the values about the mean. According to the results as shown in table 4.7 most of the sampled firms had been in operation for an average of 10 years and only a few had operated for less than four years.

#### 4.3.1 Number of business locations

The average number of business locations (branches) for the sampled SMEs was computed. In the research study, the average number of branches in the manufacturing firms was 1 and the average number of departments was 3 as shown in table 4.7. This was an indication of the relative small to medium scope of operations existent in the small and medium manufacturing enterprises in Kenya. The classification criterion was in line with the mode of classification of small and medium enterprises in Kenya which is based on the number of full time employees engaged by the firms (Mandal, 2007). As shown in table 4.8, majority of the manufacturing SMEs (63%) were found to have engaged between 5 to 49 full time employees and were thus rated as small sized firms while 37% engaged 50 to 99 employees and were rated as medium sized enterprises.

**Table 4.6: Firm attributes (Years of operation, branches and departments)**

<b>Variable</b>	<b>Mean</b>	<b>Standard deviation</b>
Years of Operation	10	9
Number of business Locations	1	1
Number of departments	3	2

**Table 4.7: Number of full time employees in the firms**

<b>Employees</b>	<b>Frequency</b>	<b>Percent</b>
5-49	85	63
50-99	50	37
<b>Total</b>	<b>135</b>	<b>100</b>

#### **4.3.2 Firms' annual sales**

The researcher also aimed at establishing the amount of sales that the different manufacturing SMEs were able to realize on an annual basis. Of the firms that the researcher sampled, 56.9% had annual sales that ranged from 500,000 shillings to 5 million shillings and 20.2% had annual sales that ranged from 20 to 100 million shillings. 14.6% of the sampled firms had annual sales that ranged from 100 to 800 million shillings and 5.5% had sales in the range of 5 to 20 million shillings as shown in table 4.9. Only 2.8% of the firms that were sampled by the researcher had annual sales of more than 800 million shillings. Cumulatively, the results showed that 82.6% of the total sampled firms had annual sales that were less than 100 million shillings.

**Table 4.8: Firms annual sales**

<b>Annual sales</b>	<b>Number</b>	<b>Percent</b>
500,000- 5 million	62	56.9
5- 20 million	6	5.5
20- 100 million	22	20.2
100- 800 million	16	14.6
Over 800 million	3	2.8
<b>Total</b>	<b>109</b>	<b>100</b>

#### **4.3.3 Firms' advancement in technology**

The respondents in the sampled firms were asked to rate the level of their firms' advancement in technology. In this aspect, majority of the manufacturing firms (77.4%) were rated by the respondents as medium, 12.8% of the manufacturing firms were rated as high and 9.8% were rated as low (table 4.10). In total, 87.2% of the total respondents in the research study rated their firms' advancement in technology as either low or medium.

**Table 4.9: Firms advancement in technology**

<b>Level of advancement</b>	<b>Number</b>	<b>Percent</b>
Low	13	9.8
Medium	103	77.4
High	17	12.8
<b>Total</b>	<b>133</b>	<b>100</b>



#### 4.3.4 Team work spirit among the employees

The respondents in the sampled manufacturing firms were asked to indicate the level of team work spirit existent in the firms. Majority of the manufacturing SMEs (56%) had a team spirit level that was rated by the respondents as medium. 42.5% of the SMEs had a team spirit level that was rated as high and only 1.5% had low team spirit level as shown in table 4.11. Cumulatively, 57.5% of the total respondents rated the firms as having low to medium team spirit levels.

**Table 4.10: Team work among the employees**

<b>Team work spirit</b>	<b>Number</b>	<b>Percent</b>
Low	2	1.5%
Medium	75	56%
High	57	42.5%
<b>Total</b>	<b>134</b>	<b>100%</b>

#### 4.3.5 Investment in Research and Development

The firms rating in terms of investment in R & D was done by asking the respondents whether investment in this aspect had been carried out by the management in the manufacturing SMEs. In this regard, majority of the manufacturing SMEs (74.1%) had not undertaken any investment in Research and Development and only 25.9% had invested on the same as table 4.12 shows.

**Table 4.11: Investment in Research and Development**

<b>Investment in R &amp; D</b>	<b>Number</b>	<b>Percent</b>
Yes	35	25.9
No	100	74.1
<b>Total</b>	<b>135</b>	<b>100</b>

**a) Amounts allocated to Research and Development**

For the firms that had invested in R & D, the respondents were asked to indicate the amount in Kenya shillings that was allocated to the department annually. Out of the total firms that had invested in R & D, 74.3% had annual investments of less than one million. 11.4% of the firms had investments that ranged from 1 to 2 million shillings and 5.7% of the firms had investments of between 2 to 5 million shillings as shown in table 4.13. The research found that 85.7% of the manufacturing firms had annual investments in R & D of less than 2 million shillings per annum.

**Table 4.12: Amount invested in Research and Development**

<b>Amount (Annual)</b>	<b>Number</b>	<b>Percent</b>
Less than 1 Million	26	74.3
1 to 2 Million	4	11.4
2-5 Million	2	5.7
More than 5 Million	3	8.6
<b>Total</b>	<b>35</b>	<b>100</b>

**4.3.6 Initiators of strategic planning tool in the firms**

The sampled respondents were asked to indicate the specific stakeholders who initiated the process of adoption of the strategic planning tool in the manufacturing firms. As

shown in table 4.14, majority (76.4%) of the manufacturing firms had the strategic planning tool initiated by the firm owners and 18% had the tool initiated by the senior managers. The remaining (5.6%) of the manufacturing firms had strategic planning tool idea initiated by other stakeholders who included; suppliers, customers and the firms' employees. The cumulative total showed that 94.4% of strategic planning in the manufacturing SMEs was initiated by the business owners and top managers.

**Table 4.13: Initiators of strategic planning**

	<b>Frequency</b>	<b>Percent</b>
Owners	68	76.4
Top managers	16	18
Suppliers	2	2.2
Customers	1	1.1
Employees	2	2.2
<b>Total</b>	<b>135</b>	<b>100</b>

#### **4.4 Descriptive analysis of the research objectives**

The purpose of this study was to determine the influence of strategic planning on the performance of small and medium sized manufacturing firms in Kenya. In order to realize the objective, the researcher applied descriptive statistics to analyze the following objectives: the rate of adoption of strategic planning among the small and medium manufacturing firms, comparison of performance of the small and medium manufacturing firms that had adopted strategic planning and those that had not adopted and comparison of performance of the small and medium manufacturing firms before and after adoption of strategic planning. The researcher also analyzed the descriptive statistics for the various factors that determine adoption of strategic planning tool by the small and medium manufacturing firms. All the indicators were framed in form of

specific questions that aided the informants in making informed and accurate answers about the adoption of strategic planning in the small and medium manufacturing firms.

#### 4.4.1 Status of adoption of strategic planning

In the preliminary investigation of the status (rate) of adoption of strategic planning tool in the manufacturing firms, the respondents were asked to indicate whether their organizations had adopted strategic planning tool. In this regard, the question was put to the informants in the form that required a plain “Yes/No” response before further determination was done regarding the actual adoption of the strategic planning tool in the manufacturing firms. The actual determination of the adoption of the strategic planning tool was consequently done by ascertaining the presence of the various sub components that define effective adoption of strategic planning in any organization. In the preliminary investigation, the researcher found that 69.7% of the respondents gave the “Yes” response in regard to whether strategic planning tool had been adopted in their firms and 30.3% gave the “No” response as shown in table 4.15.

**Table 4.14: Adoption of strategic planning (Using Yes/No responses)**

	<b>Frequency</b>	<b>Percent</b>
Yes	92	69.7
No	40	30.3
<b>Total</b>	<b>132</b>	<b>100</b>

The researcher further aimed at establishing the actual rate of adoption of strategic planning in the manufacturing firms through determination of the presence or absence of the actual sub components that define strategic planning tool in any organization. This was done because there was a possibility of some informants indicating that their

organizations had adopted strategic planning whereas in the actual fact they had not. There was also some possibility that some informants would indicate that their firms had not adopted strategic planning tool whereas the sub components of the strategic planning present indicated that the firms had adopted.

In this aspect, Mintzberg (1994) in his scholarly publications argues that the key to understanding strategic planning is to understand the concept of formalization. Much of the literature on strategic planning focuses on the idea of a system or a planning process in which authors have identified the different steps involved and treated planning as a very deliberate process that culminates in an explicit outcome. In this investigative study, the researcher thus aimed at using the existence of the different sub components of the strategic planning tool to determine the actual adoption or lack of adoption of strategic planning in the sampled manufacturing firms.

The general sub components of the strategic planning tool that the researcher aimed at establishing their existence in the firms included; Vision statement, Mission statement, Value statements, Firms' objectives, Strategies through which firm mission and objectives would be achieved, Firms' goals, Organizational programs, Action plans, use of SWOT analysis, identification of Competitive Advantage in the respective firms, presence of Scorecards, determining if the firms carried out financial assessment based on historical records and also determining if the firms carried out financial assessment based on the future projections.

The actual adoption of strategic planning was determined by the presence or absence of the three sub components that define adoption of the long term planning tool. The specific sub components that define strategic planning and that the researcher used to judge whether the firms had adopted strategic planning tool were the presence of; Vision statement, Mission statement and Organizational goals. The decision by the researcher to

use this criterion is supported by Bryson (2004) who provided a simple structure for the strategic planning process by defining the ABCs of any strategic planning.

According to Bryson, A is where the organization is before any change is done, B is where the organization wants to be and C is how it would be able to get there. The vision, mission and organizational goals according to this argument help the organization to move from point A to B (adoption of strategic planning) while strategy formulation connects point A to C and strategy implementation connects B to C. On the same line, Thompson and Strickland (1992) has argued that identification of the institutions vision, mission and organizational goals is the first step in any strategic planning process and thus describes adoption stage of strategic planning process. In this aspect, the vision helps in infusing the organization with a sense of purpose and direction and the mission becomes the statement that broadly outlines why the organization exists and acts as a guiding concept. The firm's goals outline the specific benchmarks that the organization intends to achieve in the long term.

In this study, the firms that did not have a documented vision statement that clearly detailed current and future position of the firm, did not have a mission statement that clearly expressed the firm's purpose, philosophy and commitment and also lacked organizational goals that clearly defined the different targets the different firms had set in the long term were thus declared as having not adopted the strategic planning tool. Using this method, statistical calculations showed that 58% of the manufacturing firms had adopted strategic planning while 42% had not adopted the long term planning tool as shown in table 4.16.

The research findings thus clearly showed that the adoption rate of strategic planning in the small and medium manufacturing firms was low compared to the large firms and public institutions. This research outcome is corroborated by Bryson (2011) who in his

research studies found that strategic planning was widely adopted by large manufacturing organizations in the private sector and in the public sector but did not appear to have found much popularity in the SMEs. Wang *et al.* (2007) found that strategic planning is rare or non-existent in most SMEs and that most of them tend to orientate towards short term operations rather than long-term strategic issues and that decision making in these firms tend to be reactive rather than proactive. The research finding was also in line with several other past studies that found that many small and medium sized manufacturing enterprises especially in the developing countries do not engage in strategic planning (Robinson & Pearce, 1984; Sexton & Van Auken, 1985; Robinson & Pearce, 2011; Beaver, 2003).

The research study also found some significant difference between the percentage of the informants who indicated that their firms had adopted strategic planning in the “Yes/No” question (69.7%) and the firms who had actually adopted the tool as per the statistical calculations done using the three sub components that define adoption of strategic planning tool (58%). It was thus clearly evident that a good proportion of the respondents in the research study indicated that their firms had adopted strategic planning tool but the actual strategic planning sub components present in the firms showed that they had not adopted the long term planning tool.

This research finding is corroborated by Kelmar and Noy (1990) who found that most of the SMEs that claim to have strategic plans, have plans that are frequently *ad hoc* and intuitive rather than formally written, and provide little basis upon which business performance can be measured or analyzed. On the same line, O’Regan and Ghobadian (2007) in their scholarly works found that strategic planning has become an established management tool with many SMEs engaging in it formally but a good number of SMEs focus on drafting and crafting the plan and put in little effort in implementing it making the whole planning process a paper exercise. Johnson (1992) found that in many

organizations, more effort appears to go to producing the strategic plan as a finished publication than in the development of the content and as a result, adoption of the strategic plan is often ignored and thus ineffective in helping the firm adapt to major changes.

In regard to adoption of strategic planning, Norman and Thomas (2003) argued that without a clearly defined strategy, a business has no sustainable basis for creating and maintaining a competitive edge in the market place. The low adoption of the strategic planning tool in the manufacturing SMEs means that many of the firms may not achieve their full potential and their survival could also be at risk. This is because by failing to plan in the long term, many SMEs face the risk of not being able to counter the imminent threats and take advantage of the possible opportunities available in their respective fields. Balasundaram (2009) in this regard has argued that strategic planning is essential so as to take advantage of future opportunities and to forestall any threats in an organization. The primary aim of adoption of strategic planning tool is to bring a firm into balance with the external environment (threats and opportunities) and to maintain the balance over time (Sackett *et al.*, 2005).

**Table 4.15: Adoption of strategic planning (Presence of vision, mission, goals)**

	<b>Frequency</b>	<b>Percent</b>
Yes	77	58
No	55	42
<b>Total</b>	<b>132</b>	<b>100</b>



**Table 4.16: Sub components of the strategic planning tool**

<b>Variable</b>	<b>Frequency</b>	<b>Percent</b>
The firm has a documented and realistic vision statement	80	60.1
The vision statement clearly details current and future position of the organization	82	65.6
The firm has a mission statement	78	59.4
The mission statement include a clear and concise expression of the firm's purpose, philosophy & commitment	85	68.5
The firm has value statements governing the operations of the firm and its relationship with both internal and external stakeholders	88	66.6
The firm has set objectives to help it achieve its goals	105	79.8
The firm has developed strategies through which the mission and objectives will be achieved	110	83.3
The firm has set goals that are quantifiable, consistent realistic and achievable	113	85.6
Firm has action plans that include: what is to be done, when to be done and who is accountable each of actions being carried out	115	87.2
Management has carried out a SWOT analysis to gauge its Strengths, Weaknesses, Opportunities and Threats.	112	85.5
Management has identified its competitive advantage to identify what it is best at compared to its competitors	118	89.4
The management has developed a scorecard to report data on its KPI and track performance against monthly targets	94	71.8
The management carries out financial assessment based on historical records to help in its planning	120	92.3
The management carries out financial assessment based on future projections to help in its planning	111	86.7

#### **4.4.2 Performance of the firms that had adopted/ not adopted strategic planning**

The research study aimed at establishing the performance in annual growth rates of several outlined measurement variables of the manufacturing firms that had adopted strategic planning and those that had not adopted the long term planning tool. The respondents were asked to indicate the annual growth rates in percentages for several

key business parameters that measure business performance and these included; sales, profits, number of full time employees and the market share. To compare the performance of adopters and non-adopters, independent samples t-test method was used. For the four parameters that were used to measure performance, the mean level for adopters was found to be significantly higher than that for non-adopters (mean difference = -1.25,  $t = -5.012$ ,  $df = 113$ ,  $p < 0.001$ ) as shown in table 4.18.

On average, the different measurement variables (sales, profits, number of full time employees and the market share) were all growing at an average rate of 4% to 8% for the firms that had not adopted strategic planning and 11% to 15% for the firms that had adopted (table 4.19). This was clear evidence that in terms of the different parameters used to measure performance in the study, the firms that had adopted strategic planning were having higher growth rates than the firms that had not adopted. This research finding is supported by Andersen (2000) whose research study provided evidence that strategic planning (that emphasizes elements of conventional strategic management process) is associated with higher performance in all the industrial environments. Baker, Addam and Davis (1993) also reported that where strategic planning tool was adopted and effectively implemented, most of the businesses reported that it benefited them. Miller and Cardinal (1994) in their scholarly works found that organizations that are involved in strategic planning produce better results than those that do not. In addition, Lyles *et al.* (1993) in their scholarly works found that a more advanced and more detailed strategic planning results in a more substantial corporate growth.

#### **a) Growth in sales volumes for the adopters and non-adopters**

To compare the performance in sales volumes of adopters of strategic planning with non-adopters, the researcher used independent samples t-test. The study results revealed that the two groups were significantly different. As table 4.18 shows, for the firms that

had adopted strategic planning, the mean level was significantly higher than for the firms that had not adopted (mean difference = -1.212,  $t = -4.331$ ,  $df = 113$ ,  $p < 0.001$ ). On average, the annual growth rate in sales for non-adopters of strategic planning was 6% to 10% and for the adopters the annual growth rate was 11% to 15% as shown in table 4.19.

This research outcome is validated by the findings of Wijewardena *et al.* (2004) who in their study of 168 manufacturing firms in Sri Lanka found that strategic planning and control sophistication led to increased sales and concluded that the greater the sophistication of strategic planning tool, the greater the sales volumes. Earlier research studies by Oslon and Bokor (2003) had supported the case for formal strategic planning enhancing business performance through such attributes such as sales volumes though this would be context dependent as other characteristics such as entrepreneur's prior management experience or previous work history were found to be significant factors. Further research studies showed that SMEs that engage in strategic planning (compared with those ones that do not) are more likely to be those that achieve higher sales growth, higher profit margins and higher employee growth (Carland & Carland, 2003).

#### **b) Growth in profits for the adopters and non-adopters**

The research further aimed at comparing annual growth in profits for the firms that had adopted strategic planning tool with the ones that had not adopted. In order to realize the objective, independent samples t-test was used and the results revealed that the two groups were significantly different. The mean level for the adopters of strategic planning was found to be significantly higher than for the non-adopters (mean difference = -1.3932,  $t = -4.844$ ,  $df = 111$ ,  $p < 0.001$ ) as shown in tables 4.18. For the firms that had not adopted strategic planning, the average annual growth rate in

profits was 6% to 10% and for the ones that had adopted, the average growth rate was 11% to 15% as shown in table 4.19.

It was thus clearly evident that adoption of strategic planning tool resulted to an increase in the annual growth rate of profits in the manufacturing firms. The research outcome concurs with the research findings by Fubara (1986) who observed that companies that engaged in strategic planning tool experienced higher growth in profits compared to the ones that did not. Karger and Parnell (1996) later found that effective adoption and implementation of strategic planning in organizations leads to improved business financial performance measured in profits. According to this research finding, improved financial performance in firms is because adoption of strategic planning ensures that the budget allocations are based on sound and well thought out plans.

Ackelsberg and Arlow (1985) in their research works found that strategic planning enterprises achieve better financial and non-financial results than the firms that do not have the strategic planning tool. In support of these findings, Venkatraman and Ramanujam (1987) found in their scholarly works that firms that engaged in strategic planning had better financial and non-financial performances compared to the firms that had not engaged on the same. The research finding does not support Robinson and Pearce (1984) argument that formal strategic planning is a conceptual activity suited solely for large firms and therefore has no effect on financial performance of small firms as it was evident that even manufacturing SMEs reported improved growth of profits.

### c) Growth in full-time employees for the adopters and non-adopters

To compare the performance in annual growth rate of full time employees for the adopters and non-adopters of the strategic planning tool, independent samples t-test was again used. The mean level of employees' growth rate for the adopters of strategic planning was found to be significantly higher than for non-adopters (mean difference = -1.2593,  $t = -4.540$ ,  $df = 108$ ,  $p < 0.001$ ) as shown in table 4.18. The average annual growth rate of the number of full time employees for the firms that had not adopted strategic planning tool was 0% to 5% and for the firms that had adopted, the annual growth rate was 11% to 15% (table 4.19). The results thus showed that adoption of strategic planning enables the SMEs to realize higher growth rate of full time employees.

This research finding is supported by Mesu *et al.* (2013) who found that visionary leadership coupled with clear communication of the direction that the firm intends to take helps drive employees commitment and consequently growth in organizations. Viljoen (1995) argue that strategic planning assists in providing direction so that organizational members know where the organization is headed and where they can concentrate their efforts. Similar research findings were reported by Berman *et al.* (1997), Bracker *et al.* (1988), Carland and Carland, (2003) and Gibson and Cassar (2005) who argued that once small and medium sized businesses begin to practice strategic planning, they are likely to be more innovative, achieve higher sales growth, higher ROA, higher profit margins and higher employee growth as well as gain some competitive advantage. When the employees are aware of the vision of their firms and where to best utilize their capabilities, they are bound to get retained in the respective firms for longer periods.

#### **d) Growth in market share for the adopters and non-adopters**

In order to compare the performance in annual growth rates of the market share for the manufacturing firms that had adopted strategic planning tool with the ones that had not, the researcher used independent samples t-test and the results as shown in table 4.18 revealed that the two groups were significantly different. The mean level for adopters of strategic planning was higher than that of non-adopters (mean difference = -1.187,  $t = -4.354$ ,  $df = 95$ ,  $p < 0.001$ ). The average annual growth rate of the market share for the non-adopters was 6% to 10% and for the adopters, the rate was 11% to 15% as shown in table 4.19. It was thus clearly evident that adoption of strategic planning in the manufacturing firms resulted to enhanced growth in the market share of the different manufacturing firms.

This research finding is supported by Bryson (1989), Stoner (1994) and Viljoen (1995) who found that strategic planning assists organizations to develop a comparative advantage over competitors and create a sustainable competitive advantage thereby increasing the market share. Ohmae (1983) also contended that strategic planning enables a firm to gain as effectively as possible a sustainable edge over its competitors and in the process increasing the market share. Thompson *et al.* (2007) postulated that the essence of good strategy making is to build a market position strong enough and an organization capable to produce successful performance despite unforeseeable events, potential competition and internal difficulties.

**Table 4.17: Independent samples statistics for adopters and non-adopters**

	Adoption	N	Mean	Std.	Std Error	t	df	Sig (2 tailed test)
<b>Performance</b>	No	42	5.7282	1.24668	0.19237	5.012	113	0.000
	Yes	73	6.9737	1.30348	0.15256	5.073	88.79	0.000
<b>Growth in Sales</b>	No	42	5.9524	1.46425	0.22594	4.331	113	0.000
	Yes	73	7.1644	1.43385	0.16782	4.306	84.14	0.000
<b>Growth in Profit</b>	No	41	5.7317	1.22524	0.19135	4.844	111	0.000
	Yes	72	7.125	1.59168	0.18758	-5.2	101.18	0.000
<b>Growth in Employees</b>	No	39	5.4872	1.44863	0.23197	-4.54	108	0.000
	Yes	71	6.7465	1.35981	0.16138	4.456	74.25	0.000
<b>Growth in Market share</b>	No	32	5.875	1.36192	0.24076	4.354	95	0.000
	Yes	65	7.0615	1.21033	0.15012	4.182	55.71	0.000

**Table 4.18: Growth trends for adopters and non-adopters.**

Measure	Non-adopters	Adopters
<b>Sales</b>	6% – 10%	11 – 15%
<b>Profits</b>	6% - 10%	11 – 15%
<b>Employees</b>	0% - 5%	11 – 15%
<b>Market share</b>	6% – 10%	11 – 15%
<b>Mean</b>	<b>4% - 8%</b>	<b>11 – 15%</b>

#### 4.4.3 Performance of various attributes of the manufacturing firms

In order to determine the change in growth rates of different manufacturing firms before and after adoption of the strategic planning tool, the respondents were asked to indicate the annual growth rates of several firm attributes that included; sales, profits, growth in the number of full time employees and the firms' market share. The growth rates were

categorized in two periods; period before strategic planning and period after strategic planning and for each attribute the different growth rates were outlined.

**a) Performance of the firms before and after adoption of strategic planning**

The respondents who had not yet adopted strategic planning tool in their firms were requested to fill their current growth rates in the “before” column to assist in the comparison of the performance of those firms that had adopted strategic planning tool and those that had not adopted. The respondents were asked to rate the growth trends of the different parameters before and after adoption of strategic planning with the aim of determining if the strategic planning tool had any influence in the growth of several business attributes such as sales volumes, profit levels, employees growth rates and the market share.

To compare the performance of the manufacturing SMEs, before and after adoption of strategic planning, paired t-test was used. As shown in table 4.20, the average mean in sales, profits, employees’ growth and the market share for the period after adoption of strategic planning was found to be significantly higher than for the period before (Mean difference = 1.67,  $t = -8.505$ ,  $df = 63$ ,  $p < 0.001$ ). As shown in table 4.21, the various measurement parameters (sales, profits, employees, market share) were growing at annual average of 3% to 5% before adoption and the results revealed that this average growth rate changed to 12% to 17% after adoption of strategic planning. It was thus evident that there was an improvement in the annual growth of the manufacturing SMEs after adoption of the strategic planning tool all measured in terms of sales, profits, employees’ growth rates and the market share.

These results are consistent with previous research studies that investigated the effect of adoption of strategic planning tool on firm performance. Greenley (1986), Miller and Cardinal (1994) and David (1997) found that firms record improved performance once



they were able to effectively adopt and implement strategic planning tool. Norman and Thomas (2006) found that without a clearly defined strategy, a business has no sustainable basis for creating and maintaining a competitive edge in the market place. Lerner and Almor (2002) contended that planning lays the groundwork for developing the strategic capabilities needed for high performance in organizations. In a longitudinal analysis study, Sexton and Van Auken (1985) found that the survival rates of SMEs that had adopted strategic planning tool were higher than those one that had not adopted.

#### **i. Growth in sales before and after adoption of strategic planning**

In order to compare the performance in growth of sales volumes for the period before and after adoption, the researcher used the paired t-test. As shown in table 4.20, the rate of growth in sales after adoption of strategic planning was found to be significantly higher than for the period before adoption (mean difference = 1.61,  $t = -7.168$ ,  $df = 63$ ,  $p < 0.001$ ). The results also revealed that sales in the manufacturing SMEs had been growing at an annual average rate of 6% to 10% before adoption of strategic planning and after adoption, the growth rate improved to an average of between 16% and 20% as shown in table 4.21.

It was thus clearly evident from the research findings that adoption of strategic planning had a positive impact on the level of growth in sales volumes in the manufacturing firms. This implies that planning in the long term aided the firms to put in appropriate measures that catalyzed the growth of sales volumes in the manufacturing firms. This research finding is supported by Gibson and Cassar (2005) who argued that small and medium sized businesses that strategically plan are more likely to be innovative and achieve higher sales growth, higher ROA, higher profit margins, higher employee growth and above all gain a competitive advantage. Rue and Ibrahim (1998) in their research works found a significant difference in the rate of sales growth in small and

medium businesses that had adopted strategic planning as opposed to the ones that had not adopted.

**ii. Growth in profits before and after adoption of strategic planning**

To compare the performance in the firms' growth in profits for the period before and after adoption of strategic planning, paired t-test was used and the results revealed that the rate of growth in profits for the period after adoption of strategic planning was higher than for the period before (mean difference = 1.85,  $t = -9.350$ ,  $df = 60$ ,  $p < 0.001$ ) as shown in table 4.20. After analysis of data for the two respective periods, the study revealed that the firms' profits had been growing at an average rate of 0% to 5% before adoption of strategic planning and then improved to an average of 11% to 15% after adoption as shown in table 4.21. The research results thus clearly revealed that long term planning in form of strategic planning in the manufacturing firms had a positive effect on the firms' profits. From the study findings it was clearly evident that the profits on average tripled after the adoption of strategic planning tool in the manufacturing firms. This thus implied that adoption of strategic planning tool in the SMEs resulted to an improvement of the work processes in the different departments which eventually resulted to the improvement in the profit levels.

This research finding is supported by Davis (2004) who tested the relationship between strategic planning and financial performance with affirmative results that the amount of strategic planning an organization conducts positively affects its financial performance measured in terms of profit levels. Boyd (1991) based on the results of his meta-analysis of 21 studies published between 1970 and 1988 that included 2,496 organizations concluded that there were modest positive correlations between strategic planning and financial performance. Carland and Carland (2003) in their research studies found that firms that engage in strategic planning have better financial performance than the ones

which do not engage. This according to Pearce and Robinson (2011) is because strategic planning is an organizational process that is vision driven and helps in developing the future of the organization.

### **iii. Employees' growth rate before and after adoption of strategic planning**

In order to compare the growth rate of the number of full time employees in the manufacturing firms for the periods before and after adoption, paired t- test method was again used. As table 4.20 shows, the results revealed that the full time employees' growth rate for the period after adoption was significantly higher than for the period before (mean difference = 1.47,  $t = -7.346$ ,  $df = 62$ ,  $p < 0.001$ ). Before adoption, the growth rate of the number of full time employees in the manufacturing firms was 0% to 5% per annum and this then increased to between 11% and 15% after adoption of strategic planning as shown in table 4.21. This thus clearly shows that the average growth rate of the number of full time employees in the manufacturing SMEs increased after adoption of strategic planning tool. This implies that adoption of strategic planning tool in the manufacturing firms increased the firms' capacities to an extent of necessitating an increase in the number of full time employees as the initial number was not enough to carry out the additional obligations that were realized after the adoption of strategic planning tool.

This research finding is corroborated by the works of several scholars such as Bracker *et al.* (1988), Berman *et al.* (1997) and Carland & Carland (2003) who in their scholarly works argued that once small and medium businesses begin to practice strategic planning, they are likely to be more innovative, achieve higher employee growth as well as gain some competitive advantage. Mesu *et al.* (2013) found that visionary leadership brings clear communication of direction which creates and drives employees' commitment and eventual growth in their numbers in many organizations. Lyles *et al.*

(1993) in this regard have also stated that a more advanced and detailed strategic planning results in a more substantial corporate and employees' growth.

#### **iv. Growth in market share before and after adoption of strategic planning**

To compare the performance in the market share for the period before and after adoption of strategic planning, the researcher used paired t-test. As tabulated in table 4.20, the research results revealed that the average rate of growth in market share for the period after adoption of strategic planning was significantly higher than for the period before (mean difference = 1.53,  $t = -8.141$ ,  $df = 56$ ,  $p < 0.001$ ). The study also found that the annual growth rate in the market share was 6% to 10% before adoption and this increased to an average of 11% to 15% after adoption of strategic planning tool as shown in table 4.21.

The results thus revealed that adoption of strategic planning tool in the manufacturing firms increased the customers' awareness of the existence of the manufacturing firms' products in the market and thus the increased market share. It was evident from the research finding that adoption of the strategic planning tool enabled the firms to plan in the long term in terms of reaching the consumers using the different marketing tools to increase the market share. The research finding is supported by Beaver and Prince (2002) and Upton *et al.* (2001) who found that strategic planning is more common in organizations that record enhanced financial and non-financial performances and helps organizations achieve increased market share that propels international growth.

In regard to the market share of the different products, O'Regan and Ghobadian, (2007) stated that the purpose of strategic planning is to enable a business gain as efficiently as possible a sustainable edge over its competitors in the respective market. A study by Oslon and Bokor (2003) on 442 small start-up firms supported the case of formal strategic planning enhancing business performance and consequently leading to

increased market share in the respective markets although this was context dependent where the characteristics of the entrepreneur; prior management and experience were found to be significant.

**Table 4.19: Paired samples statistics for before and after adoption**

	Mean	N	Std dev	Std error mean	t	df	Sig (2 tailed test)
Sales before adoption (%)	5.67	64	1.672	0.209	-	63	0.000
Sales after adoption (%)	7.28	64	1.419	0.177	7.168		0.000
Profits before adoption (%)	5.49	61	1.577	0.202	-	60	0.000
Profits after adoption (%)	7.34	61	1.413	0.181	9.35		0.000
Employees before adoption (%)	5.32	63	1.564	0.197	-	62	0.000
Employees after adoption (%)	6.79	63	1.358	0.171	7.346		0.000
Market share before adoption (%)	5.54	57	1.337	0.177	-	56	0.000
Market share after adoption (%)	7.07	57	1.178	0.156	8.141		0.000
Before (All in %)	5.40	64	1.348	0.168	-	63	0.000
After (All in %)	7.07	64	1.287	0.161	8.505		0.000

**Table 4.20: Growth trends before and after adoption of strategic planning.**

Measure	Before	After
Sales	6% – 10%	16 – 20%
Profits	0% - 5%	11 – 15%
Employees	0% - 5%	11 – 15%
Market share	6% – 10%	11 – 15%
<b>Mean</b>	<b>3% - 5%</b>	<b>12 – 17%</b>

## **b) Performance of various firm attributes after adoption of strategic planning**

The informants were asked to indicate their responses in regard to several key attributes that affect firm operations and which would be in a position to show the actual influence of adoption of strategic planning tool in the manufacturing firms. The respondents were asked to give their responses about the following firm attributes: the profits trends, trend in the amount of taxes paid to the government, adequacy of cash to meet the different obligations, firms' long term financial planning capabilities, trends of ROA/ROI/ROE, degree of customer satisfaction with the products, retention of the firms employees, trend of the sales volumes, generation of first class products, trend of employees' productivity, amount of customer complaints and service efficiency in addressing customer issues.

### **i. Firm's profits after adoption of strategic planning**

In regard to the trend of the profit levels, majority (78%) of the respondents agreed that since the adoption of strategic planning the firm's profits had been increasing steadily over the years implying that use of the long term planning tool had a positive effect on the firm's margins. Only 5% of the respondents disagreed with the proposition that strategic planning resulted to an increase in the amount of profits and 17% gave a neutral response as table 4.22 shows. It is thus evident that adoption of strategic planning had a positive impact on the profit levels of the manufacturing firms. In support of these findings, Venkatraman and Ramanujam (1987) found in their scholarly works that firms that engaged in strategic planning had better financial and non-financial performances compared to the firms that had not engaged on the same. Ackelsberg and Arlow (1985) in their research works found that strategic planning enterprises achieve better financial and non-financial results than the firms that do not have the strategic planning tool.

## **ii. Taxes paid to the governments after the adoption of strategic planning**

As pertains to the taxes that the firms were paying to the national and county governments, 76% of the informants disagreed with the proposition that the amount of taxes paid had been decreasing steadily over the years. Only 7% of the respondents agreed to the proposition that the amount of taxes had been decreasing in their firms while 17% gave a neutral response as shown in table 4.22. The high percentage of the respondents who disagreed with the proposition that the taxes paid to the government had been decreasing clearly implies that the profit margins that the manufacturing firms earned had been rising since the adoption of strategic planning. In most countries, the amount of taxes paid is proportional to the profits that are realized by the organizations.

The results of enhanced firm performances resulting to increased tax payments is supported by Kargar and Parnell (1996) who in their research studies concluded that strategic planning is a source of competitive advantage and that the sector in which a firm operates significantly explains the comparative advantage of the industry. This according to Andersen (2000) signifies that strategic planning tool has a positive effect on the organizational performance. It is the enhanced organizational performance in terms of increased profit levels that led most SMEs to report increased tax payments to the county and national governments.

## **iii. Amount of cash available in the firms after adoption of strategic planning**

The researcher aimed at establishing the trend of the amount of cash available to the manufacturing SMEs after the adoption of strategic planning tool in the firms. According to the research findings, 55% of the interviewees responded that the manufacturing firms had enough cash to meet their obligations. 36% of the informants in the study disagreed to the proposition that their firms had enough cash to meet their different obligations and 9% gave a neutral response as shown in table 4.22.



It was thus evident that though a big percentage of the respondents had reported that their profits had been increasing, the percentage that reported increasing amount of cash available after adoption of strategic planning was relatively lower. This could either mean that the respondents' firms used the realized profits for other purposes thus reducing the amount of cash available or that the respondents decided to answer the question with a certain degree of inaccuracy. The issue of cash being a sensitive area in most firms, it was possible that a higher percentage could have been having enough cash in their firms but preferred not to disclose the information for fear of the unknown.

#### **iv. Long term financial planning capabilities after adoption of strategic planning**

The informants were asked to indicate if long term financial planning capabilities in their respective SMEs had deteriorated after adoption of the strategic planning tool. Of the total respondents 61% disagreed with the proposition that long term financial planning had deteriorated and 14% agreed to the proposition. 25% of the respondents gave a neutral response in regard to long term financing capabilities of their respective firms as shown in table 4.22. The research findings thus showed that adoption of strategic planning impacted positively on the manufacturing firms' long term financial planning capabilities. Considering the trend of the other performance indicators such as profits, annual sales, trends of ROA, ROE and ROI it was evident that long term financial planning in most of the manufacturing SMEs improved after the adoption of strategic planning tool.

The finding corroborated with earlier research outcomes of Ackelsberg and Arlow (1985) who reported that the enterprises that plan strategically achieve better financial results due to enhanced long term financing capabilities. This according to Pearce and Robinson (2008) is because strategic planning is an organizational process that is vision

driven and helps in laying the future financial plans that can ensure financial success. In their scholarly works, Kargar and Parnell (1996) found that without financial success, virtually no business survives for long and the use of strategic planning tool leads to improved long term financial planning performance. This thus supports the research findings by Carland and Carland (2003) who found that firms that engage in strategic planning have better financial and non-financial performances than those ones that do not. The good financial and non-financial performances in many firms were as a result of the firms having enhanced long term financial planning capabilities.

**v. Performance of ROA/ROI/ROE after adoption of strategic planning**

In regard to Return on Assets (ROA) majority of the respondents (66%) agreed with the proposition that since the adoption of strategic planning in the manufacturing SMEs, ROA had been steadily increasing and 10% disagreed with the proposition. 24% of the respondents gave a neutral response in regard to the ROA. Pertaining to Returns on Investment (ROI), 63% of the respondents agreed with the proposition that ROI had been increasing steadily over the years and 14% disagreed while 23% of the informants gave a neutral response. 61% of the respondents disagreed with the proposition that Returns on Equity (ROE) had been decreasing over the years and 14% agreed with the proposition with 25% giving a neutral response as shown in table 4.22. According to the findings of this study, all aspects of ROA, ROI and ROE increased steadily over the years after the adoption of strategic planning in the manufacturing SMEs. It can thus be concluded that adoption of strategic planning in the firms aided the firms' management to implement measures that resulted in the increment of ROA, ROI and ROE.

These findings are similar to those of Baker and Leidecker (2001) who found that business planners in the SMEs that had adopted strategic planning tool were shown to be more successful when measured by ROA, ROI and ROE as compared to those who had

not adopted the tool. Gibson and Cassar (2005) argue that small and medium businesses that strategically plan are more likely to be innovative achieve higher ROA, ROI and ROE, higher profit margins and higher employee growth and above all gain a competitive advantage. In addition, past studies of manufacturing firms (Ansoff *et al.*, 2001; Eastland & McDonald, 2002; Herold, 2001; Karger & Malik, 2000; Thune & House, 1999) reported that adoption of strategic planning results in superior firm performance measured in generally accepted financial measures such as ROA, ROI and ROE.

**vi. Customers' satisfaction with products after adoption of strategic planning**

The research also aimed at establishing the customers' degree of satisfaction with the different products from the manufacturing SMEs after adoption of strategic planning tool. Asked about the degree of satisfaction with the different firm's products, 91% of the respondents agreed to the proposition that customers were satisfied with the different products after adoption of strategic planning tool and 3% disagreed with the proposition as table 4.22 shows. Of all the respondents interviewed, 6% gave a neutral response. The study thus found that adoption of strategic planning in the manufacturing SMEs helped in meeting the various customers' needs and hence the high rate of customer satisfaction cited by the respondents.

In support of this finding, Grant (2008) argues that knowing what customers want and how a firm can be able to survive competition are prerequisites for success and SMEs can use strategic planning tool to develop strategies and gain competitive advantage in their respective segments. The competitive advantage can be achieved through ensuring high degree of customer satisfaction that in return leads to repeat purchases. On the same line, Wijewardena *et al.* (2004) carried a study of 168 manufacturing firms in Sri Lanka

and found that adoption and implementation of strategic planning led to increase in sales as a result of increased degree of customer satisfaction with the sampled firms' products.

**vii. Retention of employees after adoption of strategic planning**

The study further aimed at determining the retention rate of employees in the manufacturing firms after adoption of strategic planning tool in the firms. In this regard, 81% of the informants agreed that strategic planning assisted in retention of skilled and competent employees in the manufacturing SMEs and 8% disagreed. 11% of the informants gave a neutral response in regard to employee retention as shown in table 4.22. The researcher thus found that majority of the employees working in the firms preferred to remain in their working stations for longer periods when the firms were able to plan in the long term as a result of adoption of the strategic planning tool. The longer retention periods would consequently ensure effective adoption, formulation and implementation of strategic planning tool in the manufacturing SMEs.

This research finding is supported by De-Krujif (2011) who reported that strategic planning tool helps in anticipating and deciding the future of an organization, maintaining a competent work-force, controlling checks, controlling programs against plans, leading employees towards a common vision and coordinating individual efforts to group goals. Lyles *et al.* (1993) have on the same line stated that a more advanced and detailed strategic planning in organizations results in a more substantial corporate and employees' growth.

**viii. Sales volumes after adoption of strategic planning**

In regard to the sales volumes in the manufacturing firms, 75% of the informants agreed that sales volumes in the manufacturing firms had been increasing over the years after the adoption of strategic planning as shown in table 4.22. Of the sampled respondents,

16% gave a neutral response and 9% disagreed with the proposition. The deduction from this finding is that long term planning in the form of strategic planning aided in developing the marketing tools and the firms were able to properly utilize their sales and marketing capabilities. The manufacturing firms were also able to capitalize on their strengths and work on their weaknesses well in advance to be able to beat off the prevailing competition hence the growth in sales volumes.

This research finding is supported by several scholars (Bracker *et al.*, 1988; Berman *et al.*, 1997; Carland & Carland, 2003; Gibson & Cassar, 2005) who argued that once small and medium businesses begin to practice strategic planning, they are likely to be more innovative, achieve higher sales growth, higher ROA, higher profit margins and higher employee growth as well as gain some competitive advantage. The study by Berman *et al.* (1997) to examine the nature of business planning activities undertaken by small firms suggested that a relationship exists between enhanced sales growth and the adoption and eventual implementation of business planning techniques such as strategic planning tool.

#### **ix. Generation of first class products after adoption of strategic planning**

In this aspect, the researcher found that majority (75%) of the informants were in agreement that generation of first class (prime) products had been increasing steadily in the different SMEs since adoption of strategic planning. Another 14% of the informants disagreed with the proposition that the generation had been increasing steadily and 11% gave a neutral response as table 4.22 shows. The research thus found that most of the firms reported a steady increase in the generation of first class (prime) products after the adoption of strategic planning tool.

The research outcome was an indication that employees in the firms were better equipped with improved production and quality assurance skills that were able to reduce

defects in the finished products. This outcome corresponds to the earlier research findings by (Stewart, 2002; Beaver & Prince, 2002; Gibbons and O'Connor, 2005) who found that SMEs engaging in strategic planning are likely to be more innovative, have more newly patented and quality products that employ new processes and management technologies and that aid in achieving international growth.

**x. Employees' productivity levels after adoption of strategic planning**

In the research study, 76% of the respondents agreed to the proposition that adoption of strategic planning aided in increasing the employees' productivity levels in the manufacturing firms and 6% disagreed. As shown in table 4.22, 18% of the respondents gave a neutral response in this regard. According to the results, it was evident that the productivity levels increased after the adoption of the strategic planning tool in the manufacturing firms. One of the probable causes for the increment in the productivity levels was the longer retention periods of the employees in the manufacturing firms which enabled them to have a better mastery of their jobs thus enabling them to generate more output per given time duration.

In this regard, Gibson and Cassar (2005) have argued that small and medium businesses that strategically plan are likely to be more innovative, achieve higher sales growth, higher returns on assets, increase profit margins, productivity levels as well as realize higher employee growth. The research outcome is also supported by earlier research findings that found that strategic planning is more common in better performing SMEs which as a result enables them achieve high employee satisfaction, high productivity levels, high profits, increased sales, high ROA, high innovation levels, high quality products, improved-patented products, enhanced processes, high technological levels, enhanced management practices as well as increased international growth rates (Gibbons & O'Connor, 2005).

**xi. Customer complaints after adoption of strategic planning**

When asked whether the number of customer complaints had been increasing steadily over the years, 78% of the informants disagreed and 9% agreed to the proposition. Of the total respondents, 13% gave a neutral response as shown in table 4.22. This implies that the quality of the products and services that the manufacturing firms produced after adoption of strategic planning tool improved to a point of appropriately satisfying the various customers' requirements. Reduction in the number of customer complaints shows that strategic planning tool assisted the managers in the manufacturing SMEs to identify the various customer requirements which were then appropriately fulfilled to the extent that the final product satisfied the customers' needs. The premise in this regard is that capable workers who are well trained provide better services, need less supervision and are much more likely to stay on their jobs for longer periods. As a result, customers are likely to be more satisfied with the firm's products (Harvard business Review, 1994).

**xii. Service efficiency levels after adoption of strategic planning**

The study sought to determine whether service efficiency in addressing customers' issues had changed after the adoption of the strategic planning tool. Majority (88%) of the respondents agreed that service efficiency in addressing customer issues had improved after adoption of the long term planning tool and 2% disagreed with the proposition as shown in table 4.22. 10% of the respondents gave a neutral response in regard to the service efficiency. This implies that upon adoption of strategic planning in the manufacturing SMEs, most of the managers were able to put in place measures that ensured that the various customer issues were addressed and this in turn increased the firms' service efficiency in addressing the various customers' needs. This finding corroborates with Thompson and Strickland (2003) who argued that a company's strategy consists of competitive efforts and business approaches that managers employ

to please customers, compete successfully and achieve organizational objectives. Strategic planning as a managerial process helps develop and maintain a viable fit between the organizational objectives and its changing market opportunities (Kotler, 1991).

**xiii. Location of the firms' products after adoption of strategic planning**

The respondents in the study were asked to indicate if their customers could not locate the firms' products easily in the market after adoption of strategic planning in the manufacturing firms. As table 4.22 shows, most of the respondents (82%) disagreed with the proposition that customers could not locate the firms' products easily. 10% of the informants agreed to the proposition and 8% gave a neutral response. This research outcome shows that the managers in the different manufacturing firms were able to establish efficient distribution channels such that the different customers were able to easily access the firms' products. This then implies that strategic planning tool when appropriately applied in the manufacturing firms enables customers to locate the products with ease in the respective distribution outlets.



**Table 4.21: Effects of adoption of strategic planning tool in the SMEs**

	<b>Strongly Agree (%)</b>	<b>Agree (%)</b>	<b>Neutral (%)</b>	<b>Disagree (%)</b>	<b>Strongly Disagree (%)</b>	<b>Mean</b>	<b>Std. dev</b>
The firm's profits have increased significantly over the years	27	51	17	4	1	2.0	0.8
The amount of taxes paid has been decreasing steadily over the years	1	6	17	36	40	3.9	1.0
Our firm has enough cash to meet its obligations	20	35	9	28	9	3.0	1.1
Long term financial planning capabilities has deteriorated	5	9	25	35	26	3.4	1.1
ROA has been increased steadily	10	56	24	8	2	2.4	0.9
ROI has been increased steadily	10	53	23	12	2	2.4	0.9
ROE has been decreased steadily	5	19	25	35	16	3.4	1.1
Our customers are quite satisfied with our products	48	43	6	2	1	1.6	0.7
The company is able to retain skilled and competent employees	27	54	11	7	1	2.0	0.9
Sales volumes have been increasing steadily	20	55	16	9	1	2.2	0.9
Generation of first class products has been increasing steadily	23	52	11	13	1	2.3	0.9
Employees' productivity has been increasing gradually	13	63	18	4	2	2.2	0.8
Customer complaints have increased significantly	3	6	13	37	41	4.1	1.0
Service efficiency in addressing customers issues has improved	24	64	10	2	0	1.92	.647
Customers cannot easily locate the firm's products	3	7	8	38	44	4.13	1.021

#### **4.4.4 Factors that determine adoption of strategic planning in the SMEs**

The respondents were asked to indicate by use of Likert-scale the degree to which some outlined factors determine effective adoption of strategic planning in the manufacturing firms. The researcher outlined eight factors that had the possibility of influencing effective adoption of strategic planning and the respondents were to rate the factors in regard to the degree of importance. The most important factor was given a rating of 5 while the least important factor was given a rating of 1. The factors that the researcher outlined included; availability of key resources such as manpower, machines, materials and methods, organizational structure existent in the firms, leadership style adopted by the management, organizational culture dominant in the firms, globalization of markets, reward systems applicable in the firms, degree of innovativeness within the firms and existence of policies and regulations put in place by the government.

SPSS tool version 21 was then used to calculate the mean and the standard deviation of each variable and the percentage for each factor was determined. The median values that were used to rate the responses in regard to the different factors are shown in table 4.23. The importance of understanding the factors that affect effective adoption of strategic planning in organizations is that this is bound to allow “more careful and accurate encouragement” to other firms on how some barriers can be overcome thereby increasing the overall levels of strategic planning in the SMEs (Robinson & Pearce, 1984). It would thus enable enhanced adoption of the strategic planning tool in the small and medium sized firms with greater ease, SMEs having known where possible pitfalls might exist.

**Table 4.22: Ratings of the Extent of Importance**

<b>Extent of Importance</b>	<b>Median score range</b>
Most important	4.5 – 5.0
More important	3.5 – 4.49
Important	2.5 – 3.49
Less important	1.5 – 2.49
Least important	1.0 – 1.49

**a) Availability of key resources**

In regard to the factors that determine effective adoption of strategic planning, 60% of the respondents rated the availability of key resources such as manpower, materials, machines and methods as most important, 22% as more important, 9% as important, 5% as less important and 3% as least important as shown in table 4.24. This implies that the greater majority of the respondents (91%) considered this factor as important in the effective adoption of strategic planning in the manufacturing firms. As depicted in table 4.23, the mean value for this factor was 4.30 which correspond to a “more important” rating implying that the factor is a key determinant of the adoption of strategic planning tool in the manufacturing firms. Effective adoption of strategic planning in many organizations world over would only be possible when the required resources are available in the right quantities and at the right time.

In regard to availability of resources and adoption of strategic planning in SMEs, Pushpakumari and Wijewickrama (2008) in their scholarly works argued that SMEs often do not have the means to ensure continuous and successful adoption and implementation of strategic planning as they maintain a lower level of resources, have limited access to human, financial and customer base as well as a less developed management capacity. Further studies by Pearce and Robinson (2008) showed that

SMEs' operators do not actively engage in strategic planning due to several constraints such as lack of key resources that include manpower, machines and materials, lack of time, lack of the necessary expertise, and the eagerness to centralize their decision making processes. These findings are also in tandem with the findings by Lee (2008) who found that while large firms have over the last decades been developing the capabilities (resources) needed to achieve their bottom lines, SMEs often lack the knowledge and human resource skills to make the desired change in their organizations such as adoption of strategic planning.

#### **b) Organizational structure**

The respondents were asked to indicate the importance of organizational structure in the adoption of strategic planning in the manufacturing SMEs. In regard to organizational structure, 36% of the informants rated the factor as most important, 32% as more important and 23% rated it as important. Of the total respondents 6% and 3% respectively rated organizational structure as less important and least important respectively as shown in table 4.24. In total, 91% of the respondents rated organizational structure as important in the adoption of strategic planning in manufacturing firms. As shown in table 4.23, the mean for organizational structure was 3.91 and this means that the organizational structure existent in the firm is "more important" in the adoption of strategic planning tool in the manufacturing SMEs.

The critical role of organizational structure in the adoption of strategic planning tool in the SMEs was found by Pushpakumali and Wijewickrama (2008) who argued that many of the SMEs often do not have the means to ensure continuous and successful adoption of strategic planning tool because they maintain less developed management capacity and administrative systems (organizational structure) and also have a limited access to human, financial and customer base. The research outcome was also supported by the

earlier scholarly findings by Karagozoglu & Lindell (1998) who found that unlike large firms, most SMEs normally lack a very well developed administration system (organizational structure) and also maintain lower level of resources, limited access to human capital and thus the reason why use of strategic planning instrument is often missing in most SMEs.

### **c) Leadership style**

The study aimed at establishing the influence of leadership style adopted in the SMEs on the adoption of strategic planning in the manufacturing firms. In regard to the leadership style used by the management, 33% of the respondents in the study rated it as most important, 35% as more important and 21% as important. In the research study, 8% of the respondents rated the leadership style as less important and 3% as least important as table 4.24 shows. Cumulatively, 89% of the informants who answered the question indicated that the leadership style adopted by the management was an important factor in adoption of strategic planning. The mean for this factor was 3.88 and this means that most of the respondents on average rated this factor as “more important” as table 4.23 shows. This thus suggests that the leadership style adopted by the management is a key determinant in the adoption of strategic planning tool in the manufacturing firms. The owners and managers in the SMEs should thus aim at making use of the leadership style that can motivate their employees to effectively adopt strategic planning in their firms.

This research outcome is supported by Cater and Pucko (2009) who found that lack of leadership participation among the SMEs is a key cause of firms failing to plan in the long term as well as failed strategic plans. According to the strategy-related work of Thompson and Strickland (1987), strategic planning has no value in and itself but takes on value as committed managers infuse it with energy. Birnbaum (2004) suggests that leadership focus is the key ingredient to good planning and is the very thing that makes

planning strategic. Wilkinson and Mellahi (2004) found that the characteristics of key decision makers in an organization influence strategy and subsequent firm performance.

#### **d) Organizational culture**

The respondents were asked to rate the influence of organizational culture on the adoption of strategic planning in the firms. Organizational culture dominant in the firm was rated by the respondents as more important by the majority (31%) and most important by 25% of the respondents. 23% of the respondents rated organizational structure as important, 15% as less important and 6% as least important as shown in table 4.24. Of the total respondents, 79% rated organizational culture as important in the adoption of strategic planning. The mean for this factor as shown in table 4.23 was 3.54 which is an indicator that majority of the informants rated organizational culture as “more important” in regard to the adoption of strategic planning in the manufacturing firms.

According to this research outcome, organizational culture is an important factor in determining the adoption of strategic planning in the manufacturing firms. Organizational culture in many SMEs tends to orientate towards short-term operations rather than long-term strategic issues and decision making tends to be reactive rather than proactive (Gaskil Van Auken & Manning, 1993, Stonehouse & Pemberton, 2002, Mazzarol, 2004). This then partially explains why the adoption of strategic planning in most SMES is low compared to the large firms.

Mc Namara (2005) in this regard argued that the way a strategic plan is developed depends on the nature of the organizational leadership, culture of the organization, firm complexity, size of the organization and expertise of the planners. Jones and Goldberg (1982) found that strategic planning is very important but adoption and formulation of

plans face a number of challenges such as organizational culture, politics and resistance to change in many organizations.

**e) Globalization of markets**

Majority of the respondents (26%) in this study rated globalization of markets as an important factor in the adoption of strategic planning tool in the SMEs. As shown in table 4.24, 23% of the respondents rated globalization of markets as most important and another 23% as more important. 27% of the respondents rated the factors as important and the factor was rated as less important by 11% and least important by 16% of the respondents. Cumulatively, 72% of the respondents rated globalization of markets as important in the adoption of strategic planning in the manufacturing SMEs. As shown in table 4.23, the mean for this factor was 3.26 and this corresponds to an “important” determinant in the adoption of strategic planning in the manufacturing SMEs. It was clearly evident that the bigger majority of the respondents rated globalization as a key determinant in the adoption of strategic planning in the manufacturing firms.

The research study thus found that globalization of markets is an important factor in the adoption of strategic planning tool in the small and medium sized manufacturing firms. The research outcome is in tandem with Boje (2015) who carried out research works in regard to the external factors that determine adoption of strategic planning in SMEs and identified globalization of markets and the internationalization of business, government laws and regulations, occurrence of major political events, technological advancements, customer expectations, suppliers’ requirements as well as fluctuations in business cycles as some of the factors that influence adoption of strategic planning tool in most organizations.

#### **f) Reward system existent in the firms**

The respondents were asked to rate the influence of the reward systems applicable in the firms on the adoption of strategic planning tool in the manufacturing firms. Of the total respondents 13% rated reward system existent in the firm as most important, 19% as more important and 16% of the informants rated it as important. As table 4.24 shows, 25% and 27% respectively of the respondents rated the factor as least important and less important. In total 48% of the respondents rated reward system as important, more important or most important.

The research study thus found that in the adoption of strategic planning in the manufacturing SMEs, reward systems put in place by the management was not a very important determinant of adoption of the long term planning tool. Adoption of strategic planning was thus determined by other factors but not the reward systems applicable in the firms. The outcome failed to support Okumus (2003) who argued that strategic plans in organizations fail due to lack of motivation of the employees, lack of interest from top management and the overall perception of resistance to change due to the employees self interest.

#### **g) Degree of innovativeness in the manufacturing SMEs**

The respondents were asked to categorize the degree of innovativeness in regard to adoption of strategic planning tool in the manufacturing firms. The greater majority (32%) of the informants indicated that the degree of innovativeness was more important in the adoption of strategic planning and 21% rated the factor as important. 24% of the informants indicated that the factor was most important and 19% rated it as less important as shown in table 4.24. Only 4% of the total informants rated the factor as least important. In total, 77% of the interviewees rated the degree of innovativeness as important which suggests that the factor was a key determinant of the adoption of



strategic planning in the manufacturing firms. The mean of the sub-variable was 3.54 a value that corresponds to a “more important” rating as tabulated in table 4.23. This shows that the degree of innovativeness in firms is a key determinant of the adoption of strategic planning tool in SMEs.

This research outcome is corroborated by Rogers (1996) who found out that the degree of innovativeness in a firm determines the manner in which a new technological idea such as strategic planning, management system or an artifact migrates from the point of inception to its adoption and eventual implementation in an organization. Kaplan and Norton (1992) further argued that the ability of a company to innovate, improve and learn is directly related to the company’s value to launch new products, management tools (such as strategic planning), create more value for customers and improve operating efficiencies on a continuous basis. This research study thus conclusively established that the degree of innovativeness in an organization to a great extent determines the adoption of strategic planning in the manufacturing firms.

#### **h) Policies and regulations put in place by the government**

The research study aimed to determine whether the policies and regulations put in place by the national and county governments influences the adoption of strategic planning in the manufacturing firms. According to the findings, existence of policies and regulations put in place by the governments was rated as most important by the majority (36%) of the respondents. 28% of the interviewees rated the factor as more important and 22% rated it as important. 10% of the respondents rated the factor as important and 4% as least important respectively as shown in table 4.24. In total, 86% of the informants in the study responded that the policies and regulations put in place by the governments was an important factor in the adoption of strategic planning.

The mean for this factor was 3.80 which correspond to “more important” in the factor ratings as shown in table 4.23. This was a clear indication that most interviewees considered the prevailing government policies and regulations as an important factor in determining the adoption of strategic planning by the small and medium sized manufacturing firms. This research finding is supported by Boje (2015), who carried out scholarly works in regard to the factors that determine adoption of strategic planning in SMEs and identified government laws and regulations, globalization of markets and the internationalization of businesses, occurrence of major political events, technological advancements, customer expectations, suppliers’ requirements as well as fluctuations in business cycles as some of the key factors.

In his scholarly works, Ting (2004) identified five key challenges that face many SMEs and outlined them as: increased global competition as a result of presence or absence of government policies, lack of access to finance, human resource constraints, inability to adapt to technology, lack of information on potential markets and customers. This scholar argued that there was a high risk that the SMEs would be wiped out by the large firms if they did not increase their competitiveness in the new rapidly changing world through adoption of long term planning tools such as strategic planning.

**Table 4.23: Factors that determine effective adoption of strategic planning**

	<b>Least important (%)</b>	<b>Less important (%)</b>	<b>Important (%)</b>	<b>More important (%)</b>	<b>Most Important (%)</b>	<b>mean</b>	<b>Std. dev</b>
Availability of key resources such as manpower, machines, materials and methods	3	5	9	22	60	4.30	1.07
Organizational structure existent in the firm	3	7	23	32	36	3.91	1.05
Leadership style adopted by the management	3	8	21	35	33	3.88	1.04
Organizational culture dominant within the firm	6	15	23	31	25	3.54	1.20
Globalization of markets	16	11	26	23	23	3.26	1.37
Reward systems applicable within the firm	25	27	16	19	13	2.81	1.17
Degree for innovativeness within the firm	4	19	21	32	24	3.54	1.15
Existence of policies and regulations put in place by the government	4	10	22	28	36	3.80	1.16

#### **4.5 Association of the various attributes and adoption of strategic planning**

After establishing the factors that the respondents indicated determine adoption of strategic planning tool in the manufacturing firms, the researcher then proceeded to test the degree of association between various outlined factors and the adoption of strategic planning tool. To achieve this objective, the researcher used the Chi-square test. The existence of association between the outlined factors and adoption of strategic planning in the firms was determined by  $p$  value a figure that was calculated by use of SPSS Version 21 tool. Any relationship that had a  $p$  value of 0.05 and less was considered as having an association between the respective factor and the adoption of strategic planning tool.

##### **4.5.1 Nature of firms' management (By owners/managers)**

The researcher aimed at determining if there was any association between the nature of management in the manufacturing firms (whether the firms were managed by the owners or managers) and adoption of strategic planning. A test for association in regard to the leadership (management) of the enterprises and adoption of strategic planning was done and the results revealed that an association existed between the nature of leadership and the adoption of strategic planning, ( $\chi^2 = 5.339$ ,  $df = 1$ ,  $p = 0.021$ ). In this regard, the degree of adoption of the strategic planning tool was higher in those manufacturing SMEs that were led by the managers (59.8%) as compared to the ones led by the owners (38.1%) as shown in table 4.25.

This could imply that most of the manufacturing firms were led by managers who understood the need for planning their operations in the long term in a better way compared to the owners; a strength that enabled them to adopt the strategic planning tool at a higher rate as compared to the owners. The outcome is corroborated by Miller

(1998) who noted that managers have a great influence on business strategy in small enterprises where in some few cases the manager is also the owner of the business unlike in the large firms.

In some firms especially those managed by the owners, actions and decisions revolve around the owner-manager such that the firms goals are also the owner-manager's goals, its strategy then becomes the owner-managers vision (Mintzberg, 1994). Therefore questions concerning the strategic (or other) vision of the business need to be investigated in relation to the private motivations and ambitions of the individual (Cliff, 1998; Galloway & Mochrie, 2005). According to Ennis (1998) managers within SMEs must actively plan for the future in order to compete effectively so as to survive. However in some studies, firm managers have been accused of being strategically myopic and lacking the long term vision as to where their organizations are headed (Mazzarol, 2004). The low rate of adoption of strategic planning tool especially for those firms that were managed by the owners could thus be partially explained by lack of long term vision in their organizations where some owners were just concerned about planning in the short term as compared to long term planning by use of strategic planning tool.

#### **4.5.2 Gender and adoption of strategic planning**

The next level of analysis aimed at determining if there was any association between the gender of the respondents and adoption of strategic planning tool in the manufacturing firms. In order to accomplish this, the Chi square which tested the association between the categorical variables and the adoption of strategic planning tool was computed. In regard to this, the chi-square test results showed that the respondents' gender and adoption of the strategic planning tool were not related. ( $\chi^2 = 0.91$ ,  $df = 1$ ,  $p = 0.763$ ). Out of the total male respondents who were interviewed, 51.5% had adopted strategic

planning tool in their manufacturing firms and for the female respondents almost an equal portion (48.5%) had adopted as shown in table 4.25.

This implies that the proportions of the male and female gender as drawn did not differ significantly from the population proportions which ideally were at 50% (an equal proportion of both male and female respondents was ideally expected to have adopted strategic planning tool in the total population). The finding corroborates with Bass (1981) whose research findings showed that there is no clear pattern of difference that can be discerned in the management styles of female leaders as compared to the male leaders in regard to long term planning. The research finding failed to corroborate with what Brush and Bird (1996) found that firms owned or managed by males had more sophisticated planning tools compared to female owned or managed businesses.

#### **4.5.3 Respondents' age and adoption of strategic planning**

In regard to age, the Chi square test results revealed that the respondents' age and adoption of strategic planning in the manufacturing SMEs were not associated, ( $\chi^2 = 4.738$ ,  $df = 4$ ,  $p = 0.315$ ). Of the respondents that were in the age bracket of 20-25 years, adoption of strategic planning tool as shown in table 4.25 was 47.1%, age 26-30 years adoption rate was 55.2%, 31- 40 years adoption rate was 61.0%, age 41-50 years adoption rate was 50% and for the respondents aged 51 years and above, adoption of strategic planning tool was 28.6%. This implies that the adoption of the strategic planning tool in the manufacturing SMEs was not dependent on the ages of the owners and managers as the adoption was spread across the different age brackets though with uneven distributions.

The ordinary expectation that the firms that were under the leadership of young managers would have higher rates of adoption of strategic planning was proved as

incorrect. Any observed association between the age and adoption may have been due to chance but there was no systematic association between age and adoption of the strategic planning in the small and medium manufacturing firms.

#### **4.5.4 Education level and adoption of strategic planning**

The researcher with an aim of determining the relationship between the respondents' highest education level and adoption of strategic planning carried out a Chi square test. In regard to education level, the Chi square test for association revealed that the respondents' highest level of education and adoption of strategic planning tool were significantly related, ( $\chi^2 = 13.971$ ,  $df = 3$ ,  $p = 0.003$ ). For the owners and managers who had college certificates as the highest level of education, 25% had adopted strategic planning tool, those respondents who had diplomas as the highest qualification, 44.4% had adopted strategic planning, those respondents who possessed a first degree, 73.3% had adopted and for those respondents who had post-graduate qualifications, 61.9% of the respondents had adopted strategic planning tool in their firms as shown in table 4.25.

It was thus clearly evident as per the research findings that the rate of adoption of strategic planning in the manufacturing SMEs increased as the highest level of the respondents' education increased which is an indicator of the crucial role that the education level plays in the adoption of strategic planning in the SMEs. Past studies have typically equated attained education level to key managers' attributes such as cognitive ability, capacity for information processing, tolerance for ambiguity and propensity to innovation (Guthrie & Olian, 1991). The education level of managers has also been linked with receptivity to adopt and implement strategic change in organizations (Wiersema & Bantel, 1992). Gibson and Cassar (2005) found that the enterprise leaders with university degrees plan well and more frequently than the ones with no degrees.

A higher education level has been associated with the tendency to engage in higher boundary spanning, higher tolerance for ambiguity and ability to exhibit higher integrative complexity (Dollinger, 1984). In addition, a more educated manager will exhibit a broader and more complex cognitive functioning such as having a higher capacity for information processing, recognizing the value of new information, assimilating it and applying it to commercial ends that are closely related to prior knowledge and skills (Cohen & Levinthal, 1990). Therefore highly educated managers are expected to have a greater need to gain a more and thorough understanding of a work situation. The higher adoption of strategic planning for the highly educated managers could thus be explained by the higher degree of understanding of the internal and external work environments and thus planning in the long term so as to be properly aligned in a bid to survive in the modern highly competitive business world.



**Table 4.24: Respondents' details and adoption of strategic planning**

	<b>Adoption Status</b>		<b>Total Percentage</b>
	<b>Yes</b>	<b>No</b>	
<b>Owners or manager</b>			
Owner	16 (38.1%)	26 (61.9%)	42 (100%)
Manager	52 (59.8%)	35 (40.2%)	87 (100%)
<b>Respondents gender</b>			
Males	51 (51.5%)	48 (48.5%)	99 (100%)
Females	16 (48.5%)	17 (51.5%)	33 (100%)
<b>Respondents age</b>			
20 – 25	8 (47.1%)	9 (52.9%)	17 (100%)
26 – 30	16 (55.2%)	13 (44.8%)	29 (100%)
31 – 40	25 (61.0%)	16 (39.0%)	41 (100%)
41 – 50	15 (50.0%)	17 (50.0%)	32 (100%)
Over 51 years	4 (28.6%)	10 (71.4%)	14 (100%)
<b>Highest level of education</b>			
Certificate	4 (25%)	12 (75%)	16 (100%)
Diploma	16 (44.4%)	20 (55.6%)	36 (100%)
First degree	33 (73.3%)	12 (26.7%)	45 (100%)
Post graduate degree	13 (61.9%)	8 (38.1%)	21 (100%)
<b>Motivation for starting the business</b>			
Profits	38 (48.7%)	40 (51.3%)	78 (100%)
Growth maximization	21 (52.5)	19 (47.5%)	40 (100%)
Personal fulfillment	3 (37.5%)	5 (62.5%)	8 (100%)
Hobby	2 (66.7%)	1 (33.3%)	3 (100%)

Several attributes of the small and medium sized manufacturing firms were also considered and their association with the adoption of strategic planning tool in the manufacturing firms determined by use of Chi-square test. The test results showed the presence (or lack of it) of association between the various attributes and adoption of strategic planning in the manufacturing SMEs. The firm attributes that the researcher analyzed included: size of the firms, legal form, location of the firms in regard to the CBD, number of years the firms had been in operation, motive for starting the enterprises, the firms advancement in technology, level of team work spirit existent in the firms, degree of firms' investment in research and development, firms annual sales, training of the SMEs' employees in regard to strategic planning and the most common modes of communication in the different organizations. The factors whose relationship with strategic planning resulted in a Chi Square ( $p$ ) value of less than 0.05 were considered to have a degree of association and those that had a value above 0.05 were considered as lacking the association.

#### **4.5.5 Size of the manufacturing firms and adoption of strategic planning**

In regard to the business attributes, the next level of analysis aimed at determining whether there was an association between the size of the enterprises (measured by the number of full time employees) and adoption of strategic planning tool. The Chi square test results revealed that the size of the firms and adoption level of strategic planning were significantly associated. ( $\chi^2 = 5.055$ ,  $df = 1$ ,  $p = 0.025$ ). For the small enterprises that employed between 5 and 49 permanent employees, the adoption rate of strategic planning tool was 47.4% while the medium firms that employed between 50 and 99 permanent employees, adoption rate was 75.0% as shown in table 4.26. The research findings thus clearly revealed that the size of a firm is a key determinant of the adoption of strategic planning tool as the rate of adoption of strategic planning was higher in the medium sized firms compared to the small firms.

The research finding is supported by Robinson and Pearce (2008) who found that the intensity with which managers engage in strategic planning depends with the organizational size and structural complexity, beliefs about planning-performance relationship and the strategic planning expertise that is available to the stakeholder. Mathew and Scott (1995) found that strategic planning was uncommon in many SMEs and this is because it is perceived to be dependent on company size and hence a preserve of the large corporate organizations where formalization is the most common dimension of long term planning. Stonehouse and Pemberton (2002) in their research works found the size of the business as one of the leading causes to what Sexton and Van Auken (1985) described as “anemic level” of strategic planning in small firms.

#### **4.5.6 Legal form of manufacturing firms and adoption of strategic planning**

The next level of analysis aimed at determining whether there existed any association between the legal form of the various manufacturing enterprises and adoption of strategic planning. Chi-square test for association for this study revealed that the legal form of the different firms and adoption of the strategic planning tool were related (associated) ( $\chi^2 = 6.036$ ,  $df = 2$ ,  $p = 0.049$ ). Of the small and medium manufacturing firms that were owned by one person (sole proprietorship firms), 39.6% had adopted the strategic planning tool and for those firms that were operated as partnership businesses, 55% had adopted the strategic planning tool as shown in table 4.26. For the limited companies that are in most cases owned by a group of shareholders, 62.7% had adopted strategic planning.

It was thus clearly evident that the rate of adoption of strategic planning tool increased as the number of shareholders/partners in the firms increased. The research study therefore revealed that the legal form of a firm greatly determines the adoption of strategic planning tool in the small and medium manufacturing firms. The main reason

for this finding was mostly due to the range of skills and competencies that were existent in the different categories as ideally limited firms would have more skilled and varied manpower. On the other hand partnership businesses will have a little much more diversified competencies and skills as compared to the sole proprietorship firms.

The research outcome corroborates with Mathew and Scott (1995) who found that strategic planning was uncommon in many small SMEs as it is perceived to be dependent on company size and hence a preserve of the large corporate organizations where formalization is the most common dimension of long term planning. In public sector organizations, senior managers mostly have their powers constrained by stature and regulations which predetermine to various degrees not only the very purpose of the organization but also their levels to diversify in their operations (Duncan, 1990).

#### **4.5.7 Business location and adoption of strategic planning**

The next level of analysis in the study aimed at determining whether there was any relationship between business location (the distance of the firms from the CBD) and adoption of strategic planning tool. In this study, the Chi-square test for association revealed that there was no association (relationship) between the location of the firms and adoption of strategic planning ( $\chi^2 = 5.109$ ,  $df = 3$ ,  $p = 0.164$ ). For the firms that were located within the CBD area, adoption of strategic planning tool was 60%, those that were located 2 to 5 Kilometers from the CBD, adoption was at 61.3% and those firms that were located 6 to 10 Kilometers from the CBD, adoption rate was 39.5% as shown on table 4.26.

For the manufacturing SMEs that were located more than 10 Kilometers from the CBD, adoption rate was at 47.6% as shown 4.26 table shows. The researcher thus concluded that there is no relationship between the firms' distance from the CBD and adoption of

the strategic planning tool. This research finding was in contrast to the ordinary expectation that the small and medium manufacturing firms that were close to the CBD would be expected to have higher adoption rates of the strategic planning tool due to the close proximity of key resources such as skilled manpower, materials and machines and efficient working methods.

#### **4.5.8 Years of business operation and adoption of strategic planning**

In a bid to further understand the relationship between the numbers of years the small and medium manufacturing firms had been in operation and the adoption of strategic planning tool, the researcher again computed the Chi-square test. The test results revealed that there was no association between the number of years the firms had been in operation and adoption of strategic planning, ( $\chi^2 = 0.474$ ,  $df = 3$ ,  $p = 0.925$ ). Of those manufacturing SMEs that had been in operation for between 1 to 10 years, adoption rate of strategic planning tool was 48.4%, 11 to 20 years, the adoption rate was 50.0%, 21 to 30 years adoption rate was 51.9% while those that had been in operation for over 30 years the rate of adoption was 56.7% as table 4.26 shows.

Contrary to the ordinary expectation that the firms that had been in operation for many years would be expected to adopt the strategic planning tool at a higher rate as compared to the young SMEs, the study found that the different firms across the board had adopted the tool at almost the same rate of close to 50%. Under normal circumstances, firms that have been in operation for many years would ideally be expected to have more exposure and managed by more skilled managers who would be expected to adopt the latest management tools available such as strategic planning. This was not the case as per the Chi square test results in this research study.

#### **4.5.9 Motive of starting the business and adoption of strategic planning**

The next level of analysis in the study aimed at determining if there was any relationship (association) between the motive for starting the manufacturing SMEs and the adoption of strategic planning tool. The Chi-square test for association revealed that the key motive for starting the enterprises and adoption of strategic planning were not associated, ( $\chi^2 = 0.977$ ,  $df = 3$ ,  $p = 0.807$ ). The respondents who had their manufacturing firms established with profits as the prime motivation had 48.7% adoption rate and those who had growth maximization as the prime motivation had 52.5% adoption rate of the strategic planning tool as shown in table 4.26. For those entrepreneurs who had personal fulfillment as the key motive for starting the SMEs, adoption rate of the strategic planning tool was 37.5%.

The manufacturing SMEs that were started with hobby as the prime motive had 66.7% adoption rate of the long term planning tool. The research findings thus clearly showed that the motive for starting the different enterprises and adoption of strategic planning tool were not associated. Adoption of the strategic planning tool in the manufacturing SMEs is thus influenced by other factors but not the motivation for starting the business. The research outcome did not corroborate with the earlier finding by Wang *et al.* (2007) that business ownership motivations is a major cause of why many businesses do not adopt strategic planning. The research outcome also did not align with the finding by Galloway and Mochrie (2005) who found that the strategic (or other) visions of the business are closely aligned with the private motivations and ambitions of the business operators.

#### **4.5.10 Degree of advancement in technology and adoption of strategic planning**

In regard to the different firms' rate of advancement in technology, the researcher by use of Chi-square test carried out further analysis to determine whether there was any association between the level of the firms' rate of advancement in technology and adoption of strategic planning. Chi-square test for association results revealed that the rate of the firms' advancement in technology was significantly associated with adoption of the strategic planning tool in the SMEs, ( $\chi^2 = 11.306$ ,  $df = 2$ ,  $p = 0.004$ ). For those firms whose level of advancement in technology was rated as low by the respondents, the rate of adoption of strategic planning tool was 7.7%, those firms whose advancement in technology was rated as medium, the rate of adoption of strategic planning was rated at 56.3% and those that had a high advancement in technology, the rate of adoption of the planning tool was rated at 58.8% as table 4.26 shows.

The results thus clearly showed that the status of adoption of the strategic planning tool increased as the rate of advancement in technology in the manufacturing firms also increased. Strategic planning tool is in itself an advanced management tool and this thus implies that the firm owners and managers who had higher rates of adoption of other technological advancements in their firms were also able to adopt the strategic planning tool at higher rates as well. The research finding was supported by Raduan *et al.* (2009) who found that businesses that had some operations and products that were difficult to replicate as a result of technological advancements had a competitive advantage and were more versatile and profitable than their rivals. The firms that were rated as having high rates of adoption of technology in this study were more versatile in their operations that enabled them to engage different management tools for continuous improvements and this included adoption of the strategic planning tool.

#### **4.5.11 Team work spirit and adoption of strategic planning**

The researcher then used the Chi-square test to determine whether there was any association between the degree of team work spirit existent in the different manufacturing SMEs and the adoption of strategic planning tool. The Chi-square test for association revealed that the level of team spirit and adoption of strategic planning was highly associated (related), ( $\chi^2 = 9.697$ ,  $df = 2$ ,  $p = 0.008$ ). Of those informants who rated their firms' employees as having low team work spirit, the rate of adoption of strategic planning tool was 0.0%, those informants who rated their employees team work spirit as medium, the rate of adoption was 42.7% while those who rated the team work spirit as high, the rate of adoption of the strategic planning tool was 66.7% as shown in table 4.26.

The results thus clearly showed that the rate of adoption of the strategic planning tool in the manufacturing firms increased as the degree of team work spirit in the organizations also increased. From this research finding, it can be inferred that managers and owners of the small and medium manufacturing firms should encourage their employees to work as teams in order to increase the adoption rate of various available management tools such as strategic planning in their firms. It was clearly evident as per the research findings that low levels of team work spirit led to low levels of adoption of strategic planning and thus to increase the rate of adoption of strategic planning tool in the SMEs, team work spirit levels among the employees should also need to be encouraged.

The research finding is supported by Johnson and Johnson (1999) who argued that a positive and interdependent team environment (high team work spirit) in an organization helps bring out the best in each person enabling the team to achieve the organizational goals at a far much superior level. This is because individuals with high team spirit promote and encourage their fellow team members to achieve, contribute and learn



more. Useem (2006) further argued that becoming skilled at doing more with others may be the single most important thing one can do to increase value regardless of the level of authority in the organization. The firms that employ workers talented at doing more with others are more likely to adopt strategic planning tool.

#### **4.5.12 Investment in Research and Development and adoption of strategic planning**

The study then aimed to establish whether there was any association between investment in R & D in the manufacturing firms and adoption of strategic planning tool. Chi-Square test for association results revealed that investment in R & D in the manufacturing SMEs and adoption of strategic planning were associated. ( $\chi^2 = 5.762$ ,  $df = 1$ ,  $p = 0.016$ ). For those small and medium manufacturing firms that had not invested in R & D, the rate of adoption of the strategic planning tool was 45.0% while those firms that had invested in R & D, the rate of adoption was 66.0% as shown in table 4.26. According to this finding, it was clearly evident that those respondents who had invested in R & D in their firms reported higher adoption rates of strategic planning tool compared to the firms that had not invested.

This implies that the owners and managers in the manufacturing firms who devoted their resources to increasing firm capacities in R &D also gave higher priority to the adoption of strategic planning in their firms. This research outcome is supported by the empirical evidence of Song *et al.* (2011) who suggested that adoption and implementation of strategic planning leads to new product development projects which in turn lead to better firm performance. The research finding is also corroborated by past research findings by Upton *et al.* (2001) and Beaver & Prince, (2002) who found that adoption of strategic planning tool in organizations led to improved innovations, development of new products, enhanced processes, improved technological levels, improved management practices as well as propels international growth.

According to the research findings by Moyer (1982), strategic planning always includes an evaluation of the firms' distinctive competencies (the particularly hardly imitable skills and strengths) and this might be a unique combination of resources such as innovations, products, production facilities or patents but may also include a firm's personnel, financial situation or product development record. Involvement in R & D involves high levels of versatility and innovation and these attributes then enabled higher rates of adoption of the strategic planning tool that was found in the small and medium manufacturing firms.

#### **4.5.13 Firms annual sales and adoption of strategic planning**

The researcher carried out Chi-square test to determine if there was an association between the level of annual sales in the manufacturing SMEs and the adoption of strategic planning tool. The Chi-test results revealed that the annual sales' levels and adoption of strategic planning were not related (associated), ( $\chi^2 = 6.940$ ,  $df = 4$ ,  $p = 0.139$ ). For the SMEs that made annual sales that averaged between 0.5 to 5 million shillings, the rate of adoption of strategic planning was 43.5%, those that had annual sales of between 5 to 20 million shillings the rate of adoption was 83.3% and those that had annual sales of between 20 to 100 million shillings the rate of adoption was 50% as shown in table 4.26. For the manufacturing SMEs that had annual sales of between 100 to 800 million shillings, the rate of adoption of strategic planning was 100%.

This implies that the amount of sales that the different manufacturing SMEs made annually did not necessarily necessitate firm managers and owners to adopt management tools such as strategic planning in their firms. The adoption of strategic planning tool in the small and medium manufacturing enterprises was contributed by other factors and not the amount of sales that the manufacturing firms made on an annual basis.

#### **4.5.14 Training on strategic planning and adoption of strategic planning**

The next level of analysis in regard to the level of association aimed at determining whether there was any relationship between training on strategic planning tool by the firms' owners and managers and adoption of strategic planning tool in the manufacturing SMEs. In this regard, Chi-Square test for association was done and the results revealed that there was a significant association between training on strategic planning and the adoption of the strategic planning tool in the manufacturing SMEs. ( $\chi^2 = 13.478$ ,  $df = 1$ ,  $p = 0.001$ ). Of those respondents who had received some training in regard to strategic planning, the rate of adoption of strategic planning in their firms was 73.8% while those who had not received any training the rate of adoption in their respective SMEs was 40.4% (table 4.26).

This implies that training on strategic planning had a direct relationship with the adoption of strategic planning in the manufacturing SMEs. It can thus be inferred that training on strategic planning motivated the business owners and managers to adopt the long term planning tool in the manufacturing firms. The high rate of adoption by the owners and managers who had received relevant training implies that training increased the respondents' awareness of the benefits of the long term planning tool and therefore the high adoption rate by the respondents. Similar results were reported by Al-Swidi and Mahmood (2011) who argued that presenting the necessary training and education to managers about strategic planning is vital to enable them to strengthen strategic insight and thinking within the firm.

King and McGrath (2002) in their scholarly works found that conventional strategic planning is uncommon in many SMEs and this can be attributed to knowledge gaps in the different stakeholders in the field of strategic planning emanating from poor or no training in regard to strategic planning. Al-Ghamdi (1991) found that among the

problems that occur during strategy adoption and implementation include managers failing to anticipate the needed trainings and instructions for the employees in order to equip them with the required skills for execution.

#### **4.5.15 Mode of communication and adoption of strategic planning**

Regarding the most preferred modes of communication in the SMEs, the study further aimed at establishing whether there was any association (relationship) between the most common modes of communication in the small and medium manufacturing firms and adoption of strategic planning tool. In order to achieve this, the Chi-square test which is used to test two sets of categorical variables was used and the results showed that the mode of communication applicable in the firms and adoption of strategic planning tool were significantly associated, ( $\chi^2 = 11.951$ ,  $df = 4$ ,  $p = 0.018$ ).

Out of the respondents who took part in the research, adoption rate of the strategic planning tool for the firms which preferred meetings as the most common mode of communication was 23%, those firms where the management preferred written mode of communication, adoption rate was 50% and for those firms which had symbols as the most common mode, adoption rate for strategic planning tool was 88.9%. The adoption rate for those informants who preferred E-mails as the most ideal mode of communication was 60% and for those respondents who preferred phones, adoption rate of strategic planning tool was 34.1% as shown in table 4.26.

In summary, the respondents who preferred symbols and E-mails as the preferred modes of communication had the highest rate of adoption of strategic planning at 88.9% and 60% respectively. The respondents who preferred meetings and phones as the ideal mode of communication in their firms had the lowest rate of adoption at 23% and 34.1% respectively. The results clearly outline the crucial role that the different modes of

communication played in the adoption of strategic planning practice in the small and medium manufacturing firms.

The research outcome is supported by Baker *et al.* (1993) who found that formal written plans are widely considered better than informal unwritten plans because they foster critical thinking, group decision making and internal as well as external communication and furthermore serve as control mechanism for possible course corrections. Peng and Littlejohn (2001) research findings showed that effective communication is a key requirement for effective adoption and implementation of strategic planning in organizations. Firm owners and managers should thus be very conscious while selecting the most common mode of communication in the firms as the communication mode chosen by the top management has a big influence in the adoption of management tools such as strategic planning.

**Table 4.25: Firm attributes and adoption of strategic planning**

	Adoption Status		Total Percentage
	Yes	No	
<b>Size of the business</b>			
5 to 49 employees	45 (47.4%)	50 (52.6%)	95 (100%)
50 to 99 employees	15 (75.0%)	25 (25.0%)	40 (100%)
<b>Legal form</b>			
Sole Proprietorship	21 (39.6%)	32 (60.4%)	53 (100%)
Partnership	11 (55.0%)	9 (45.0%)	20 (100%)
Limited company	37 (62.7%)	22 (37.3%)	59 (100%)
<b>Business location</b>			
Within CBD	3 (60.0%)	2 (40.0%)	5 (100%)
2 to 5 Km from CBD	38 (61.3%)	24 (38.7%)	62 (100%)
6 to 10 KM from CBD	17 (39.5%)	26 (60.5%)	43 (100%)
More than 10 Km from CBD	10 (47.6%)	11 (52.4%)	21 (100%)
<b>Years of operation</b>			
1 to 10 years	15 (48.4%)	16 (51.6%)	31 (100%)
11 to 20 years	18 (50.0%)	18 (50.0%)	36 (100%)
21 to 30 years	14 (51.9%)	13 (48.1%)	27 (100%)
Over 30 years	17 (56.7%)	13 (43.3%)	30 (100%)
<b>Firms advancement in technology</b>			
Low	1 (7.7%)	12 (92.3%)	13 (100%)
Medium	58 (56.3%)	45 (43.7%)	103 (100%)
High	10 (58.8%)	7 (41.2%)	17 (100%)
<b>Team work spirit in firms</b>			
Low	0 (0.0%)	2 (100%)	2 (100%)
Medium	32 (42.7%)	43 (57.3%)	75 (100%)
High	38 (66.7%)	19 (33.3%)	57 (100%)
<b>Investment in Research &amp; Dev.</b>			
Yes	23 (66.0%)	12 (34.0%)	35 (100%)
No	45 (45.0%)	55 (55.0%)	100 (100%)
<b>Firms' annual sales</b>			
0.5 to 5 Million	27 (43.5%)	35 (56.5%)	62 (100%)
5 to 20 Million	5 (83.3%)	1 (16.7%)	6 (100%)
20 to 100 Million	11 (50.0%)	11 (50.0%)	22 (100%)
100 to 800 Million	9 (56.2%)	7 (43.8%)	16 (100%)
Over 800 Million	3 (100%)	0 (0.0%)	3 (100%)
<b>Training on Strategic Planning</b>			
Yes	52 (74.0%)	18 (26.0%)	70 (100%)
No	23 (40.4%)	34 (59.6%)	57 (100%)
<b>Mode of communication in firms</b>			
Meetings	23 (57.5%)	17 (42.5%)	40 (100%)
Written	2 (50.0%)	2 (50.0%)	4 (100%)
Symbols	8 (88.9%)	1 (11.1%)	9 (100%)
E-mails	21 (60.0%)	14 (40.0%)	35 (100%)
Phones	15 (34.1%)	29 (65.9%)	44 (100%)

## **4.6 Logistic regression analysis**

Another method that was used to analyze data for this investigative study was inferential analysis in the form of logistic regression. Logistic regression is useful for situations in which the researcher wants to be able to predict the presence or absence of characteristic or outcome based on the values of a set of predictor variables (Dayton, 1992). Logistic regression also called Logit model is used to model dichotomous outcome variables. Logistic model is the appropriate regression analysis to conduct when the dependent variable is dichotomous (binary in nature) and in this research study the binary aspect in the outcome was either the adoption or lack of adoption of strategic planning in the small and medium manufacturing firms. Logistic regression was used to explain the degree of influence of the various factors under investigation on the adoption of strategic planning.

Multiple logistic regression was used to determine the probability of the manufacturing SMEs either adopting or not adopting the strategic planning tool when the various independent variables were analyzed together by use of SPSS tool version 21 to give one output. According to Mugenda and Mugenda (2013), descriptive statistics enable meaningful description of a distribution of scores or measurements using a few indices or statistics.

### **4.6.1 Education level and adoption of strategic planning**

Logit model was fitted to the data with adoption of strategic planning as dependent variable and education level of the respondents as the independent variable (and categorical) and the model converged ( $\chi^2 = 13.564$ ,  $df = 3$ ,  $p = 0.004$ ). The goodness of fit was 11.1% (Cox & Snell R square = 0.111) with 68.7% correct classification.

The fitted model was:  $\text{Logit}(p) = 0.693 - 1.705 \text{ Certificate} - 0.457 \text{ Diploma} + 0.56 \text{ Degree}$ .

Since  $B = -1.705$ ,  $\text{Wald} = 5.234$ ,  $\text{df} = 1$ ,  $p = 0.022$ , having a certificate level of education significantly influences probability of adoption negatively (table 4.27). Those respondents who had certificate level of education as the highest qualification were 5.49 times less likely to adopt strategic planning than those with post graduate qualifications. The respondents who had diploma level of education as the highest qualification were 1.58 times less likely to adopt strategic planning than those with post-graduate qualifications. The researcher thus noted that having a certificate or a diploma as the highest level of education was not found to significantly influence the probability of adoption of strategic planning taking post graduate qualification as the reference.

The research outcome corroborates earlier findings by Gibson and Cassar (2005) who found that the enterprise leaders with university degrees plan well and more frequently than the ones with no degrees. The education level of managers in charge of organizations has also been linked with receptivity to adopt and implement strategic change in organizations (Wiersema & Bantel, 1992).



**Table 4.26: Logistic regression analysis for education level**

**Omnibus Tests of Model Coefficients**

		Chi-square	df	Sig.
Step 1	Step	13.564	3	.004
	Block	13.564	3	.004
	Model	13.564	3	.004

**Model Summary**

Step 1	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
	138.467 <sup>a</sup>	.111	.152

**Classification Table**

		Observed	Predicted		Percentage Correct
			Adoption status		
			No	Yes	
Step 1	Adoption status	No	11	32	25.6
		Yes	4	68	94.4
Overall Percentage					68.7

a. The cut value is .500

**Variables in the Equation (Education level)**

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	Education			11.866	3	.008	
	Certificate	-1.705	.745	5.234	1	.022	.182
	Diploma	-.457	.578	.625	1	.429	.633
	Degree	.560	.586	.913	1	.339	1.750
	Post graduate (Constant)	.693	.463	2.242	1	.134	2.000

#### 4.6.2 Nature of firms' management and adoption of strategic planning

Logit model was again fitted to the data with adoption of strategic planning as dependent variable and the nature of SMEs' management (whether managed by owners or managers) as the independent variable (and categorical) and the model converged ( $\chi^2 = 5.367$ ,  $df = 1$ ,  $p = 0.021$ ). The goodness of fit was 4.1% (Cox & Snell R square = 0.041) with 60.5% correct classification.

The fitted model was:  $\text{Logit}(p) = 0.396 - 0.881 \text{ Owners}$ .

Since  $B = -0.881$ ,  $Wald = 5.222$ ,  $df = 1$ ,  $p = 0.022$ , being the business owner running the manufacturing firm significantly influences the probability of adoption of strategic planning tool negatively (table 4.28). The respondents who owned the sampled manufacturing firms and were involved in their management were 2.42 times less likely to adopt strategic planning compared with the managers employed to lead the firms. We thus note that being the owner running the manufacturing firm was not found to significantly influence the probability of adopting strategic planning tool taking the position of the managers employed to lead the SMEs as the reference.

This research finding is supported by Mazzarol (2004) who found owner-managers in most SMEs to be "strategically myopic" and lacking the "long term vision of where their organizations are headed". In some organizations especially those managed by the owners, actions and decisions revolve around the owner-manager such that the firms goals are also the owner-manager's goals, its strategy then becomes the owner-managers vision (Mintzberg, 1994). This according to Le cornu *et al.* (1996) is because most SMEs operate as "extensions" of their owner-managers. The strategic (or other) visions of the business are closely aligned with the private motivations and ambitions of the operators (Galloway & Mochrie, 2005).

**Table 4.27: Logistic regression analysis for firms' management**

<b>Omnibus Tests of Model Coefficients</b>							
		<b>Chi-square</b>	<b>df</b>	<b>Sig.</b>			
Step 1	Step	5.367	1	0.021			
	Block	5.367	1	0.021			
	Model	5.367	1	0.021			
<b>Model Summary</b>							
<b>Step</b>	<b>-2 Log likelihood</b>	<b>Cox &amp; Snell R Square</b>	<b>Nagelkerke R Square</b>				
1	173.085 <sup>a</sup>	0.041	0.054				
<b>Classification Table<sup>a</sup></b>							
	<b>Observed</b>		<b>Predicted adoption status</b>		<b>Percentage Correct</b>		
			<b>No</b>	<b>Yes</b>			
Step 1	Adoption status	No	26	35	42.6		
		Yes	16	52	76.5		
	Overall Percentage				60.5		
a. The cut value is .500							
<b>Variables in the Equation (Nature of firms' management)</b>							
		<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
Step 1 <sup>a</sup>	Owner	-0.881	0.386	5.222	1	0.022	0.414
	Manager						
	(Constant)	0.396	0.219	3.279	1	0.07	1.486

#### **4.6.3 Size of the business and adoption of strategic planning**

In regard to the size of the business and adoption of strategic planning, Logit model was again fitted to the data with adoption of the strategic planning tool as dependent variable and the size of the business as the independent variable (and categorical) and the model again converged ( $\chi^2 = 6.288$ ,  $df = 1$ ,  $p = 0.012$ ). The goodness of fit was 5.5% (Cox & Snell R square = 0.055) with 59.8% correct classification.

The fitted model was:  $\text{Logit}(p) = 1.674 - 1.480 \text{ Small firms}$

Since  $B = -1.480$ ,  $Wald = 4.985$ ,  $df = 1$ ,  $p = 0.026$ , operating the manufacturing business in form of a small firm significantly influences probability of adoption of strategic planning tool negatively (table 4.29). Small firms were 4.39 times less likely to adopt strategic planning compared with the medium sized ones. The researcher therefore noted that operating the manufacturing firms as small size enterprises was not found to significantly influence the probability of adopting strategic planning taking the medium size status of the firms as the reference.

This outcome is supported by Robinson and Pearce (2008) who found that the intensity with which managers engage in strategic planning depends with the organizational size and structural complexity. Miller (1998) on the same line found that larger organizations, because of their more complex structure, are expected to adopt a strategic process more comprehensively and more formally than the smaller companies. Stonehouse and Pemberton (2002) found the size of the business as one of the leading causes to what Sexton and Van Auken (1985) described as “anemic level” of strategic planning in small firms.

**Table 4.28: Logistic regression analysis for firms' size**

<b>Omnibus Tests of Model Coefficients</b>				
		<b>Chi-square</b>	<b>df</b>	<b>Sig.</b>
Step 1	Step	6.288	1	0.012
	Block	6.288	1	0.012
	Model	6.288	1	0.012

<b>Model Summary</b>			
<b>Step</b>	<b>-2 Log likelihood</b>	<b>Cox &amp; Snell R Square</b>	<b>Nagelkerke R Square</b>
1	144.627 <sup>a</sup>	0.055	0.074

<b>Classification Table<sup>a</sup></b>					
	<b>Observed</b>		<b>Predicted Adoption status</b>		<b>Percentage Correct</b>
			<b>No</b>	<b>Yes</b>	
Step 1	Adoption status	No	0	45	0
		Yes	0	67	100
Overall Percentage					59.8

a. The cut value is .500

<b>Variables in the Equation (Size of the business)</b>							
		<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
Step 1	Small sized firms	-1.48	0.663	4.985	1	0.026	0.228
	Medium sized firms (Constant)	1.674	0.629	7.079	1	0.008	5.333

#### **4.6.4 Legal form of the firms and adoption of strategic planning**

Logit model was fitted to the data with adoption of strategic planning as dependent variable and the legal form of the small and medium manufacturing firms as the independent variable (and categorical) and the model converged ( $\chi^2 = 9.727$ ,  $df = 2$ ,  $p = 0.008$ ). The goodness of fit was 7.3% (Cox & Snell R square = 0.073) with 64.3% correct classification.

The fitted model was:  $\text{Logit}(p) = 0.965 - 1.241 \text{ Sole proprietorships} - 0.560 \text{ Partnerships}$ .

Since  $B = -1.241$ ,  $Wald = 9.269$ ,  $df = 1$ ,  $p = 0.002$  operating a manufacturing enterprise as either sole proprietorship or as a partnership significantly influences probability of adoption of strategic planning tool negatively (table 4.30). The firms that were operated as sole proprietorship businesses were 3.46 times less likely to adopt strategic planning tool compared to the limited companies. The firms that were operated as partnership enterprises were 1.75 times less likely to adopt strategic planning tool compared to the limited companies. The researcher therefore found that operating a business in both sole proprietorship and partnership forms was not found to significantly influence the probability of adoption of strategic planning taking the limited firms as the reference.

This research outcome corroborates the findings by Mathew and Scott (1995) that strategic planning is uncommon in many SMEs and this is because it is perceived to be dependent on company size and hence a preserve of the larger corporate organizations where formalization is the most common dimension of long term planning. Miller (1998) in this regard found that larger organizations, because of their more complex structure, are expected to adopt a strategic process more comprehensively and more formally than the smaller companies.

**Table 4.29: Logistic regression analysis for legal form of the firms**

<b>Omnibus Tests of Model Coefficients</b>				
		<b>Chi-square</b>	<b>df</b>	<b>Sig.</b>
Step 1	Step	9.727	2	0.008
	Block	9.727	2	0.008
	Model	9.727	2	0.008

<b>Model Summary</b>				
<b>Step</b>	<b>-2 Log likelihood</b>	<b>Cox &amp; Snell R Square</b>	<b>Nagelkerke R Square</b>	<b>Sig.</b>
1	164.982 <sup>a</sup>	0.073	0.098	

**Classification table**

	<b>Observed</b>		<b>Predicted Adoption status</b>		<b>Percentage Correct</b>
			<b>No</b>	<b>Yes</b>	
Step 1	Adoption status	No	29	24	54.7
		Yes	22	54	71.1
Overall Percentage					64.3

a. The cut value is .500

<b>Variables in the Equation (Legal form of the firms)</b>							
		<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
Step 1 <sup>a</sup>	Legal form			9.298	2	0.01	
	Sole Proprietorship						
	Partnership	-1.241	0.408	9.269	1	0.002	0.289
	Limited Company	-0.56	0.543	1.063	1	0.303	0.571
	(Constant)	0.965	0.294	10.791	1	0.001	2.625

#### **4.6.5 Advancement in technology and adoption of strategic planning**

Logit model was fitted to the data with adoption of strategic planning as dependent variable and the rate of advancement in technology as the independent variable (with categorical) and the model again converged ( $\chi^2 = 12.317$ ,  $df = 2$ ,  $p = 0.002$ ). The goodness of fit was 9.0% (Cox & Snell R square =0.090) with 65.4% correct classification. The fitted model was:

$$\text{Logit (p)} = 0.118 - 1.823 \text{ Low advancement} + 0.501 \text{ Medium advancement}$$

Since  $B = -1.823$ ,  $Wald = 4.016$ ,  $df = 1$ ,  $p = 0.045$ , having low advancement in technology significantly influences the probability of adoption of strategic planning negatively (table 4.31). The firms with low advancement in technology were 6.17 times less likely to adopt strategic planning compared with the ones with high advancement. We therefore note that having a low rate of advancement in technology was not found to significantly influence the probability of adoption of strategic planning taking the high rate of advancement in technology as the reference. Rogers (1996) in this regard posited that the degree of firm's advancement in technology (innovativeness) in a firm determines the manner in which a new technological idea, management system (such as strategic planning) and artifacts migrate from the point of inception to full use in an organization.



**Table 4.30: Logistic regression analysis for firms' advancement in technology**

<b>Omnibus Tests of Model Coefficients</b>				
		<b>Chi-square</b>	<b>df</b>	<b>Sig.</b>
Step 1	Step	12.317	2	0.002
	Block	12.317	2	0.002
	Model	12.317	2	0.002

<b>Model Summary</b>			
<b>Step</b>	<b>-2 Log likelihood</b>	<b>Cox &amp; Snell R Square</b>	<b>Nagelkerke R Square</b>
1	164.160 <sup>a</sup>	0.09	0.122

<b>Classification Table<sup>a</sup></b>					
	<b>Observed</b>		<b>Predicted Adoption status</b>		<b>Percentage Correct</b>
			<b>No</b>	<b>Yes</b>	
Step 1	Adoption status	No	11	43	20.4
		Yes	2	74	97.4
Overall Percentage					65.4

a. The cut value is .500

<b>Variables in the Equation (Advancement in technology)</b>							
		<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
Step 1 <sup>a</sup>	Rate of advancement			8.924	2	0.012	
	Low rate	-1.823	0.909	4.016	1	0.045	0.162
	Medium rate	0.501	0.529	0.897	1	0.344	1.651
	High rate (Constant)	0.118	0.486	0.059	1	0.808	1.125

#### **4.6.6 Team work spirit and adoption of strategic planning**

Logit model was fitted to the data with adoption of strategic planning as dependent variable and the team work spirit among the employees in the manufacturing firms as independent variable (and categorical) and the model again converged ( $\chi^2 = 8.320$ ,  $df = 2$ ,  $p = 0.016$ ). The goodness of fit was 6.2% (Cox & Snell R square = 0.062) with 60.3% correct classification. The fitted model was:

$$\text{Logit (p)} = 0.693 - 21.896 \text{ Low team spirit} - 0.989 \text{ Medium team spirit}$$

Since  $B = -21.896$ ,  $Wald = 0.00$ ,  $df = 1$ ,  $p = 0.999$  having low levels of team work spirit in the firms significantly influences probability of adoption of strategic planning tool negatively (table 4.32). The firms that had low team work spirit levels were not likely to adopt strategic planning when compared with the ones that had high levels of team work spirit. The manufacturing firms with medium level of team work spirit were 2.69 times less likely to adopt strategic planning than those with high team work spirit. In this research study, the researcher noted that having low and medium levels of team work spirit was not found to significantly influence the probability of adoption of strategic planning in the SMEs taking high level of team work spirit as the reference.

The research finding is supported by Cohen and Bailey (1999) who found that organizations that emphasize more on teams have increased employee performance, greater productivity and better problem solving skills at different work stations. This is because high team spirit is the key to achieving common goals of teams in any organization (Boyt, Lusch and Mejza, 2005).

**Table 4.31: Logistic regression analysis for firms' team work spirit**

<b>Omnibus Tests of Model Coefficients</b>				
		<b>Chi-square</b>	<b>df</b>	<b>Sig.</b>
Step 1	Step	8.32	2	0.016
	Block	8.32	2	0.016
	Model	8.32	2	0.016

<b>Model Summary</b>			
<b>Step</b>	<b>-2 Log likelihood</b>	<b>Cox &amp; Snell R Square</b>	<b>Nagelkerke R Square</b>
1	169.226 <sup>a</sup>	0.062	0.083

<b>Classification Table<sup>a</sup></b>					
	<b>Observed</b>		<b>Predicted Adoption status</b>		<b>Percentage Correct</b>
			<b>No</b>	<b>Yes</b>	
Step 1	Adoption status	No	2	52	3.7
		Yes	0	77	100
Overall Percentage					60.3

a. The cut value is .500

<b>Variables in the Equation (Team work spirit)</b>							
		<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
<b>Step 1<sup>a</sup></b>	Team work spirit			7.324	2	0.026	
	Low team work spirit	-21.896	0.4	0	1	0.999	0
	Medium team work spirit	-0.989	0.365	7.324	1	0.007	0.372
	High team work spirit (Constant)	0.693	0.281	6.086	1	0.014	2

#### **4.6.7 Investment in R & D and adoption of strategic planning**

Logit model was fitted to the data with adoption of strategic planning as dependent variable and investment in Research and Development as the independent variable and the model again converged ( $\chi^2 = 11.568$ ,  $df = 1$ ,  $p = 0.001$ ). The goodness of fit in this regard was 8.5% (Cox & Snell R square = 0.085) with 62.3% correct classification. The fitted model was:

$$\text{Logit (p)} = 1.153 - 1.303 \text{ No investment in R \& D}$$

Since  $B = -1.303$ ,  $Wald = 10.615$ ,  $df = 1$ ,  $p = 0.001$  having no investment in R & D in firms significantly influences probability of adoption of strategic planning tool negatively (table 4.33). The manufacturing SMEs that had not invested in R & D were 3.68 times less likely to adopt strategic planning compared to those who had invested on the same. The researcher thus noted that having no investment in R & D in the manufacturing SMEs was not found to significantly influence the adoption of strategic planning taking investment on the same as reference. In regard to investment in research and development, Gibbons and O'Connor (2005) found that SMEs that engage in strategic planning are more likely to be those that are more innovative, that have more newly patented products that employ new processes and management technologies and that achieve international growth.

**Table 4.32: Logistic regression analysis for investment in R & D**

**Omnibus Tests of Model Coefficients**

		Chi-square	df	Sig.
Step 1	Step	11.568	1	0.001
	Block	11.568	1	0.001
	Model	11.568	1	0.001

**Model Summary**

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	165.561 <sup>a</sup>	0.085	0.114

**Classification Table<sup>a</sup>**

Observed		Predicted		Percentage Correct
		Adoption status No	status Yes	
Adoption status	No	43	12	78.2
	Yes	37	38	50.7
Overall Percentage				62.3

a. The cut value is .500

**Variables in the Equation (Investment in R & D)**

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	No investment in R &D	-1.303	0.4	10.615	1	0.001	0.272
	Investment in R &D (Constant)	1.153	0.331	12.117	1	0	3.167

#### **4.6.8 Training on strategic planning and adoption of strategic planning**

Logit model was fitted to the data with adoption of strategic planning as dependent variable and training on strategic planning by the respondents as the independent variable (and categorical) and the model converged ( $\chi^2 = 11.998$ ,  $df = 1$ ,  $p = 0.001$ ). The goodness of fit was 9.7% (Cox & Snell R square = 0.097) with 65.8% correct classification. The fitted model was:

Logit (p) = 1.306 – 1.378 No training in strategic planning

Since  $B = -1.378$ ,  $Wald = 11.213$ ,  $df = 1$ ,  $p = 0.001$  having received no training in regard to strategic planning significantly influences probability of adoption negatively (table 4.34). The respondents who had not received any training on strategic planning were 3.97 times less likely to adopt the tool compared to those who had been trained. The researcher therefore found that having no training on strategic planning tool was not found to significantly influence the probability of adoption of strategic planning in the manufacturing SMEs taking training on the same as the reference. This research finding is supported by Al-Swidi and Mahmood (2011) who argued that presenting the necessary training and education to managers about strategic planning is vital to enable them to strengthen strategic insight and thinking within the firm. Robinson and Pearce (1984) suggested that lack of time and inadequate knowledge of the planning process are detrimental and compromise strategic planning in small businesses.

**Table 4.33: Logistic regression analysis for training on strategic planning**

<b>Omnibus Tests of Model Coefficients</b>				
		<b>Chi-square</b>	<b>df</b>	<b>Sig.</b>
<b>Step 1</b>	Step	11.998	1	0.001
	Block	11.998	1	0.001
	Model	11.998	1	0.001

<b>Model Summary</b>				
<b>Step</b>	<b>-2 Log likelihood</b>	<b>Cox &amp; Snell R Square</b>	<b>Nagelkerke R Square</b>	
1	140.764 <sup>a</sup>	0.097	0.134	

<b>Classification Table<sup>a</sup></b>					
	<b>Observed</b>	<b>Predicted</b>		<b>Percentage Correct</b>	
		<b>Adoption status</b>			
		<b>No</b>	<b>Yes</b>		
<b>Step 1</b>	Adoption status	No	29	13	69
		Yes	27	48	64
	Overall Percentage				65.8

a. The cut value is .500

<b>Variables in the Equation (Training on strategic planning)</b>							
		<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
<b>Step 1<sup>a</sup></b>	No training	-1.378	0.411	11.213	1	0.001	0.252
	Training	1.306	0.313	17.455	1	0	3.692
	(Constant)						

#### **4.6.9 Mode of communication and adoption of strategic planning**

Logit model was fitted to the data with adoption of strategic planning as dependent variable and the modes of communication as independent variable (and categorical) and the model converged ( $\chi^2 = 17.106$ ,  $df = 4$ ,  $p = 0.002$ ). The goodness of fit was 12.4% (Cox & Snell R square =0.124) with 69.0% correct classification. The fitted model was:

$$\text{Logit (p)} = 2.079 - 1.232 \text{ Meetings} - 3.178 \text{ Written} - 1.099 \text{ E-mails} - 2.504 \text{ Phones}$$

Since  $B = -1.232$ ,  $Wald = 1.22$ ,  $df = 1$ ,  $p = 0.269$  having meetings and phones in the firms as the most common modes of communication significantly influences the probability of adopting strategic planning tool negatively (table 4.35). The firms that use meetings as the preferred most of communication were 3.42 times less likely to adopt strategic planning compared to the ones that preferred symbols. The firms that used phones as the prevalent mode of communication were 12.20 times less likely to adopt strategic planning compared to those using symbols. Firms that used meetings as the most common mode were 3.42 times less likely to adopt strategic planning compared to the ones using symbols.

The researcher thus noted that having meetings, phones and E-mails as the common modes of communication in the SMEs was not found to significantly influence the adoption of strategic planning tool in the SMEs taking use of symbols as the reference. Johnson and Scholes (2002) found that among the five top reasons why strategic plans fail to take off or fail upon commencement are related to the mode of communication, motivation and personal ownership, passive management and leadership style adopted. This is further corroborated by Peng and Littlejohn (2001) who showed that adoption of an effective communication tool is a key requirement for effective adoption and implementation of strategic planning in many firms.



**Table 4.34: Logistic regression analysis for communication modes**

<b>Omnibus Tests of Model Coefficients</b>				
		<b>Chi-square</b>	<b>df</b>	<b>Sig.</b>
Step 1	Step	17.106	4	0.002
	Block	17.106	4	0.002
	Model	17.106	4	0.002

<b>Model Summary</b>				
<b>Step</b>	<b>-2 Log likelihood</b>	<b>Cox &amp; Snell R Square</b>	<b>Nagelkerke R Square</b>	<b>R</b>
1	156.033 <sup>a</sup>	0.124	0.168	

<b>Classification Table<sup>a</sup></b>					
	<b>Observed</b>		<b>Predicted</b>		<b>Percentage Correct</b>
			<b>Adoption status</b>		
Step 1	Adoption status	No	Yes		
				29	22
		Yes	18	60	76.9
	Overall Percentage				69

a. The cut value is .500

<b>Variables in the Equation (Mode of Communication)</b>						
	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
Step 1 <sup>a</sup>			15.063	4	0.005	
Meetings	-1.232	1.115	1.22	1	0.269	0.292
Written	-3.178	1.568	4.108	1	0.043	0.042
E- mails	-1.099	1.13	0.945	1	0.331	0.333
Phones	-2.504	1.106	5.131	1	0.024	0.082
Symbols (Constant)	2.079	1.061	3.844	1	0.05	8

#### **4.7 Multiple logistic regression**

Multiple logistic regression model was fitted using the variables that gave significant  $\chi^2$  results. The “Enter method” led to a model that did not converge but the “Forward conditional method” led to two variables (rate of advancement in technology and mode of communication most prevalent in the firms) being picked. Analysis of these variables showed that only one variable- mode of communication prevalent in the manufacturing SMEs had significant coefficients namely: meetings (0.013), E-mails (0.193), phones (0.098) and symbols (0.096) as shown in appendix 5. The researcher therefore retained the initial results and took this variable as having the overall predictive role in the presence of the rest. From this model, it was evident that the mode of communication dominant in the firms (whether in form of meetings, E-mails, phones or symbols) played a determinant role in the adoption of strategic planning tool in the small and medium manufacturing firms.

## **CHAPTER FIVE**

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

#### **5.1 Introduction**

This chapter will focus on the major findings of the study and also draw conclusions and make recommendations that can be applied in other organizations. It will also make suggestions for further research studies based on the findings of this particular study.

#### **5.2 Summary of major findings**

The study aimed at investigating the adoption of strategic planning in the small and medium manufacturing firms in Kenya. Specifically, the study aimed at establishing the rate of adoption of strategic planning tool in the small and medium manufacturing firms, compare the performance of the firms that had adopted strategic planning against the ones that had not adopted, compare the performance of the manufacturing SMEs before and after adoption of strategic planning and also establish the factors that determine adoption of strategic planning in the manufacturing SMEs.

Data was collected from a total of 135 manufacturing firms that were located in Thika town and the adjoining areas. This was a 52% sample representation of all the small and medium sized manufacturing firms in Thika town. The manufacturing firms were treated as the unit of analysis and the respondents were the business owners and the senior managers in the firms with a focus on the firms' Managing Directors and the Human Resource Managers.

Of the total research respondents in the study, the business owners composed 31.9% of the total sample and the remaining 68.1% was composed of the business managers. Male respondents comprised 75% of the total informants while female respondents comprised 25%. The biggest percentage of the respondents (30.4%) was in the age bracket of 31 to 40 years while the respondents who were aged 51 years and above comprised 10.4% of the total respondents. In regard to the respondents' highest level of education, majority (48.8%) possessed a University degree or a post graduate qualification.

Of the total respondents, majority (36.3%) had worked in their current work stations for a period of 4 to 6 years and 32.6% had worked for a period of between 1 and 3 years and only 14.8% had worked in their current stations for a period of more than 10 years. 16.3% of the informants had worked in their work stations for a period of 7 to 10 years. Regarding the number of full time employees in the manufacturing SMEs, 63% of the SMEs had engaged 5 to 49 full time employees and were rated as small firms and 37% had engaged 50 to 99 employees and were thus rated as medium sized firms.

In regard to the initiators of strategic planning in the manufacturing SMEs, the study found that in majority (76.4%) of the manufacturing firms, the long term planning tool was initiated by the firms' owners and 18% by the senior managers. Of the remaining 5.6%, the initiators of the tool included; firms' employees, customers and the suppliers. As appertains to training on strategic planning, 51.7% of the respondents had been trained and 48.3% had not received the relevant training and this could partly explain the low adoption of strategic planning in the manufacturing SMEs as it is not ideally possible to highly adopt the tool when the senior managers and the owners have not received the necessary and relevant training.

### **5.2.1 Investigation of the status of adoption of strategic planning by small and medium manufacturing enterprises in Kenya.**

The study used descriptive statistics to tabulate the rate of adoption of strategic planning for the manufacturing SMEs. Based on this method, a total of 92 informants (69.7%) responded that their firms had adopted strategic planning and 40 respondents who represented (30.3%) responded that they had not adopted. The researcher then proceeded to establish the actual rate of adoption of strategic planning based on the existence of the key sub components of the long term planning tool. According to Bryson (2004), strategic planning process is defined by three stages that he classified as ABC. A is where the organization is before any change is done, B is where the organization wants to be and C is how the organization would be able to get there.

The vision, mission and goals helps the organization to move from point A to B and the existence of the three sub components of the strategic planning process were used to judge whether a manufacturing firm had adopted strategic planning or not. According to this method, the researcher found that 58% of the manufacturing firms had actually adopted strategic planning tool and 42% had not adopted. The difference in percentages between the firms that indicated that they had adopted strategic planning in the “YES/NO” question (69.7%) and the ones that had actually adopted as confirmed by the sub components (58%) supported earlier findings by Kelmar and Noy (1990) who found that many of the SMEs that claim to have strategic plans have plans that are *ad hoc* and intuitive rather than formally written.

### **5.2.2 Comparison of the performance of the small and medium manufacturing firms that had adopted strategic planning and those that had not adopted.**

To compare the performance of adopters and non-adopters, independent samples t-test method was used and the different variables that were measured included; the firms' annual growth in sales, profits, number of full time employees and the firms' annual growth rate in the market share. For the different parameters that were used to measure performance, the mean level for adopters was found to be significantly higher than that of non-adopters (mean difference = -1.25,  $t = -5.012$ ,  $df = 113$ ,  $p < 0.001$ ). The study found that the different measurement attributes improved upon adoption of strategic planning from an average growth rate of 4% to 8% for non-adopters of strategic planning and 11% to 15% for the adopters.

In regard to the growth in sales volumes, the study found that the mean level for the adopters was significantly higher than that of non-adopters (mean difference = -1.212,  $t = -4.331$ ,  $df = 113$ ,  $p < 0.001$ ). On average the rate of annual growth in sales for the SMEs that had not adopted strategic planning was 6% to 10% and for the firms that had adopted, the annual growth rate was 11% to 15%. The results thus clearly showed that adoption of strategic planning in the small and medium manufacturing firms improved the rate of annual growth of the sales volumes.

The test results revealed that mean level in regard to profits for the adopters was significantly higher compared to non-adopters (mean difference = -1.3932,  $t = -4.844$ ,  $df = 111$ ,  $p < 0.001$ ). The average annual growth rate in profits was between 6% to 10% for the firms that had not adopted strategic planning and for the firms that had adopted, the growth rate was between 11% to 15%. Based on these results, it was clearly evident that the firms that had adopted strategic planning had a higher annual growth rate in profits compared to the ones that had not adopted.

In regard to annual growth of full time employees, independent samples t-test results revealed that the mean level of the SMEs that had adopted strategic planning tool was significantly higher than for the firms that had not adopted (mean difference = -1.259 , t = -4.540, df = 108, p < 0.001). In percentage form, the annual growth rate of full time employees for the firms that had not adopted was 0% to 5% and for the ones that had adopted, the growth rate was 11% to 15%. The growth rate of the number of full time employees for the firms that had adopted strategic planning was thus higher than for the firms that had not adopted and this showed that adoption of strategic planning tool in the manufacturing SMEs led to an increased growth rate in the number of full time employees engaged by the SMEs.

In regard to the market share, independent samples t-test results revealed that the mean level for the adopters of strategic planning was significantly higher than that of non-adopters (mean difference = -1.187, t = -4.354, df = 95, p < 0.001). The annual growth rate for the firms that had not adopted strategic planning was 6% to 10% and for the ones that had adopted, the annual growth rate was 11% to 15%. It was thus clearly evident that use of strategic planning tool in small and medium sized manufacturing firms led to an increase in the annual growth rate of the market share.

### **5.2. 3 Comparison of the performance of the small and medium manufacturing firms before and after adoption of strategic planning.**

A key goal of a firm that adopts strategic planning is to improve its overall performance after the long term planning tool has been effectively adopted. Among the areas that many firms aim at improving upon successful adoption of strategic planning include; sales, profits, number of full time employees and the market share. To establish the growth trends for the two periods, the study used paired t-test. The aggregate rate of performance of the different measurement parameters for the period after adoption of

strategic planning was found to be significantly higher than for the period before adoption (mean difference = 1.67,  $t = -8.505$ ,  $df = 63$ ,  $p < 0.001$ ). On average, the different measurement parameters improved from an average of 3% to 5% before adoption of strategic planning to between 12% and 17% after adoption.

Paired t-test results showed that the rate of growth in sales volumes was higher after adoption of strategic planning (mean difference = 1.61,  $t = -7.168$ ,  $df = 63$ ,  $p < 0.001$ ). In percentage form, the test results revealed that the annual growth in sales volumes was 6% to 10% before adoption of strategic planning and after adoption, the growth rate improved to between 16% and 20%. In regard to this aspect, 74% of the respondents whose firms had adopted the long term planning tool agreed that sales volumes had been growing steadily after adoption of strategic planning. The findings of this research study thus showed that the annual sales growth in the manufacturing SMEs improved after adoption of strategic planning.

As pertains to the growth in profit levels, the study found that the rate of growth for the period after adoption of strategic planning was higher than the rate before (mean difference = 1.85,  $t = -9.350$ ,  $df = 60$ ,  $p < 0.001$ ). Comparison of growth rate in profits for the two periods found that the annual growth rate for the period before strategic planning was 0% to 5% and after adoption increased to between 11% and 15%. Of the respondents who had adopted strategic planning in their firms, 78% agreed that the profits had steadily increased after the adoption of the long term planning tool. Based on these findings, the average growth rate in profits increased significantly after the adoption of strategic planning in the manufacturing SMEs.

In regard to the growth rate in the number of full time employees, paired t-test results showed that the rate of growth for the period after adoption of strategic planning was significantly higher than the period before (mean difference = 1.47,  $t = -7.346$ ,  $df = 62$ ,  $p$



< 0.001). Before adoption of strategic planning, the average annual growth rate in full time employees was 0% to 5% and this then increased to between 11% and 15% after adoption. 81% of the informants agreed that strategic planning aided in the growth of full time workers in their small and medium manufacturing firms. It was thus evident that the annual growth rate in the number of full time employees improved significantly after adoption of strategic planning tool in the manufacturing SMEs.

Paired t-test was also used to compare the annual growth rates in market share for the period before and after adoption of strategic planning. The test results revealed that the rate of annual growth for the period after adoption was significantly higher than for the period before (mean difference = 1.53,  $t = -8.141$ ,  $df = 56$ ,  $p < 0.001$ ). In percentage form, the annual growth rate in market share was 6% to 10% before adoption and this then increased to between 11% and 15% after adoption. It was thus clearly evident that the growth rate in the market share improved after adoption of strategic planning in the manufacturing SMEs.

#### **5.2.4 Assessment of the factors that determine adoption of strategic planning in small and medium manufacturing firms in Kenya.**

The study aimed at establishing the internal and external factors that influence adoption of strategic planning tool in the small and medium manufacturing firms in Kenya. In regard to the availability of key resources such as manpower, materials, money as well as machines and methods, the study found that this was a key determinant that influenced adoption of strategic planning in the manufacturing SMEs. The factor was rated as important by 91% of the respondents and only 5% and 3% respectively rated it as less and least important. The mean value for the factor was 4.30 which correspond to a “more important” rating in the Likert scale. All firms depend on both internal and

external resources for growth and this was found to greatly determine adoption of strategic planning tool in the manufacturing SMEs.

Organizational structure in an organization as a factor that determines adoption of strategic planning was considered an important factor by majority (91%) of the respondents and only 6% and 3% respectively considered it as less important and least important. In the Likert scale, organizational structure had a mean value of 3.91 which corresponds to a “more important” rating in the Likert scale. The way in which the leadership of an organization is structured was thus found to greatly determine whether a firm adopts strategic planning tool or does not.

The study also found that the leadership style adopted by the organization determines whether the firm would adopt the strategic planning tool or not and the factor was rated as important by 89% of the total informants. 8% and 3% of the respondents rated the factor as less and least important respectively. The mean value for this parameter was 3.88 which correspond to a “more important” scale rating in the Likert scale. The findings of the study showed that there is a high relationship between the leadership style practiced in the small and medium manufacturing firms and adoption of strategic planning tool.

The organization culture prevalent in the organization was also found to have an influence on the adoption of strategic planning in the small and medium manufacturing firms in Kenya. The factor was rated as important by 79% of the respondents and only 15% and 6% respectively of the respondents rated the factor as less and least important. The mean value for organizational culture was 3.54 which correspond to a “more important” rating in the Likert scale. The elements of an organizational culture in any firm will determine how much employees are aligned to the strategic plan, how much they support it with their actions and thus the degree of its success.

Globalization of markets was another factor that the study found to have an influence on the adoption of strategic planning in the manufacturing SMEs. 73% of the total respondents rated the factor as important in the adoption of strategic planning while 11% and 16% of the respondents rated the factor as less and least important respectively. In the Likert scale, the mean value was 3.26 which correspond to an “important” rating. Globalization of markets has implications for business strategy and only businesses that are able to appropriately respond to global challenges through adoption of strategic plans are able to survive in the long term.

The study found the degree of innovativeness in the small and medium manufacturing firms to also affect the adoption of strategic planning in the firms and the factor was rated as important by 77% of the informants. 19% and 4% of the total informants rated the factor as less and least important respectively. The mean value for the factor was 3.54 which correspond to a “more important” rating in the Likert scale. In order to overcome internal and external challenges prevalent in the modern business and thus increase chances of adopting strategic planning tool, business owners and managers must enhance the degree of innovativeness in their firms.

The study also found policies and regulations put in place by the governments as another factor that determine adoption of strategic planning in the manufacturing SMEs. 86% of the respondents rated this factor as important and only 10% and 4% respectively rated the factor as less and least important. In the Likert scale, this factor had a mean value of 3.80 which corresponds to a “more important” rating in the Likert scale. In many countries world over, the governments design rules and regulations that can have major effects on the operations of the manufacturing firms. It also provides social goods such as public health and education that affects the stock of human capital and can affect the long term operations of many organizations thus the need for planning in the long term by use of strategic plans.

In regard to the reward system existent in the firms, the study found that the factor was not a significant determining factor in the adoption of strategic planning in the small and medium manufacturing firms in Kenya. Only 48% of the respondents indicated this as an important factor and 25% and 27% of the informants rated the factor as less and least important respectively. This thus clearly showed that adoption of strategic planning in the manufacturing SMEs is influenced by other factors apart from the reward systems.

The study then proceeded to test the degree of association of some outlined factors and the adoption of strategic planning using the Chi square test. Logit model was then used to explain the degree of influence of various factors on the adoption of strategic planning tool on the small and medium manufacturing firms. Regarding the nature of management (whether by owners or managers) the study results revealed that a degree of association existed between the nature of management and adoption of strategic planning. Logit model was fitted in the data with adoption of strategic planning as the dependent variable and the nature of management as the independent variable and the model converged ( $\chi^2= 5.367$ ,  $df=1$ ,  $p= 0.021$ ).

Adoption of strategic planning tool was found to be higher in those SMEs that were headed by managers (59.8%) as compared to the ones run by the owners (38.1%). The results of the Logit model further revealed that being the business owner managing the firm significantly influences the probability of adoption negatively. The manufacturing SMEs where the firm owners were managing the firms were 2.42 times less likely to adopt strategic planning tool compared with the ones run by employed managers.

Chi square test for association between the respondents' highest level of education and adoption of strategic planning tool revealed that the two variables were associated. When Logit model was fitted to the data with adoption of strategic planning as the dependent variable and the level of education as the independent variable, the model

converged ( $\chi^2 = 13.564$ ,  $df= 3$ ,  $p= 0.004$ ). For the respondents who had post-graduate qualifications as the highest qualification, 61.9% had adopted strategic planning, those who had first degree as the highest qualification, 73.3% had adopted strategic planning in their firms. Of the informants who had diplomas as the highest qualification, 44.4% had adopted the long term planning tool and the ones who had college certificates as the highest qualification, 25% had adopted strategic planning in their operations.

The Logit model results further revealed that possession of college certificates and diplomas by top managers and owners influences the probability of adoption of strategic planning tool negatively. The respondents who possessed college certificates as the highest level were 5.49 times less likely to adopt strategic planning in their firms compared to the ones who possessed a post-graduate qualification. The informants who possessed diplomas as the highest qualification were 1.58 times less likely to adopt strategic planning tool as compared to the holders of a post-graduate degree.

In regard to the size of the business, Chi square test results revealed that the size of the business and adoption of strategic planning were significantly associated. For the small enterprises that employed between 5 and 49 permanent employees, the adoption rate of strategic planning tool was 47.4% while the medium firms that employed between 50 and 99 permanent employees, adoption rate was 75.0%. When Logit model was fitted to the data with adoption of strategic planning as dependent variable and the size of the business as independent variable, the model converged ( $\chi^2 = 6.288$ ,  $df=1$ ,  $p= 0.012$ ). The study found that operating a manufacturing business as a small firm influences the adoption of strategic planning negatively. Small firms were 4.39 times less likely to adopt strategic planning tool compared to the medium sized firms.

Chi square tests revealed that an association existed between the legal form of the manufacturing firms and adoption of strategic planning ( $\chi^2= 6.036$ ,  $df= 2$ ,  $p= 0.049$ ).

The adoption rate for sole proprietorship firms was 39.6%, for partnership firms was 55%, and for the limited firms, adoption rate was 62.7%. Upon Logit model being fitted to the data with adoption of strategic planning being the dependent variable and the legal form of firms as the independent variable, the model converged ( $\chi^2 = 9.727$ ,  $df= 2$ ,  $p= 0.008$ ). The study found that operating a manufacturing firm as sole proprietorship or partnership significantly influences the rate of adoption negatively. The firms that were operated as sole proprietorships were 3.46 times less likely to adopt strategic planning taking limited companies as the reference. The firms that were operated as partnership businesses were 1.75 times less likely to adopt strategic planning compared to the ones operated as limited firms.

As pertaining to the SMEs' rate of advancement in technology, the Chi square tests revealed that there existed an association between the advancement in technology and adoption of strategic planning ( $\chi^2= 11.306$ ,  $df= 2$ ,  $p= 0.004$ ). For the firms that had a low rate of advancement in technology, the rate of adoption of strategic planning tool was 7.7%. For the manufacturing firms that had a medium rate of advancement in technology, the adoption rate was 56.3% and the ones that had a rate of advancement, the adoption rate of strategic planning was 58.8%. When the Logit model was fitted to the model with adoption of strategic planning as the dependent variable and rate of advancement in technology as the independent variable, the model converged ( $\chi^2 = 12.317$ ,  $df= 2$ ,  $p= 0.002$ ). The study results revealed that having a low and medium rate of advancement in technology influences the probability of adoption of strategic planning tool negatively. Firms that had a low rate of advancement in technology were 6.17 times less likely to adopt strategic planning tool as compared to the ones with high rate of advancement.

In regard to the level of team work spirit existent in the firms, the study by use of Chi square test revealed that an association existed between the level of team-work spirit in

the manufacturing SMEs and adoption of strategic planning ( $\chi^2= 9.697$ ,  $df= 2$ ,  $p= 0.008$ ). For the firms that had a low team work spirit, the rate of adoption of strategic planning was 0.0% and the firms that had a medium level of team-work spirit, the rate of adoption was 42.7%. The firms that had high levels of team work spirit had 66.7% rate of adoption of strategic planning. Upon Logit model being fitted in the model with strategic planning as dependent variable and the level of team work spirit as the independent variable, the model converged ( $\chi^2 = 8.320$ ,  $df= 2$ ,  $p= 0.016$ ). The study found that having low and medium levels of team work spirit influences the probability of adoption of strategic planning negatively. The firms that had a medium level of team-work spirit were 2.69 times less likely to adopt strategic planning as compared to the ones with high level of team-work spirit.

As pertains to the firms' investment in Research and Development, Chi square test results revealed that there existed an association between investment in R & D and adoption of strategic planning ( $\chi^2= 5.762$ ,  $df= 1$ ,  $p= 0.016$ ). The rate of adoption of strategic planning for the firms that had not invested in R &D was 45.0% and for the ones that had made the investment, the rate of adoption was 66.0%. When logit model was fitted to the model with adoption of strategic planning as the dependent variable and investment in R & D as the independent variable, the model converged ( $\chi^2 = 11.568$ ,  $df= 1$ ,  $p= 0.001$ ). The study found that having no investment in R & D influences the probability of adoption of strategic planning negatively. The firms that had not invested in R & D were 3.68 times less likely to adopt strategic planning compared to the ones that had invested on the same.

In regard to training about strategic planning tool, Chi square results revealed that an association existed between training on strategic planning and adoption of strategic planning in the manufacturing firms ( $\chi^2= 13.478$ ,  $df= 1$ ,  $p= 0.001$ ). For the firms that had not invested in training on strategic planning to the managers and firm owners, the rate

of adoption of strategic planning tool was 40.4% and for the firms that had invested on the same, the rate of adoption was 73.8%. When Logit model was fitted to the data with adoption of strategic planning as the dependent variable and training on strategic planning as the independent variable, the model converged ( $\chi^2 = 11.998$ ,  $df= 1$ ,  $p= 0.001$ ). The study results revealed that having no training on strategic planning influences the adoption of strategic planning in the manufacturing firms negatively. The firm owners and managers who had not received any training were 3.97 times less likely to adopt the tool compared to the ones who had been trained.

As pertaining to the modes of communication dominant in the manufacturing firms, Chi square test results revealed that there was a significant association between the mode of communication prevalent in the firms and adoption of strategic planning ( $\chi^2= 11.951$ ,  $df= 4$ ,  $p= 0.018$ ). The rate of adoption of strategic planning for the firms that preferred meetings as most common mode of communication was 23% and the firms that preferred phones, the adoption rate was 34.1%. For the firms that used written mode as the most common mode of communication, the rate of adoption of strategic planning tool was 50% and the ones that used E-mails, the rate of adoption was 60%.

For the firms that used symbols as the most common mode of communication, the rate of adoption of strategic planning was 88.9%. Upon Logit model being fitted on the data, the model converged ( $\chi^2 = 17.106$ ,  $df= 4$ ,  $p= 0.002$ ). The study found that use of meetings, phones, written mode and E-mails influences adoption of strategic planning negatively taking use of symbols as the reference. The firms that used phones as the most common mode of communication were 12.20 times less likely to adopt strategic planning compared to the ones using symbols. The manufacturing firms that used E-mails as the most preferred mode of communication were 3.00 times less likely to adopt strategic planning taking the firms that used symbols as the reference.



The Chi-square test results revealed that the following factors were not associated with the adoption of strategic planning in the small and medium manufacturing firms in Kenya; gender and age of the respondents, the location of the firms in regard to the CBD (Thika town), the number of years the firms had been in operation, motive for starting the businesses and the volumes of annual sales made by the manufacturing firms.

### **5.3 Conclusions**

Based on the various findings of the research study, the researcher made several conclusions that are as outlined based on the research objectives.

#### **5.3.1 Investigation of the status of adoption of strategic planning by small and medium sized manufacturing enterprises in Kenya.**

The results of the study led to the conclusion that the rate of adoption of strategic planning in the small and medium manufacturing firms in Kenya is low (58%) compared to the adoption rate of large manufacturing firms in the private sector and the public institutions. The rate is also low compared to the adoption rate of the same in the small and medium firms in the developed countries. The study results thus confirmed the study findings that have been carried out in other developing countries that found the adoption rate of strategic planning to be low in many small and medium manufacturing firms.

In response to the general question (using the YES/NO format) as to whether the SMEs had adopted strategic planning tool, the study found that a higher percentage of the informants (69.7%) responded that their firms had adopted the long-term planning tool. A further enquiry that sought to determine the presence of the first three key sub components of strategic planning (vision, mission and goals) in the SMEs revealed that a slightly lower percentage of the manufacturing firms (58%) had actually adopted strategic planning. The study thus made a conclusion that not all firms that start the

process of adoption of strategic plans have plans that add value to their operations. This research finding supported earlier findings by Kelmar and Noy (1990) who found that many SMEs that claim to have strategic plans have plans that are *ad hoc* and intuitive rather than formally written. The study also found that strategic planning was relatively new in most of the small and medium manufacturing firms in Kenya as majority of the firms had adopted the tool had only adopted it for a period of less than six years.

### **5.3.2 Comparison of the performance of the small and medium manufacturing firms that had adopted strategic planning and those that had not adopted.**

When the different measurement parameters (annual growth in sales, profits, market share and number of full time employees) were analyzed together the results showed that the mean level for adopters was significantly higher than that of non-adopters. The average growth rate of the parameters for the non-adopters was between 4% and 8% and for the adopters of strategic planning the growth rate was 11% to 15% and therefore the findings showed that adoption of strategic planning enhances overall performance in organizations.

Independent samples t- test results showed that the annual growth rate in sales was significantly higher for the firms that had adopted strategic planning as compared to the ones that had not adopted. Sales volumes grew at a higher rate in the firms that had adopted strategic planning as compared to the ones that had not adopted. The results thus revealed that the annual growth in sales volumes was higher for the adopters of strategic planning tool compared with the non-adopters and therefore the study concluded that adoption of strategic planning tool in organizations leads to an improvement in the annual growth rate of sales volumes.

In regard to the growth in profits, the study found that the annual growth rate was significantly higher for the adopters of strategic planning as compared to the non-adopters. The average annual growth in profits measured in percentages for the firms that had adopted the long term planning tool was higher compared to the firms that had not adopted. It was therefore inferred that adoption of strategic planning leads to enhanced growth of profits levels in manufacturing SMEs.

The study found that the mean level in regard to the growth of full time employees for the firms that had adopted strategic planning was significantly higher than the ones that had not adopted. The average annual growth rate in the number of full time employees for the manufacturing firms that had adopted strategic planning was higher compared to the firms that had not adopted. The study thus evidently found that the growth rate of full time employees hired by the manufacturing SMEs was higher for the firms that had adopted strategic planning compared to the ones that had not adopted and therefore concluded that adoption of strategic planning leads to a higher annual growth rate in full time employees.

Pertaining to the annual growth in the market share, the study by use of independent samples t-test showed that the mean level for the firms that had adopted strategic planning was significantly higher than for the firms that had not adopted. The average annual growth rate in the market share for the firms that had adopted strategic planning tool was higher compared to the SMEs that had not adopted. It was thus clearly evident that the growth rate in the respective market shares was higher for the firms that had adopted strategic planning compared to the ones that had not adopted and thus the study concluded that adoption of strategic planning leads to an increase in the annual growth rate of an organizations' market share.

### **5.3.3 Comparison of the performance of the small and medium manufacturing firms before and after adoption of strategic planning.**

The aggregate mean level of annual growth of the different parameters that were used to measure performance (sales, profits, employees' growth and the market share) for the period after adoption of strategic planning was found to be higher than for the period before. Measured in percentage form, the average growth rate for the four parameters was higher for the period after adoption of strategic planning as compared to the period before. It was thus clearly evident that adoption of strategic planning improves the overall performance of the manufacturing SMEs.

Using paired t- test, the study found that the rate of annual growth in sales volumes was significantly higher for the period after adoption as compared to the period before. In percentage form, the annual growth rate in sales volumes for the period after adoption of strategic planning was also higher compared to the period before. It was thus clearly evident that adoption of strategic planning led to an increase in the annual growth of sales volumes in the manufacturing firms and thus the study concluded that adoption of strategic planning tool leads to enhanced growth of sales volumes in manufacturing firms.

The study found that the annual growth in profits was significantly higher after adoption of strategic planning tool compared to the period before. Measured in percentages, the results showed that the average annual growth in profits for the small and medium manufacturing firms after adoption of strategic planning was higher than for the period before adoption. The results thus revealed that the annual growth in profits for the SMEs was higher for the period after adoption of strategic planning compared to the period before. The study thus concluded that adoption of strategic planning in the manufacturing SMEs leads to increased growth rate in profit levels.

Regarding annual growth in full time employees in the manufacturing SMEs, the study found that the mean level was significantly higher after adoption of strategic planning tool compared with the period before. In percentages, the average annual growth rate of full time employees for the period after adoption of strategic planning was higher than for the period before adoption. It was evident from the study findings that the growth rate in the number of full time employees increased significantly after adoption of strategic planning in the small and medium manufacturing SMEs. The researcher thus concluded that adoption of strategic planning in manufacturing SMEs leads to a higher growth rate in the number of full time employees.

Pertaining to the market share, the study found that the mean level was higher for the period after adoption of strategic planning compared to the period before. Measured in percentages, the average annual growth rate in market share for the period after adoption was higher than for the period before adoption. The study findings thus clearly showed that the growth rate of the market share in the small and medium manufacturing firms increased after the adoption of strategic planning and therefore the researcher concluded that adoption of strategic planning leads to enhanced growth rate in the market share.

#### **5.3.4 Assessment of the factors that determine adoption of strategic planning in small and medium manufacturing firms in Kenya.**

The research study found that a number of factors determine adoption of strategic planning in the small and medium manufacturing firms in Kenya. The first factor that the study found that determines the adoption of strategic planning is the availability of key resources. Organizations are dependent on the environment for their resources and these resources literally control the manner in which the firms do their long term planning. These resources must be nurtured and protected to ensure effective adoption

and implementation of the long term planning tool as resources can either be an impediment or support in the adoption of strategic planning tool.

The study also found organizational structure to be an important factor in determining the adoption of strategic planning in the manufacturing SMEs. Many of the manufacturing SMEs often do not have the means to ensure continuous and successful adoption of strategic planning tool because they maintain less developed management capacity and administrative systems (organizational structure). The study thus found that the manner in which leadership is organized from the top to down plays a big role in the adoption of strategic planning in the manufacturing SMEs.

The leadership style dominant in an organization was another factor that the research study found determines adoption of strategic planning in the manufacturing firms. Staff participation in decision making is important to the management and has an impact on the adoption of strategic plans in the manufacturing firms. An effective leadership involves encouraging employees to perform better through communicating the value of the long term targets and providing a scope for individual and team contributions. Adoption of strategic planning tool is therefore determined by the leadership style that is adopted in an organization.

The organizational culture dominant in an organization was another factor that the study found determines the adoption of strategic planning tool in the manufacturing SMEs. The elements of an organizational culture will determine how much employees in an organization are aligned to the strategic plan, how much they support it with their actions and thus the degree of its success. The culture dominant in an organization can act as a catalyst or an inhibitor in the adoption of strategic planning in any organization.

Globalization of markets was also another factor that the study found determines the adoption of strategic planning in the manufacturing SMEs. Globalization of markets and

with it the subsequent entry of cheaper end products in the developing countries has significantly changed market contexts and thus the way the manufacturing SMEs do their long term planning, majority preferring to start planning in the long term by use of strategic planning in a bid to survive.

The degree of innovativeness existent in an organization was another factor that the study found determines the adoption of strategic planning in the manufacturing SMEs. Strategic planning being a relatively new management tool especially in the developing countries, the study found that the degree of innovativeness in other aspects in firms also determines the ease with which the SMEs adopt strategic planning. The study concluded that firms with high degree of innovativeness in other fields such as production, quality assurance and marketing are more likely to adopt strategic planning compared to those with medium or low levels.

Existence of policies and regulations put in place by the governments was another factor that the study found determines the adoption of strategic planning in the small and medium manufacturing firms. Many national and county governments on several occasions design policies and regulations that have direct effect on the operations of the manufacturing SMEs and this influences the manner in which the firms do their long term planning. The researcher thus concluded that the policies and regulations that the governments put in place can either encourage or discourage adoption of strategic planning in organizations. However, the reward systems put in place by the firm's management was not found to be a determining factor in the adoption of strategic planning tool.

The study by use of Chi square test sought to determine the existence of association (relationship) between some factors and adoption of strategic planning in the manufacturing SMEs. In this aspect, the study found the nature of management (whether

the firms were managed by owners or managers) had an association with adoption of strategic planning tool. The firms that were under the leadership of managers were found to have adopted strategic planning at higher rates compared to the ones run by the owners. The firms run by the owners were 2.42 times less likely to adopt strategic planning compared to the ones under the leadership of managers. To encourage adoption of strategic planning, the firms' owners should thus encourage leadership by qualified managers.

The study also found that the level of education of owners and managers was associated with adoption of strategic planning in the manufacturing SMEs. The firm owners and managers who possessed university degrees and post-graduate qualifications were found to have adopted strategic planning in their firms at higher rates compared to the ones who possessed diplomas and college certificates. Firm owners and managers who possessed a college certificate as the highest education level were 5.49 times less likely to adopt strategic planning taking possession of a post-graduate qualification as the reference. The respondents who possessed diplomas as the highest education level were 1.58 times less likely to adopt strategic planning compared to the one who possessed a post-graduate qualification. Possession of higher education levels by the firm owners and managers was thus found to be a key determinant of the adoption of strategic planning in manufacturing firms.

The size of the business was also found to have an association with the adoption of strategic planning in the manufacturing SMEs. The adoption rate of the long term planning tool was higher in the medium sized firms compared to the small firms. The study found that small firms were 4.39 times less likely to adopt strategic planning compared to the medium sized firms. The study therefore concluded that adoption of strategic planning tool in manufacturing firms depends with the size of the organization.



This then explains the reason why adoption of the strategic planning tool is higher in the large firms and public organization as compared with the SMEs.

Also associated with adoption of strategic planning was the legal form of the SMEs. Manufacturing firms operated as sole proprietorships had the lowest adoption of strategic planning while Limited companies had the highest rate of adoption of strategic planning tool. The study found that sole proprietorships were 3.46 times less likely to adopt strategic planning compared with limited companies. Partnership firms were 1.75 times less likely to adopt strategic planning taking limited companies as the reference. The researcher thus concluded that adoption of strategic planning in organizations depended with the degree of a firm's development. Small and less developed firms had less rates of adoption and larger and more developed firms had higher rates of adoption of strategic planning tool.

The rate of the manufacturing firms' advancement in technology was also found to have an association with adoption of strategic planning. The firms that were rated as having low levels of advancement in technology were found to have the lowest adoption rates of strategic planning and the firms that were rated as having high levels of advancement in technology were found to have the highest rate of adoption of strategic planning tool. The firms that had a low rate of advancement in technology were 6.17 times less likely to adopt strategic planning taking the ones with high rate of advancement as the reference. Therefore the study concluded that the rate of advancement in technology determines the rate of adoption of strategic planning in organizations.

The research study also found the levels of team-work spirit in the manufacturing firms had an association with the adoption of strategic planning. The firms that the respondents rated as having low levels of team work spirit were found to have not adopted strategic planning while the firms that had high team spirits had the highest

adoption of the long term planning tool. The manufacturing SMEs that had medium levels of team-work spirit were 2.69 times less likely to adopt strategic planning taking the ones that had high team-work spirit as the reference. The level of team-work spirit in the manufacturing firms was thus found to be a key factor in the adoption of strategic planning tool.

Investment in R & D was another factor that the study found to have an association with the adoption of strategic planning in the manufacturing firms. The firms that had not invested in R & D were found to have lower rates of adoption of the long term planning tool as compared to the ones that had invested on the same. The research study found that the manufacturing firms that had not invested in R & D were 3.68 times less likely to adopt strategic planning taking the ones that had invested on the same as the reference. The study therefore concluded that investment in R &D in firms has a positive correlation with the adoption of strategic planning in the manufacturing SMEs.

Training on strategic planning was also found to have an association with adoption of strategic planning tool. The firms that had invested in training on strategic planning were found to have higher rates of adoption compared to the ones that had not invested on the same. The manufacturing firms that had not invested in training on strategic planning were 3.97 times less likely to adopt strategic planning compared to the firms that had invested in training. Training in regard to strategic planning was thus found to have a positive correlation with adoption of strategic planning in the small and medium manufacturing firms.

The research study also found the mode of communication dominant in the manufacturing firms to be associated with the adoption of strategic planning. The firms that had meetings and phones as the preferred modes of communication had the lowest rates of adoption and the firms that used symbols as the preferred mode had the highest

rate of adoption. The manufacturing firms that preferred E-mails as the dominant mode of communication were 3.00 times less likely to adopt strategic planning compared to the ones using symbols. The firms that used phones as the dominant mode of communication were 12.20 times less likely to adopt strategic planning taking the firms that used symbols as the reference. The study thus concluded that the mode of communication that a firm adopts has an influence on the adoption of strategic planning tool. Some communication modes such as use of symbols were found to lead to higher adoption of strategic planning compared to use of meetings, phones and E-mails.

#### **5.4 Recommendations**

The findings of this study have shown that the status of adoption of strategic planning in the small and medium sized firms is actually low when compared to the rate in large manufacturing firms and public institutions. The study also found that for the firms that had adopted strategic planning, majority had adopted the tool for a period of less than six years. The study thus recommends that the management in the small and medium enterprises give key focus to training on strategic planning tool to the managers and owners in the manufacturing firms as a good percentage of the respondents were found not to have received the relevant training.

The firm owners who entrusted managers to run their small and medium manufacturing firms should also empower them to make key decisions regarding the firms. This is so as the initiators of the long term planning tool were found to be the firm owners yet majority of the SMEs were run by managers. The small and medium manufacturing firms should also form strategic partnerships with the large firms in the value chain so as to gain from the advantage of benchmarking in regard to strategic planning. Many firms in the current business world are ready and willing to upgrade the operations of other supporting firms in their value chain to gain from the derived enhanced service levels.

As the performance of the manufacturing SMEs that had adopted strategic planning measured in annual growth rates of; sales volumes, profits, full time employees and market share was found to be higher compared to the firms that had not adopted, the study recommends that the firm owners and managers in-charge of the small and medium manufacturing firms should embrace strategic planning tool in their operations. This is because the firms implementing strategic planning are more likely to report enhanced growth in sales, profits, number of full time employees and the market share among other benefits. The performance of the firms that had adopted strategic planning was also better after adoption of strategic planning as compared to the period before. Therefore adoption of strategic planning was found to lead to improved firm results in the firms that had adopted strategic planning as compared to the ones that had not adopted and also for the period after adoption as compared to the period before adoption.

In regard to the factors that determine the adoption of strategic planning in the small and medium manufacturing firms, the study recommends that firm managers and owners should ensure that the key resources such as the manpower, money, machines, materials and proper working methods are availed in their firms, nurtured and protected. Inadequate resources in a firm are likely to lead to incomplete adoption of strategic plans in the firms. The management in manufacturing SMEs should also ensure that proper organization structures are set up to ensure easy flow of communication and coordination both downwards and upwards along the various hierarchies. The study recommends that firms' management teams adopt leadership styles that will encourage staff participation in long term planning decisions. The organizational culture in firms should also be adopted, modified and developed in such a way that it is aligned to the strategic plan in the firms as the culture in any organization to a great extent determines the degree of success of any adopted management tool or practice.

Due to the competition that has been realized as a result of globalization, firms should develop products that will add value to the customers yet be in a position to compete in regard to price and value addition with the cheap imports. The owners and managers should encourage all cadres of employees in their firms to be highly innovative as this is likely to lead to adoption of the current management tools and practices in their organizations. The national and county governments should also draft policies and regulations that will encourage firms operating within their boundaries to increase the adoption of management tools that have been proved to work in other firms especially in developed countries. The governments should also encourage collaborations of local firms with large multinationals who over time have been able to develop long term planning tools that have been tested, passed and qualified over time.

The study also recommends that the entrepreneurs seek and employ highly trained and competent managers to oversee the operations of their firms. Highly trained and qualified managers are able to competently plan in the long term to ensure enhanced firm performance in organizations. The firm owners should also possess high academic qualifications as there is a positive correlation between high academic qualifications and ability to plan in the long term. Entrepreneurs should also upgrade the size of their firms once they have been properly established as medium and large sized firms have better resources to adopt modern management tools such as strategic planning as compared to the small firms. The study also recommends that firms should increase their levels of investment in R & D as this would increase the rate of adoption of other management tools in addition to developing newer and highly competitive end-products.

The levels of team work spirit in the manufacturing firms should also be enhanced to ensure that all employees are properly aligned and work in unison in regard to strategic planning. The management in manufacturing SMEs should also give focus to training in strategic planning to their employees as the degree of training has a positive correlation

with the adoption of strategic planning tool. The preferred modes of communication in firms also ought to be carefully and properly selected to ensure fast, effective and convenient transmission of information across the entire organizations. The mode of communication that is fast, cheap, effective and convenient such as use of symbols should be given special impetus in small and medium sized organizations as it was found to enhance higher adoption of strategic planning tool.

### **5.5 Suggestions for further research**

The study considered adoption of strategic planning using small and medium manufacturing firms for firms located in an urban setting. The study recommends that future research be done to determine whether the status of adoption of strategic planning in small and medium manufacturing firms in urban areas is the same for manufacturing SMEs that are located in peri-urban or rural settings. Future research studies can compare the performance before adoption and after adoption, compare the performance of the firms that have adopted and not adopted strategic planning and also establish the factors that determine adoption of the long term planning tool in manufacturing SMEs located in the peri-urban or rural settings.

The study was specific to the small and medium manufacturing firms and more research on adoption of strategic planning should be carried out in other small and medium firms in sectors such as banking, retailing, insurance, distribution among others. Performance for the period before adoption and after and also for the manufacturing firms that had adopted/not adopted strategic planning was measured in terms of annual growth of; sales, profit levels, number of full time employees and the market share. This study recommends that future comparisons be carried out using other different measurement criteria such as productivity levels, turn-around times, ROA, ROE and ROI.

The study focused only on the concept of adoption of strategic planning in the small and medium manufacturing firms. It is proposed that more studies should be carried on other strategic planning process stages so as to broaden the understanding of strategic planning practice. The study mainly used questionnaires and the study thus recommends that future studies be carried out using different data collection techniques. Future research studies can also investigate the adoption of other management tools in firms such as Balanced Score Card, Six Sigma and Gemba Kaizen.

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## APPENDICES

### **Appendix 1: Introduction letter to the respondents**

Dear Respondent,

My name is Francis Muiruri Kang'ethe, a student at Jomo Kenyatta University of Agriculture and Technology and pursuing a Doctor of Philosophy Degree in Business Administration (Strategic Management). In furtherance to my area of study, am conducting an academic research whose objective is to determine the influence of strategic planning on performance of small and medium manufacturing firms in Kenya.

I have selected your firm to participate in the study and would kindly request for your input in this study. Your answers should indicate the nature of adoption of strategic planning in your organization, the performance of the firm before and after adoption of strategic planning using the parameters outlined and the factors that determine the adoption of strategic planning in your organization.

The response obtained during the study will be treated with utmost confidentiality and will be used purely for the purpose of this study and not for any other purpose. I thank you for your willingness and participate in the research study.

Yours truly,

Francis Muiruri Kang'ethe

**Appendix 2: Introduction letter to the County Secretary**

MR FRANCIS MUIRURI KANG'ETHE  
P.O. BOX 7- 00600,  
NAIROBI.

THE COUNTY SECRETARY,  
KIAMBU COUNTY,  
P.O. BOX 2344- 00900,  
KIAMBU.  
Dear Sir

**REF: REQUEST TO CARRY OUT RESEARCH IN THIKA SUB-COUNTY**

I wish to kindly request for your approval and permission to carry out a research study in the small and medium manufacturing enterprises that are based in Thika Sub-County of Kiambu County. I am a PhD student at JKUAT in the department of ETML and part of the requirements before graduation is a research study in the area of study.

My Research study is titled: "Investigation of the adoption of strategic planning in small and medium manufacturing firms in Thika Sub-county". I will appreciate your assistance and promise to use this purely for the purpose of academic studies. I thank you well in advance.

Yours faithfully,

Mr. Francis Muiruri Kang'ethe

### **Appendix 3: Research Questionnaire**

This questionnaire seeks to determine the influence of strategic planning on performance of small and medium manufacturing enterprises in Kenya. This is an academic study and the information obtained will be treated confidentially and will not be used for any other purpose. Please answer ALL questions by putting a tick (√) in the box that closely matches your view or alternatively write in the spaces provided. I thank you for choosing to participate in this academic research.

Company and respondent details

#### **A. Respondents details**

1. Position/ Title of respondent  Owner  Manager
2. Gender  Male  Female
3. Respondent's age  20-25 years  26-30  31-40  41-50  51 and above
4. Respondent's highest level of formal education?  Certificate  Diploma  University (First degree)  Post-graduate  Other (Specify) .....
5. Respondent's length of service in the firm ..... years

#### **B. Organizations details**

6. Firm's name (Optional) .....
7. Legal form:  Sole proprietorship  Partnership  Cooperative  Limited Company  Others (Specify) .....

8. Where is the business located?  Within CBD  2-5KM from CBD  
 6-10 KM from CBD  More than 10 KM from CBD
9. How many years has the firm been operating in Kenya? .....years
10. What was the key motive of starting the business?  Profits  Growth maximization  Personal fulfillment  Hobby/Interest  Other reasons (Specify).....
11. In which business sector is the firm?  Food & beverage  Animal feeds  Rubber & plastics  Metal & allied  Chemical & Allied  Pharmaceuticals & medical equipment  Building & construction  Electrical & Electronics  Leather & footwear  Motor vehicle & Accessories  Paper & board  Textiles & Apparels  
 Others (Specify) .....
12. Total number of full time employees in the company including founders  5-49 employees  50-99 employees. Please state the actual number ..... employees
13. Number of business location(s) ..... branches
14. Number of departments within the firm ..... departments
15. The firm annual sales fall under one of the categories (In Ksh)  500,000-5M  
 5M-20M  20M-100M  100M – 800M  > 800 M
16. The firm's advancement in technology can be rated as:  Low  Medium  High



17. Team-work spirit amongst the employees can be rated as:  Low  Medium  High

18. Has the firm invested in Research and Development?  Yes  No. If yes, how much did the firm allocate to R&D in the last three years?  Less than 1M Ksh

1-2M Ksh  2-5M Ksh  More than 5M Ksh

### **C. Adoption of Strategic Planning**

19. Has the firm adopted strategic planning?  Yes,  No. If NO explain the reason(s) that has hindered adoption.....

20. For how long has your organization done strategic planning? ..... years

21. Who initiated the process of adoption of strategic planning in the firm?  Owner  Top managers  Suppliers  Customers  Employees  Others (Specify) .....

22. Have you received any training in regard to strategic planning?  Yes  No

23. Did customers' demands play a role in adoption of strategic planning?  Yes  No

24. Did suppliers' requirements play a role in adoption of strategic planning?  Yes  No

25. What is the most common mode of communication in your organization?

Meetings  Written  E-mails  Phones  Others (Specify) .....

26. In regard to the strategic plan document, please answer the following questions? (Rank using 1-10: where 10 is assigned to the MOST IMPORTANT and 1 LEAST IMPORTANT to the organization)

		Yes	No	Rank
a	The firm has a documented and realistic vision statement			
b	Vision statement clearly shows the current & future position of the firm			
c	The firm has a mission statement			
d	Does the mission statement include a clear and concise expression of the firm's purpose, philosophy & commitment?			
e	The firm has value statements governing the operations of the firm and its relationship with both internal and external stakeholders			
f	The firm has set objectives to help it achieve its goals			
g	The firm has developed strategies through which the mission & objectives will be achieved			
h	The firm has set goals that are quantifiable, consistent, realistic and achievable			
i	The firm has programs that cover resources, objectives, deadlines, budgets and performance targets			
j	The firm has action plans that include: what is to be done, when to be done & who is accountable each of actions being carried out			
k	The management has carried out a SWOT analysis to gauge its Strengths, Weaknesses, Opportunities & Threats			
l	The management has identified its competitive advantage to identify what it is best at compared to its competitors			
m	The management has developed a scorecard to report data on its KPI and track performance against monthly targets			
n	The management carries out financial assessment based on historical records to help in its planning			
o	The firm carries out financial assessment based on future projections			

27. To what extent are the objectives set out in the strategic plan achieved in your firm?

Not at all    Low    Moderate    High

**D. Factors determining adoption of strategic planning**

28. Please indicate if the following factors determined effective adoption of strategic planning in your firm. (Rank using 1-5: where 5 is assigned to the MOST IMPORTANT and 1 LEAST IMPORTANT to the organization)

		1	2	3	4	5
a	Availability of key resources such as manpower, machines, materials and methods					
b	Organizational structure existent in the firm					
c	Leadership style adopted by the management					
d	Organizational culture dominant within the firm					
e	Globalization of markets					
f	Reward systems applicable within the firm					
g	Degree for innovativeness within the firm					
h	Existence of policies & regulations put in place by the government					
	Others (Specify)					

29. Please, rate the following attributes in regard to your firm

		SA	A	N	D	SD
a	The firm's profits have been increasing significantly over the years					
b	Amount of taxes paid has been decreasing steadily over the years					
c	Our firm has enough cash to meet its obligations					
d	Long term financial planning capabilities has deteriorated					
e	ROA (Return on Assets) has been increasing steadily					
f	ROI (Return on Investment) has been increasing steadily					
g	ROE (Return on Equity) has been decreasing steadily					
h	Our customers are quite satisfied with our products					
i	The company is able to retain skilled & competent employees					
j	Sales volumes have been increasing steadily over the years					
k	Generation of first class products has been increasing steadily					
l	Employees' productivity has been increasing gradually					
m	Customer complaints have been increasing significantly					
n	Service efficiency in addressing customers issues has improved					
o	Customers cannot easily locate the firm's products					

Thank you for taking time to fill in the questionnaire. The information that you have provided will be treated with utmost confidentiality and will be used strictly for academic purposes only.

#### **Appendix 4: Interview guide**

1. What is the name of the organization?
2. When was the organization started?
3. Position/designation of the respondent
4. What is your business type and how is the business organized?
5. Has the organization adopted strategic planning?
6. If yes, what is the strategic planning time frame?
7. Who determines the adoption of strategic planning in the organization?
8. Who initiated strategic planning in the organization?
9. What key factors: internal, external and cultural (in the order of importance) determine the adoption of strategic planning in the organization?
10. How satisfactory has been the achievement of your profits, sales, ROA, ROE and ROI since the adoption of strategic planning?
11. Overall, to what extent are you satisfied with the achievement of company objectives since the adoption of strategic planning?
12. Do you have resources that are competitive compared to other SMEs? Please outline them
13. Which other management tool apart from strategic planning does the firm use?
14. Comment on the general adoption of strategic planning.

## Appendix 5: Multiple Logistic Model Results

### Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	15.382	4	0.004
	Block	15.382	4	0.004
	Model	15.382	4	0.004
Step 2	Step	6.287	2	0.043
	Block	21.67	6	0.001
	Model	21.67	6	0.001

### Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	83.991 <sup>a</sup>	0.175	0.246
2	77.704 <sup>a</sup>	0.237	0.334

### Classification Table<sup>a</sup>

		Predicted			Percentage Correct
		Adoption status			
	Observed	No	Yes		
Step 1	Adoption status	No	15	10	60
		Yes	11	44	80
	Overall Percentage				73.8
Step 2	Adoption status	No	10	15	40
		Yes	3	52	94.5
	Overall Percentage				77.5

**Variables in the Equation**

		<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
<b>Step</b>	<b>Mode</b>						
<b>1<sup>a</sup></b>	<b>Communication</b>			<b>9.797</b>	<b>4</b>	<b>0.044</b>	
	Meetings	1.916	0.679	7.96	1	0.005	6.795
	Written	-					
		21.036	2.84E+04	0	1	0.999	0
	E-Mails	1.959	1.155	2.875	1	0.09	7.091
	Phones	1.266	0.659	3.687	1	0.055	3.545
	Symbols	-0.167	0.41	0.166	1	0.683	0.846
<b>Step</b>	<b>Advancement</b>						
<b>2<sup>b</sup></b>	<b>technology</b>			<b>5.982</b>	<b>2</b>	<b>0.05</b>	
	Low	-0.095	1.372	0.005	1	0.945	0.909
	Medium	1.637	0.862	3.61	1	0.057	5.139
	<b>Mode</b>						
	<b>Communication</b>			<b>7.426</b>	<b>4</b>	<b>0.115</b>	
	Meetings	1.767	0.711	6.187	1	0.013	5.856
	Written	-					
		21.464	2.84E+04	0	1	0.999	0
	E-Mails	1.531	1.175	1.696	1	0.193	4.621
	Phones	1.284	0.775	2.745	1	0.098	3.61
	Symbols	-1.376	0.828	2.764	1	0.096	0.253