# THE ROLE OF EMPLOYEE BEHAVIOUR AND ORGANIZATIONAL STRUCTURE IN THE RELATIONSHIP BETWEEN STRATEGIC PLANNING AND COMPETITIVE ADVANTAGE OF LARGE MANUFACTURING FIRMS IN KENYA

BY

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# A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY IN BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

**NOVEMBER 2019** 

### DECLARATION

I hereby declare that this thesis is my original work. No part has been submitted to any other university or institution for a degree award. The works of other scholars cited in the study have been duly referenced.

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## DEDICATION

This thesis is dedicated to my wife Beatrice Nthenya Maingi for the unwavering support and inspiration accorded to me throughout the whole period. To my children, Alice Ndinda, Daniel Mutuku and Kevin Mbithi for their patience and understanding, and to my late parents for inculcating within me the values of hard work, perseverance, honesty and diligence.

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## ABBREVIATIONS AND ACRONYMS

AC	-	Affective Commitment
ANOVA	-	Analysis of Variance
CA	-	Competitive Advantage
CC	-	Continuance Commitment
CCA	-	Cost Competitive Advantage
СЕО	-	Chief Executive Officer
CV	-	Coefficient of Variation
DA	-	Differentiation Advantage
DCT	-	Dynamic Capabilities Theory
DV	-	Dependent Variable
EB	-	Employee Behaviour
FA	-	Focus Advantage
FPA	-	Financial Performance Advantage
HRM	-	Human Resource Management
ICT	-	Information Communication Technology
I/O	-	Industrial Organization
IV	-	Independent Variable
KAM	-	Kenya Association of Manufacturers
KPI	-	Key Performance Indicator
KSHS	-	Kenya Shillings
$MV_1$	-	Mediating Variable
$MV_2$	-	Moderating Variable
NC	-	Normative Commitment

OS	-	Organizational Structure
PCA	-	Michael Porter's related Competitive Advantage
PIEC	-	Planning for Implementation, Evaluation and Control
PLC	-	Public Liability Company
PIMS	-	Profit Impact of Market Strategy
Q-Q Plot	-	Quantile-Quantile Plot
RBT	-	Resource-Based Theory
RBV	-	Resource-Based View
RCA	-	Resources and Capability Advantage
SAB	-	Strategically Aligned Behaviour
SCA	-	Sustained Competitive Advantage
SD	-	Standard Deviation
SF	-	Strategy Formulation
SME	-	Small and Medium Enterprises
SP	-	Strategic Planning
SPP	-	Strategic Planning Process
SWOT	-	Strengths, Weaknesses, Opportunities and Threats
USA	-	United States of America
VIF	-	Variance Inflation Factor
VRIN	-	Valuable, Rare, Inimitable, Non-Substitutable
VRIO	-	Valuable, Rare, Inimitable, Organization

## ABSTRACT

Several studies have been carried out in the past to find out how strategic planning and competitive advantage are connected and the causes of differences in competitive advantage among firms. Scholars have argued that competitive advantage can emanate from either internal or external sources and is usually in several forms which include; valuable resources, the position held within the industry, position within the marketplace, operating at lower costs than rival firms, differentiation, capabilities and dynamic capabilities. The debate on what causes differences in competitive advantage is still on. This study sought to advance knowledge and was based on the premise that strategic planning influences competitive advantage both directly and also indirectly by way of the intervening influence of employee behaviour and the moderating effect of organizational structure. The overall purpose of the research was to determine whether the association between strategic planning and competitive advantage of large manufacturing organizations is influenced by employee behaviour and organizational structure. Out of this overall purpose, four specific objectives were formulated with corresponding four hypotheses which were tested at 95.0% confidence level. The study was underpinned by the goal-setting theory, the competitive advantage typology/theory, the resource-based theory, dynamic capabilities theory and contingency theory. The study used a positivist research paradigm and a cross-sectional survey design. Data collected from 122 large manufacturing firms was tested using a 5-point Likert-type scale. The data received was analyzed using both descriptive and inferential statistics. Hypotheses were tested using both simple and multivariate regression analysis as well as hierarchical analysis for mediating and moderating effects. The findings indicate that overall strategic planning has a statistically significant influence on competitive advantage and that employee behaviour completely mediates the relationship between strategic planning and competitive advantage. The findings further reveal that organizational structure has a partial moderating effect between strategic planning and competitive advantage and that the joint influence of employee behaviour and organizational structure is different from the influence of individual variables on the relationship between strategic planning and competitive advantage of large manufacturing organizations. In the joint influence, employee behaviour had the highest contribution followed by organizational structure. The results of this research lend support to previous enquiries and seem to support all the theories used to underpin the study. The study has added to knowledge in the field of strategic management by establishing the mediating influence of employee behaviour and the moderating effect of organizational structure. Managers will use the results of this research to monitor the crucial competitive advantage drivers in their firms especially relating to employee behaviour and organizational structure. The thesis suggests comparable studies to be undertaken in other industries, other contexts and even in small to medium manufacturing firms. Besides, longitudinal studies can be carried out in large manufacturing firms so as to authenticate the results obtained from this cross-sectional study. The study has offered direction for policy makers and owners of large manufacturing firms. Finally, areas for further research have been highlighted in terms of context, other variables and performance indicators to be tested.

### CHAPTER ONE

## **INTRODUCTION**

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

Over the last three decades, strategic management scholars have tried to give reasons to justify the differences in performance by firms in the same industry. A number of studies have been done to find out how strategic planning and competitive advantage are connected and the causes of differences in competitive advantage among firms. Scholars have argued that competitive advantage can emanate from either internal or external sources and is usually in several forms which include; "valuable resources, standing within the industry, position within the marketplace, lower costs than rival firms, differentiation, capabilities and dynamic capabilities" (Reed & fillippi, 1990, p. 90). For Barney and Hesterly (2012), a firm attains competitive advantage if it can generate higher economic value than the competitors can. On his part, Porter (1991) identified two forms through which competitive advantage could be obtained and one form is when costs are decreasing while the other form is anchored on the differentiation basis.

In order to be certain about favourable outcomes of the strategic plan, it becomes necessary to make sure that the behaviour of employees is supportive. Indeed, to realize the objectives of the strategic plan, it is necessary to ensure that there exists strategically aligned behaviours from the employees (Cees, Van, Guido & Majorie, 2009). Cultivating positive and supportive employees' behaviour becomes a key concern of managers in order to attain competitive advantage in complex environments (Kane, 1997; Stewart & Nandkeolyar, 2006).

It has been argued that employee behaviour has a mediating influence between strategic planning and competitive advantage. On the other hand, structure supports strategy and in the words of Chandler (1962), structure follows strategy. It can be argued that the organizational structure has a moderating effect between strategic planning and competitive advantage.

The Goal-Setting theory (Locke & Latham, 2002. P. 705) is the anchoring theory in this study and supports strategic planning and employee behaviour. Apart from this theory, the Competitive Advantage typology/theory of Michael Porter (1990, p. 34), supports competitive advantage; the Contingency theory (Van de Ven & Drazin, 1985) supports organizational structure. The Resource-Based theory (Peteraf & Barney, 2003, p. 511) and the Dynamic Capabilities Theory (Teece, Pissano & Shuen, 1997, p. 509) support both competitive advantage and to some extent, employee behaviour.

In the studies undertaken on large manufacturing firms in Kenya by Kidombo (2007), Awino (2007), and Haron and Chellakumar (2012), firm performance was the criterion variable. The researcher has not come across a study, which has looked at the overall relationship linking strategic planning, employee behaviour, organizational structure and competitive advantage in large manufacturing organizations in Kenya or elsewhere. This research was inspired by a strong desire to establish how the link between strategic planning and competitive advantage of large manufacturing organizations is influenced by employee behaviour and organizational structure. Large manufacturing organizations in Kenya were chosen as the context of the study. Observations have been made to the effect that the practice of strategic planning is widespread among large manufacturing organizations in Kenya. It can be argued that in order to be able to attain a position of competitive advantage, manufacturing organizations need to prepare not only strategic plans but also to stimulate appropriate employees' behaviour and dedication to the goals and purposes of the firms. In addition, manufacturing firms need to put in place appropriate organizational structures. Appropriate employees behaviour and the right organizational structures can contribute to ensuring that firms attain a sustainable competitive advantage position.

## **1.1.1 Strategic Planning**

Strategic planning has its roots in the concept of strategy. The term strategy has several meanings with no widely agreed upon and universal meaning (Quinn, 1980; Mintzberg, Ahlstrand & Lampel, 1998). A number of definitions have been put forward. Chandler (1962, p. 13) described "strategy as the determination of basic long term goals and objectives of an enterprise and the adoption of courses of action and the allocation of resources necessary for carrying out these goals." On his part, Andrews (1971, p. 18) defined strategy as "the pattern of major objectives, purposes or goals and essential policies or plans for achieving the goals, stated in such a way as to define what the business is in or is to be in and the kind of company it is or it is to be."

As stated by Mintzberg (1978, p. 935), "strategy is a pattern of activities arising from intended or un-intended actions. He proposed that strategy should be seen as something more intricate than just a straightforward action plan." He suggested five strategy views including seeing strategy as a plan, a ploy, a pattern, a position and a perspective.

Johnson, Scholes, and Whittington (2008, p. 9) have defined strategy as "the course and extent an organization charts out over the long term, which assists in attaining an edge over other organizations in a dynamic environment by reorganizing its resources and competencies with the objective of satisfying the expectations of shareholders." It has been recognized that in the foregoing definition, the contribution of strategy is "gradually compromised the more the relation between strategy and the purposes of an organization become more unclear with widening geographical and temporal dimensions and an ever-changing environment" (Bakir & Todorovic, 2010, p. 1043).

Different scholars and writers have described strategic planning in diverse but complementary ways. Wendy and Tushman (2005, p. 523) have described "the strategic planning process as consisting of three facets, these being strategic analysis, the SWOT analysis, strategic choices which incorporates and strategic implementation." The strategic analysis facet includes deciding the direction the organization will take regarding its vision, mission and goals (Kumar, 2015). On their part, Pitts and Lei (1996) came up with six major components applied in a formalized strategic planning process. The six components are determining the mission of the organization, scanning the environment, setting the goals and objectives, ensuring strategy deployment, implementing the strategy and finally evaluating and controlling the process.

Steiner (1979) has defined strategic planning as a systematic and to a certain extentformalized effort of an organization to determine its essential purposes, policies, objectives and strategies. Ansoff (1970) has conceptualized strategic planning as being the means of trying to find a superior match between the products of an organization or technology and its increasingly unstable or turbulent markets. From the foregoing definitions, it can be inferred that the broad dimensions of strategic planning include; defining the corporate direction of the organization, appraising the environment of the business, identifying and analyzing the strategic issues, generating and selecting appropriate strategies and preparing for strategy implementation. The last stage incorporates developing implementation, evaluation and control tools.

There are two contrasting views in the process of strategic planning, the rational view and the political view. The rational view assumes the existence of a direct and straightforward means to an end relationship. In the sequential rationality approach, strategic planning is deemed as a process of intended assessment and analysis, designed to ensure the achievement of the highest possible long-term advantage (Mintzberg & Lampel, 1999, p. 22). A precondition for this analysis is the assumption of the existence of a direct and clear means-end relationship.

There are varieties of models, tools and techniques for use in the strategic planning process and particularly under the rational view. These tools and techniques have evolved over the decades and they enhance the manager's analytical and diagnostic skills. Ghamdi (2005, p. 381) observed that analysis of strategic planning could be done by evaluating how individual firms use the "techniques and tools of strategic planning. The tools include SWOT analysis, PIMS analysis, value chain analysis, Delphi technique, portfolio analysis, benchmarking, analysis of key success factors, porter's five-force analysis, experience curve analysis, product life cycle analysis, cognitive mapping, growth share matrix and the balanced scorecard."

Ghamdi (2005, p. 376) has argued that an "effective approach to strategic planning looks forward as well as backward and seeks to learn from the past in order to improve the future." He goes on to state that the "key to successful planning is to get the best fit between the chosen tools and techniques, the organization culture, abilities, environment and the expected outcomes." Tools and techniques operate at their very best when they are tailor-made to an organization and its unique circumstances and act as a means of nurturing the creative mindset that can sufficiently utilize intuition and imagination (Ghamdi, 2005).

According to Child, Elbanna and Rodrigues (2016, p. 1), "the political view is concerned with the ways in which the parties involved can affect the process and outcomes of strategic decision-making either through the power they possess or through measures they take to exert influence." Strategic decisions are those, which have a significant impact on the organization and its long-term performance (Hickson, Buttler, Cray, Mallory & Wilson, 1986, p. 311). The political perspective focuses on how and why individuals, groups and organizations exercise power or accrue influence in order to shape the strategic decisions that are made on behalf of organizations (Child et al., 2016).

#### 1.1.2 Employee Behaviour

It is necessary to ensure the existence of strategically aligned behaviour (SAB) from employees if the success of the strategic plan is to be guaranteed (Cees et al., 2009). According to Gagnon and Michael (2003, p. 24), Strategically aligned behaviour can be described as the "on the job actions by employees which are aligned to the strategy of the organization." A prerequisite to the way workers conduct themselves and how jobs are accomplished is the extent to which they are motivated to carry out the duties that have been allocated to them (Blumberg & Pringle, 1982). The two broad components of employee behaviour are strategically aligned behaviour (Cees et al., 2009) and commitment (Kline & Peters, 1991). Strategically aligned behaviour is exemplified through employee participation in decision-making, self-drive, continuous learning and innovativeness while employee commitment is exemplified through three dimensions, that is, affective, continuous and normative (Meyer & Allen, 1991)

In his goal setting theory, Locke (1978) has posited that when employees are given clear and difficult goals, their level of motivation and performance increases. In empirical studies conducted on goal setting, it was found out that the important aspect is not only to set goals, but also the way in which the goals are communicated to employees (Latham, Erez & Locke., 1988). Nutt (2008) carried out some studies that showed that when the logic and reason for having a strategic goal is made explicitly clear, then the chances of succeeding at the implementation stage are much higher than when the goal is not adequately justified. Explaining the rationale of working towards achieving certain goals guarantees and provides comfort to employees that those goals are both beneficial and achievable (Cees et al., 2009).

According to Smidts, Pruyn, Van & Cees (2001, p. 10), "a stimulating communication climate enhances employee association with the organization." This is because openness, involvement and supportive inclinations tend to boost the sense of belonging of the employees to the organization (Cees et al., 2009, p. 1202).

Studies have been done linking communication climate directly to strategically aligned behaviour (SAB); the actions taken on the job which are in line with the strategy of the firm. Edmondson (2003) established that the communication climate had a positive influence on the motivation of workers to freely express their feelings to their seniors about the issues that transpired while utilizing new work processes. A good communication climate enhances employee participation in decision-making as well as stimulating the employees self-drive. Openness and involvement of employees can stimulate innovative behaviour while supportive inclinations could result to further continuous learning.

A communication climate deemed as good by workers motivates them to become innovative (Gibson & Gibbs, 2006). It has been demonstrated that when top level managers have a high regard for the skills and experiences of managers at the middle level, this high regard stimulates the middle level managers to commit themselves to implementing the strategy of the organization (Mantere, 2008). The extant literature suggests that developing employees' innovative behaviour can enable organizations to have a head start when striving to attain a competitive advantage position.

Kline and Peters (1991) have defined commitment as the means through which employees become emotionally beholden to their actions so that they develop a strong desire to see through the implications of their actions to their logical conclusion. One should ensure they get especially the key staff committed to the problems, plans, measures and expected outcomes of an organization. Commitment can be increased and even sustained by ensuring employees are involved in defining the results expected, the criteria to be used to measure the results and the work schedules. Often times, employees behaviour is determined by their degree of dedication or commitment to the objectives and ideals of the firm.

It is well established that by getting involved, employees acquire a good understanding of the work they have to perform, they gain a feeling of importance, develop professional liking of their work and a great desire for success. In the end, employees become fully committed to the specific tasks they have to perform and to the desired goals of the organization. According to Erdheim, Wang & Zickar, (2006, p. 961) and Harrison, Newman & Roth, (2006, p. 305), "over the last 20 years, the topic of organizational commitment has been highly recognized as an attitudinal topic of study because of the benefits that accrue from achieving full employees' commitment."

It has been demonstrated through research that "individuals with high levels of commitment to the organization are inclined to staying much longer in that organization" (Meyer & Allen, 1991, p. 83). Further, committed employees exhibit more positive behaviours while on-the-job (for example, in their task performance, job attendance and in contextual performance), experience higher job satisfaction, get more engaged in their job, and tend to cope better with issues that stress them at the work place (Begley & Czajka, 1993; Meyer, Stanley, Herscovitch & Topolnytsky, 2002; Harrison et al., 2006). Commitment is a component that can enhance the behaviour of employees in the workplace. Meyer & Allen (1991, p. 67) have determined "organizational commitment as consisting of three definite attitude related elements."

The three attitudinal components, which have also been taken as dimensions in this study include "affective commitment (AC), continuance commitment (CC) and normative commitment (NC)." According to Meyer & Allen (1991, p. 67), these three dimensions constitute "three psychological predispositions of individuals towards an organization that influence their decision on whether to stay or not to stay or whether to remain as members or not."

Affective commitment has been defined as employees' psychological bond to, association with, and participation in the organization (Allen & Meyer, 1990, p. 2). The emotional bond of the employees to their organization is taken as a crucial factor in determining their level of dedication and loyalty. Meyer & Allen (1991, p. 64) and Mowday, Porter and Steers (1982) have observed that, "employees who are affectively committed to an organization portray a good sense of affiliation and identification, which enhances their level of involvement in the organization's activities, their readiness to pursue the goals of their employer, and their eagerness to remain with the organization." Affective or emotional attachment ensures an individual will identify with, is involved in and will enjoy being a member of an organization between affective commitment and performance, absenteeism and turnover (Mathieu & Zajac, 1990, p. 171; Meyer & Allen, 1991, p. 75).

Meyer and Allen (1997) observed that work experiences including procedural justice, supervisor support and organizational rewards demonstrate stronger links with affective commitment than structural features of the organization for example decentralization or personal attributes of the employees. However, not much work has been done in examining the causes of these relationships.

Continuance commitment has been described as the awareness an employee has of estimated cost of exiting the organization. According to Meyer and Allen (1991, p. 71), "it is related to the need or the desire to stay in an organization because of perceived costs associated with leaving." This type of commitment can be viewed as the propensity to participate in steady lines of activity (Becker, 1960) depending on the employee's acknowledgement of the costs that would arise because of terminating the job (Becker, 1960; Farrel & Rusbult, 1981; Rusbult & Farrel, 1983). Continuance commitment can arise from actions which increase the costs associated with exiting the organization, and especially if the costs arising would have to be borne by the employees themselves.

Meyer and Allen (1991, p. 64), in their three-component model of organizational commitment, have described continuance commitment actions as investments and alternatives to investments. In this model, investments are to be treated as 'personal sacrifices' associated with exiting the organization. Employees can invest in the organization in various ways, including for example, in costs associated with relocating their families to a place of current employment or spending some time in acquiring specific organizational skills in various ways.

On the other hand, alternatives can be explained as 'limited possibilities' of finding another job. Indeed, low alternative items reflect the degree to which the employee believes that alternative employment opportunities exist in the labour market (Meyer at al., 2002). Employees who believe they have fewer alternatives will usually develop strong continuance commitment. Normative commitment (NC) can be defined as the aggregate of pressures from within to conduct oneself in a way, which helps to attain the goals and interests of the organization (Allen & Meyer, 1990, p. 3). This definition seems to suggest that under normative commitment, employees exhibit certain behaviours purely "because of the belief that it is the right thing to do" (Wiener, 1982, p. 418). An employee who is normatively committed will remain with an organization because they believe it is the right and moral thing to do.

Normative commitment represents the sum total of internalized normative pressures, which make one to behave in a manner that is congruent with the organizational objectives and other interests in the particular organization (Meyer & Allen, 1991, p. 77). Individual norms, "which can be defined as internalized moral obligations, have been identified as critical contributors to human behaviour, including the action of terminating the contract of employment with an organization" (Prestholdt, Lane & Mathews, 1987, p. 221). Normative commitment evolves from earlier socialization experiences as well as from experiences the employee is subjected to when they are newly employed in the organization during induction and other socialization processes.

Socialization of work at both a person's early childhood and the one learnt in the work place includes lots of various information associated with the relevance of particular behaviour characteristics and beliefs (Wolowska, 2014, p. 131). "Complex conditioning and modelling processes enable individuals to learn and acquire knowledge on what is valued most and what their organization, culture or family expects of them" (Wolowska, 2014, p. 131).

Normative commitment has been found to develop based on a specialized investment undertaken by the organization for its employees, an investment, which the employees view as difficult to return (Meyer & Allen, 1991). Investments in this category may include, for example, when the employer pays tuition or for guarding services to the family members of the employee.

### 1.1.3 Organizational Structure

Every firm should have a distinct structure, which indicates its prevailing reporting relationship, image and internal politics (Kiptoo & Mwirigi, 2014). Structure is not just represented by the chart of organization. Instead, it is represented by all the personnel, rankings, systems, processes, technology, culture, and other related elements that constitute an organization (Kavale, 2012). It seeks to establish the internal arrangement or pattern of authority, relationships, and communication in the organization (Mintzberg, 1979; Mathur & Nair, 2015). Chandler (1962) considered the contingency relationship between the corporate strategy of a firm and its internal administrative structure and asserted that structure follows strategy and that it plays a major role in delivering the expected results.

The four constructs, which are key to the definition of organizational structure according to Mintzberg's (1979) include; formalization, centralization, specialization and integration. Formalization can be "defined as the extent to which established and formal rules and processes are applied in decision-making and relationships at the workplace" (Olson, Slater, Hult & Tomas, 2005, p. 51).

These established rules and processes under the construct of formalization are likely to enhance efficiency and reduce the costs of administration (Walker & Ruekert, 1987). This is because the established rules and processes assist in making quick decisions. Firms which have highly formalized processes are said to be mechanistic while those with less formal processes are said to be organic.

Centralization occurs when authority to make decisions is tightly in the hands of top managers and very little of that authority is passed on to lower and middle level managers (Oslon et al., 2005). Centralizing activities may hinder opportunities for organizational learning. According to Collins, Hage and Gill (1988, p. 515), specialization refers to "the degree to which duties and activities are shared out in an organization. Specialization not only provides a broad knowledge base but also precipitates intellectual latitude in the process of making decisions." Organizations, which have more specialists, have a propensity to embrace more innovations. This is because these specialists have the expertise necessary to identify, take up and exploit new ways of doing things (Daugherty, Germain & Drodge, 1995).

Integration refers to the strategic and operational connection of the processes of a business across groups with specialized functions. This connection is done using connecting devices, interdepartmental committees and functional teams (Mintzberg, 1979). Integration enables organizations to become more receptive and flexible through better means of communication and is necessary within complex firms in order to develop organizational capabilities (Lawrence & Lorsch, 1967).

#### **1.1.4** Competitive Advantage

The firm's competitive advantage (CA) can be derived from many areas (Reed & DeFillipi, 1990). Barney (1991) and Barney and Hesterly (2012) have defined competitive advantage at the firm level whereby different firms implement strategies which are value creating and these strategies are not at the same time being implemented by rival firms. On his part, Porter (1991, p. 104) has asserted "that there are two types of competitive advantage, one that is founded on reducing costs and the other founded on differentiation." Collis and Montgomery (1994) have used the resource-based view to analyze sources of competitive advantage.

Gannon, Lynch, Holden and Hannington, (2010, p. 6) have observed that, "defining the concept of sustainable competitive advantage (SCA) is even more risky than defining competitive advantage." According to Porter (1985) and Hill and Jones (2004), sustainable competitive advantage (SCA) is defined as the key foundation for a firm to perform at an above-average position in the long term. Some scholars have argued that the basic assumption upon which sustained competitive advantage is established can only be displayed in a time continuum (Porter, 1985; Hill & Jones, 2004). On the other hand, other scholars such as Barney (1991, p.102) disagree and assert that "sustainability refers to the capability of the organization to have an inimitable strategy which is difficult to be duplicated by others."

Different writers have developed strategy typologies that bestow organizations with the capacity to achieve a position of competitive advantage. The two most prominent typologies are the four strategic categories by Miles and Snow (1978); these being: prospectors, defenders, analyzers and reactors and the three generic strategies by Michael Porter (1980); these being: cost leadership, differentiation and focus. This study will emphasize on Michael Porter's strategy types as ones to enable a firm to achieve and sustain competitive advantage.
A strategy based on low cost demands that the firm should be the one producing at the lowest cost in that particular industry and not merely one amidst other firms contending for that position (Porter, 1980; 1985). According to Porter (1980, p. 35), "this strategy entails audacious establishment of efficient scale-facilities, aggressive follow-up of cost reduction measures from experience, tight cost and overhead control, and minimizing costs in all areas of the organization including costs of research and development." Cost leadership targets cost reduction across the whole value chain until the lowest possible cost structure is reached.

A differentiation strategy materializes when an organization achieves a position, which is unprecedented in a particular category of operation by differentiating its products or services (Porter, 1980). Under the differentiation strategy, an organization chooses one or more characteristics regarded as important by many consumers in an industry, and then in a unique way sets itself up to satisfy those needs. Porter (1980) argues that a differentiation strategy does not imply that a firm will disregard its costs but instead, costs will not be the foremost strategic objective.

Focus strategy concerns dividing or segmenting the industry and handling a "restricted or narrow niche to the exclusion of others" (Porter, 1980, p. 39). Under focus, there are two types; one type focusing on cost while the other one focusses on differentiation. Cost focus is aimed at achieving cost advantage while differentiation focus aims at seeking differentiation in a particular target market segment.

Apart from Michael Porter's generic strategies, the resource-based view has also contributed a lot to the debate on competitive advantage. Barney (1991) has argued that a firm gains a competitive advantage position by implementing a strategy that is value creating and which is not concurrently being implemented by any of its present or future competitors. Barney suggested a competitive structure using four main features namely, value, rareness, inimitability and non-substitutability (Barney, 1991). Under the resource-based theory (RBT), for resources to produce superior performance, they have to be employed in a certain manner. This has led to the development of the dynamic capabilities theory (DCT). In their influential scholarly contribution, Teece, Pisano & Shuen (1997) have argued that dynamic capabilities make it possible for firms to consolidate, develop and reconfigure their resources and capabilities and as a result, sustain performance even amidst fast changing environmental conditions.

#### 1.1.5 Large Manufacturing Firms in Kenya

Manufacturing firms from all sectors contributed about 10% to the Gross Domestic Product in Kenya in 2014 (Kenya Association of Manufacturers (KAM), 2015). The growth of the entire sector in 2014 was by 3.4% when compared to the growth in 2013, which was by 5.6%. Formal employment grew by 2.9% to reach 287.5 thousand employed persons in year 2014. The current policy framework for Kenya's manufacturing firms is to develop a vibrant manufacturing sector capable of stimulating growth and strengthening linkages in the sector (Kenya Vision 2030/2007).

Although there is no uniformity in defining the size of manufacturing firms in Kenya, firms can be classified as small, medium and large. Several different measures are used such as capital employed (Sawyer, 1985), the number of workers in the organization (Kirkpatrick, 1994; Kidombo, 2007) the sales turnover (Crossan, 2005) or all the measures mentioned (Aosa, 1992). Small firms employ between 11 and 50 persons, medium sized firms between 51 and 100 persons while large firms employ over 100 persons (Kenya Association of Manufacturers Directory, 2013; Ondiek & Odera, 2012).

The Kenya Association of Manufacturers Directory (2015) has only one measure of categorizing manufacturing firms and that is the turnover of the firm. Firms with a turnover of between Kshs 50 million and Kshs 150 million are categorized as small in size; firms with a turnover of Kshs 151 million to Kshs 250 million are categorized as medium in size while firms with a turnover of over Kshs 251 million are categorized as large in size.

Large manufacturing firms operate in a very unstable environment occasioned by rapid changes in the environment (Kenya Association of Manufacturers directory, 2013). To survive and remain competitive, there may be need for these large manufacturing firms to develop strategic plans. There may also be the need for these firms to attain a fit between the structure and strategies to be employed in order to avoid creating bottlenecks at the implementation stage. Another important component that would need to be considered and aligned to the strategy is the behaviour of the employees. Overall, it is necessary for large manufacturing firms to ensure that the strategies adopted enable them to gain a sustainable competitive advantage position.

# **1.2 Research Problem**

There is no single explanation as to why firms attain competitive advantage. Therefore, different concepts have been used to explain the causes. The type of business level strategy applied, either low cost or differentiation, can generate competitive advantage (Porter, 1980, p. 35). A different conceptual foundation that focusses more on "capabilities of the firm states that a firm's ability to achieve and sustain competitive advantage is directly related to its firm-specific resources" (Barney, 1991, p. 105; Peteraf, 1993, p. 189; Rumelt, 1984, p. 561; Wernerfelt, 1984, p. 171).

Hamel and Prahalad (1994) have argued that know-how, knowledge, intellectual assets and competencies are the key drivers of competitive advantage and as a result superior performance. Hamel and Prahalad (1994), agree with Pfeffer (1994) who has isolated human resource practices including employee behaviour as the main driver of competitive advantage. On their part, Mathur and Nair (2015) have identified organizational structure as a key driver of competitive advantage.

In most of the previous studies cited by the researcher, nearly all the elements contributing to competitive advantage have been studied in isolation or in some combination. Mutunga and Minja (2014) studied the generic strategies employed by Food and Beverage firms in Kenya and their effects on competitive advantage and established a positive relationship. Gowrie, Sreenivasan and Govindan (2012) studied "the critical success factors of sustainable competitive advantage of manufacturing firms in Malaysia and established the factors including cost leadership and differentiation.

Dirisu, Iyiola & Ibidunni (2013) studied product differentiation as a tool of competitive advantage on the Unilever firm in Nigeria and found a positive relationship. The reviewed empirical literature indicates conceptual gaps because the studies cited so far did not consider how the strategic planning and competitive advantage relationship is influenced by employee behaviour and organizational structure.

Studies to establish causes of competitive advantage have been done under various contexts. A study between "strategic planning and competitive advantage in Kenya's ICT Small and Medium Enterprises (SMEs) sector" (Awino, 2013, p. 191) was carried out and a positive relationship established. Mutunga and Minja (2014, p. 1) carried out their study on "generic strategies employed by the Food and Beverage sector in Kenya's manufacturing industry and established a positive relationship."

Dirisu et al. (2013) carried out their study on one manufacturing firm, Unilever PLC Nigeria and established the existence of a positive influence of product differentiation on organizational performance. Gowrie et al. (2012) carried out their study on manufacturing firms as a whole in Malaysia. They did not distinguish between small, medium-sized or large firms. The study by Gowrie et al. (2012) managed to identify the critical factors contributing to sustainable competitive advantage.

Chavunduka, Chimunhu and Sifie (2015, p. 12) carried out a study on the "intensity of strategic planning and how it affects the performance of a firm using the case of Zimbabwe Mining Development Corporation and found a positive relationship." Kumar (2015, p. 64) carried out "a study on the correlation between strategic planning and firm performance based on European, Asian and American firms in India and found a positive association between strategic planning and performance regardless of the size of the firm."

Flamholtz and Hua (2010, p. 222)) carried out a study in the USA "on searching for competitive advantage in the black box and established a positive relationship between organizational development factors and competitive advantage." Haron and Chellakumar (2012) carried out their study on efficiency performance of manufacturing firms in Kenya: evaluation and policies, from a sample based on all manufacturing firms in Kenya. Awino (2007) carried out a study on empirical investigation of selected strategy variables on firm performance: a study on supply chain management in large private manufacturing firms in Kenya.

There seems to be contextual gaps between the empirical studies cited by the researcher and this study. Firstly, the researcher has not come across a similar or nearly similar study to the one being studied that has been carried out on large manufacturing firms in Kenya. Secondly, the context for the current study is all large manufacturing firms in Kenya as per the KAM (2015) Directory. Most of the other contexts studied were different and included the ICT sector in Kenya, food and beverage sector in Kenya, case study of one firm in Nigeria and other contexts in far off countries including the USA, India and Malaysia.

As for the methodology used in some of the empirical literature reviewed; Awino (2013), Mutunga and Minja (2014), Gowrie et al. (2012), Awino (2007) and Manar (2014) used descriptive cross sectional surveys and on large samples. This same methodology was used under the current study. On the other hand, Dirisu et al. (2013) used a case study of one firm, Flamholtz and Hua (2010) sampled sixteen companies drawn from eight industries while Cees et al. (2009) collected their data from three (3) large companies via on-line surveys. All the scholars noted studied different topics from the one being studied and therefore, even for the scholars who had cross sectional surveys as their methodology, there still exists methodological gaps because of the subject of study.

As demonstrated, there remains unresolved issues along the conceptual, contextual and methodological spheres in the relationship among the variables being studied. The current study was on strategic planning being the predictor variable while competitive advantage was taken as the outcome variable. At the same time, employee behaviour was taken as the mediating variable and organizational structure as the moderating variable. The researcher has not found a similar study undertaken that has considered the four variables so far in the literature reviewed and even from the empirical studies documented. Most contexts of the studies nearer the one undertaken were from far away countries. This study addressed the gaps identified from the literature reviewed and attempted to answer the question: Is the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya influenced by the employee behaviour and organizational structure?

#### **1.3** Research Objectives

The overall objective of the study was to determine whether the relationship between strategic planning and competitive advantage of large manufacturing firms is influenced by employee behaviour and organizational structure. The specific objectives were to:

- i. Determine the influence of strategic planning on the competitive advantage of large manufacturing firms in Kenya.
- Determine the influence of employee behaviour on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.
- Establish the effect of organizational structure on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.
- iv. Establish the joint influence of employee behaviour and organizational structure on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.

# 1.4 Value of the Study

This study was to assess why some large manufacturing firms performed better than others even when in the same industry and faced with similar environmental conditions and the sources of competitive advantage. It was to assist manufacturing firms to understand the value of undertaking the strategic planning process, the influence of employee behaviour and the effect of organizational structure. In addition, the study was to assist manufacturing firms in determining whether these factors being studied resulted to a sustainable competitive advantage. As was envisaged at the conceptual stage, the study has contributed significantly to the advancement of strategic management theory. The study was underpinned by the Goal-Setting theory of Locke and Latham (1978) and four other theories namely, Michael Porter's competitive typology/theory, the Contingency theory, Resource-Based theory and Dynamic Capabilities theory. The findings from this study have reinforced the theories accordingly but also formed the basis for further empirical investigation in future.

The results of the study will be a source of reference in policy formulation on the key role of strategic management in the manufacturing sector. Such policies will be a guide to understanding what steps and variables to emphasize in the strategic planning process and the reasons why these should be emphasized. Finally, the findings from this study will be crucial to government in formulating policies that promote operational efficiency and business growth of manufacturing firms in Kenya.

## **1.5** Organization of the Thesis

The thesis is presented in six chapters. Chapter one covers the background of the study. It discusses the variables of study namely strategic planning, employee behaviour, organizational structure and competitive advantage. Also discussed in this first chapter is the context of the study, which is large manufacturing firms in Kenya. Finally, the chapter highlights the research problem, the research objectives and the value of the study.

Chapter two presents an in depth review of the theoretical foundations of the thesis. The pairwise reviews and relationships between the variables of study are also discussed at length. The chapter carries a summary of the research and knowledge gaps and the conceptual framework. Finally, the chapter presents the hypotheses of study presented along the schematized conceptual framework. In chapter three is presented the methodology of the study. This covers the research philosophy adopted for the study, the research design, population of study, and the data collection instrument and method. Under this chapter is described the instrument's reliability and validity and operationalization of the study variables. Finally, the chapter discusses the data analysis techniques.

Chapter four presents the pretest assumptions and how they have been met. It explains how reliability and validity tests for the statistical assumptions made have been done. Data analysis is presented on descriptive analysis and interpretations made. Chapter four also covers descriptive analysis for the variables of study, strategic planning, employee behaviour and organizational structure and how they influence the dependent variable, competitive advantage.

Chapter five discusses the second level of analysis, which is hypotheses testing. Different relationships of the variables of study are tested. Hypothesis testing was guided by the research objectives and each hypothesis was tested and subsequently interpreted. Besides, the findings are discussed in conformity with each objective and in relation to previous studies undertaken. Areas of agreement and divergence are highlighted and discussed.

Chapter six is the final one in this study. It contains the summary, conclusion and recommendations of the study. Further, the chapter presents the implications of the study in relation to theory, policy, methodology and practice as well as limitations of the study. Areas for further research opportunities in the field of strategic management are discussed as well.

## **CHAPTER TWO**

# LITERATURE REVIEW

#### 2.1 Introduction

In this chapter is presented the theoretical, conceptual framework and empirical literature along the key variables of the study. First, the theories that underpin the study are presented and discussed. The goal-setting theory is the anchoring theory and addresses employee behaviour. This theory also addresses strategic planning to a large extent. The competitive advantage typology/theory by Michael Porter addresses competitive advantage and is supported by the resource-based theory and dynamic capabilities theory. The three theories emphasize on the causes of competitive advantage in firms. Besides, the resource-based theory and the dynamic capabilities theory also largely address employee behaviour. Finally, the contingency theory addresses organizational structure.

After discussing the theoretical underpinnings, the chapter presents empirical literature along the relationships of the study variables on strategic planning, employee behaviour, organizational structure and competitive advantage. This is in an attempt to concretize the relationships between these study variables.

The important aspects of the chapter are propositions emerging from the theoretical and empirical gaps. The gaps identified are summarized, tabulated and presented in a conceptual framework, which indicates the relationship of the conceptualized variables and hypotheses of the study. In this study, strategic planning takes the place of the independent variable while competitive advantage takes the place of the dependent variable. Employee behaviour takes the place of the mediating variable while organizational structure takes the place of the moderating variable.

#### 2.2 Theoretical Foundation

The study was anchored on various theories as already observed. The goal-setting theory supporting both strategic planning and employee behaviour was the main theory. The other supporting theories included Michael Porter's typology/theory on competitive advantage, the contingency theory which underpins organizational structure, the resource-based theory (RBT) and dynamic capabilities theory (DCT), which underpin competitive advantage (Barney, 1991; Teece et al., 1997) and to some extent, employee behaviour concepts.

#### 2.2.1 Goal-Setting Theory

Goal-setting theory (Locke & Latham, 1990, 2002, p. 705) was developed in an inductive manner within the industrial/organizational (I/O) psychology in over a period of 25 years. It was founded on 400 laboratory and field studies. These studies indicated that some specific and high or hard goals invariably lead to higher levels of task performance than do easy, unclear or abstract goals including the exhortation to individuals to do their best.

According to Yearta, Maitlis and Briner (1995, p. 238), if an individual is "committed to the goal, has the required capability to achieve it and does not have other conflicting goals, then there exists a positive, linear relationship between goal difficulty and the performance of the task." Due to the fact that goals refer to future valued results, goal setting becomes primarily a discrepancy creating process. It involves dissatisfaction with an individual's current condition and the longing to achieve an objective or result.

Goal-setting theory has several practical implications (Locke & Latham, 1990). First, clearcut performance goals should be established and put in place to direct behaviour and maintain the individual's motivation. Second, the goals that have been set should be challenging enough but also set at realistic levels. Third, there should be accurate, complete and timely feedback recognizing that knowledge of outcomes is usually linked with high performance. Fourth, goals can be put in place either by the employee's supervisor or by the employees themselves. This theory supports employees' behaviour in organizations quite well. Besides, under the strategic planning process, goals are set, and therefore this theory addresses strategic planning as well.

Goal setting has faced several criticisms. The very strong concentration on the goals that are set makes individuals fail to notice a striking component of their visual world (Bazerman & Chugh, 2006, p. 88). With goals, individuals limit their focus and this limiting or narrowing effect can blind them to significant matters that do not appear related to their goal, and yet such matters may be important in accomplishing the task. Neale and Bazerman (1985, p. 19) have observed that, "the inclination to focus too narrowly on goals gets even worse when managers choose the wrong course by setting the wrong goals. It has also been argued that goal setting can distort risk preferences."

According to Barsky (2007, p. 63), "Goal setting can bring about unethical behaviour." One study carried out tried to establish a direct connection between goal setting and not telling the truth. In this study, "it was found out that participants were more likely to mispresent what their performance was or even cheat when they were faced with a specific challenging goal, than when they were not" (Barsky, 2007, p. 63). This was more the case "when their actual performance level fell just a bit short of attaining the set goal" (Schweitzer, Ordonez & Douma, 2004, p. 422). The interaction between organizational culture and goal setting is especially important. An organizational culture, which is ethical, can reduce the adverse effects of goal setting, but at the same time, the use of goals can influence the culture of an organization. It has been established that the use of goal setting, just like management by objectives makes individuals focus on ends rather than the means. Barsky (2007) has argued that goal setting hampers ethical decision making by making it more difficult for individuals to recognize ethical issues but easier for them to justify unethical behaviour.

Goal setting can impede learning (Wood, Bandura & Bailey, 1990; Locke & Latham, 2002). "Whereas goal setting can increase extrinsic motivation, yet it can also hurt intrinsic motivation if an individual gets involved in a task just for the sake of it" (Rawsthorne & Elliot, 1999, p. 181). The criticisms of goal-setting theory notwithstanding, the theory has withstood the test of time and its applicability is still strong.

# 2.2.2 Competitive Advantage Typology/Theory

The theory of competitive advantage by Porter (1990, p. 34) proposes that states and businesses need to pursue policies that create goods of high quality for sale at high prices in the market. Porter (1990, p. 34) continues to argue that competitive strategy is concerned with "taking offensive and defensive actions that lead to the creation of a defendable position in an industry in order to cope successfully with competitive forces and create a superior return on investment." Furthermore, Porter (1993) observed that the foundation for above-average performance within an industry is sustainable competitive advantage. Three ways of achieving competitive advantage have been identified; one is through cost leadership and the other is through differentiation and the last one is through focus.

Porter's competitive advantage theory has been criticized for the confusion between firms and nations. It has also been said that the theory is characterized by an environmental determinism and a linear cartesian point of view towards complex problems. This orientation assumes an enterprise is just the sum of its parts rather than being a complex, uncertain and ever-changing relationship amidst its parts.

Regarding the generic strategies, Porter (1980) argued that in order to be successful, a firm should compete on the basis of one strategy; cost leadership, differentiation or focus. However, according to Wright (1987, p. 94), "the choice of strategy is limited by the size of the firm, access to resources as well as industry and competitive analysis." Wright (1987) argues that small firms have a choice of successfully competing only through focus strategy whereas the choice of either cost leadership or differentiation by bigger firms may not suffice and be attractive enough. Dawes and Sharp (1996, p. 36), have argued that "Porter's generic strategy schema does not fit the empirical reality, and there is no support that demonstrates that these strategies are a route to superior performance." Porter (1998. P. 40), has stated that "heavy up-front capital investment in the state-of-the-art equipment is required" for cost leadership to work. However, according to Datta (2009, p. 6), "investing a big fortune in the-state-of-the-art equipment when one is not clear about its advantage may not be profitable at all."

Porter (1998, p. 36), stated that, "low cost position often requires a high relative market share or other advantages, such as favourable access to raw materials." However, critics have wondered at how one can achieve high market share in the first place (Datta, 2010). Scholars have argued that "market leaders actually come to that point through differentiation strategy whether arising from higher quality products or attractive packaging, rather than cost leadership" (Datta, 2009, p. 22).

Porter's (1980, p. 37; 1985, p.14; 1990, p. 37) differentiation strategy calls for a product that is "perceived industrywide as being unique for which it is rewarded with a premium price." Porter (1980, p. 38) further suggests that because of its need for exclusivity, "differentiation strategy and high market share do not generally go together." Similarly, Porter (1985, p. 127-128; 1990, p.38) emphasizes that differentiation is also generally incompatible with cost leadership. However, "Porter seems to have used the term 'premium price' rather loosely, and it is not clear what it really means" (Datta, 2010, p.42). Most markets can be categorized into three basic price-quality segments: premium, mid-price and economy (Datta, 1996). Porter's examples of firms that command a 'premium price' fail to answer the question of how he has defined the term 'premium price'. The problem seems to lie in realizing a subtle but vital difference: 'premium price' versus 'price premium' (Datta, 2010). Porter's observation on how differentiation strategy is achieved has also been criticized for lack of distinguishing between segmentation and differentiation, treating differentiation as being synonymous with being unique, not recognizing that customer perceived quality is central to long-term success, and lack of the recognition that even higher quality may lead to lower cost (Datta, 2010).

However, in their empirical studies, Helms and Allen (2006) established a clear relationship between each strategy schema (cost leadership, differentiation or focus) and organizational performance. Beyond these criticisms, the theory of competitive advantage still stands strong. This study proposed that a firm can select a firm-level strategy like low cost or differentiation at the strategic planning stage. This firm-level strategy would require and lead to a review of the organizational structure. Once a structure that is suitable to employees is selected, the firm is in a position, by applying the selected firm-level strategy, to work towards attaining a sustainable competitive advantage position.

#### 2.2.3 Contingency Theory

Contingency theory is founded on the premise that there is no one form of organizational structure, which can be applied equally to different types of organizations. Instead, how effective an organization is depends on a fit between the technology use, its information system, the volatility of the environment, the organization size and the components of the organizational structure. Van de Ven and Drazin (1985, p. 333) "have explained the idea of fit in three different ways, that is, selection, interaction and systems approaches." Once a fit is obtained between strategy and structure, the firm will be in a position to work towards attaining sustainable competitive advantage.

During the time the firm is reviewing and changing its structure, it will have to ensure the type of structure selected can enable employees to adopt a strategically aligned behaviour. This is to ensure employees are motivated and committed to work towards attaining the goals and objectives set out. Contingency theory can be used to support the organizational structure variable very well.

The basic research problem of contingency theory is that it is inherently dynamic (Merton, 1968; Parsons, 1961). This is in spite of the concepts of fit used in actual research being not dynamic but static. Based on classical comparative studies, the concepts of fit presuppose a balanced or equilibrium position in both time and space (Donaldson, 2001). This equilibrium position has left a lacuna between applied ontology in contingency theory research and an ontology that is required for explaining the research problem. This study proposes that after a firm has determined the strategy to follow at the strategic planning stage, thereafter it will have to review and change its structure in order to align it to the new strategy.

#### 2.2.4 Resource-Based Theory

According to Peteraf and Barney (2003, p. 309), "an organization will achieve a competitive advantage position when it generates additional economic benefit than its competitors in its product market." The resource-based theory is based on two foundational assumptions about organization-based resources to clarify how sustained competitive advantage is generated (Peteraf & Barney, 2003, p. 309). The first assumption is that organizations own bundles of resources, which are different even when they are operating within a similar industry. The second assumption is that the resource differences may be sustained for a while due to the difficulty of buying and selling of resources across organizations. This difficulty in trading makes it possible for benefits from diverse resources to be sustained over a period of time (Barney & Hesterly, 2012).

Four conditions have to be simultaneously met for sustained competitive advantage (SCA) to exist and these are; the resources have to be Valuable, Rare, Inimitable and there should be good Organization (VRIO framework). An organization must be well organized in order to utilize the maximum competitive potential of the resources and capabilities it possesses (Barney & Hesterly, 2012). In other studies, instead of the last condition being Organization, it is given as Non-Substitutability (Talaja, 2012), and therefore the acronym becomes VRIN.

Some criticisms have been levelled against the resource-based theory (RBT). For example, methodological challenges keep occurring in the RBT literature. A pivotal matter that arises is how to measure resources mainly because a number of them are of an intangible nature (Godfrey & Hill, 1995). Molloy, Chadwick, Ployhart and Golden (2011) have picked up on the theoretical disconnect existing between RBT and the measuring of intangible resources and argued that this disconnect leaves some key questions unaddressed. This disconnect further undermines confidence in empirical tests that are supposed to support RBT and narrows the usefulness of future research. Molloy et al. (2011) have identified the gap through a content analysis of how scholars studied 186 intangibles in tests of RBT, which have recently been established.

This study posits that unique resources owned by the firm can be configured and used in a way that enables the firm to attain a competitive advantage position. It must be pointed out that the behaviour of employees and the organizational structure will play a crucial part in the way the resources are configured and deployed if the firm is to attain and even sustain a competitive advantage position.

# 2.2.5 Dynamic Capabilities Theory

The Dynamic Capabilities Theory (DCT) is an extension of resource-based view and resource-based theory (Teece et al., 1997, p. 509). It underscores the deployment of the capabilities of the organization so as to attain higher-level performance. Dynamic capabilities (Teece et al., 1997, p. 509) emphasizes two main facets. The first facet is *dynamic*, which reflects the ability to have competencies renewed in order to agree with changes occurring in the business environment.

The second facet is *capabilities*. This second facet emphasizes the crucial part played by strategic management in making organizations "to adapt, integrate and redesign internal and external organizational skills, resources and practical competencies (Teece et al., 1997, p. 509). All this is done in order to counter the effects of an environment that is fast changing.

In spite of the extensive utilization of the dynamic capabilities construct, a widely accepted definition has taken long to be developed (Easterby-Smith, Lyles & Peteraf, 2008, p. 2). Scholars from varied traditions have viewed dynamic capabilities differently depending on their background. Zollo and Winter (2002, p. 339) for example have "defined dynamic capabilities in terms of routines." On the other hand, Eisenhardt and Martin (2000, p. 1105) have defined "dynamic capabilities in terms of processes whose nature varies with the degree of market dynamism taking the form of simple rules in high velocity environments."

Williamson (1999) has criticized dynamic capabilities because of their lack of precise measurement and empirical grounding. According to Pavlou & El Sawy (2011, p. 239), "the poor understanding of dynamic capabilities coupled with the lack of a measurable model makes it difficult to explore how dynamic capabilities can be utilized in actionable managerial decision-making."

The study posits that knowledge and good organizational skills will be developed and deployed after the firm has determined its strategic direction. Such knowledge, which is embedded within the employees in the organizational structure, once implemented will ensure the resources of the firm are exploited to maximum advantage and therefore enable the firm to attain and even sustain a competitive advantage position.

# 2.3 Strategic Planning and Competitive Advantage

Formal strategic planning has been found to provide benefits, which eventually generate economic benefits for a firm (Steiner, 1979; Thompson & Strickland, 1987). It has been argued that strategic planning generates useful information, assures a detailed review of all possible options, forces the organization to carry out an environmental scan, helps to stimulate new ideas, enhances organizational motivation and commitment, increases both internal communication and interaction and to stakeholders it has a symbolic value (Powell, 1992; Awino, 2013). It has been said that successful business strategies are founded on sustainable competitive advantage.

A number of sources of competitive advantage can be found and they include producing goods at lower cost than competitors, producing goods of the highest quality, offering superior service to customers, and providing customers more value for their money (Porter, 1985; Thompson, 1984). Dirisu et al. (2013) found a positive relationship between product differentiation and competitive advantage in a manufacturing set up in Nigeria. On the other hand, Mutunga and Minja (2014), found a positive relationship between adopting cost leadership and competitive advantage among Kenyan Food and Beverage firms.

Critical elements of sustainable competitive advantage include differentiating products and innovating, having a supply chain management, which is effective, having an organization that is responsive and ensuring cost leadership (Gowrie et al., 2012). (Arasa & K'Obonyo, 2012, p. 211) established "a positive linkage between strategic planning and the performance of a firm."

According to Miller and Cardinal (1994, p. 1653), "strategic planning positively influences firm performance and that methods and factors are primarily responsible for the inconsistencies reported in the strategic management literature." Miller and Cardinal (1984) carried out a meta-analytic study with data drawn from 26 previous studies and empirically tested, in the United States of America (USA). According to Miller and Cardinal (1984, p. 1649), "researchers like Greenly (1986) and Mintzberg (1990) may have been incorrect in their conclusion that strategic planning has no effect on the performance of the firm." It can be argued from the studies carried out by Miller and Cardinal (1984) and other scholars that strategic planning has an influence on competitive advantage.

# 2.4 Strategic Planning, Employee Behaviour and Competitive Advantage

Different writers have asserted that strategic planning reveals and helps to clarify an organization's future opportunities and threats in addition to supplying a structure to be used in decision-making across the entire firm (Kumar, 2015). According to Cees et al. (2009, p. 2), "employees need to know the goals of the organization and the role they are expected to play in achieving them. It is necessary to ensure employees adopt a behaviour which is aligned and supportive of the strategic plan." Besides, employees need to be committed to the organization because this affects the performance of the organization (Irefin & Mechanic, 2014)

Summers and Hyman (2005) have argued that worker involvement in the strategic decision-making process of an organization helps to secure their commitment and yearning to contribute in actualizing the goals of that organization. The commitment of employees to the organization enhances the success of that organization by making them devoted to achieving its goals (Grawe, Daugherty & McElroy, 2012). It has been noted that high levels of dedication play a role in cultivating favourable attitudes and behaviours in organizations (Chungtai & Zafar, 2006; Sinclair, Tucker, Cullen & Wright, 2005; Srivastava, 2013).

Human resources fulfil the standards developed by Barney before a resource can qualify as a springboard of sustained competitive advantage (Wright, Pringle & Kroll, 1994, Coff, 1994). If managers have faith in their employees and assign challenging jobs to them, the employees on their part will reciprocate by showing high commitment, high motivation, and the performance will also be high (Guest, 1990). This implies that the sources of competitive advantage have moved away from the traditional financial resources to technology and currently to human resources. It can be argued that employee behaviour has an intervening effect between strategic planning and competitive advantage.

#### 2.5 Strategic Planning, Organizational Structure and Competitive Advantage

Kavale, (2012, p. 60), has observed that, "the firm's strategy must be aligned to the remote and operating environment. Once the strategy of the firm has been shaped by forces from the environment, thereafter the strategists have to develop a framework that can closely match the strategy." According to Johnson et al. (2008, p. 17), "the fit between strategy, structure, environment and the capacity of the firm should be nurtured in order to generate a strategic fit."

Miller (1987) studied organizational structures under the general dimensions of centralization, formalization and structural integration. According to Miller (1987), the formalization dimension impacted significantly and positively on the rational approach to strategy-making. Gibbons and O'Connor (2005) established that organizations with structures, which were organic in nature, were inclined to embrace a process of strategy formation, which was emergent and incremental. On the other hand, organizations with mechanistic structures tended to espouse a process of strategy formation, which was both formal and comprehensive, and hence rational.

According to Grant (1998), the main structure of a firm is one of the fundamental ways used by strategists to try to position the firm in order to implement the strategy in a way to balance internal efficiency and effectiveness. (Kavale, 2012, p. 60) observes that, "structure is represented by all personnel, rankings, systems, processes, technology, culture and other related elements that constitute an organization." It has been argued that strategy is supported by structure and that if a firm revises its strategy, then it must reorganize its existing structure to enable it underpin the revised strategy (Kavale, 2017, p. 69).

When strategy is changed, then what everyone does in the organization should be changed (Ansoff, 1965) and in the words of Chandler (1962), structure follows strategy. From the studies cited here, it seems explicit that it is not possible to attain the strategic objectives of the firm without aligning the organizational structure to the strategy of that firm. Consequently, it can be argued that organizational structure has a moderating effect between strategic planning and competitive advantage.

# 2.6 Strategic Planning, Employee Behaviour, Organizational Structure and Competitive Advantage

The process of strategic planning shapes the strategic choice of the firm. It also unveils and makes clear what the prospective opportunities and threats are, in addition to making it possible to develop a structure for use in making decisions throughout the firm (Kumar, 2015). Strategic planning helps firms to make better strategies by using an approach to strategic choice, which is more organized, logical and rational in nature.

The degree of strategically aligned behavior displayed by employees determines the success or failure of any strategy and consequently leads to competitive advantage (Cees et al., 2009). Developing innovative behaviour of employees can give an organization competitive advantage. Structure cannot be taken simply as the chart of an organization. Instead, "it comprises all the people, their positions, organization processes and procedures, organization culture, the technology in use and all the associated components that make up an organization" (Kavale, 2012, p.60).

According to Irefin and Mechanic (2014, p. 33), "there is a high relationship between employee commitment and organizational performance." The higher the commitment by employees, the higher is the organizational performance. Irefin and Mechanic (2014) also found out that there was a very high relationship between employee commitment and employees turnover. The higher the employees' commitment, then the lower the turnover. It can be argued from the studies by Irefin and Mechanic (2014) that employee commitment has a positive contribution to competitive advantage. In order for a business to attain its mission, goals and objectives, it is necessary that the structure and the strategy are properly integrated. Changing the strategy of an organization will lead to changing what employees in different positions do (Ansoff, 1965). It has been established that "companies with more valuable and rare resources achieve higher levels of sustainable competitive advantage and performance than those without these resources" (Talaja, 2012, p. 58). Furthermore, companies should strive to differentiate themselves based on resources, capabilities and systems because of the collective effect these items have on competitive advantage (Alimin et al., 2012)

From the studies cited, it can be postulated that strategic planning, mediated by employee behaviour and moderated by organizational structure will enable a firm to achieve competitive advantage over its rivals. It should be pointed out that in the studies cited, no one study has looked at the variables strategic planning, employee behaviour organizational structure and competitive advantage in one study.

# 2.7 Summary of Literature Review and Knowledge Gaps

The studies reviewed in chapter one and especially under the research problem in section 1.2 and in chapter two sections 2.1 to 2.6, have presented mixed findings on the influence of employee behaviour and organizational structure on the relationship between strategic planning and competitive advantage. This is due to the use of different methodologies, definition of variables and contextual factors. These studies have not tested the causal linkages of all variables and consequently their joint influence on competitive advantage. The summary of knowledge gaps demonstrated throughout the studies in chapters one and two are given in Table 2.1:

# Table 2. 1: Knowledge gaps

Author/researcher	Area of focus	Methodology	Findings	Knowledge gap
Chavunduka,	"Strategic planning	This was a case study	"A positive relationship was found	"The study focused on strategic planning
Chimunhu & Sifie,	intensity and firm	carried out on	between strategic planning	and firm performance" (Chavunduka et
2015	performance: A case study	Zimbabwe Mining	intensity variables and	al., 2015, p. 12). What is referred to as
	of Zimbabwe Mining	Development	organizational performance"	planning intensity are factors that can be
	Development	Corporation.	(Chavunduka et al., 2015, p. 12)	found under the strategic planning process
	Corporation"(Chavunduka			or strategy formulation. The study did not
	et al., 2015, p. 12)			test any mediating or moderating
				variables. Furthermore, the dependent
				variable was firm performance and not
				competitive advantage.
Kumar, 2015	"Correlation between	A cross-sectional	"There is a positive association	The study focused on "strategic planning
	strategic planning and firm	survey design was used,	between strategic planning and	and performance, including size of firm as
	performance" (Kumar,	but also where possible,	performance regardless of size of	a contingency factor" (Kumar, 2015, p.
	2015, p. 64)	one-on-one	the firm" (Kumar, 2015, p. 73)	64). It did not investigate the role of
		unstructured interviews		employee behaviour and organizational
		and group interviews		structure. In addition, the study focused
		were held. The survey		on financial performance and not
		was on insurance firms		necessarily on competitive advantage.
		and was carried out on		
		European, Asian and		
		American firms.		
Irefin & Mechanic,	"Effect of employee	"A research survey was	"There is a high relationship	The study focused on employee
2014	commitment on	undertaken among 120	between employee commitment	commitment and performance. It did not
	organizational performance	selected employees of	and organizational performance.	consider the role played by strategic
	in Coca Cola Nigeria	Coca Cola Nigeria	There is also a very high	planning and organizational structure.
	Limited Maiduguri, Borno	Limited" (Irefin &	relationship between employee	Besides, the study used organizational
	State" (Irefin & Mechanic,	Mechanic, 2014, p. 37)	commitment and employees'	performance as the dependent variable
	2014, p. 33)		turnover" (Irefin & Mechanic,	and not competitive advantage.
			2014, p. 33)	

# Table 2.1 continued...

Author/researcher	Area of focus	Methodology	Findings	Knowledge gap
Manar, 2014	"The impact of	A cross-sectional survey	"All structure dimensions are	The study focused on organizational
	Organizational Structure	(sample of 412 items)	related to organizational	structure and commitment, a form of
	on Organizational	was done across 23	commitment in both sectors, except	employee behaviour. It did not touch on
	Commitment: A	public and private firms	the hierarchy of authority.	strategic planning and competitive
	Comparison between	in Amman. 239 valid	Formalization exhibited the largest	advantage.
	Public and Private	questionnaires were	correlation with organizational	
	Sector Firms in Jordan"	returned	commitment in public firms while	
	(Manar, 2014, p. 30)		participation had the largest	
			correlation in private firms"	
			(Manar, 2014, p. 35)	
Mutunga & Minja,	"Generic strategies	"A descriptive study	"That most firms embrace duo	The study focused on the "duo strategies
2014	employed by food and	design consisting of 138	strategies of cost leadership and	of cost leadership and differentiation"
	beverage firms in Kenya	food and beverage	differentiation followed by a higher	(Mutunga & Minja, 2014, p. 1). It did
	and their effects on	manufacturing firms in	percentage on cost leadership only	not explore the effect of other variables
	sustainable competitive	Kenya registered with	and lastly those which embraced	like organizational structure and
	advantage" (Mutunga &	the KAM" (Mutunga &	differentiation only being fewest"	employee behaviour.
	Minja, 2014, p. 1)	Minja, 2014, p. 2)	(Mutunga & Minja, 2014, p. 13)	
Awino, Z.B., 2013	"Strategic planning and	"A cross-sectional	"A significant number of SMEs in	The study did not consider the role of
	competitive advantage of	descriptive study of 238	the ICT sector employ strategic	organizational structure and employee
	ICT Small and medium	ICT SMEs in Nairobi	planning practices and have	behaviour in the Strategic planning and
	enterprises in Kenya"	drawn from the	written strategic plans" (Awino, Z.	competitive advantage relationship.
	(Awino, Z. B., 2013, p.	Computer Society of	B., 2013, p. 201)	
	191)	Kenya" (Awino, Z. B.,		
		2013, p. 197)		
Dirisu et al., 2013	"Product differentiation:	A survey research was	"The existence of a positive and	The study focused on product
	A tool of competitive	adopted and	significant influence of product	differentiation and competitive
	advantage and optimal	questionnaires	differentiation on organizational	advantage. The roles played by strategic
	performance (a study of	administered to sampled	performance of manufacturing	planning, organizational structure and
	Unilever Nigeria PLC)"	consumers and	firms in Nigeria" (Dirisu et al.,	employee behaviour were not
	(Dirisu et al., 2013, p.	customers of Unilever	2013, p. 277)	considered.
	258)	PLC Nigeria		

# Table 2.1 continued...

Author/researcher	Area of focus	Methodology	Findings	Knowledge gap
Alimin, Raduan, Jegak	"The relationship	"A cross-sectional survey	"The overall findings indicated	The study focused on the dimensions of
& Haslinda, 2012	between organizational	conducted among	significant positive effects of	RBV to establish a relationship with
	resources, capabilities,	manufacturers listed in the	organizational resources, capabilities	competitive advantage. It did not take into
	systems and competitive	2008 Federation of	and systems collectively on	account the role played by strategic
	advantage"(Alimin et al.,	Malaysian Manufacturers	competitive advantage, providing	planning and organizational structure. The
	2012, p. 151)	Directory" (Alimin et al.,	support and corroboration to the	study did not also take into account the
		2012, p. 157)	resource-based view" (Alimin et al.,	broader issues contained under employee
			2012, p. 165-166)	behaviour.
Arasa & K'Obonyo,	"The relationship	A cross-sectional survey	"The existence of a relationship	"The study focused on the connection
2012	between strategic	design was used. Data was	between strategic planning and firm	between the strategic planning process and
	planning and firm	collected from a cross-	performance was established" (Arasa	firm performance" (Arasa & K'Obonyo,
	performance" (Arasa &	section of insurance firms.	& K'Obonyo, 2012, p. 209)	2012, p. 201). It did not investigate role of
	K'Obonyo, 2012, p. 201)	Where possible focused		other variables like employee behaviour
		group discussions were held		and organizational structure.
Gowrie et al., 2012	"Critical success factors	"A large sample cross-	"The study managed to identify the	The study did not focus critically on the
	of sustainable	sectional email survey was	critical factors contributing to	relationship between strategic planning
	competitive advantage:	carried out within	sustainable competitive advantage,	and competitive advantage. It did not also
	A study in Malaysian	manufacturing organizations	these being: effective supply chain	touch on the role of employee behaviour
	manufacturing	in Malaysia. A total of 960	management, product differentiation	and organizational structure in the
	industries" (Gowrie et	survey questionnaires were	and innovation, organizational	relationship.
	al., 2012, p. 29)	emailed to business	responsiveness and cost leadership"	
		organizations" (Gowrie et	(Gowrie et al., 2012, p. 37)	
<b>T</b> 1 1 2010		al., 2012, p. 35)		
Talaja, 2012	"Testing VRIN	"A cross-sectional survey	"Companies with more valuable and	The study focused on two dimensions, that
	Framework: Resource	conducted on 265 large and	rare resources achieve higher levels	is, value and rareness to establish their
	value and rareness as	medium-sized Croatian	of sustainable competitive advantage	influence on competitive advantage. It did
	resources of competitive	companies from all	and performance. Since there is an	not consider the role of strategic planning
	advantage and above	industries" (Talaja, 2012, p.	inter-dependence between resource	and other elements of employee behaviour
	average performance"	56)	value and rareness, their impact on	and organizational structure in its
	(Talaja, 2012, p. 51)		competitive advantage is both direct	relationships.
			and indirect" (Talaja, 2012, p. 58)	

Table 2.1	continued
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Author/researcher	Area of focus	Methodology	Findings	Knowledge gap
Flamholtz & Hua	"Searching for	"Sixteen companies from	"The analysis revealed a clear	The study focused on the factors that
(2010)	Competitive	eight industries were	relationship between the pyramid of	cause competitive advantage. It did not
	Advantage in the	selected as matched pairs	Organizational Development factors	consider the role of strategic planning,
	Black	from the USA" (Flamholtz	and competitive advantage"	employee behaviour and organizational
	Box"(Flamholtz &	& Hua, 2010, p. 226)	(Flamholtz & Hua, 2010, p. 234)	structure.
	Hua, 2010, p. 222)			
Cees et al., 2009	"Stimulating	"Data was collected from	"First, perceived efforts by	The study focused on strategy and
	Strategically aligned	three (3) large companies	management aimed at motivating	behaviour of employees, and to an extent
	Behaviour Among	via an online survey in	and informing employees and at	on performance (which is an extension of
	Employees" (Cees et	Rotterdam, Netherlands.	developing their capabilities were	competitive advantage). The role played
	al., 2009, p. 1197)	Prior to conducting the	related to SAB. Second, among the	by organizational structure was not
		survey, interviews were	perceived efforts to stimulate	considered.
		held with each company's	motivation among employees,	
		top communication and	providing a rationale for the strategy	
		determine the content of	have a stronger relationship with	
		their strategies" (Coos et al	SAP then participation in decision	
		then shategies (Cees et al., $2009 \text{ p}$ , $1205$ )	sAB than participation in decision making and participation" (Cees et	
		2009, p. 1205)	al 2009 p 1197)	
Miller & Cardinal	"Strategic planning	"Meta-analytic data was	"Strategic planning positively	This was a meta-analytic study and not
1994	and firm	drawn from 26 previous	influences firm performance and that	from raw cross-sectional survey. It
	performance: A	studies and empirically	methods and factors are primarily	focused on strategic planning and
	synthesis of more	tested. The context was the	responsible for the inconsistencies	performance in capital-intensive as
	than two decades of	USA" (Miller & Cardinal,	reported in the literature" (Miller &	opposed to labour-intensive firms as well
	research" (Miller &	1994, p. 1653)	Cardinal, 1994, p. 1649)	as in firms facing turbulent environments.
	Cardinal, 1994, p.			The study did not investigate the role of
	1649)			employee behaviour and organizational
				structure. It also focused on performance
				as the dependent variable as opposed to
				the current study, which has competitive
				advantage as the dependent variable.

From the literature reviewed, it was found out that in most cases, the variables have been studied in isolation or in some combination. This study addressed the gaps identified by investigating the four variables proposed in the study. The current study therefore hypothesized the direct, mediating and moderating relationships amongst the variables of study.

This study sought to establish the direct influence of strategic planning on competitive advantage. In addition, it investigated the intervening influence of employee behaviour on the strategic planning and competitive advantage relationship and the moderating effect of organizational structure on strategic planning and competitive advantage. Finally, the study sought to establish the joint influence of employee behaviour and organizational structure on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.

# 2.8 Conceptual Framework

The knowledge gaps highlighted in Table 2.1 above led to the development of the conceptual framework in Figure 2.1. This framework was adopted to guide empirical research in attempting to fill the gaps identified from the review of conceptual and empirical literature. From the model, strategic planning is the independent variable while competitive advantage is the dependent variable. The independent variable is antecedent to the dependent variable (Sekaran & Bougie, 2014). It is also called "explanatory, predictor or manipulated variable" (Raiphea, 2015, p. 436). The depended variable is one, which depends upon or is a consequence of the independent or other variables. This dependent variable is sometimes called the outcome, criterion or explained variable (Raiphea, 2015, p. 436).



Figure 2. 1: Conceptual Framework Source: Author, 2018

LOG:

- $MV_1$  Mediating Variable
- $MV_2$  Moderating Variable
- DV Dependent Variable

 $H_1$ ,  $H_2$ ,  $H_3$  and  $H_4$  – represent the four hypothesis of the study shown on page 49-50.

The dimensions of strategic planning that were manipulated to affect competitive advantage include the strategic planning process, strategy formulation and preparing for strategy implementation, evaluation and control according to Wendy & Tushman, (2005, p. 523). The three dimensions had specific indicators, which are directly observable and these were the ones that were tested in this research. The specific indicators are shown under Table 3.1 on Operationalization of Key Variables.

Employee behaviour was conceptualized as the mediating variable. This is a variable that surfaces between the time the independent variable starts operating to influence the dependent variable, and the time their effect is felt on it (Sekaran & Bougie, 2014, p. 75). There is therefore a transitory quality of time dimension to the mediating variable. The mediating variable surfaces as a function of the independent variable operating in any situation, and assists in conceptualizing and explaining the influence of the independent variable on the dependent variable (Sekaran & Bougie, 2014, p. 75). The basic causal links in the mediation process are shown in figure 2.2 below.



Source: Adapted from Baron & Kenny model (1986)

The model in figure 2.2 presupposes a three-variable structure in such a way that there are two separate paths that lead into the dependent variable. There is the direct path from which there is a direct impact of the independent variable (**path c**), then there is the impact of the mediating variable (**path b**). Lastly, there is the path from the independent variable through to the mediator variable (**path a**). According to Baron and Kenny (1986, p. 1176), a variable operates as a mediator after meeting three conditions.

Condition one is when "variations in the levels of the independent variable significantly explain variations in the assumed mediator (**path** a). Condition two is satisfied when variations in the mediator variable significantly account for the dependent variable (**path** b). On the other hand, condition three is exemplified when after paths a and b are controlled, a relationship between the independent and dependent variables, which was previously significant, ceases to be so. The strongest demonstration of mediation occurs when **path** c is zero" (Baron & Kenny, 2014, p. 1176). In this study, employee behaviour has been tested using the dimensions of strategically aligned behaviour and commitment. The commitment dimension was further broken down into its indicators, which include affective, continuance and normative commitments (Table 3.1).

Organizational structure was conceptualized as the moderating variable. This is a variable with a strong contingent effect on the relationship between the independent and dependent variables (Sekaran & Bougie, 2014). This implies the presence of a third variable (the moderating variable) modifies the initial relationship between the independent and dependent variables (Sekaran & Bougie, 2014). The effect of moderation is demonstrated in the diagram in Figure 2.3 below:



Figure 2. 3: Moderator Model Source: Adapted from Baron & Kenny model (1986)

The moderator model in Figure 2.3 has three causal paths that feed into the dependent variable (Baron & Kenny, 1986, p. 1176). Path a shows the impact the independent variable has on the dependent variable while path b shows the impact of controllability as the moderator variable affects the dependent variable (Baron & Kenny, 1986, p. 1176). The last path, c, indicates the interaction of the product of the independent variable and the moderator variable (Baron & Kenny, 1986, p. 1176).

The moderator hypothesis is supported if the interaction (path c) is significant. There may also be significant main effects for the independent and the moderator variables (paths aand b), but conceptually, these other effects are not directly relevant to testing the moderator hypothesis (Baron & Kenny, 1986, p. 1176). The dimensions of organizational structure, which were tested and which also qualify to be the structural constructs (indicators) included formalization, centralization, specialization and integration (Table 3.1). In this study, competitive advantage was conceptualized as the depended or outcome variable. The dimensions tested on this variable included cost, differentiation and focus advantages as propagated by Michael Porter (1990), resources and capability advantages and financial performance advantages (Table 3.1). The various dimensions under the concept of competitive advantage could also qualify to be the indicators. Lastly, the model investigated the joint influence of employee behaviour and organizational structure to establish whether that influence was different from the influence of individual variables on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.

# 2.9 Conceptual Hypotheses

A hypothesis is a tentative, yet verifiable assertion, which predicts what one would expect to find in empirical data (Sekaran & Bougie, 2014). Hypotheses are obtained from the theory on which conceptual models are founded and in many instances, they are relational in nature. Hypotheses can therefore be defined as logically conjectured relationships between two or more variables expressed in statements, which are testable (Sekaran & Bougie, 2014). By testing the hypotheses and affirming the conjectured relationships, it is expected that solutions can be found to correct problems encountered. From the relationships in the conceptual framework presented in figure 2.1, the following four hypotheses stated in the alternative form were formulated for further testing.

- H1: Strategic planning significantly influences the competitive advantage of large manufacturing firms in Kenya.
- **H2:** Employee behaviour significantly influences the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.

- **H3:** Organizational structure significantly affects the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.
- H4: The joint influence of employee behaviour and organizational structure is different from the influence of individual variables on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya

The chapter discussed the theories underpinning the study. The theories supporting the study include the goal-setting theory, the competitive advantage typology/theory, the contingency theory, the resource-based theory (Peteraf & Barney, 2003) and the dynamic capabilities theory (Teece et al., 1997). The chapter also discussed the relationships between the study variables and a summary of previous empirical studies that generated the knowledge gaps.

The aim of studying the relationships between study variables was to gain an understanding of how they related. From the study of the relationship between the variables, the conceptual framework was developed. In this conceptual framework, strategic planning was shown as the independent (predictor) variable while competitive advantage was shown as the dependent (outcome) variable. Employee behaviour was shown as the mediating (intervening) variable while organizational structure was taken as the moderating variable.

From the objectives of the study developed in chapter one and the conceptual framework developed in this chapter, the hypotheses of the study were developed. The four hypotheses corresponded with the four objectives developed in chapter one, with the independent, mediating and moderating variables being aligned mainly to one hypothesis per variable, but with all the three variables mentioned in the fourth hypothesis. Chapter three will present the research methodology.

#### **CHAPTER THREE**

# **RESEARCH METHODOLOGY**

#### 3.1 Introduction

This chapter discusses the research philosophy, design of the research and the population to be studied. Under the research philosophy, the study presents and compares the two common philosophical thoughts that is positivism and phenomenology because of their relevance to this work. The study used positivism and not phenomenology. As for research design, the study adopted the descriptive cross-sectional approach (Saunders, Lewis & Thornhill, 2012) while the population of study was taken as all large manufacturing firms in Kenya as defined by the KAM Directory (2015).

This was a census study covering all the large KAM (2015) listed manufacturing firms in Kenya and therefore no sampling was done. Primary data was collected by using questionnaires while secondary data was extracted from information and documents maintained by the manufacturing firms and especially the financial reports. Reliability tests were performed to test the quality of measurement while "validity tests were undertaken to test the quality of the questionnaire with improvements made where necessary" (Sekaran & Bougie, 2014, p. 225).

The Likert-type scale (Saunders et al., 2012) was used and respondents were requested to indicate on a scale of one (the lowest) to five (the highest) the degree of agreement with each statement in the questionnaire presented. Data analysis included questionnaire checking, sorting, editing, coding and establishing the relationships among variables. Diagnostics tests were done under Data Analysis to determine if the data set met the regression assumptions such as normality, homoscedasticity and multicollinearity.
# 3.2 Research Philosophy

Research philosophy deals with the source, nature and development of knowledge (Saunders et al., 2011). It is a belief about the ways in which data about a phenomenon should be collected, analysed and used (Bajpai, 2011). According to Saunders et al (2012, p. 127), "the inherent features of knowledge incorporate fundamental assumptions by which those carrying out research perceive the world." Knowledge consists of a set of beliefs about some particular aspects of reality or phenomenon (Mugenda & Mugenda, 2003). "This leads the researcher to the nature of reality and existence (ontology) and how knowledge concerning reality can be made available (epistemology)" (Saunders et al., 2012, p. 130, 132). Epistemology is concerned with the enquiry into theories touching on knowledge and it assists one to comprehend what it means to know and how one will get to come to a complete understanding of a given phenomenon (Mugenda & Mugenda, 2003).

In the social sciences, research is guided by two major philosophical schools of thought: that is positivism and phenomenology. The overriding factor under positivism is that the social world exists externally, and that its characteristics can only be assessed through methods that are objective, instead of being deduced subjectively through either feelings, serious thought or even intuition (Easterby-Smith, Thorpe & Jackson, 2012). According to Bryman and Bell (2011, p. 15), under positivism, "more attention is placed on observations which are quantifiable and which can lend themselves to statistical analysis. Positivist research is undertaken in a value-free way. From theory already existing, positivists come up with hypotheses that are put to the test and confirmed either partly or wholly." This process leads to further theory development which may thereafter be examined in additional research carried out later (Zikmund, 2003).

On the other hand, phenomenology is a science philosophy focusing on the immediate experience. Phenomenology gives a detailed account of things the way they are and not the way the researcher thinks they are. A researcher using the phenomenology philosophy will start their research from the unknown and is open to and trusts experience (Mugenda & Mugenda, 2003). Furthermore, phenomenologists do not break down phenomena, instead they study it as a whole (Mugenda, 2008).

The two types of philosophies that is positivism which tends to go with quantitative methods and phenomenology which is associated with qualitative methods have both strengths and weaknesses. According to Easterby-Smith et al. (2012, p. 27), the main strengths of the positivism paradigm are "that they can provide wide coverage of the range of situations, they can be fast and economical and, particularly when statistics are aggregated from large samples, they may be of considerable relevance to policy decisions." On the downside, positivism methods tend to be rather inflexible and artificial. In fact, they are not quite effective in understanding processes or the significance that people attach to actions.

Easterby-Smith et al. (2012, p. 27) continue to argue that positivist methods "are not helpful in generating theories; and because they focus on what is, or what has been recently, they make it hard for the policy-maker to infer what changes and actions should take place in the future." In addition, much of the data collected may not be relevant to real decisions although it can still be used to support the covert goals of decision-makers.

Phenomenology methods have their strengths in their ability to look at change processes over time, to understand people's meanings, to adjust to new issues and ideas as they emerge, and to contribute to evolution of new theories. They also provide a way of gathering data, which is seen as natural rather than artificial. According to Easterby-Smith et al. (2012, p. 28), phenomenological methods have some weaknesses. "Data collection can take a very great deal of time and resources, and the analysis and interpretations of data may be very difficult, and this depends on the intimate, tacit knowledge of the researchers." Qualitative studies often feel very untidy because it is harder to control the pace, progress and end-points. There is also the problem that many people, especially policy-makers, may give low credibility to studies based on apparently 'subjective' opinions (Easterby-Smith et al., 2012).

The philosophical foundation of this study was positivism. Positivism is considered appropriate when the research is theory driven and the test of hypothesis is envisaged. By using the positivist paradigm, the researcher was guided by objectivity and could not influence the outcome of the study. The researcher was external to the process of collecting data and there was little he could do to alter the substance of the collected data (Easterby-Smith et al., 2012). In addition, under positivism, the researcher is able to collect a large quantity of data at a point in time, analyse it and thereafter give the results. It is not easy to collect and analyse data by using phenomenological methods.

## **3.3** Research Design

A research design is the masterplan for collecting, measuring and analysing data on the basis of research questions or hypotheses being examined (Sekaran & Bougie, 2014). It can also be defined as a structure for the specification of the relationships between the variables being studied as well as the blueprint that outlines the various procedures ranging from the hypothesis of the study to the data to be analysed (Kerlinger, 2007). According to the positivists' approach, a particular research design has to provide sufficient assurance to a community of scientists that the results derived from following that design will capture the true facts and have reliability and validity levels of a high standard.

This study adopted a descriptive cross-sectional approach in order to establish the link between strategic planning and competitive advantage, the intervening influence of employee behaviour and the moderating effect of organizational structure on this relationship in large manufacturing firms in Kenya. "A cross-sectional design involves collecting data on more times than one and at more than one point in time with a view to having an amount of quantitative or qualitative data relating to two or more than two variables, which are subsequently tested in order to establish any correlation between them" (Bryman & Bell, 2011, p. 53).

The descriptive cross-sectional design was deemed appropriate because it covered the study objectives, the scope, the data to be collected and the analyses that were to be carried out (Cooper & Schindler, 2011). The cross-sectional design has been used by other researchers including Aosa (1992), Awino (2007), Munyoki (2007) and Machuki (2011) as it enabled them test hypotheses and come up with credible conclusions.

However, it should be noted that hypotheses can be tested with data collected using non-cross-sectional survey designs (for example through experimental and longitudinal designs). Mugenda (2008) has posited that cross sectional surveys become suitable where the aim is to find out whether significant relationships exist among the variables being studied at some time during the study.

#### **3.4 Population of the Study**

The target population is defined in terms of elements, geographical boundaries and time (Sekaran & Bougie, 2014). This target population is the universe of units from which a sample is to be selected (Bryman & Bell, 2011). In this study, the population of interest was all large manufacturing firms in Kenya. The KAM Directory (2015, p. 40) was used to delineate the large manufacturing firms in Kenya. Therefore, the unit of analysis was the large manufacturing firm.

The KAM Directory (2015) provides and measures the size of manufacturing firms using the turnover of the firm. Firms with a turnover of between Kshs 50 million and Kshs 150 million were categorised as small in size while firms with a turnover of between Kshs 151 million and Kshs 250 million were categorised as medium in size. Firms with a turnover of Kshs 251 million and above were categorized as large in size.

The total number of manufacturing firms as per the KAM Directory (2015) excluding the service sector was 604. Out of this total, 299 firms were categorized as small, 181 firms categorized as medium while 124 firms were categorized as large in size. It is these 124 firms which formed the population of interest in this study. The entire population of 124 large manufacturing companies shown under appendix IV were studied and therefore no sampling was necessary. The researcher chose a census study because it could enable the study to capture variability of responses. A census study also facilitated comparative analysis and ensured adequate representation, accuracy and reliability.

# **3.5 Data Collection**

Primary data was collected by using questionnaires given in appendix III. Respondents were given time to fill in the questionnaires and these were picked later after being filled. Where necessary, a face-to-face discussion was held with the respondents to clarify any issues of concern before the questionnaire was filled in. Secondary data was extracted mainly from the manufacturing firms' past financial statements. The secondary data was be used to complement the answers given in the questionnaires.

The questionnaire had been designed on a five point Likert-type scale ranging from (1) – not at all to (5) – a very large extent. The Likert-type scale is one of the most frequently used tool of the summated rating scale (Saunders et al., 2012). It consists of statements that express either a favourable or unfavourable attitude toward the object being studied. The research questionnaire consisted of questions from previous empirical studies, theory and the researchers own questions based on the context of the study. The questionnaire was divided into five sections. Section A contained general information including mainly the demographics of the respondent. Section B covered questions on strategic planning while section C covered questions on employee behaviour. Section D covered questions on organizational structure while the last section E covered questions on the firm's competitive advantage.

Where possible, the questionnaires were administered face-to-face with the respondents as this enabled the respondents to ask for clarification (Sekaran & Bougie, 2014). But where a face-to-face encounter was not possible, the questionnaires were dropped and picked later. From each company, the main respondent was to be the CEO. In the absence of the CEO, the other possible respondents were senior managers with good knowledge of the organization and the subject of the questionnaire. Such managers included the head of strategy, the head of human resource management or the head of finance and administration.

#### **3.6 Reliability Tests**

Reliability is used in connection with the quality of measurement (Trochim & Odonnelly, 2006). "The reliability of a measure indicates the extent to which it is without bias and hence ensures consistent measurement across the various items in the instrument" (Sekaran & Bougie, 2014, p. 228). Reliability can also refer to the extent to which techniques of collecting data or analyses procedures will yield consistent findings (Mugenda & Mugenda, 2003).

Reliability can be determined by using the internal consistency test. This test involves correlating the responses to questions in the questionnaire with each other. It thus measures the consistency of responses across either a subgroup of the questions or all the questions from the questionnaire (Saunders et al., 2012). Cronbach's Alpha is the measure that is most commonly used to determine the coefficient of internal consistency (Saunders et al., 2012). Alpha values range from zero where there is no internal consistency to one, where there is complete internal consistency. A higher coefficient implies the measurement scale is more reliable. Saunders et al., (2012) proposed that if values were too low, either few items were used or the items had little in common and suggested that a value of 0.70 and above was sufficient.

On his part, Kline (1998) noted that acceptable values for Cronbach's alpha are usually between 0.7 and 0.9 while Sekaran and Bougie (2014, p. 293) have contended that "alpha values of between 0.5 and 0.8 are adequate" and that with such values, one can accept there is presence of internal consistency. If a coefficient of 0.70 is derived, this will imply that there is a high reliability of data (Saunders et al., 2012). This study therefore used 0.70 and above as the benchmark in determining the reliability of the questionnaire that was used.

# 3.7 Validity Tests

According to Saunders et al (2012, p. 429), "validity is the ability of the research instrument to accurately assess what it is intended to measure. It is sometimes termed as measurement validity as it refers to concerns that what you find with the questionnaire actually represents what is being measured." Three types of validity are available including, content validity, construct validity, and criterion validity.

This research sought to determine content validity by establishing the extent to which the measurement instrument provided adequate coverage of the investigative questions guiding the study (Saunders et al., 2012). Content validity was determined using expert judgement from the research supervisors, research experts and colleagues in the doctoral class. Content validity ensures that the measure includes an adequate and representative set of items that tap the concept. The more the scale items represent the domain or universe of the concept being measured, the greater the content validity (Sekaran & Bougie, 2014). The face validity test, which is "considered by some a basic and minimum index of content validity" (Sekaran & Bougie, 2014, p. 226) was used to determine the validity of the study. This test was undertaken by administering the questionnaire as a pilot test before undertaking the fieldwork. This was in an attempt to establish whether the respondents could answer the questions without difficulty. The feedback obtained from the pilot test was used to improve the questionnaire and make it clear so that there were no ambiguous and double-barreled questions. This ensured that administering the questionnaire to the entire sample elicited the correct responses.

Construct validity refers to the extent to which the measurement questions actually measure the presence of those constructs intended to be measured (Saunders et al., 2012). It can be thought of as answering the question: 'How well can you generalize from your measurement questions to your construct?' According to Sekaran and Bougie (2014, p. 227), "construct validity can be assessed through convergent and discriminant validity. Convergent validity is established when the scores obtained with two different instruments measuring the same concept are highly correlated, while discriminant validity is established when, based on theory, two variables are predicted to be uncorrelated, and the scores obtained by measuring them are indeed empirically found to be so."

Sekaran and Bougie (2014, p. 227) argue that "criterion validity is established when the measure differentiates individuals on a criterion it is expected to predict. This can be done by establishing concurrent validity or predictive validity. Concurrent validity is established when the scale discriminates individuals who are known to be different, that is, they should score differently on the instrument. On the other hand, predictive validity indicates the ability of the measuring instrument to differentiate among individuals with reference to future criterion.

#### **3.8 Operationalization of Key Variables**

Reduction of abstract concepts to render them measurable in a tangible way is referred to as operationalizing the concepts (Sekaran & Bougie, 2014). According to Sekaran and Bougie (2014, p. 200), "operationalizing is done by looking at the behavioural dimensions, facets, or properties denoted by the concept. These are then translated into observable and measurable elements so as to develop an index of measurement of the concept." Operationalizing a concept involves a series of steps. The first step is to come up with a definition of the construct to be measured. Then to think about the measure, that is, an instrument that can actually measure the concept. Subsequently, a response format is needed and finally, the validity and reliability of the measurement scale has to be assessed (Sekaran & Bougie, 2014).

According to Zikmund (2003), operationalization gives meaning to a concept by specifying the operations necessary to measure it. For example, a five-point rating scale with end-points anchored by "Not at All" and "Very Large Extent," can be used. The wording of the rating scale will determine the type of responses required. Dillman (2000) proposed that study constructs should be operationalized so as to test linkages among the constructs in the theoretical model.

Without operationalizing the study constructs, it would be difficult to test the linkages among the constructs in the theoretical model. This makes it necessary to ensure correct operationalization of study variables in order to achieve the desired results. The operationalization of key variables of the study is indicated in Table 3.1 below:

• •	· · ·		Research	
Key study			Ouestionnaire	
Variables	<b>Operational indicators</b>	Measurement	items	Supporting Literature
Strategic	Strategic planning process	5 Point Likert-	Section B	Wendy& Tushman (2005)
planning	• Defining firm's corporate	type Scale	• Part A	Pitts & Lei (1996)
(Independent)	direction	ope searc	No. $13(1-10)$	Mintzberg & Lampel (1999)
(independent)	• Approisal of business		10.15(1-10)	Johnson et al 2008
	• Applaisal of busiless			Arasa & K'Obonyo 2012
	environment			Awino $2013$
	Stunto and formulation		C. Alex D	Amarff 1070
	Strategy formulation		Section B	Alisoli, 1970
	• Identification and		• Part B	Steiner, 1979
	analysis of firms strategic		No 13 (11-13)	$\begin{array}{c} \text{Gnammar} (2005) \\ \text{A} & \text{A} & \text{A} \end{array}$
	issues			Arasa & K Obonyo, 2012
	• Strategy generation,			Awino, 2013
	evaluation and selection			Kumar, 2015
	Planning for strategy		Section B	Mintzberg, 1990
	implementation, evaluation		Part C	Johnson et al., 2008
	& control		No 13 (14-23)	Arasa & K'Obonyo, 2012
	• Development of			Awino, 2013
	implementation,			Kumar, 2015
	evaluation & control			Child et al., 2016
	systems			
Employee	Strategically aligned	5 Point Likert-	Section C	Nutt, 2008
Behaviour	behaviour	type Scale	Part A	Cees et al., 2009
(Mediating)	• Employee participation	21	No 14 (1-12)	Mantere, 2008
	Self-drive			Blumberg and Pringle, 1982
	Innovativeness			
	Continuous learning			
	Employee commitment		Section C	Sinclair at al 2005
			• Dort D	Chungtoi and Zafar 2006
	• Affective		• Fall D No 14 (12, 21)	Grawo at al. 2012
	• Continuance		NO 14 (15-51)	Srivestave 2012
	• Normative			Mouer & Allen 1001
				Wiener 1082
Organizational	Organizational Structure	5 Doint Libort	Section D	Chandler 1062
Organizational	Organizational Structure	5 Point Likert-	Section D	Chandler, 1962
Structure	• Formalization	type Scale	• Part A	Olson, et al., $2005$
(Moderating)	Centralization		No 15 (1-22)	Kavale, 2012
	<ul> <li>Specialization</li> </ul>			Kiptoo & Mwirigi, 2014
	Integration			Mathur & Nair, 2015
				Grawe et al, 2012
<i>a</i>		5 D 1 4 1 1	a	Srivastava, 2013
Competitive		5 Point Likert-	Section E	Porter, 1980, 1985, 1991
Advantage	<ul> <li>Cost advantages</li> </ul>	type Scale	Part A	Gowrie et al., 2012
(Dependent)			No 16 (1-9)	Mutunga & Minja, 2014
	<ul> <li>Differentiation</li> </ul>		Section E	Porter, 1980, 1985, 1991
	advantages		Part B	Mutunga & Minja, 2014
			No 16 (10-16)	
	<ul> <li>Focus advantages</li> </ul>		Section E	Porter, 1980, 1985
			Part C	
			No 16 (17-22)	
	• Resources and capability		Section E	Barney, 1991
	advantages		Part D	Teece et al., 1997
			No 16 (23-29)	Barney & Hesterly, 2012
	• Financial performance	1	Section E	Powell, 1992
	advantages		Part E	Arasa & K'Obonyo, 2012
	6		No 16 (30-35)	Awino, 2013

 Table 3. 1: Operationalization of Key Variables

Operationalizing key variables of the study enables the researcher to measure variables quantitatively and consequently be able to test the formulated hypotheses. Munyoki (2007) pointed out that no variable is designed to be always independent or dependent but the position taken depends on the situation. The variables studied included strategic planning as the independent variable, competitive advantage as the dependent variable, employee behaviour as the mediating variable and organizational structure as the moderating variable.

Sekaran and Bougie (2014, p. 220) have indicated that in a Likert-type scale, "respondents are required to respond to each of the statements in terms of a number of degrees, normally five degrees of either agreement or disagreement. The technique assigns a scale value to each of the five responses indicating its favourableness or unfavourableness. The scores are summed up to measure the attitude of the respondent" (Sekaran & Bougie, 2012, p. 220).

# 3.9 Data Analysis

Data was analysed using both descriptive and inferential statistics. Descriptive statistical information including average scores, percentages, standard deviations, frequency distributions and cross tabulations were worked out in order to explain the attributes of the variables under study. Descriptive analyses were conducted on the characteristics of the sample. Hypotheses were tested using simple and multiple regression analyses. This was in order to determine the relationship between strategic planning, employee behaviour, organizational structure and competitive advantage of large manufacturing firms in Kenya.

Inferential statistics were employed in determining the nature and significance of the link existing between the variables in addition to testing the hypotheses. The appropriate tests were Pearson's Coefficient Correlation, Coefficient of Determination and other multivariate techniques like the multiple regression analysis and hierarchical regression analysis. Regression analysis was used to establish the type of relationship among various variables (Hoyer & Hoyer, 2001). These analyses assisted in assessing the level of influence the independent variables have on the dependent variables. The study used simple linear regression analysis to test the influence of strategic planning on competitive advantage.

To test for the mediation of employee behaviour, the study used hierarchical or stepwise regression analysis. This enabled the researcher to add variables sequentially to the regression equation. It helped in determining how much each set of the variables added to the prediction of the dependent variable over and above the contribution of the previously included independent variables (Cohen, Cohen, West & Aiken, 2003).

The testing for mediation followed the four steps in the Baron and Kenny model (1986). The first step in testing for the mediating variable influence involved establishing the direct relationship between strategic planning and competitive advantage while the second step involved establishing the relationship between strategic planning and employee behaviour. The third step involved establishing the relationship the relationship between employee behaviour and competitive advantage. The fourth and final step involved establishing the relationship between the joint effect of strategic planning and employee behaviour as predictors of competitive advantage.

The mediating influence of employee behaviour would only be confirmed if the joint influence of employee behaviour and strategic planning is more than that of the direct influence. According to Rucker, Preacher, Tormalla and Petty (2011, p. 365) "any observed mediation for a total effect with an initial p-value of .05 will likely lead to claims of full mediation, because the p-value of the direct effect will likely be greater than .05 after controlling for the mediator."

The Baron and Kenny model (1986) was used to test for the moderating effect of organizational structure. In the first step, the direct influence of strategic planning on competitive advantage was tested. In step two, the effect of strategic planning and organizational structure on competitive advantage was tested while in the step three, the effect of strategic planning, organizational structure and an interaction term on competitive advantage was established. Moderation would only be established if the joint influence explained a statistically significant amount of variance in the dependent variable. The summary of data analysis techniques and interpretation is given in Table 3.2.

Research objective	Hypotheses	Analytical model	Interpretation
Objective 1: Determine the influence of	H <sub>1</sub> : Strategic planning significantly influences	Simple regression analysis:	R <sup>2</sup> is expected to show % variation in competitive advantage as explained by characteristics of strategic planning.
strategic planning on the competitive advantage of large	the competitive advantage of large manufacturing	By averaging the components of strategic planning:	F-Test is used to determine generally the strength and significance of
manufacturing firms in Kenya	firms in Kenya	$CA=\beta_0+\beta_1SP+\epsilon$	the simple regression model.
		CA= Competitive Advantage $\beta_0$ = Constant $\beta_0$ = Regression coefficient for	t-statistic is to find out individual significance of the relationship. If t statistic is greater than the critical value, then the variables are individually significant (Saunders et al., 2012).
		strategic planning SP = Composite index for	Beta ( $\beta$ ) is to determine the contribution of each variable to the significance of the model (Sekaran & Bougie, 2014, p. 318).
		$\epsilon = \text{Error term}$	$P - Value \le 0.05$ , shall signify statistical significance.
<b>Objective 2:</b> Determine the influence of	H <sub>2</sub> : Employee behaviour significantly influences	Path analysis:	$R^2$ is expected to show % variation in competitive avantage as explained by characteristics of strategic planning and employee
employee behaviour on the relationship between strategic	the relationship between strategic planning and	There are four steps in this path analysis shown below.	behaviour.
planning and competitive advantage of large manufacturing firms in Kenya	competitive advantage of large manufacturing firms in Kenya	Step 1: $CA=\beta_0 + \beta_1 SP + \varepsilon$ Step 2: $EB=\beta_0+\beta_1 SP+\varepsilon$	F-Test is to determine the overall strength and significance of the regression model.
		Step 2: $CA = \beta_0 + \beta_1 EB + \epsilon$ Step 4: $CA = \beta_0 + \beta_1 SP + \beta_2 EB + \epsilon$	$P - Value \le 0.05$ , to evaluate whether steps 1 to 3 are statistically significant (Rucker et al., 2011, p. 365).
		CA=Competitive Advantage SP=Strategic Planning EB=Employee Behaviour $\beta_0, \beta_1$ = Regression coefficients E=Error term	t-statistic is to determine individual significance of the relationship. Some form of mediation is supported when Strategic Planning (SP) has a smaller regression coefficient than EB or when it (SP) is no longer significant when both SP and EB are incorporated into the model.

# Table 3.2 continued...

Research objective	Hypotheses	Analytical model	Interpretation
<b>Objective 3:</b> Establish the effect of organizational structure on the relationship between strategic	<b>H3</b> : Organizational structure significantly affects the relationship between strategic	Stepwise multiple regression analysis: There are three steps. Step 1: $CA=\beta_0 +\beta_1SP + \epsilon$	R <sup>2</sup> is expected to show percentage of variation in the performance of the firm as explained by strategic planning and organizational structure.
planning and competitive advantage of large manufacturing firms in Kenya	planning and competitive advantage of large manufacturing firms in Kenya	Step 2: $CA = \beta_0 + \beta_1 SP + \beta_2 OS + \mathcal{E}$ Step 3: $CA = \beta_0 + \beta_1 SP + \beta_2 OS + \beta_3 SP.OS + \mathcal{E}$	A significant change in $\mathbb{R}^2$ after introducing the interaction term affirms that a moderating effect exists (Sekaran & Bougie, 2014).
		SP=Composite index for strategic planning OS= Composite index for organizational Structure	F-Test is to evaluate the strength and significance of the model (Sekaran & Bougie, 2014, p. 314).
		SP.OS=Interaction term $\beta_0$ =Constant term	t-Test is to establish the significance of individual variables in the relationship.
		$\beta_1$ , $\beta_2$ , and $\beta_3$ = regression coefficients	P-Value≤0.05 is to evaluate whether steps 1 to 3 are significant from a statistical point of view (Rucker et al., 2011).
<b>Objective 4:</b> Establish the joint influence of	H <sub>4</sub> : The joint influence of employee behaviour	Stepwise multiple regression analysis:	$R^2$ and change in $R^2$ will assess how much change in competitive advantage will be due to SP, EB and OS.
employee behaviour and organizational structure on the relationship between strategic	and organizational structure is different from the influence of	There are two steps under the joint effect: Step 1: $CA=\beta_0 + \beta_1 SP + \varepsilon$	• If for example in step 1 R <sup>2</sup> is 0.6 and in step 2 R <sup>2</sup> is 0.87, then 0.87 > 0.6 and therefore, there is a significant joint effect.
planning and competitive advantage of large manufacturing firms in Kenya	individual variables on the relationship between strategic planning and	Step 2: $CA = \beta_0 + \beta_1 SP + \beta_2 EB + \beta_3 OS + \varepsilon$ CA=Competitive Advantage SP=Composite index for strategic planning	F-Test is to evaluate the overall strength and significance of the regression model.
	competitive advantage of large manufacturing	EB=Composite index for employee behaviour	t-Test is to establish individual significance of the relationship.
	firms in Kenya	OS=Composite index for organizational structure	"Beta ( $\beta$ ) is to determine the contribution of each variable to the significance of the model" (Sekaran &
		$\beta_0$ =Constant term	Bougie, 2014, p. 318).
		$\beta_1$ , $\beta_2$ , and $\beta_3$ = regression coefficients	P-Value $\leq 0.05$ is to verify the statistical significance.

Data diagnostics were done to determine if the data set met the regression assumptions such as normality, homoscedasticity and multicollinearity. Normality was tested using Shapiro-Wilk Test and Q-Q Plots. If the probability value of Shapiro-Wilk Test derived was greater than 0.05, then the data was considered to be normal; otherwise if the value was less than 0.05, then the data deviated significantly from that of a normal distribution.

Homoscedasticity assumes that there is a constant variance of errors. When Homoscedasticity is violated resulting to Heteroscedasticity, it becomes difficult to assess what the true standard deviation of forecasted errors is, and the result is usually to have confidence intervals which are either too wide or too narrow. The Levene test was used to test Homoscedasticity. If p-value was found to be  $\geq$  than 0.05, then there was no problem of Homoscedasticity.

The test for multicollinearity was conducted to assess whether one or more of the variables of interest was highly correlated with one or more of the other independent variables. "Pearson product moment correlation coefficient (r) was used to establish relationships between two variables" (Saunders et al., 2012, p. 521). Correlation reveals the magnitude and direction of the relationships (Cooper & Schindler, 2011).

This chapter has presented the research methodology that was adopted for the current study. The research philosophy, research design, population of study, data collection, reliability and validity tests were discussed. The research philosophy adopted for the study was positivism as opposed to phenomenology, while the research design adopted for the study was the descriptive cross-sectional survey approach.

The chapter further presented operationalization of the study variables and analytical techniques and models. The chapter showed how data collected would be prepared and cleaned before being analyzed. The data diagnostic tests including tests of normality, homoscedasticity and multicollinearity were discussed.

The analytical techniques used including descriptive statistics, inferential statistics including regression analyses, correlation analyses and hypothesis testing were discussed. The chapter also presented the techniques used in the analytical interpretation of data. Chapter four presents descriptive data analysis and findings. The data analysis is by way of descriptive statistics and pretests of regression on the three independent variables and interpretation of results.

## **CHAPTER FOUR**

# **DESCRIPTIVE DATA ANALYSIS AND FINDINGS**

#### 4.1 Introduction

The overall objective of the study was to determine whether the relationship between strategic planning and competitive advantage of large manufacturing firms is influenced by employee behaviour and organizational structure. From this broad objective, four specific objectives and hypotheses were derived. From the four specific objectives of the study and the conceptual framework developed, four hypotheses were developed for further testing.

To lay the ground for further analysis to test the hypotheses and achieve the study objectives, this chapter presents preliminary findings whose key focus is the manifestation of the study variables across the studied organizations. The chapter also presents the results of reliability and validity tests as well as various tests of goodness of fit of the data that was gathered including shapiro-wilk tests and Q-Q plots.

Both descriptive and inferential statistics are presented in this chapter. Descriptive statistics were used to analyze the demographic data and were presented in frequency tables, mean, standard deviation and coefficient of variation. In addition, the chapter presents pretests of statistical assumptions and descriptive and demographic research findings. Inferential statistics including one sample t-test and significant tests were done to establish the statistical significance after regressing the dependent variable on the indicators in the areas of strategic planning, employee behaviour and organizational structure. The findings were interpreted and discussed.

#### 4.2 Statistical Assumptions

Statistical tests rely on certain assumptions regarding the variables used in the analysis. Osborne and Waters (2002) have argued that when these assumptions are not met, the outcomes may lack validity. They have further argued that lack of validity may result to either a type I or a type II error, or in the over-estimation or under-estimation of significance or effect size(s). It is therefore important to pretest for these assumptions for validity of the results.

Pendhazur (1997, p. 33) has noted that "knowledge and understanding of the situations when violations of assumptions lead to serious biases, and when they are of little consequence, are essential to meaningful data analysis." However, Osborne, Christensen and Gunter (2001, p. 5) noted that "just a few articles report to having tested assumptions of the statistical tests they rely on before coming up with their conclusions."

Lack of pretesting for these assumptions has led to a situation where there is ample literature in education and the social sciences but issues of the validity of many of the results, assertions and conclusions still exist (Osborne & Waters, 2002). Testing for assumptions is beneficial as it ensures that an analysis meets the related assumptions and helps avoid either a type I error or a type II error (Osborne & Waters, 2002). A type I error occurs when the researcher decides to reject the null hypothesis when it is actually true, while a type II error occurs when the researcher decides not to reject the null hypothesis when it is actually false. Prior to data analysis, tests were done on reliability, validity, and statistical assumptions on normality, multicollinearity, and homogeneity.

# 4.3 Reliability Test

Reliability is a measure of the extent to which an instrument gives consistent results or data after repeated trials. It is concerned with estimates of the degree to which a measurement is free of random or unstable error (Sekaran & Bougie, 2014; Saunders et al., 2012; Bryman & Bell, 2011). It is important that the measurement instrument is reliable for it to measure consistently. Reliability tests results obtained by the use of Cronbach's alpha are presented in Table 4.1.

Variable	Number of items	Cronbach's Alpha
Strategic Planning	23	0.766
Employee Behaviour	31	0.918
Organizational Structure	22	0.866
Competitive Advantage	35	0.896

Table 4. 1: Reliability Test

Source: Research Data (2018)

This study used Cronbach's alpha coefficients "to assess the internal consistency or average correlation of items within the test" (Saunders et al., 2012, p. 430). The study used the value of 0.70 and above as a quick rule to determine internal consistency. The results of all the variables used in this study were above the 0.70 threshold, with the lowest alpha coefficient of 0.766 being on the strategic planning variable while the highest alpha coefficient of 0.918 was on the employee behaviour variable. This was a confirmation of the reliability of the data used to draw conclusions from theoretical assumptions.

#### 4.4 Validity Test

Validity is the ability of the research questionnaire to measure what it is intended to measure in terms of accuracy and meaningfulness (Sekaran & Bougie, 2014). It refers to the issue of whether or not an indicator or set of indicators that is devised to gauge a concept really measures that concept (Bryman & Bell, 2011). Three types of validity exist and they include, content validity, construct validity and criterion validity.

Content validity ensures that the measure includes an adequate and representative set of items that tap the concept. It was determined using expert judgement from the research supervisors, research experts and colleagues in the doctoral class. Construct validity testifies to how well the results obtained from the use of the measure fit the theories around which the test is designed (Sekaran & Bougie, 2014). On the other hand, criterion validity is established when the measure differentiates individuals on a criterion it is expected to predict (Sekaran & Bougie, 2014). This was done by establishing concurrent validity or predictive validity.

Construct and criterion validity were also carried out on the instrument by randomly testing 12 firms initially. The outcome of the pilot test was used to improve the instrument and make it clear. This ensured that the results arising from the measures captured were reliable.

#### 4.5 Tests for Statistical Assumptions

According to Saunders et al. (2012, p. 150), "statistical procedures using correlations, regression, t-tests and analysis of variance are usually based on the presupposition that the data being analyzed follows a normal distribution." Often times however, these analyses have statistical errors, which need to be checked. This study used Shapiro-Wilk Test, Q-Q plot, multicollinearity and homogeneity of variance to test for these statistical errors. This was in order to establish whether the data set was well modelled. The outcome of these statistical tests are presented in the sections that follow below.

#### 4.5.1 Tests of Normality

Osborne and Waters (2002, p. 2) proposed that regression analysis assumes that "data is normally distributed. When the data is not normally distributed, relationships can be distorted affecting significance tests and consequently statistical inference." Data that is not normally distributed may lead to inaccuracy of results.

In some way, the normality test does not largely apply in a census study because the population is also the sample. Nevertheless, normality was tested using Kolmogorov-Smirnov Test and the Shapiro-Wilk Test. According to Razali and Wah (2011, p. 32), "Shapiro-Wilk Test is the most powerful tool in testing for normality." Table 4.2 presents the results of Shapiro-Wilk Test.

**Table 4. 2: Tests of Normality** 

	Kolmogorov-Smirnov <sup>g</sup>			Shapiro-Wilk		
Variable	Statistic	df	Sig.	Statistic	df	Sig.
Strategic Planning	0.189	32	0.200	0.898	65	0.419
Employee Behaviour	0.241	5	0.200	0.910	27	0.488
Organizational Structure	0.270	5	0.200	0.893	25	0.439

Source: Research Data (2018)

The results in Table 4.2 reveal that the significant levels under the Shapiro-Wilk Test in respect of strategic planning, employee behaviour and organizational structure were above 0.05 ( $p \ge 0.05$ ). The significance levels were 0.419, 0.488 and 0.439 for strategic planning, employee behaviour and organizational structure respectively. This implies that the samples were picked from a normally distributed population. The Table further reveals that not all items were included in the statistics. The degrees of freedom were 65 for strategic planning, 27 for employee behaviour and 25 for organizational structure. This implies that not all items were included in calculating the statistics.

This research involved a census and all items in the population were in the sample. In effect, there is little need for a normality test because "normality is used to determine whether a sample has been drawn from a normally distributed population" (Razali & Wah, 2011, p. 21). Hence, the normality results obtained in Table 4.2 were supplemented by Q-Q plots, which reveal normality graphically. The Q-Q plots for strategic planning, employee behaviour, organizational structure and competitive advantage are shown in figures 4.1 to 4.4 below.



Figure 4. 1: Normal Q-Q Plot of Strategic Planning Source: Field data (2018)

In this study, strategic planning was the dependent variable, also referred to as the predictor variable. The Q-Q Plot of the strategic planning variable indicates data points, which are very close to the diagonal line. If the data points are close to the diagonal line in a Q-Q Plot, then it implies the data is normally distributed. In this case, therefore, the conclusion is that the data used in this study regarding strategic planning was normally distributed. The Q-Q Plot for employee behaviour is shown in figure 4.2 below.



Figure 4. 2: Normal Q-Q Plot of Employee Behaviour Source: Research data (2018)

Employee behaviour was the mediating or intervening variable in this study. The Q-Q Plot in figure 4.2 shows that the diagonal line covers most of the data points. This implies that the data was normally distributed. However, some data points are outliers and lie a bit further away from the diagonal line. These outliers do not pose a significant problem because most of the data points are clustered around the diagonal line. Therefore, it can be concluded that the data used in testing employee behaviour was normally distributed. The Q-Q Plot covering organizational structure is given in Figure 4.3 below.



Figure 4. 3: Normal Q-Q Plot for Organizational Structure Source: Research data (2018)

In this study, organizational structure represented the moderating variable. As is evident from the Q-Q Plot, most of the data lie on either side of the diagonal line. This implies that the data used was normally distributed. The normal distribution notwithstanding, there are a few data points which are clearly outliers and are further away from the diagonal line. These outliers do not obviate the fact that most points are close to the diagonal line and therefore the data was normally distributed. Figure 4.4 below shows the Q-Q Plot for the dependent variable, competitive advantage.



Figure 4. 4: Normal Q-Q Plot of Competitive Advantage Source: Research data (2018)

In the Q-Q Plot for competitive advantage, most of the data points are close to the diagonal line. They do not stray from the diagonal line in an obvious non-linear manner. This implies that most of the data used in this study was normally distributed. This notwithstanding, there are some outlying data points but these are few and cannot affect the validity of the results obtained by using the data collected on the competitive advantage variable.

#### 4.5.2 Multicollinearity Test

According to Sekaran and Bougie (2014, p. 319), "multicollinearity is an often encountered statistical phenomenon in which two or more independent variables in a single regression model are highly correlated. In most severe cases where the correlation between two independent variables is equal to 1 or -1, multicollinearity makes the estimation of the regression coefficients impossible. In all other cases, it makes the estimates of the regression coefficients unreliable."

As already indicated, multicollinearity is a detrimental state in which the correlations amidst the independent variables are strong. It increases the standard errors of the coefficients using collinearity statistics to get tolerance and variation inflation factors (VIF) which are high. According to Sekaran & Bougie (2014, p. 319), "tolerance can be defined as the amount of variance in the independent variable that is not accounted for by other independent variables. Variation inflation factor (VIF) measures how much variance the regression coefficient is inflated by multicollinearity."

The minimum cut-off value for tolerance is typically 0.10. When there is no problem with multicollinearity tolerance, the calculated values should not be less than 0.10 while VIF should be no more than 10. The maximum acceptable cut-off value for VIF is 10. If two variables are not correlated, then the VIFs should be 1.0. If the VIF of one variable is  $\geq$  5, then there is collinearity associated with that variable Sekaran & Bougie, 2014). The multicollinearity results for the three variables, strategic planning, employee behaviour and organizational structure are shown in Table 4.3.

		Unstandardized Coefficients		Standardized Coefficients			Collinea Statist	arity ics
М	odel	В	Std. Error	Beta	t- value	Sig	Tolerance	VIF
1	(Constant)	1.543	.482		3.200	.002		
	Strategic Planning	.636	.112	.462	5.700	.000	1.000	1.000
2	(Constant)	.459	.280		1.638	.104		
	Strategic planning	.125	.071	.091	1.772	.079	.797	1.255
	Employee behaviour	.768	.048	.822	16.053	.000	.797	1.255
3	(Constant)	.275	.310		.884	.378		
	Strategic Planning	.219	.075	.159	2.929	.004	.843	1.186
	Organization Structure	.722	.051	.763	14.048	.000	.843	1.186
4	(Constant)	.227	.257		.885	.378		
	Strategic Planning	.103	.064	.075	1.617	.109	.793	1.261
	Employee Behaviour	.498	.066	.534	7.498	.000	.335	2.983
	Organizational Structure	.349	.065	.368	5.322	.000	.355	2.819
	Dependent Variable: Competitive Advantage							

#### **Table 4. 3: Multicollinearity Test**

Source: Research Data (2018)

The results in Table 4.3 indicate that all the VIFs for collinearity are below 5.0. Considering the rules of multicollinearity, the results have not indicated any problem since the tolerance values and the VIF values for all the variables being tested were within the acceptable limits. The lowest VIF value of 1.0 was on strategic planning when taken alone while the highest VIF value was 2.983 on employee behaviour when the three variables were considered together.

#### 4.5.3 Test of Homogeneity of Variance

Homogeneity of variance tests is a condition in which all the variables in a sequence have the same finite or limited variance from the mean. Homoscedasticity assumes that there is a constant variance of errors. When Homoscedasticity is violated resulting to Heteroscedasticity, it becomes difficult to assess what the true standard deviation of forecasted errors is, and the result is usually to have confidence intervals which are either too wide or too narrow. Heteroscedasticity arises when the variance of the errors of the dependent variable are not the same across the data.

Tabachnik and Fidel (2001) and Field (2009) have posited that heteroscedasticity occurs when there is a variance of the error term. It occurs when the variance of errors differs at different values of the independent variables. Berry and Fieldman (1985) and Tabachnick and Fidel (1996) have posited that some low level heteroscedasticity has little impact on significance tests. The results of the levene test used to test for homoscedasticity are shown in Table 4.4.

	Levene			
Variable	Statistic	df1	df2	Sig.
Strategic Planning	.656	1	102	.420
Employee Behaviour	1.615	1	102	.207
Organization Structure	.597	1	102	.442
Competitive Advantage	.700	1	102	.405

 Table 4. 4: Test of Homogeneity of Variances

Source: Research Data (2018)

To calculate the levene test, the categories or groups were taken as the number of years in which organizations had practiced strategic planning. There were three groups. The first group was 0 - 5 years, the second group was 6-10 years while the third and final group was over 10 years. As is evident from Table 4.4, all variables had significant values of  $p \ge 0.05$ . The p-values were 0.420 for strategic planning, 0.207 for employee behaviour, 0.442 for organizational structure and 0.405 for competitive advantage. The decision rule is that if the p-value calculated under the levene test is  $\ge 0.05$ , then there is no problem of Heteroscedasticity. Our data therefore exhibits Homoscedasticity.

#### 4.6 **Response Rate**

This was a census study and the population of interest comprised 124 large manufacturing firms in Kenya. By the time the questionnaires were being distributed to the firms, it was found that two firms had closed their businesses. To the remaining 122 firms, questionnaires were physically dropped and picked later. All the 122 questionnaires were returned and upon further scrutiny, it was established that all of them had been completed well except in some few instances under the general information where some respondents did not respond to all the questions.

The effective response rate was therefore 98.4%. This response rate was good and compared well with other studies on large-scale manufacturing firms in Kenya carried out by other scholars in the past. Awino (2007) achieved a response rate of 65% and proposed that an average response rate of 65% for empirical studies is acceptable. Kidombo (2007) achieved a response rate of 64% while Magutu (2013) had a response rate of 75%.

# 4.7 **Respondents' Demographic Profiles**

The respondents' characteristics were analyzed in terms of position of respondent, category in management, years of service worked in the firm in the current position, and highest level of education. The designation and category of respondents were important because those higher up in the hierarchy can give more reliable and objective responses. Table 4.5 shows the position of the respondents.

Position of Respondent	Frequency	Percentage
	Trequency	
Chief Executive Officer (CEO)	12	9.8
Human Resource Manager (HRM)	53	43.5
Finance Director/Manager	25	20.5
Strategy Manager	26	21.3
Other Senior Manager	6	4.9
Total	122	100.0

 Table 4. 5: Position of Respondent

Source: Research Data (2018)

The results in Table 4.5 indicate that 9.8% of the respondents were Chief Executive Officers in their firms, 43.5% were Human Resource Managers, 20.5% were Finance Directors/Managers, and 21.3% were Strategy Managers while 4.9% of the respondents were from other categories of management. The Human Resource Managers in most firms are the ones who deal with training and education matters and this might explain the reason why they were the most respondents.

The categories to which the respondents belonged were analyzed to establish how many of the respondents were in top management and how many were in middle management. This was important because in most cases, the higher you are in the hierarchy, the more informed you are especially on strategic issues and therefore the responses given can be more reliable. Table 4.6 shows the categories to which the respondents belonged.

Category of Management	Frequency	percentage
Top Management	111	91.0
Middle Management	7	5.7
Total	118	96.7
Not responded	4	3.3
Total	122	100.0

**Table 4. 6: Category of Management** 

Source: Research Data (2018)

The results in Table 4.6 indicate that 91.0% of the respondents were in top management position while only 5.7% were in middle management. From Table 4.6, it is evident that 3.3% of the respondents failed to indicate what their categories were. Apart from the management position, the respondent's length of service in the current position was important as it showed that they had interacted with the systems and processes of the firms long enough and were therefore capable of giving credible responses. Table 4.7 shows the distribution of the respondents' in terms of their length of service in the current position.

Years in Current Position	Frequency	percentage
Less than 5 years	4	3.3
5-10 years	20	16.4
10-15 years	71	58.2
Over 15 years	19	15.5
Total	114	93.4
Not responded	8	6.6
Total	122	100.0

Table 4. 7: Number of Years worked in Current Position

Source: Research Data (2018)

The results in Table 4.7 indicate that 58.2% of the respondents had worked in the current position for a period between 10 and 15 years. Those respondents whose length of service was between 5 to 10 years accounted for 16.4% while 15.5% had been in their current positions in their various firms for over 15 years. The three highest categories made up 90.1% of the total respondents and this is a reflection of the good and experienced workforce the firms had. The study's respondents were therefore in a good position to give plausible, reliable and good information for analysis to test the intended objectives. The study also sought to establish the highest education level attained by the respondents and the results are shown in Table 4.8.

Level of Education	Frequency	percentage
Diploma Level	1	0.8
Bachelors Level	36	29.5
Masters Level	73	59.8
Doctorate Level	3	2.5
Total	113	92.6
Not responded	9	7.4
Total	122	100.0

**Table 4. 8: Highest Level of Education** 

Source: Research Data (2018)

The results in Table 4.8 indicate that 59.8% of the respondents had a master's degree while 29.5% had a bachelor's degree. The total from these two categories is 89.3%. This means that the study's respondents were highly educated. This can be attributed to the recruitment policies of the large manufacturing firms, which require an employee at a senior position to have attained a minimum qualification of a degree. The results imply that these employees have been exposed to diverse ideas and can grasp and apply difficult concepts that might increase the level of competitive advantage of the firm. The results also lend support to previous empirical research that has shown that high levels of education are linked with firm success (Kariuki, Awino & Ogutu, 2012; Hambrick & Mason, 1984).

Human capital is regarded as the greatest essential component of competitive advantage in most organizations (Memon, Mangi & Rohra, 2009). In fact, this capital has been defined as the knowledge, skill, creativity and health of the individual (Becker, 2002). High formal education levels are associated with a high ability to ponder about and distinguish between a variety of alternatives (Kariuki, Awino & Ogutu, 2012). The results indicate that the respondents had the ability to make informed decisions that could influence the competitive advantage of their firms.

# 4.8 Firm Profile

The characteristics of the firm were analyzed in terms of scope of operations, ownership structure, age of the firm indicated by the number of years in existence, the years within which the firm had been practicing strategic planning, the sub-sector to which the firm belonged, and the number of employees. Scope of operations was to indicate whether the firm was operating nationally within Kenya, regionally within East Africa, on a continental basis covering the whole of Africa or whether the firm was global in its scope.
The age of the firm was important as it showed the stability of the firms. Those firms, which have been operating for a long time are considered stable and well established and this could be an indicator that the firms have some sustainable competitive advantage characteristics. The period within which the firm had practiced strategic planning was an important indicator as to whether good and competitive performance was by chance or it had been planned. In this study, all sub-sectors of the large manufacturing firms in Kenya were well represented, thus avoiding any likelihood of bias. The results of the profiles of the large manufacturing firms are given in Tables 4.9 to 4.14.

Scope of operation	Frequency	percentage
National (within Kenya)	104	85.2
Regional (within East Africa)	8	6.6
Global	10	8.2
Total	122	100.0

Source: Research Data (2018)

The results in Table 4.9 indicate that 85.2% of the firms operated in Kenya and this implies that the majority of the firms operated locally. Only 6.6% and 8.2% of the firms operated regionally and globally respectively. The results imply that the firms pursue a consolidation strategy and might not be quite ready to face competition in the global arena. Ownership structure was defined by classifying the firms in three categories namely; fully locally owned, fully foreign owned and both locally and foreign owned. The results of the question on ownership structure of the firms is shown in Table 4.10.

Ownership Structure	Frequency	percentage
Fully locally owned	103	84.4
Fully foreign owned	5	4.1
Both locally and foreign owned	14	11.5
Total	122	100.0

# Table 4. 10: Ownership Structure of the Firm

**Source:** Research Data (2018)

The results in Table 4.10 indicate that 84.4% of the large manufacturing firms in Kenya are fully locally owned. Another 4.1% are foreign owned while 11.5% of the firms are both locally and foreign owned. In the last few years, manufacturers have complained about the high cost of doing business in Kenya and especially the cost of energy. This might explain why the percentage of foreign and both locally and foreign owned firms is small, at 15.6%. The study respondents were asked to indicate the number of years the firm had been in existence. The results from the respondents are shown in Table 4.11.

Years of existence of the firm	Frequency	percentage
6-10 years	4	3.3
11-15 years	18	14.8
16-20 years	41	33.6
Over 20 years	46	37.7
Total	109	89.4
Not responded	13	10.6
Total	122	100.0

Table 4. 11: Years of existence of firm

Source: Research Data (2018)

The results in Table 4.11 indicate that 14.8% of the firms had been existence for between 11 to 15 years, 33.6% had been in existence for between 16 and 20 years while 37.7% of the firms had been in existence for over 20 years. This indicates that 86.1% of the firms had been in existence for over 11 years. The results indicate that a firm has to be in existence for a good number of years to learn from experiences and to grow into a large organization. The study also sought to find out for how long the firm had been practicing strategic planning and the results are shown in Table 4.12 below.

Years of Practising Strategic Planning	Frequency	Percentage
0-5 years	1	0.8
6-10 years	6	4.9
over 10 years	98	80.4
Total	105	86.1
Not responded	17	13.9
Total	122	100.0

**Table 4. 12: Years of practising Strategic Planning** 

Source: Research Data (2018)

The results in Table 4.12 reveal that 80.4% of the firms have practiced strategic planning for over 10 years. Another 4.9% of the firms have practiced strategic planning for between 6 and 10 years. Therefore, 85.3% for the firms have practiced strategic planning for over 6 years. About 1% of the firms had practiced strategic planning for a period between zero and 5 years, while 13.9% of the responders did not indicate the years they had practiced strategic planning. The large manufacturing firms in Kenya operate under quite a competitive environment and having a strategic plan is viewed as a tool to assist the firm in attaining a competitive advantage position. The study also sought to find out the distribution of participation by target firms and the frequency in response is shown in Table 4.13 below.

Sector	Initial target	Frequency in	Percentage	
	firms	response	response	
Building, Construction & Mining	5	5	4.1	
Chemicals and Allied Products	18	18	14.8	
Energy, Electricals & Electronics	6	6	4.9	
Food, Beverages and Tobacco	52	51	41.8	
Leather & Footwear	2	2	1.6	
Metal and Allied	14	14	11.5	
Motor and Vehicle Accessories	4	3	2.5	
Paper and Board	11	11	9.0	
Pharmaceutical and Allied	1	1	0.8	
Plastic and Rubber	6	6	4.9	
Textile and Apparels	4	4	3.3	
Timber, Wood and Furniture	1	1	0.8	
Total	124	122	100.0	

 Table 4. 13: Manufacturing Sector to which the firm belongs

Source: Research Data (2018)

This was a census study targeting all large manufacturing firms as per KAM Directory (2015). These were firms with a turnover of over Kshs 251 million. There were 124 firms with a turnover of Kshs 251 million and above and these firms were spread across various sub-sectors in the manufacturing industry. The results in Table 4.13 indicate that all the sectors in the manufacturing industry in Kenya were represented. Besides, the response rate at 98.4% was good and therefore the results can be relied upon.

The study also sought to find out the number of employees in each firm and therefore the respondents were required to indicate the number of employees in their firms. The options given in the questionnaire regarding the number of employees were four. The first band was for less than 100 employees and the next one was for employees between 100 and 300 employees. The third band was for employees between 301 and 500 while the last band was for over 500 employees. The results are shown in Table 4.14 below.

Number of employees	Frequency	Percentage
Less than 100	3	2.5
100-300	63	51.6
301-500	38	31.2
0ver 500	6	4.9
Total	110	90.2
Non-respondents	12	9.8
Total	122	100.0

Table 4. 14: Number of Employees

Source: Research Data: 2018

The results in Table 4.14 indicate that 51.6% of the firms had between 100 to 300 employees while 31.2% of the firms had between 301 and 500 employees. In this study, turnover was used to indicate whether firms were small, medium or large. Firms with a turnover ranging between Kshs 50 million and Kshs 150 million were classified as small in size, firms with a turnover between Kshs 151 million and Kshs 250 million were classified as medium in size while firms with a turnover of over Kshs 251 million were classified as large in size. Another measure that can be utilized to indicate the firm's size has been the number of those employed.

Small firms have in the past been considered as those that employ between 11 and 50 persons, medium sized firms between 51 and 100 while large firms employ over 100 persons (Ondiek & Odera, 2012). In this study, 87.7% of the firms employed more than 100 persons while only 2.5% of the firms employed less than 100 persons. Therefore, this study has confirmed that large manufacturing firms usually employ more than 100 persons.

# 4.9 Strategic Planning

The first objective of this study was to determine the influence of strategic planning on the competitive advantage of large manufacturing firms in Kenya. Wendy and Tushman (2005) described strategic planning as comprising three facets namely strategic analysis, which incorporates SWOT analysis, strategic choices representing strategy formulation and strategic implementation. Formal strategic planning has been found to provide benefits, which ultimately generate economic benefits for a firm (Steiner, 1979; Thompson & Strickland, 1987).

It has been argued that strategic planning can enable an organization to attain a sustainable advantage position. The study measured strategic planning using three dimensions namely the strategic planning process, strategy formulation and planning for strategy implementation (including evaluation and control). Ten factors were measured under the strategic planning process, three measured under strategy formulation and ten factors measured under planning for strategy implementation.

#### 4.9.1 Strategic Planning Process

Firms were required to respond to ten descriptive statements on the strategic planning process using a five point Likert type scale ranging from 1 = not at all to 5 = to a very large extent (Sekaran & Bougie 2014). The respondents were required to tick against the statement that reflected their firm's strategic planning practice. The aim was to establish whether firms prepared detailed strategic plans to assist them in their operations. The results are presented in Table 4.15.

The results in Table 4.15 indicate that the overall mean score for the ten statements used to measure the strategic planning process was 4.30. The results indicate that large manufacturing firms undertake the strategic planning process. The statement with the highest mean was that the strategic plan is formally written and approved by the board (mean score = 4.43, standard deviation = 0.716). The high average mean score indicates that the strategic plan is taken seriously as a management tool. The second highest mean was on the statement that management is involved in the strategic planning process (mean score = 4.42, standard deviation = 0.573). This indicates that managers actively participate in the strategic planning process.

The third highest score was on the statement that working time is spent in the strategic planning process when the strategic plan is being prepared (mean score = 4.38, standard deviation = 0.607). This indicates that the strategic planning process is taken seriously by the firms and not done as a side job. The coefficients of variation and significant levels are discussed below Table 4.15.

						Sig
			Std.	%		(2-
Statement	Number	Mean	Deviation	CV	t-value	tailed)
A formal and						
systematic S.P process						
is practised	122	4.06	.503	12%	-1.378	.171
Adequate financial						
resources are allocated						
to the S.P process	122	4.20	.524	12%	.365	.716
All departments and						
autonomous sections						
are involved in the S.P						
process	122	4.25	.637	15%	369	.713
Management is						
involved in the S.P						
process	122	4.42	.573	13%	.012	.990
Working time is spent						
in the S.P process						
when the strategic plan						
is being prepared	122	4.38	.607	14%	2.194	.030
The time management						
devotes to the S.P						
process is adequate	122	4.30	.664	15%	4.247	.000
There is a formal						
review or						
determination of the						
firm's vision and						
mission during the S.P						
process	122	4.28	.620	14%	2.166	.032
A systematic search for						
strengths and						
weaknesses is done						
when planning	122	4.37	.606	14%	1.084	.281
A systematic search for						
opportunities and						
threats is done when						
planning	122	4.35	.691	16%	1.626	.107
The strategic plan is						
formally written and						
approved by the board						
of directors	122	4.43	.716	16%	1.280	.203
Average mean score		4.30				

 Table 4. 15: The Strategic Planning Process

Source: Research Data (2018)

The coefficients of variation ranged from 12% to 16%, which indicates little variability in the responses. There were two statements with a variability of 12% and these were that a formal and systematic strategic planning process is practised and that adequate financial resources are allocated to the strategic planning process. Another two statements had the highest coefficient of variation of 16%. These are, a systematic search for opportunities and threats is done when planning, and the strategic plan is formally written and approved by the board. In the two statements with a higher coefficient of variation of 16%, it means that the variability in responses amongst the respondents was higher. This implies that the respondents perceptions of what was happening in the two areas were somewhat different.

Statistically significant results were reported under three areas. The first area was that working time was being spent in the strategic planning process when the plan was being prepared (t-value = 2.194, p-value = 0.030). The second area was that the time management devoted to the strategic planning process was adequate (t-value = 4.247, p-value = 0.000). The third and last area with statistically significant results was that a formal review or determination of the firm's vision and mission was being done during the strategic planning process (t-value = 2.166, p-value = 0.032). All the other seven areas under study had lower t-values and the p-values were more than 0.05 meaning that the results were not statistically significant.

### 4.9.2 Strategy Formulation

Strategy formulation involves identifying and analyzing the strategic issues affecting the firm. Once the strategic issues have been identified and analyzed, the goals and objectives to be pursued by the firm are established. Thereafter, strategy generation and selecting the best strategies to apply to assist in achieving the objectives of the firm is done. In this study, respondents were asked to state the extent to which issues pertaining to the strategy formulation stage of strategic planning were being handled and the results are presented in Table 4.16 below.

Statement	Number	Mean	SD	% CV	t-value	Sig (2- tailed)
There is a clear identification and analysis of the strategic issues facing the firm	122	4.07	.448	11%	567	.572
There is clear delineation of goals and objectives of the firm	122	4.35	.513	12%	1.753	.082
There is clear delineation of the strategies to meet the objectives of the firm	122	4.52	.533	12%	1.598	.113
Average mean score		4.32				

Table 4. 16	5: Strategy	Formulation
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Source: Research Data (2018)

The results in Table 4.16 indicate that the average mean score for strategy formulation was 4.32 (to a large extent). This implies that the respondents felt that strategy formulation was being taken seriously in their firms. The highest mean score of 4.52 (standard deviation of 0.533) was on the statement that there was a clear delineation of the strategies to meet the objectives of the firm.

The lowest mean score at 4.07 (standard deviation of 0.448) was on the statement that there was a clear identification and analysis of the strategic issues facing the firm. A score of 4.07 is still high and implies that the respondents took strategy formulation seriously and were able to identify and analyze the strategic issues before delineating the strategies to meet the objectives of the firms.

The coefficients of variation were low and ranged from 11% to 12% indicating that there was little disparity among respondents on the areas of strategy formulation that were being studied. The t-values were low, starting from a -0.567 on clear identification and analysis of the strategic issues facing the firm to 1.753 on there being a clear delineation of goals and objectives of the firm. Overall, on the three areas tested, no statistically significant results were obtained because in the three cases, the p values were above the significant cut-off rate, p-value  $\leq 0.05$ .

# 4.9.3 Planning for Strategy Implementation, Evaluation and Control

At the strategic planning stage, it is important to make adequate preparations for the implementation, evaluation and control of the strategic plan. This stage involves developing the implementation models and the evaluation and control systems. Without these, it would be difficult to implement the strategic plan developed. Firms were required to respond to ten descriptive statements on planning for strategy implementation using "a five point Likert type scale ranging from 1 =not at all to 5 = to a very large extent" (Sekaran & Bougie, 2014, p.220). The respondents were required to tick against the statement that reflected their state of preparedness for implementing the developed strategic plan. The aim was to establish whether firms made adequate preparations to implement the strategic plans or not and the results are indicated in Table 4.17 below.

				%		Sig (2-
Statements	Ν	Mean	SD	CV	t-value	tailed)
Relevant experience is available from either in-house or outsourced resources to implement strategies in the firm	122	4.07	.448	11%	.748	.456
The criteria for assessing the success of strategy implementation is clear - there are clear KPIs	122	4.31	.576	13%	1.166	.246
The implementation tasks to be performed are specified beforehand so as to ensure effective strategy implementation	122	4.41	.586	13%	1.193	.236
Adequate resources which include human, financial and time, are always available for the strategy implementation process	122	4.31	.562	13%	075	.940
What is to be done during the implementation process is acceptable to those involved	122	4.39	.583	13%	2.863	.005
A system has been put in place to monitor progress of the implementation process	122	4.28	.593	14%	3.468	.001
Strategy implementation was well received from the start due to conditions within and/or external to the firm	122	4.31	.618	14%	1.403	.163
Activities and responsibilities for strategy implementation are assigned to staff with expertise and authority who are consequently accountable for results	122	4.30	.628	15%	1.531	.129
The board of directors is supportive of the strategy implementation process	122	4.46	.548	12%	.304	.762
Strategy implementation is given priority over other commitments	122	4.47	.578	13%	2.109	.037
Average mean score		4.33				

# Table 4. 17: Planning for Strategy Implementation

Source: Research Data (2018)

The average mean score for planning for strategy implementation was 4.33 signifying that respondents prepared for strategy implementation in their various firms to a large extent. The highest mean score of 4.47 (standard deviation = 0.578) was on the statement that strategy implementation was prioritized over other commitments. Top management in large manufacturing firms understand the competition in the market and this might explain why they prioritize strategy implementation over other commitments because this enables them to attempt to attain a competitive advantage position.

The second highest mean score of 4.46 (standard deviation = 0.548) was on the statement that the board of directors is supportive of the strategy implementation process. This implies that the board of directors of the various firms understood the importance of preparing for strategy implementation because this enabled the strategies of the firm to be achieved.

The lowest mean score of 4.07 (standard deviation = 0.448) was on the statement that relevant experience was available from either in-house or outsourced resources to implement strategies in the firm. This score was still high and implies that the practice of preparing for strategy implementation in large manufacturing firms in Kenya is undertaken to a large extent because of the importance of strategic planning in the competitive advantage of the firms.

The statement with the lowest coefficient of variation at 11% was that relevant experience was available from either in-house or outsourced resources to implement strategies in the firm. The second statement with the lowest coefficient of variation at 12% was that the board of directors was supportive of the strategy implementation process. In both cases, the coefficients are low implying that the respondents were in agreement that relevant experience was available and also that board members were supportive of the strategy implementation process. Overall, under the area of preparing for strategy implementation, the coefficients of variation were low, ranging from 11% to 15% indicating that there was little disparity among respondents on the areas that were being studied.

Statistically significant results were reported under three areas. The first area was that a system had been put in place to monitor progress of the implementation process (tvalue 3.468, p-value = 0.001). The mean score under this area was 4.28 and the standard deviation was 0.593 with a variability in responses of 14%. The second area with significant results was that what was being done during the implementation process was acceptable to those involved (t-value = 2.863, p-value = 0.005). Incidentally, this was the area with the third highest mean score of 4.39 with a standard deviation of 0.583 and a coefficient of variation of 13%. The third area with statistically significant results was that the strategy implementation was given priority over other commitments (t-value = 2.109, p-value = 0.037). This area was also the one with the highest mean score of 4.47 and a modest variability in responses of 13%. Apart from the three statistically significant areas noted, all the other seven areas tested returned non-significant results. The t-values in these seven areas were low, ranging from -0.075 to 1.531. The lower t-values led to p-values above the threshold  $p \le 0.05$  and therefore the results were not statistically significant. The area with the least statistically significant results was on the statement that adequate resources which include human, financial and time, were always available for the strategy implementation process (t-value = -0.075, p-value = 0.940). This implies that inadequate resources are made available for the strategy implementation process. The next area with the least statistically significant results was on the strategy implementation process (t-value = 0.304, p-value = 0.762). This implies that in most cases, the board of directors is not supportive of the strategy implementation process.

# 4.9.4 Summary of Strategic Planning

The previous sub-sections on findings on strategic planning focused on specific planning dimensions. This sub-section focusses on the overall manifestations of the entire area. The overall manifestation was arrived at by taking the mean scores of the specific areas, which included the strategic planning process, strategy formulation, and preparing for strategy implementation. The results of the overall strategic planning area are displayed in Table 4.18 below.

Area	Ν	Mean	SD	% CV	t- value	Sig (2- tailed)
Strategic planning process	122	4.30	0.29	7%	1.230	.221
Strategy formulation	122	4.32	0.30	7%	-1.723	.088
Planning for strategy implementation	122	4.33	0.26	6%	5.863	.000
Average mean score		4.32				

 Table 4. 18: Overall Manifestation of Strategic Planning

Source: Research Data (2018)

The results in Table 4.18 indicate the overall average mean score for the strategic planning area of 4.32 (to a large extent). The standard deviations in the three areas are very close to the mean ranging from 0.26 to 0.30. The variability of responses by the respondents were low as exemplified by the coefficients of variation which range from a low of 6% on the planning for strategy implementation area to a high of 7% in the other two areas, that is, strategic planning process and strategy formulation.

Statistically significant results were reported under the area of planning for strategy implementation (t-value = 5.863, p-value 0.000). This demonstrates that planning for strategy implementation is the most critical area in the process of strategic planning. Strategy formulation is the next important area but it falls out of the statistical significance bracket with a p-value of 0.088 (t-value = -1.723) while the strategic planning process is the least statistically significant area with a p-value of 0.221 and a t-value of 1.230.

# 4.10 Employee Behaviour

The study sought to establish whether employee behaviour influences the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. It has been argued that the successful implementation of a strategic plan will require the existence of strategically aligned behaviour from employees (Cees et al., 2009). Furthermore, employees have to be committed to their jobs and to carry them out passionately to ensure the realization of the strategic plan objectives. In this study, employee behaviour was operationalized using two perspectives. These perspectives are strategically aligned behaviour and employee commitment.

# 4.10.1 Strategically Aligned Behaviour

Strategically aligned behaviour comprises on the job actions by employees, which are aligned to the strategy of the organization (Gagnon & Michael, 2003). To capture issues of strategically aligned behaviour, respondents were asked to indicate how employee behaviours were exemplified in their firms using a likert-type scale with five (5) measures ranging from 1 (not at all) to 5 (to a very high extent). The findings on the twelve statements measured are given in Table 4.19 below.

The results in Table 4.19 indicate that the overall mean score for the twelve statements that were used to measure strategically aligned behaviour was 4.30. This implies that in the firms that were studied, strategically aligned behaviour was exemplified to a high extent (a score above 4.0). The highest mean score of 4.52 (standard deviation = 0.646) was on the statement that employees were always ready and enthusiastic for change. Other details concerning the mean scores are given after Table 4.19.

Statements	Ν	Mean	SD	% CV	t- value	Sig (2- tailed)
Employees participate in making decisions on their jobs	122	3.97	.405	10%	2.331	.022
Employees are energized by challenging but realistic goals and objectives	122	4.21	.502	12%	2.298	.023
Employees take action without being directed	122	4.38	.720	16%	4.315	.000
Employees are always ready and enthusiastic for change	122	4.52	.646	14%	2.137	.035
Employees embrace open and detailed communication on issues affecting the strategic plan of the organization	122	4.46	.682	15%	1.897	.060
Employees do not always have to check or ask for permission before proceeding with their tasks	122	4.20	.703	17%	.241	.810
Employees take responsibility for their actions	122	4.23	.586	14%	1.381	.170
Employees are prepared to work beyond the scope of their job	122	4.30	.525	12%	.601	.549
Employees are involved in continuous learning in order to improve work performance	122	4.35	.655	15%	1.416	.160
Some employees find new approaches to execute tasks	122	4.29	.596	14%	803	.424
Some employees systematically introduce innovative ideas into work practices	122	4.36	.617	14%	2.449	.016
Some employees with specialized skills search out new working methods, techniques or instruments	122	4.36	.604	14%	3.631	.000
Average mean score		4.30				

# Table 4. 19: Strategically Aligned Behaviour

Source: Research Data (2018)

The second highest mean of 4.46 (standard deviation = 0.682) was on the statement that employees embraced open and detailed communication on issues affecting the strategic plan of the firm. The lowest mean score of 3.97 (standard deviation = 0.405) was on the statement that employees participated in making decisions on their jobs. This mean score, although low still approximated the score of 4.0 (to a high extent). The overall implication is that the employees' behaviour in the various firms surveyed exemplified behaviour, which was supportive and aligned to the strategic plans.

The coefficients of variations were low, ranging from 10% to 17%. This indicates that there was little variability of responses among respondents on the areas that were being studied. The statement with the lowest coefficient of variation of 10% was that employees participated in making decisions on their jobs. It implies that the respondents were almost in agreement regarding the extent to which employees participated in making decisions on their jobs. The highest variability in responses of 17% was on the statement that employees did not always have to check or ask for permission before proceeding with their tasks. The slight variability indicates that in some instances employees did not have to check or ask for permission before proceeding with their tasks while for other respondents, permission needed to be sought to some extent.

In the area of strategically aligned behaviour, statistically significant results were from six areas. The strongest significance of 0.000 was on two statements. The first statement was that employees took action without being directed (t-value = 4.315, mean = 4.38, standard deviation = 0.720) and the second statement was that some employees with specialized skills look out for new working methods, techniques or instruments (t-value = 3.631, mean = 4.36 and standard deviation = 0.604).

The other four areas with significant results were; employees participated in making decisions on their jobs (t-value = 2.331, p-value = 0.022), employees are energized by challenging but realistic goals and objectives (t-value = 2.298, p-value = 0.023), employees are always ready and enthusiastic for change (t-value = 2.137, p-value = 0.035) and some employees systematically introduce innovative ideas into work practices (t-value = 2.449, p-value = 0.016).

#### 4.10.2 Employee/Organizational Commitment

Meyer & Allen (1991, p. 67) have observed that, "organizational commitment is a multi-dimensional construct, which is made up of three well-defined attitudinal components. These components include affective commitment, continuance commitment and normative commitment. The components stand for three psychological states of employees with respect to an organization that will influence their decision to maintain membership with the particular organization." In this study, the three components were tested separately as indicated below:

# **Affective Commitment**

Affective commitment has been defined as employees' emotional attachment to, identification with, and involvement in the organization (Allen & Meyer, 1990). Six descriptive statements on affective commitment at the firms were asked on a five point Likert-type scale ranging from 1 = not at all to 5 = to a very high extent (Sekaran & Bougie, 2014). The respondents were asked to indicate the extent to which affective behaviours were exemplified in their firms. The aim was to establish the extent of affective commitment in the firms and the results are shown in Table 4.20 below.

# Table 4. 20: Affective Commitment

				%	t-	Sig (2-
Statement	Ν	Mean	SD	CV	value	tailed)
Employees would be very happy to spend the rest of their careers in the firm	122	3.93	.401	10%	2.100	.038
Employees really take the organization's problems as their own	122	4.22	.610	14%	2.723	.007
Employees feel like part of the family of the firm	122	4.39	.636	14%	3.505	.001
Employees get emotionally attached to the firm	122	4.42	.601	14%	.754	.453
Employees feel the firm has a great deal of personal meaning to them	122	4.50	.620	14%	3.275	.001
Employees have a sense of belonging to the firm	122	4.50	.593	13%	3.385	.001
Average mean score		4.33				

Source: Research Data (2018)

The results in Table 4.20 indicate an overall mean score for affective commitment of 4.33 (to a high extent). This implies that the respondents felt that employees in their firms exemplified high affective commitment and therefore, they were committed to the vision of the firm. The highest mean score was recorded under two statements. First, on the statement that employees felt the firm had a great deal of personal meaning to them (mean = 4.50, standard deviation = 0.620) and second, on the statement that employees had a sense of belonging to the firm (mean = 4.50, standard deviation = 0.593).

The two statements with the highest mean score are closely related and this implies that employees, who value the firms they are in, feel secure in those firms and are able to contribute positively to the development of those firms. The lowest mean score of 3.93 (standard deviation = 0.401) was recorded under the statement that employees would be very happy to spend the rest of their careers in the firm. Nevertheless, even this score was high and closer to a high extent than to a moderate extent.

The coefficients of variation were low on all the statements and ranged from 10% to 14%. This indicates that there was little disparity among respondents on the areas of affective commitment that were being studied. The lowest coefficient of variation at 10% was on the statement that employees would be very happy to spend the rest of their careers in the firm. On the other hand, the highest coefficient of variation at 14% was on four statements that are, employees really take the organization's problems as their own; employees feel like part of the family of the firm, employees get emotionally attached to the firm and employees feel the firm has a great deal of personal meaning to them.

Statistically significant results were reported for all the statements except the one that stated that employees got emotionally attached to the firm (t-value = 0.754, p-value = 0.453). This means that the respondents were in agreement as to the extent affective commitment was being exemplified in the firms and its general importance in influencing the relationship between strategic planning and competitive advantage of the firms.

### **Continuance Commitment**

Meyer & Allen (1991, p. 67) have defined "continuance commitment as employees' awareness of perceived cost of leaving the organization." Seven descriptive statements on continuance commitment were asked. The respondents were to indicate the extent to which continuance commitment behaviours were exemplified in their firms. The results are shown in Table 4.21.

The results in Table 4.21 indicate the average mean score for continuance commitment was 4.21 (to a high extent). This implies that the respondents felt that employees were willing to stay on in their firms probably because the cost of leaving would be high. The highest mean score of 4.36 (standard deviation = 0.644) was on the statement that employees had too few options to consider leaving the firm. This would imply that the firms are treating the employees well to the extent that it becomes difficult to get better options elsewhere. The lowest mean score of 3.92 (standard deviation = 0.524) was on the statement that it would be very hard for the employees to leave the firm immediately even if they wanted to. This might be because there are no better alternatives or there are some obligations the employees have at the current firms, which cannot be transferred easily to another firm.

Statement	Ν	Mean	SD	% CV	t- value	Sig (2- tailed)
It would be very hard for the employees to leave the firm immediately even if they wanted to	122	3.92	.524	13%	.863	.390
Employees feel their lives would be disrupted if they decided to leave the firm immediately	122	4.16	.603	15%	2.942	.004
Employees' stay at the firm is more out of necessity than desire	122	4.25	.687	16%	1.516	.132
Employees have too few options to consider leaving the firm	122	4.36	.644	15%	3.893	.000
Employees would consider working elsewhere if they had not invested so much in the firm	122	4.26	.736	17%	4.058	.000
Employees feel leaving the firm would require considerable personal sacrifice because the overall benefits cannot be matched elsewhere	122	4.25	.711	17%	2.406	.018
Employees feel one of the negative consequences of leaving the firm is the scarcity of available alternatives	122	4.26	.780	18%	1.818	.072
Average mean score		4.21				

# Table 4. 21: Continuance Commitment

Source: Research Data (2018)

The coefficients of variation ranged from 13% to 18% and therefore they were close. This indicates that the disparity among respondents on the areas of continuance commitment was not big. The lowest disparity in responses of 13% was on the statement that it would be very hard for the employees to leave the firm immediately even if they wanted to. On the other hand, the highest variability in responses of 18% was on the statement that employees feel one of the negative consequences of leaving the firm was the scarcity of available alternatives.

Statistically significant results were reported under four areas. Arranging the statistically significant areas from the one with the lowest p-value to the one with the highest: there is the statement that employees would consider working elsewhere if they had not invested so much in the firm with a p-value of 0.000 (t-value = 4.058). The next statement is that employees have too few options to consider leaving the firm with a p-value of 0.000 (t-value = 3.893). Then there is the statement that employees feel their lives would be disrupted if they decided to leave the firm immediately with a p-value of 0.004 (t-value = 2.942). The last statement is that employees feel leaving the firm would require considerable personal sacrifice because the overall benefits cannot be matched elsewhere, with a p-value of 0.018 (t-value = 2.406).

There are three statements, which did not have statistically significant results. The first one is that it would be very hard for the employees to leave the firm immediately even if they wanted to (t-value = 0.863, p-value = 0.390). The second statement is that employees' stay at the firm is more out of necessity than desire (t-value = 1.516, p-value = 0.132). The third and last statement is that employees feel one of the negative consequences of leaving the firm is the scarcity of available alternatives (t-value = 1.818, p-value = 0.072).

# **Normative Commitment**

Normative commitment has been defined as the employee's feeling of obligation to stay at the organization (Meyer & Allen, 1991). Employees may choose to stay in an organization because they want to (affective commitment), need to (continuance commitment) or because they feel they ought to do so (normative commitment). An individual's total commitment usually reflects the net sum of the three psychological states (Allen & Meyer, 1990). In this particular study, respondents were asked to state the extent to which normative employee behaviours' were exemplified in their firms and the results are shown in Table 4.22 below.

				%	t-	Sig (2-
Statement	Ν	Mean	SD	CV	value	tailed)
Employees feel obligated to remain with the firm	122	4.02	.596	15%	2.829	.006
Even if it were to their advantage, employees do not feel it would be right to leave the firm at this time	122	4.23	.640	15%	2.801	.006
Employees would feel guilty if they left the firm at this time	122	4.22	.798	19%	6.859	.000
Employees feel the firm deserves their loyalty	122	4.36	.739	17%	136	.892
Employees would not leave the firm right now because they have a sense of obligation to the people in it	122	4.35	.781	18%	1.734	.086
Employees feel they owe a great deal to the firm	122	4.41	.790	18%	5.969	.000
Average mean score		4.27				

# Table 4. 22: Normative Commitment

Source: Research Data (2018)

The results in Table 4.22 reveal an average mean score of the six statements used to measure normative commitment of 4.27 (to a high extent). This implies that employees in the firms being studied exemplified normative commitment behaviours. The highest mean score on normative commitment of 4.41 (standard deviation = 0.790) was recorded under the statement that employees felt they owed a great deal to the firm. This implies that employees did not wish to leave the current employers because they were attached to them and owed them a debt of gratitude. The lowest mean score of 4.02 (standard deviation = 0.596) was on the statement that employees felt obligated to remain with the firm. This lower score is still high and it is evident that all the statements under the normative commitment scored above 4.0 (to a high extent).

The coefficients of variation ranged from 15% to 19%, with a difference of 4% between the lowest coefficient and the highest. The lowest coefficient of variation of 15% was recorded under two statements, that is, employees feel obliged to remain with the firm and even if it were to their advantage, employees did not feel it would be the right thing to exit the firm at this time. The highest coefficient of variation of 19% was recorded under the statement that employees would feel guilty if they left the firm at this time. The relatively low coefficients indicate that there was little disparity among the respondents on the areas under normative commitment that were being studied.

Statistically significant results were reported under four areas. The first area is that employees felt obligated to remain with the firm (t-value = 2.829, p-value = 0.006). The second area is that even if it were to their advantage, employees did not feel it would be right to leave the firm at the time (t-value = 2.801, p-value = 0.006). The third area with statistically significant results was on the statement that employees would feel guilty if they left the firm at this time (t-value = 6.859, p-value = 0.000) while the fourth area with statistically significant results was that employees felt they owed a great deal to the firm (t-value = 5.969, p-value = 0.000). These four areas would be the ones to emphasize in order to increase the influence of employee behaviour on the relationship between strategic planning and competitive advantage.

Two areas had statistically insignificant results. The first one was that employees felt the firm deserved their loyalty (p-value = 0.892, t-value = -0.136). The second statistically insignificant statement was that employees would not leave the firm right now because they had a sense of obligation to the people in it (p-value = 0.086, tvalue = 1.734). These two areas would be the ones to be given less emphasis in an attempt to increase the influence of employee behaviour on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.

#### 4.10.3 Summary of Employee Behaviour

This sub-section focuses on the overall manifestations of the entire employee behaviour area. The overall manifestation was arrived at by taking the mean scores of the individual areas included under employee behaviour. The individual areas under employee behaviour include, strategically aligned behaviour, "affective commitment, continuous commitment and normative commitment" (Meyer & Allen, p. 67). The results of the overall manifestations under the employee behaviour area are presented in Table 4.23:

Statement	Ν	Mean	SD	% CV	t- value	Sig 2- tailed
Strategically aligned behaviour	122	4.30	0.31	7%	3.095	.002
Affective commitment	122	4.33	0.33	8%	1.252	.213
Continuance commitment	122	4.21	0.44	11%	2.483	.014
Normative commitment	122	4.27	0.52	12%	4.628	.000
Average mean score		4.28				

Table 4. 23: Overall Manifestation of Employee Behaviour

**Source:** Research Data (2018)

The results in Table 4.23 indicate that the overall average mean score for the employee behaviour area was 4.28 (to a high extent). The standard deviations in the four areas measured are close to the mean and range from 0.31 on strategically aligned behaviour to 0.52 on normative commitment. The variability of responses by the respondents in the four areas were low, ranging from 7% on strategically aligned behaviour to 12% on normative commitment.

Statistically significant results were recorded in three areas. The first area was normative commitment with a p-value of 0.000 (t-value = 4.628) and the second area was strategically aligned behaviour with a p-value of 0.002 (t-value = 3.095). The third area with statistically significant results was continuance commitment with a p-value of 0.014 (t-value = 2.483). The only area were results were not statistically significant was affective commitment with a p-value of 0.213 (t-value = 1.252). Overall, employee behaviour has a significant influence on the relationship between strategic planning and competitive advantage.

### 4.11 Organizational Structure

Kiptoo and Mwirigi (2014, p. 189) observe that "every organization has a distinct structure that indicates its current image, reporting relationship and internal politics." Organization structure is a system used to define a hierarchy within an organization. It seeks to establish the internal pattern of relationships, authority, responsibility and communication in an organization (Mintzberg, 1979; Mathur & Nair, 2015). According to Louw and Venter (2006), organization structure is the formalized pattern of interactions and co-ordinations designed by management to connect the tasks and patterns of individuals and groups in trying to achieve the organizational goals. According to Kavale (2012, p. 63), "the issues for consideration under organization structure include the effect of any new strategy on potential changes in roles, duties decision making and on reporting relationships."

Chandler (1962) examined the contingency relationship between the corporate strategy of a firm and its internal administrative structure. The debate on the relationship between strategy, structure and the performance of the firm flourished in the 1970s and 1980s. Chandler (1962) asserted that structure follows strategy. Without proper structures being put in place, strategic planning may be of no use because structures play a key role in helping to deliver the expected results. Four constructs typically define the alternative forms of structures. The four constructs, which are central to Mintzberg's (1979) definition of organizational structure, include formalization, centralization, specialization and integration. It is on these four constructs that the study of organizational structure was operationalized in this study.

### **4.11.1** Formalization of Organizational Structure

Formalization is the extent to which formal rules and procedures in an organization govern decision-making and working relationships (Olson et al., 2005). The authors continue to observe that rules and procedures become the means for directing appropriate behaviours and for addressing routine aspects of any problems arising. Organizations, which have highly formal procedures, are said to be mechanistic while those with fewer formal procedures are referred to as organic. To capture data on the aspect of formalization, respondents were asked to indicate the extent to which some six statements (measures) were relevant to their firms using a Likert type scale ranging from 1 (not at all) to 5 (very high extent) (Sekaran & Bougie, 2014). The findings from the respondents are presented in Table 4.24.

				%	t-	Sig (2-
Statements	N	Mean	SD	CV	value	tailed)
The organization has many rules defining what employees should do	122	3.98	.416	10%	4.124	.000
Employees have job descriptions defining their roles and responsibilities	122	4.39	.521	12%	.951	.344
There are procedures in place defining what is to be done under the various organization jobs	122	4.34	.569	13%	.885	.378
Organizational control systems are enforced according to the rules and procedures and not shared norms	122	4.36	.644	15%	2.018	.046
Coordination of work is done according to work standards and not mutual agreements	122	4.29	.686	16%	3.823	.000
Written communication is the normal mode of communication in the firm	122	4.38	.607	14%	3.520	.001
Average mean score		4.29				

Table 4. 24: Formalization of	Organizational	Structure
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Source: Research Data (2018)

The results in Table 4.24 indicate that the average mean score for formalization was 4.29 (High extent). This implies that the respondents felt that formalization was being practised and therefore was relevant in their firms. The highest mean score of 4.39 (standard deviation = 0.521) was recorded on the statement that employees have job descriptions defining their roles and responsibilities. The second highest mean score of 4.38 (standard deviation = 0.607) was recorded on the statement that written communication is the normal mode of communication in the firm.

The lowest mean score of 3.98 (standard deviation = 0.416) was on the statement that the organization has many rules defining what employees should do. A mean score of 3.98 is nearer to 4.0 than it is to 3.0 and therefore the respondents felt that their organizations had many rules defining what employees should do. From the mean scores recorded, it is evident that the firms surveyed were highly formalized and therefore mechanistic in nature.

The coefficients of variation were within a narrow range, from 10% to 16%. The lowest coefficient of variation of 10% was on the statement that the organization has many rules defining what employees should do. This indicates that there was little disparity among respondents on the area of rules defining what employees should do. The highest variability of 16% was on the statement that coordination of work is done according to work standards and not mutual agreements. Manufacturing is not an easy process and therefore it would be difficult for employees to be left to do work according to mutual agreements, nevertheless, respondents exemplified some variability in the way coordination of work was being done.

Statistically significant results were reported under four areas. The first area with a p-value of 0.000 (t-value = 4.124) was on the statement that the organization has many rules defining what employees should do. The second area with a p-value of 0.000 (t-value = 3.823) was on the statement that coordination of work is done according to work standards and not mutual agreements. The third area with a p-value of 0.001 (t-value = 3.520) was on the statement that written communication is the mode of communication in the firm. The fourth and last area with statistically significant results was on the statement that organizational control systems are enforced according to the rules and procedures and not shared norms (p-value = 0.046, t-value = 2.018). All the significant results point out to the fact that the large manufacturing firms are formal and mechanistic in their structure.

#### 4.11.2 Centralization of Organizational Structure

Centralization refers to a situation where "decision authority is closely centred around top managers or is delegated to those in middle and lower levels of management" (Oslon et al., 2005, p. 51). The authors further observe that in "centralized organizations, both lines of communication and responsibilities are relatively well spelt out." Under centralization, the route to the final decision can be reached quickly. In comparison, in decentralized organizations, a number of views and ideas are allowed to emerge from different groups. Centralization of activities may hinder opportunities for organizational learning. To capture data on the aspect of centralization, respondents were asked to indicate the extent to which some seven statements (measures) were relevant to their firms using a Liket-type scale ranging from 1 (not at all) to 5 (very high extent) (Sekaran & Bougie, 2014). The results from the respondents are presented in Table 4.25 below.

				%		Sig (2-
Statement	Ν	Mean	SD	CV	t-value	tailed)
Decision-making is in the hands of top managers	122	4.08	.456	11%	-1.417	.159
Lines of communication and responsibilities are clear and the route to the final approval can be travelled quickly	122	4.30	.512	12%	2.689	.008
Most communication in the organization is one-way, from management to the employees	122	4.25	.764	18%	.706	.481
Employees participate in making decisions involving the tasks associated with their positions	122	4.38	.696	16%	2.387	.019
Employees participate in making decisions involving their work and work environment	122	4.24	.728	17%	2.052	.042
Views from lower ranking employees in the firm are not encouraged	122	4.21	.902	21%	2.041	.044
New ideas and program changes from lower ranking employees are usually not encouraged because they could delay decision-making	122	4.20	.859	20%	4.837	.000
Average mean score		4.24				

#### Table 4. 25: Centralization of Organizational Structure

Source: Research Data (2018)

From the results in Table 4.25, it is evident that the average mean score for centralization was 4.24 (high extent). This implies that the respondents were satisfied that centralization was being practised and was relevant in their firms to a high extent. The statement with the highest mean score of 4.38 (standard deviation = 0.696) was that employees participate in making decisions involving the tasks associated with their positions. The statement with the lowest mean score of 4.08 (standard deviation = 0.456) was that decision-making is in the hands of top managers. From the highest mean score, employees seem to be given some leeway in decision-making but from the lowest statement, that decision-making seems to be taken away from them.

The lowest disparity among respondents was on the statement that decision-making is in the hands of top managers (coefficient of variation = 11%) while the highest disparity among respondents was on the statement that views from lower ranking employees in the firm are not encouraged (coefficient of variation = 21%). From these two statements, it is evident that variability in responses is quite low on decisionmaking being in the hands of top managers while there is quite some variability in responses on the statement that views from lower ranking employees are not encouraged.

Statistically significant results were recorded under five areas. The first area with a p-value of 0.000 (t-value = 4.837) was that new ideas and program changes from lower ranking employees are usually not encouraged because they could delay decision-making. The second area with a p-value of 0.008 (t-value = 2.689) was that lines of communication and responsibilities are clear and the route to the final approval can be travelled quickly. The third area with statistically significant results with a p-value of 0.019 (t-value = 2.387) was that employees participate in making decisions involving the tasks associated with their positions.

The fourth area with a p-value of 0.042 (t-value = 2.052) was that employees participate in making decisions involving their work and work environment while the fifth area with a p-value of 0.044 (t-value = 2.041) was that views from lower ranking employees in the firm are not encouraged. All these significant results point out to the fact that decision-making in the large manufacturing firms is centralized to a high extent and the only time lower ranking employees are involved is when deciding about what exactly they do and their localized work environment. However, this situation also lends support to the idea of centralization.

There were only two areas that did not report statistically significant results. The first area with a p-value of 0.159 (t-value = -1.417) was on the statement that decision-making is in the hands of top managers. The second area with a p-value of 0.481 (t-value = 0.706) was on the statement that most communication in the organization is one-way, from management to the employees. From these two statements, it seems that decision-making and communication in the firms surveyed is decentralized to some extent and not entirely in the hands of senior management.

#### 4.11.3 Specialization of Organizational Structure

Oslon et al. (2005, p. 52), have indicated that "specialization refers to the extent to which tasks and activities are shared out in the organization and the extent to which workers have control in undertaking those tasks." Specialization provides a broad knowledge base and produces cognitive breadth in decision-making processes (Collins et al., 1988). "Organizations with more specialists are inclined to embracing more innovations because they have the expertise required to recognize, adopt and utilize those innovations" (Daugherty, Chen & Ferrin, 2011, p. 42). To capture data on the aspect of specialization, respondents were asked to indicate the degree to which some five statements (measures) were relevant to their firms using a Likert type scale ranging from 1 (not at all) to 5 (very high extent) (Sekaran & Bougie, 2014). The results from the responders are given in Table 4.26.

				%	t-	Sig (2-
Statement	Ν	Mean	SD	CV	value	tailed)
Departmentalization is done according to similarities in tasks and activities in the firm	122	4.12	.650	16%	455	.650
Line staff responsibilities in the firm are distinct and not blurred	122	4.33	.743	17%	4.865	.000
Employees have control in carrying out tasks in their departments	122	4.02	.374	9%	1.197	.234
The firm has specialists who direct their efforts towards well-designed set of activities	122	4.16	.630	15%	3.715	.000
The specialists in the firm have expertise in their respective areas and are given substantial authority to determine the best approach to complete their tasks	122	4.33	.755	17%	3.048	.003
Average mean score		4.19				

#### Table 4. 26: Specialization of Organizational Structure

Source: Research Data (2018)

The results in Table 4.26 indicate that the average mean score for specialization was 4.19 (high extent). This implies that the respondents in the various firms surveyed felt that the measures used for specialization were relevant to their firms. The highest mean score was recorded on two statements. The first statement was that line staff responsibilities in the firm are distinct and not blurred (mean = 4.33, standard deviation = 0.743) and the other statement was that the specialists in the firm have expertise in their respective areas and are given substantial authority to determine the best approach to complete their tasks (mean = 4.33, standard deviation = 0.755). The lowest mean score of 4.02 (standard deviation = 0.374) was recorded on the statement that employees have control in carrying out their tasks in their departments. The score of 4.02 was still high and represents results relating to a high extent.
In the area of variability of responses, the lowest coefficient of variation of 9% was recorded on the statement that employees have control in carrying out tasks in their departments. This shows there was little disparity among respondents on this particular statement. On the other hand, there were two statements with the highest variability among the respondents. The first statement with a variability of 17% was on the statement that line staff responsibilities in the firm are distinct and not blurred. The other statement with a coefficient of 17% was that the specialists in the firm have expertise in their respective areas and are given substantial authority to determine the best approach to complete their tasks.

Statistically significant results were recorded under three measures out of the total five measures. The first statement with significant results was that line staff responsibilities in the firm are distinct and not blurred (t-value = 4.865, p-value = 0.000). The second area with significant results was on the statement that the firm has specialists who direct their efforts towards well-designed set of activities (t-value = 3.715, p-value = 0.000). The third statistically significant area was on the statement that the specialists in the firm have expertise in their respective areas and are given substantial authority to determine the best approach to complete their tasks (t-value = 3.048, p-value = 0.003). The significant results indicate the areas to emphasize on specialization as a dimension in order to obtain best results.

There were two areas on which statistically non-significant results were recorded. The first area was on the statement that departmentalization is done according to similarities in tasks and activities in the firm (t-value = -0.455, p-value = 0.650). The second area was on the statement that employees have control in carrying out tasks in their departments (t-value = 1.197, p-value = 0.234). This implies that the two areas are not worth emphasizing when looking at the specialization dimension in large manufacturing firms.

#### 4.11.4 Integration of Organizational Structure

Integration refers to the strategic and operational connecting of business processes across functionally specialized groups by using connecting devices, cross-functional teams and interdepartmental committees (Mintzberg, 1979). Integration gives firms the opportunity to be responsive and flexible by using improved communications and is necessary in complex firms so as to develop organizational capabilities (Lawrence & Lorsch, 1967). In order to capture data on integration, respondents were asked to indicate the extent to which four measures (statements) were relevant to their firms using the Likert-type scale ranging from 1 (not at all) to 5 (very high extent) (Sekaran & Bougie, 2014). The results from the respondents were captured in Table 4.27 below.

The results in Table 4.27 indicate an average mean score for the area of integration of 4.27 (high extent). This implies that the respondents felt that integration was relevant in their firms to a high extent. The highest mean score of 4.39 (standard deviation = 0.637) was on the statement that there is a strong tendency in the organization to let the demands of the situation define what the proper behaviour on the job should be. Other details on the mean scores are given after Table 4.27.

Statement	Ν	Mean	SD	% CV	t- value	Sig (2- tailed)
The firm's business process are integrated across functionally specialized groups using connection devices, cross-functional teams and inter-departmental committees	122	4.10	.488	12%	1.393	.166
The organization structure hierarchy has many layers	122	4.24	.631	15%	4.870	.000
There is a strong tendency in the organization to let the demands of the situation define what the proper behaviour on the job should be	122	4.39	.637	15%	4.636	.000
There is a strong tendency in the organization to let the personality of the individual define what proper behaviour on the job should be	122	4.37	.707	16%	5.315	.000
Average mean score		4.27				

#### Table 4. 27: Integration of Organizational Structure

Source: Research Data (2018)

The second highest mean score of 4.37 (standard deviation = 0.707) was on the statement that there is a strong tendency in the organization to let the personality of the individual define what proper behaviour on the job should be. From these two statements, one can assume that the emerging behaviour on the job will largely be determined by the demands of the situation and the personality type of the individual. The statement with the lowest mean score of 4.10 (Standard deviation = 0.488) was on the statement that the firm's processes are integrated across functionally specialized groups using connection devices, cross-functional teams and inter-departmental committees.

The lowest variability in responses of 12% was on the statement that the firm's business processes are integrated across functionally specialized groups using connection devices, cross-functional teams and inter-departmental committees. This was also the statement with the lowest mean score of 4.10 and the lowest standard deviation of 0.488. The respondents were largely in agreement on this particular dimension. On the other hand, the statement with the highest variability in responses was the one that there is a strong tendency in the organization to let the personality of the individual define what proper bahaviour on the job should be (coefficient of variation = 16%).

Statistically significant results were reported under three out of the four areas surveyed. The first area was on the statement that there is a strong tendency in the organization to let the personality of the individual define what proper behaviour on the job should be (t-value = 5.315, p-value = 0.000). The second area was on the statement that the organization structure has many layers (t-value = 4.870, p-value = 0.000) and the third area was on the statement that there is a strong tendency to let the demands of the situation define what the proper behaviour on the job should be (t-value = 4.636, p-value = 0.000).

The only area with no statistically significant results was on the statement that the firm's business process are integrated across functionally specialized groups using connection devices, cross-functional teams and inter-departmental committees (t-value = 1.393, p-value = 0.166). These results largely indicate that the various dimensions under integration are quite relevant and should be considered when running large manufacturing firms in Kenya.

### 4.11.5 Summary of Organizational Structure

This sub-section focusses on the overall manifestations of the entire organizational structure area instead of the specific dimensions. The overall manifestation was arrived at by taking the mean scores of the specific dimensions included in organizational structure. The dimensions include formalization, centralization, specialization and integration. The results of the overall organizational structure area are presented in Table 4.28 below.

				%	t-	sig 2-
Statement	Ν	Mean	SD	CV	value	tailed
Formalization	122	4.29	0.32	7%	4.519	.000
Centralization	122	4.24	0.43	10%	2.630	.010
Specialization	122	4.19	0.42	10%	2.480	.015
Integration	122	4.27	0.38	9%	3.200	.002
Average mean score		4.25				

Table 4. 28: Overall Manifestation of Organizational Structure

Source: Research Data (2018)

The results in Table 4.28 indicate that the overall average mean score for the organizational structure area was 4.25 (high extent). The standard deviations in the four areas were very close to the mean ranging from 0.32 under formalization to 0.43 under centralization. The variability of responses by the respondents were low ranging from 7% under formalization to 10% under both centralization and specialization. This implies that the respondents were more-or-less in agreement on the responses they gave on the four areas that were being tested.

All the four dimensions of organizational structure had statistically significant results. The p-values from the highest to the lowest were 0.000 (t-value = 4.519) under formalization, 0.002 (t-value = 3.200) under integration, 0.010 (t-value = 2.630) under centralization and lastly 0.015 (t-value = 2.480) under specialization. These results indicate that organizational structure has a moderating effect on the relationship between strategic planning and competitive advantage.

### 4.12 Competitive Advantage

From strategy literature, what is notable is that competitive advantage (CA) can be derived from either internal or external sources. It can take the form of valuable resources, position within an industry or marketplace, capabilities, dynamic capabilities, lower costs and differentiation (Reed & de Fillipi, 1990). In view of the many elements that can bring about such an advantage, the term competitive advantage is not conclusively clear (Cockburn, Henderson & Stern, 2000).

Barney (1991) has defined CA at an organizational level at which firms are engaged in implementing strategies that create value but those strategies are not at the same time being implemented by any current or potential rivals. According to Barney and Hesterly (2012), CA occurs when a firm has the ability to generate more economic value than can competing firms. Likewise, Porter (1991) has indicated that there exists two forms of CA, one that is based on decreasing costs while the other is based on differentiation. Competitive advantage was operationalized using measures defined by Porter (1991), Barney and Hesterly (2012) and financially based measures. The specific indicators were cost advantages, differentiation advantages, focus advantages, resources and capabilities advantages and financial performance advantages.

#### **4.12.1 Cost Advantages**

Porter (1980) has indicated that, a low cost strategy requires the firm to be the lowest cost producer in that industry and not one among several vying for that position. Cost leadership seeks to reduce costs throughout the value chain until the lowest possible cost structure is attained (Porter, 1980). The cost leadership dimension has various groupings; cost minimizing (Utterback & Abernathy, 1975), cost leadership (Porter, 1980, Hambrick, 1983), Maintenance (Galbraith & Schendel, 1983), cost leaders (Miller, 1988, Kim & Lim, 1988), cost reduction (Schuler & Jackson, 1987), low cost (Wright et al., 1992), efficiency and service (Robinson & Pearce, 1988) and low cost provider (Thompson & Strickland, 1987). To capture data on cost advantages, respondents were asked to indicate the extent to which some nine measures described their firms' competitive advantage using the Likert-type scale. The results from the respondents are presented in Table 4.29.

The results in Table 4.29 indicate that the average mean score for cost advantages is 4.31 (to a large extent). This implies that the respondents felt that their firms enjoyed cost competitive advantages to a large extent. The highest mean score was recorded in two areas. The first area with the highest mean score was that the firm has high market share (mean = 4.47, standard deviation = 0.563) and the second area was on the statement that the firm enjoys economies of scale in its production capacity (mean = 4.47, standard deviation = 0.619). The lowest mean score of 4.08 (standard deviation = 0.583) was recorded on the statement that the firm is a low cost producer. This score was still high (to a large extent), and this implies the firms surveyed enjoyed cost advantages. Other explanations from data in Table 4.29 are given after the Table.

Table 4. 29:	Cost	Advantage	of the	Firm
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				%
Statement	Ν	Mean	SD	CV
The firm is a low cost producer	122	4.08	.583	14%
The firm has a unique and efficient production line	122	4.24	.561	13%
The firm has a high market share	122	4.47	.563	13%
The firm enjoys economies of scale in its production capacity	122	4.47	.619	14%
The firm has retained its customers for extended periods	122	4.34	.611	14%
The firm has set the stage for price discipline in the industry	122	4.44	.617	14%
The firm has kept potential competitors out of the industry through price cutting	122	4.20	.738	18%
The firm has sustained price increases passed on to it by the suppliers	122	4.21	.695	16%
The firm has enjoyed above-average profitability over extended periods	122	4.38	.607	14%
Average mean score		4.31		

Source: Research Data (2018)

The coefficients of variation were low, ranging from 13% to 18% indicating that there was little disparity among respondents on the areas surveyed. Two areas tied on the lowest variability of 13% and these were on the statements that the firm has a unique and efficient production line and the firm has a high market share. In both cases, the firms surveyed could afford to lower costs and perhaps charge the customers lower prices due to the lower costs in production. The highest variability in responses of 18% was recorded under the statement that the firm has kept potential competitors out of the industry through price-cutting. This demonstrates that the respondents did not agree on the price undercutting statement.

### **4.12.2 Differentiation Advantages**

Porter (1980, p. 37) observes that, "a differentiation strategy arises when an organization attains an unparalleled position within a sector of operation by differentiating its products or services." A differentiation strategy, which gets successful, enables an organization to provide a product or service considered to be of higher quality, at a differentiated cost below the value premium to buyers (Pearce & Robinson, 2005). Differentiation is driven by uniqueness. An organization's uniqueness in a value activity is determined by a number of basic drivers, which form the basic reasons why an activity is unique and without which the organization cannot fully come up with ways of developing new forms of differentiation or figure out how sustainable the existing differentiation can be (Porter, 1985). Respondents were asked to indicate the degree to which some seven statements described their firms' competitive advantage and the results are presented in Table 4.30 below.

				%
Statement	Ν	Mean	SD	CV
The firm is insulated from competitive rivalry in the industry	122	3.90	.786	20%
The firm has built a strong brand reputation for its products and services	122	4.45	.562	13%
The firm has built a pool of loyal customers	122	4.44	.576	13%
The customers are satisfied with the firm's products and services	122	4.54	.548	12%
The firm has been able to increase its market share	122	4.30	.556	13%
The firm is able to pass along price increases to its customers	122	4.48	.620	14%
The firm does not experience difficulty in sustaining a price premium as the product becomes familiar in the market	122	4.34	.663	15%
Average mean score		4.35		

 Table 4. 30: Differentiation Advantage of the Firm

Source: Research Data (2018)

The results in Table 4.30 indicate that the average mean score in the area of differentiation advantages was 4.35 (to a large extent). Respondents were therefore satisfied that differentiation was evident in their firms. The highest mean score of 4.54 (standard deviation = 0.548) was on the statement that the customers are satisfied with the firm's products and services. This implies that customers could notice the good qualities of the products and services offered, which made the difference between these products/services and those of other firms.

The lowest mean score of 3.90 (standard deviation = 0.786) was on the statement that the firm is insulated from competitive rivalry in the industry. This score is nearer 4.0 than it is to 3.0 and therefore a good score. However, respondents seems to agree that they were not completely insulated from competitive rivalry in the industry. The second lowest mean score of 4.30 was on the statement that the firm had been able to increase its market share. Although this score is still good, it means firms face some difficulties in increasing market share.

The statement with the lowest coefficient of variation of 12% was that the customers are satisfied with the firm's products and services. This implies respondents almost agreed on this particular area and therefore the variability in responses was low. Incidentally, this is also the statement with the highest mean score and the lowest standard deviation. The statement with the highest variability in responses of 20% was that the firm is insulated from competitive rivalry in the industry. This was also the statement with the lowest mean score and the lowest mean score and the lowest mean score and the highest standard deviation.

### 4.12.3 Focus Advantages

Focus is about segmenting the industry and offering service to a narrow niche to the exclusion of other parts (Porter, 1980, p.38; 1985). Focus strategy therefore focusses at a narrow competitive scope within a particular industry. "It has two variants; these being; cost focus and differentiation focus. The objective under cost focus is to achieve cost advantage while differentiation focus is about seeking differentiation in a selected market segment. Cost focus makes good use of differences in cost behavior in some segments, while differentiation focus exploits the special needs of buyers in certain market segments" (Porter, 1980, p. 38; 1985). Respondents were required to indicate the extent to which some six statements described their firms' competitive advantage and the results are presented in Table 4.31 below.

				%
Statement	Ν	Mean	SD	CV
The firm serves a special market segment(s)	122	4.06	.519	13%
The firm enjoys high prices for its products and services	122	4.20	.616	15%
The firm offers products specially made for a particular segment of customers or users	122	4.36	.656	15%
The firm offers unique products (performing a unique function or uniquely designed) to its customers	122	4.23	.801	19%
The firm has utilized its distinctive competencies to create new markets	122	4.29	.649	15%
The firm has used its distinctive assets to create new markets	122	4.35	.691	16%
Average mean score		4.25		

Table 4. 31: Focus Advantage of the Firm

Source: Research Data (2018)

The results in Table 4.31 indicate an average mean score of 4.25 (to a large extent) in the area of focus advantage. This implies that the focus strategy was being practiced in the firms surveyed. The highest mean score of 4.36 (standard deviation = 0.656) was on the statement that the firm offers products specially made for a particular segment of customers or users. This implies that the area the firms surveyed capitalized on to attain focus advantages was on offering special products to a particular segment of customers or users. On the other hand, the statement with the lowest mean score of 4.06 (standard deviation = 0.519) was that the firm serves a special market segment(s).

The statement with the lowest coefficient of variation of 13% was that the firm serves a special market segment(s). This was also the statement with the lowest mean score of 4.06 and the lowest standard deviation of 0.519. There was little disparity among respondents on this area. On the other hand, the statement with the highest variability in responses among the respondents of 19% was that the firm offers unique products (performing a unique function or uniquely designed) to its customers.

## 4.12.4 Resources and Capability Advantages

The resource-based view has contributed a lot to the discourse on competitive advantage. Barney (1991, p. 102) "has argued that a firm has competitive advantage when it is implementing value-creating strategy that is not at the same time being implemented by other current or potential rivals. He (Barney) proposed a framework using four key characteristics namely; value, rareness, inimitability and non-substitutability. The dynamic capability view pays particular attention to the development of resources, which have rent-generation potential instead of merely possessing them." The Resource-based View (RBV) proposes that resources in and by themselves cannot generate competitive advantage. For the resources to produce superior performance, they have to be employed in a particular manner. In their groundbreaking contribution, Teece et al. (1997, p. 509) have argued that dynamic capabilities allow firms to consolidate, build and reconfigure both their resources and competencies and as a result, maintain their performance in the face of changing business environments. Respondents were asked to indicate the degree to which seven statements on resources and capabilities described their firms' competitive advantage and the results are shown in Table 4.32 below.

				%
Statement	Ν	Mean	SD	CV
The firm offers a valuable resource not being offered by other firms	122	3.94	.579	15%
The firm has rare source of raw materials and has control over the suppliers	122	4.11	.845	21%
The firm does not have competition from similar products and services	122	4.25	.950	22%
The firm has a high retention of skilled employees	122	4.32	.696	16%
The firm has highly skilled and experienced top managers	122	4.42	.587	13%
The firm has erected barriers to entry into similar business because of the large size of the manufacturing plant	122	4.17	.800	19%
The firm encourages and supports innovation in new products and services	122	4.34	.663	15%
Average mean score		4.22		

Table 4. 32: Resources and Capability Advantages of the Firm

Source: Research Data (2018)

The results in Table 4.32 indicate that the average mean score in the area of resources and capability advantage was 4.22 (to a large extent). This implies that the respondents were satisfied that resources and capabilities generated competitive advantage in their firms. The statement with the highest mean score of 4.42 (standard deviation = 0.587) was that the firm has highly skilled and experienced top managers. This implies that capabilities were valued more in the surveyed firms than were tangible resources.

The statement with the lowest mean score of 3.94 (standard deviation = 0.579) was that the firm offers a valuable resource not being offered by other firms. This lowest mean score is nearer 4.0 (to a large extent) than it is to 3.0 (to a moderate extent), meaning that the firms surveyed still offered some valuable resources not being offered by other firms. The statement with the second lowest mean score of 4.11 (standard deviation = 0.845) was on the statement that the firm had rare source of raw materials and had control over the suppliers. Although this score is good, it does imply that firms do not always have rare sources of raw material and also that they did not have total control over their suppliers.

The lowest variability in responses among the respondents was on the statement that the firm has highly skilled and experienced top managers (coefficient of variation =13%). This just goes to emphasize about capabilities being the main source of competitive advantage as compared to tangible resources. These results support those in Table 4.8 that indicate the percentage number of employees with a Masters degree at 59.8%, while those with a Bachelors degree at 29.5%. On the other hand, the highest variability in responses was on the statement that the firm does not have competition from similar products and services (coefficient of variation = 22%). This implies the respondents did not agree on the extent of the competition they had from similar products and services.

#### 4.12.5 Financial Advantage Measures

On financial measures, respondents were asked to indicate the extent to which six measures described their firms' position and the results are presented in Table 4.33. These results indicate that the average mean score for financial measures was 4.31 (to a large extent). This implies that the financial measures for the firms surveyed were favourable and therefore that competitive advantage translated to financial advantage. The highest mean score of 4.52 (standard deviation = 0.683) was on the statement that the firm's return on equity has been increasing in the last five years. Return on equity is calculated by taking net income and dividing the number by shareholders equity. The higher the net income, the higher the ratio. A high mean score implies that most of the firms surveyed had a good track record in profitability.

				%
Statement	Ν	Mean	SD	CV
The sales revenue of the firm has been increasing in the last five years	122	4.09	.498	12%
The profits before tax of the firm have been increasing in the last five years	122	4.26	.627	15%
The sales revenues of the firm have improved due to repeat sales	122	4.35	.629	14%
The firm has achieved good returns by improving its asset utilization in the last five years	122	4.33	.661	15%
The firm has increased its market share in its industry in the last five years	122	4.30	.679	16%
The firm's return on equity has been increasing in the last five years	122	4.52	.683	15%
Average mean score		4.31		

 Table 4. 33: Financial Advantage Measures

Source: Research Data (2018)

The lowest mean score of 4.09 (standard deviation = 0.498) was on the statement that the sales revenue of the firm has been increasing in the last five years. This mean score is still high indicating that the firms surveyed had a track record of profitability over the last five years. The second lowest mean score of 4.26 (standard deviation = 0.627) was on the statement that the profits before tax of the firms had been increasing in the last five years. This score, although the second lowest, is high enough and implies that the firms surveyed had increasing profits before tax in the last five years.

As for coefficient of variation, the statement with the lowest variability of 12% was that the sales revenue of the firm has been increasing in the last five years. This is also the statement with the lowest mean score (4.09) and the lowest standard deviation (0.498). The respondents were in agreement about the growth of revenue of the various firms in the last five years. The statement with the highest variability in responses of 16% was that the firm has increased its market share in its industry in the last five years. This implies that the respondents from the various firms held differing views on increase in market share. This notwithstanding, this area had a high mean score of 4.30 (standard deviation = 0.679).

### 4.12.6 Summary of Competitive Advantage

The dimensions tested under competitive advantage included cost advantages; differentiation advantages, and focus advantages, as promulgated by Michael Porter (1991). They also included resources, capability advantages, and financial performance advantages. The results of the overall manifestations under the competitive advantage area are presented in Table 4.34 below.

Statement	N	Mean	Std. Deviation	% CV
			Deviation	
Cost advantage	122	4.31	0.30	7%
Differentiation advantage	122	4.35	0.32	7%
Focus advantage	122	4.25	0.40	10%
Resources and capability advantage	122	4.22	0.45	11%
Financial performance advantage	122	4.31	0.39	9%
Average mean score		4.29		

 Table 4. 34: Overall manifestation of Competitive Advantage

Source: Research Data (2018)

The results in Table 4.34 indicate that the overall average mean score for the competitive advantage area was 4.29 (to a large extent). The standard deviations in the five areas measured were close to the mean ranging from 0.30 on cost advantage to 0.45 on resources and capability advantage. The variability of responses from the respondents in the five areas were low, ranging from 7% on cost advantage and differentiation advantage to 11% on resources and capability advantage.

#### 4.12.7 Summary Scores in the Key Variables of the Study

The overall objective of the study was to determine the influence of employee behaviour and organizational structure on the relationship between strategic planning and competitive advantage. The average mean scores of the variables together with the standard deviations and coefficients of variation are shown in Table 4.35:

Area	Ν	Mean	Std. Deviation	% CV
Strategic Planning	122	4.32	0.23	5%
Employee behaviour	122	4.28	0.34	8%
Organizational structure	122	4.25	0.33	8%
Competitive advantage	122	4.29	0.31	7%
Average mean score		4.28		

 Table 4. 35: Average Mean Scores of the four variables of the Study

**Source:** Research Data (2018)

The results in Table 4.35 indicate that the overall mean score for the four areas that were being studied was 4.28 (to a large extent or to a high extent). In percentage terms, this average mean score would be over 80.0%. The area with the highest mean score of 4.32 was strategic planning while the area with the lowest mean score was organizational structure. The standard deviations were close to the mean ranging from 0.23 on the area of strategic planning to 0.34 on employee behaviour. The variability of responses from the respondents were low as exemplified by the coefficients of variation. The lowest variability of 5.0% was on the strategic planning area while the highest variability of 8.0% was on two areas, employee behaviour and organizational structure.

#### 4.12.8 Additional Financial Measures

The study sought to establish the extent to which the firms had achieved financial performance measures. In this regard, respondents were asked to provide information in percentage terms from year 2013 to 2017 on growth in sales revenue, growth in profit before tax, growth in market share in the industry and growth in return on investments. Out of the 122 returned questionnaires, 47 respondents had provided the information for the five years, 73 respondents had provided information for four years while 106 respondents had provided information for the last three years, that is year 2015, 2016 and 2017. The results for the three years, from 2015 to 2017 are shown in Table 4.36.

Area	N	2015	2016	2017	Average
Growth in sales	106	11.54	12.77	6.27	10.19
Growth in profit before tax	106	8.74	15.68	8.02	10.81
Growth in market share	106	11.20	13.25	7.82	10.76
Growth in return on equity	106	11.78	11.95	10.44	11.39
Non-respondents	16				

 Table 4. 36: Three years Average Growth

Source: Research Data (2018)

The results in Table 4.36 indicate that there was growth in all the four financial indicators tested. As is evident from the results in Table 4.36, the average growth in the four areas was over 10.0%. These results agree with those given under Table 4.33, which indicated that the average mean score for the financial measures tested as being 4.31 (to a large extent). The respondents felt that there was growth in sales revenue, which translated to growth in profit before tax. The growth in profit before tax contributed to growth in return on equity of the firms. In addition, it appears that growth in sales contributed to growth in market share for the firms surveyed.

This chapter has presented findings regarding the respondents and the demographics of the firms. The findings focused on how the various variables manifested in the firms being studied and how the respondents viewed them. Descriptive findings were discussed based on frequencies, mean scores, standard deviations, coefficient of variation, one sample t-tests and the 2-tailed significance levels.

The number of respondents were 122 out of a possible 124 and this represented a response rate of 98.4%. All the sectors in the manufacturing industry were represented in the list of respondents and this meant that the results obtained were representative of the position existing in the manufacturing industry. One hundred and five (105) firms responded on the number of years they had been practicing strategic planning. Out of the 105 respondents, only one (1) firm had practiced strategic planning for a period of 0 - 5 years, with the rest of the 104 firms having practiced strategic planning for 6 years and above.

The summary results on the strategic planning area indicated an average mean score of 4.32, with the mean scores ranging from 4.30 for the strategic planning process to 4.33 for the planning for strategy implementation dimension. The coefficients of variation were close and were between 6% and 7%. The only dimension which returned significant results on the strategic planning area was planning for strategy implementation with a p-value of 0.000 (t-value = 5.863).

On the area of employee behaviour, the average mean score was 4.28 while the coefficient of variations ranged from 7% to 12%. Out of the four dimensions tested under employee behaviour including strategically aligned behaviour, "affective commitment, continuance commitment and normative commitment" (Meyer & Allen, 1991, p. 67) three of the dimensions showed significant results with p-values  $\leq 0.05$ . Only affective commitment had results which were not significant with a p-value of 0.213 (t-value = 1.252).

The overall results of the organizational structure area had an average mean score of 4.25 with coefficients of variation ranging from 7% to 10%. All the four dimensions under organizational structure including formalization, centralization, specialization and integration returned significant results with p-values  $\leq 0.05$ . It was not possible to work out t-values and p-values for the dependent variable, competitive advantage, and therefore the descriptive results were done up-to the coefficient of variation stage. For this variable, the average mean score for the five dimensions used was 4.29 while the coefficients of variation ranged from 7% to 11%.

The overall manifestations from the four variables showed consistently high average mean scores. They ranged from 4.25 on organizational structure, 4.28 on employee behavior, 4.29 on competitive advantage and 4.32 on strategic planning. The variability in responses was also low amongst all the four variables ranging from a low of 5% on strategic planning to 8% on employee behaviour and organizational structure. From these descriptive results and based on levels of significance, it is evident that employee behaviour and organizational structure have better results than strategic planning and this implies managers of firms need to take the two areas seriously if they want to achieve sustainable competitive advantage. The next chapter presents the results of hypotheses testing and discussion of results.

# **CHAPTER FIVE**

# TESTS OF HYPOTHESES, INTERPRETATION OF RESUTLS AND DISCUSSION

#### 5.1 Introduction

This chapter presents the results of the hypotheses testing and interpretation of the results. The overall aim of the research was to determine whether the relationship between strategic planning and competitive advantage of large manufacturing firms was influenced by employee behaviour and organizational structure. To attain the overall objective, four different specific objectives were set.

The first specific objective was to determine the influence of strategic planning on the competitive advantage of large manufacturing firms while the second one was to determine the influence of employee behaviour on the relationship between strategic planning and competitive advantage of large manufacturing firms. The third objective was to establish the effect of organizational structure on the relationship between strategic planning and competitive advantage of large manufacturing firms. The last objective was to establish the joint influence of employee behaviour and organizational structure on the relationship between strategic planning and competitive advantage of large manufacturing firms. The last objective was to establish the joint influence of employee behaviour and organizational structure on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.

From the four specific objectives, four hypotheses were formulated for testing. Simple and multiple regression analyses were performed at 95% confidence level (p-value = 0.05). Out of the regression analyses were obtained the values of R, R<sup>2</sup>, F-ratio, tvalues and p-values. The R-value shows the strength of the relationship between the variables while the  $R^2$  value shows the extent to which variations in indicators are explained (goodness of fit or explanatory power) ((Sekaran & Bougie, 2014). F-value shows the statistical significance of the overall model and t-values represent the significance of individual variables (Sekaran & Bougie, 2014). Beta values show the effect of the independent variable on the dependent variable (either positive or negative) and p-values represent the significance level at 95% confidence level (p = 0.05). The decision to confirm or not confirm the hypothesis is made at p < 0.05 (Sekaran & Bougie, 2014).

Hypothesis one was tested using simple linear regression analysis while hypothesis two was tested using a hierarchical path regression analysis (Easterby-Smith et al., 2012). Hypothesis three was tested using stepwise multiple regression analysis. Lastly, hypothesis four was also tested using stepwise regression analysis (Easterby-Smith et al., 2012).

On a more detailed basis, the Baron and Kenny (1986) model was used in testing for mediation. The first step in testing for the mediating variable influence in hypothesis two was to establish the direct relationship between strategic planning and competitive advantage while step two involved establishing the direct relationship between strategic planning and employee behaviour. The third step involved establishing the direct relationship between employee behaviour and competitive advantage while the fourth step involved establishing the joint effect of strategic planning and employee behaviour on competitive advantage. Mediating influence would be confirmed only if the joint influence of employee behaviour and strategic planning was more than that of the direct influence. The Baron and Kenny Model (1986) was also used to test for the moderating effect of organizational structure. In the first step, the direct influence of strategic planning on competitive advantage was established. Thereafter, the effect of strategic planning and organizational structure was established. In the third step, strategic planning, organizational structure and the interaction term were entered into the model as predictors of competitive advantage. Moderation was established if the joint influence explained a statistically significant amount of variance of the dependent variable (Baron & Kenny, 1986).

In addition to hypotheses analyses on financial performance, the study employed growth ratios including growth in sales, growth in profit before tax, growth in market share and growth in return on equity. The financial ratios were supposed to cover five years but most firms provided information for the years 2015, 2016 and 2017. These ratios were analyzed under the Descriptive Data Analysis and Findings in Chapter four, section 4.12.8.

This chapter first presents the results of the effects of the various predictor variables on the various dimensions of the dependent variables. This is followed by the results of the composite effect of the predictor variables on the various indicators of the dependent variables. Lastly, the results of the composite or combined effect of the independent variables on the composite dependent variable is determined. It is on this combined effect that the decisions to reject or fail to reject the hypotheses (that were given in the alternative form) were made.

# 5.2 Strategic Planning and Competitive Advantage

The first objective of the study was to determine the influence of strategic planning on the competitive advantage of large manufacturing firms in Kenya. The objective corresponds with the first hypothesis stated as:

 $H_1$  – Strategic planning significantly influences the competitive advantage of large manufacturing firms in Kenya.

To test this hypothesis and achieve the objective of the study, strategic planning was operationalized along the dimensions of the strategic planning process, strategy formulation and planning for strategy implementation. On the other hand, competitive advantage was operationalized on the dimensions of cost advantages, differentiation advantages, focus advantages, resources and capability advantages and financial performance. Before testing the hypothesis, the independent effects of strategic planning dimensions on the various indicators of competitive advantage are presented from sections 5.2.1 to 5.2.6. Thereafter the hypothesis is tested under section 5.2.7.

#### 5.2.1 Strategic Planning and Cost Advantages

The results of the independent effect of strategic planning dimensions on cost advantage are shown in Table 5.1. From these results, it is evident that the coefficient of determination is 0.355. This indicates that 35.5% of variation in cost advantage was explained by strategic planning. The remaining 64.5% was explained by other factors not considered in the model. The overall ANOVA model had a p-value of 0.000 (F-value = 21.677), which revealed a statistically significant position. This implies that strategic planning has a significant influence on cost advantages.

Мо	Model Summary											
Moo	del	R	R Square	Adjus	sted R Sq	uare	Std. Erro	r of the Es	stimate			
1		.596ª	.355			.339			.24548			
a. P. strat	a. Predictors: (Constant), Strategic planning process, strategy formulation, planning for strategy implementation											
AN	OVA	a			T							
Moo	del		Sum of	Squares	df	]	Mean Square	F	Sig.			
1		Regression		3.919	3		1.306	21.677	.000 <sup>b</sup>			
		Residual		7.111	118		.060					
Tota	al	L		11.029	121							
Coe	fficie	ents <sup>a</sup>			1			L				
				Uns	standardiz	zed	Standardized					
					Coefficie	ents	Coefficients					
Moo	del			В	Std. Er	ror	Beta	t	Sig.			
1	(Co	nstant)		1.493	.4	426		3.504	.001			
	Stra	tegic planning p	process	.070	.1	100	.067	.702	.484			
Strategy formulation			087	.(	)84	085	-1.034	.303				
Planning for implementation				.668	.1	11	.584	6.006	.000			
Dep	ende	ent variable: Co	ost Advanta	ige	1			<u>.</u>				

<b>T</b>	_	4	TO	e	· · · ·	DI	•	1		$\alpha$	A 1 4
Table		•	Influence	UT.	Strateor	Plann	ınσ	dimensions	on	C'AST .	Advantage
Lanc	<b>~</b> •		muchec	UL.	Duducgic	1 1001111		unitensions	<b>UII</b>	COBU	. iu rannage

Source: Research Data (2018)

The results in Table 5.1 further indicate statistically significant independent influence of planning for strategy implementation, evaluation and control with a p-value of 0.000 (t-value = 6.006). The results also show that planning for strategy implementation, evaluation and control has a positive contribution to a unit change in competitive advantage ( $\beta = 0.584$ ) using the standardized coefficients. The other two dimensions, namely, strategic planning process and strategy formulation did not produce significant results. The p-values at 0.484 and 0.303 (t-values = 0.702, and -1.034) respectively were higher than p  $\leq 0.05$ . A negative effect of -0.085 was observed under strategy formulation. This implies that a unit change in strategy formulation negatively influences by 0.085 the change in competitive advantage. In addition, a unit change in the strategic planning process positively influences by 0.067 the change in competitive advantage. These findings imply that planning for strategy implementation, evaluation and control should be taken seriously in large manufacturing firms. On the other hand, the results indicate that large manufacturing firms in Kenya have to closely watch the dimensions of the strategic planning process and strategy formulation in order to sustain competitive advantage. The model for independent influence of strategic planning dimensions on cost advantages is given below:

	CCA	=	1.493 + 0.067 SPP - 0.085 SF + 0.584 PIEC
Where:	CCA	=	Cost Advantage
	SPP	=	Strategic Planning Process
	SF	=	Strategy Formulation
	PIEC	=	Planning for Implementation, Evaluation and Control

Table 5.2 shows the regression results of the overall (combined) influence of strategic planning on cost advantage. The regression results in Table 5.2 indicate that on the overall, strategic planning had moderately weak but positive relationship with cost advantage (R = 0.476). The coefficient of determination ( $R^2$ ) was 0.227 implying that the strategic planning dimensions explained 22.7% of cost advantages (F = 35.155, p-value = 0.000). Other variables in the firms explained the remaining 77.3%. The findings were sufficient to support the influence of the combined strategic planning dimensions, implying that strategic planning had statistically significant influence on cost advantages.

Mod	el Summary										
							S	td. Error	of the		
Mode	el R		R Square	Adj	justed R S	quare		Es	timate		
1	.476 <sup>a</sup>		.227			.220			26662		
a. Pre	edictors: (Const	tant), Sti	rategic Planr	ning			L				
ANO	<b>V</b> A <sup>a</sup>		_								
Mode	Model Sum of Squares df Mean Square F Sig.										
1	Regression		2.	499	1		2.499	35.155	.000 <sup>b</sup>		
	Residual	8.	530	120	.071						
	Total	11.	11.029 121								
a. De	pendent Variat	ole: Cost	t Advantage		11						
b. Pre	edictors: (Cons	tant), St	rategic Plan	ning							
Coef	ficients <sup>a</sup>										
			U	nstar	ndardized	Stan	dardized				
				Co	efficients	Coe	efficients				
Mode	el		E	3 5	Std. Error		Beta	t	Sig.		
1	(Constant)		1.585	5	.461			3.438	.001		
	Strategic Planning (combined)		.632	2 .107			.476	5.929	.000		
a. De	pendent Variab	ole: Cost	t Advantage								

 Table 5. 2: Combined influence of Strategic Planning on Cost Advantage

Source: Research Data (2018)

The results in Table 5.2 further indicate that strategic planning had a positive contribution (beta value = 0.476) to a unit change in cost advantages. Besides, the results indicate statistically significant results with a p-value of 0.000 (t-value = 5.929) for strategic planning on cost advantages. The model for the composite strategic planning and cost advantages is shown below:

$$CCA = 1.585 + 0.476 \text{ SP}$$
Where: 
$$CCA = Cost \text{ Competitive Advantage}$$

$$SP = Strategic \text{ Planning}$$

### 5.2.2 Strategic Planning and Differentiation Advantages

Table 5.3 presents the regression results of the dimensions of strategic planning on differentiation advantages. The results in Table 5.3 indicate that the strategic planning dimensions have a moderately weak but positive influence on differentiation advantages (R = 0.414). The coefficient of determination was 0.172, which indicates that 17.2% of the variation of differentiation advantages was explained by the dimensions of strategic planning. The remaining 82.8% was explained by other factors not considered in this model.

Table 5. 3: Influence of Strategic Planning dimensions on DifferentiationAdvantages

Mod	lel Summary											
	•			А	djusted R		Std. Erro	or of the				
Mod	el R		R Square		Square		E	Estimate				
1	.414ª		.172		.151			.29128				
a. Pr	edictors: (Constan	nt),Strategic p	lanning pro	cess, Strate	gy formu	lation, Pl	anning fo	or				
strate	strategy implementation											
ANC	ANOVA <sup>a</sup>											
Sum of Mean												
Model Squares df Square F Sig.												
1	Regression			2.074	3	.691	8.149	.000 <sup>b</sup>				
	Residual			10.012	2 118	.085	5					
	Total			12.086	5 121							
a. De	ependent Variable	e: Differentiat	ion advanta	ges			·					
b. Pr	edictors: (Consta	nt), Strategic	planning pr	ocess, Strat	egy form	ulation, P	lanning f	for				
strate	egy implementation	on										
Coef	ficients <sup>a</sup>											
			Uns	tandardized	l Stand	lardized						
				Coefficients	Coe	fficients						
Mod	el		В	Std. Error	•	Beta	t	Sig.				
1	(Constant)		2.157	.505	i		4.267	.000				
	Strategic Planni	ng process	.144	.118	3	.132	1.218	.226				
	Strategy formul	ation	038	.100		036	382	.703				
	Planning for strategy implementation.401.132.3353.037.003											
a. De	ependent Variable	e: Differentiat	ion advanta	ges								

Source: Research Data (2018)

The overall model had a p-value of 0.000 (F = 8.149) and the results reveal a statistically significant model which indicates that strategic planning influences differentiation advantages. The results show that two strategic planning dimensions had positive contribution to a unit change in differentiation advantages while one dimension had a negative contribution. The positive contributions were for a beta value of 0.132 for the strategic planning process and a beta value of 0.036 was for planning for strategy implementation while the negative contribution of 0.036 was for strategy formulation.

The results in Table 5.3 indicate statistically significant results on one dimension, planning for strategy implementation with a p-value of 0.003 (t-value = 3.037). The other two dimensions had statistically no significant results. On the strategic planning process, the p-value was 0.226 (t-value = 1.218) while on strategy formulation, the p-value was 0.703 (t-value = -0.382). This implies that preparing for strategy implementation is to be taken seriously by firms if they want to succeed in implementing their strategic plans. The model of strategic planning and differentiation advantages is shown below:

$$DA = 2.157 + 0.132 \text{ SPP} - 0.036 \text{ SF} + 0.335 \text{ PIEC}$$

Where:	DA	=	Differentiation Advantage
	SPP	=	Strategic Planning Process
	SF	=	Strategy Formulation
	PIEC	=	Planning for Implementation, Evaluation and Control

The regression results in Table 5.4 indicate the overall (combined) influence of strategic planning on differentiation advantage. The results in Table 5.4 indicate that on an overall basis, strategic planning has a weak but positive influence on differentiation advantages with an R of 0.360. This leads to a coefficient of determination of 0.130, which indicates that 13.0% of the variation in differentiation advantages is explained by strategic planning. The remaining 87.0% is to be explained by other factors not considered in this model.

 Table 5. 4: Combined influence of Strategic Planning on Differentiation

 Advantage

M	odel S	Summary									
									Std. Error	of the	
M	odel	R	R Square	А	djuste	d R S	Square		Estimate		
1		.360ª	.130				.122			.29609	
a. 1	Predi	ctors: (Constant	), Strategic plannii	ng							
Aľ	NOV	Aa									
				Sum	of			Mean			
M	odel			Squa	res	df		Square	F	Sig.	
1	R	egression		1	.565		1	1.565	17.854	.000 <sup>b</sup>	
	R	esidual	10	0.521	120		.088				
	Т	otal		12	2.086	12	21				
a. 1	Depe	ndent Variable:	Differentiation adv	vantage	L				1		
b.	Predi	ctors: (Constant	), Strategic Planni	ng							
Co	oeffici	ients <sup>a</sup>									
				Unstan	dardiz	ed	Stand	lardized			
				Coeff	ficient	s	Coef	ficients			
					Sto	1.					
M	odel			В	Erre	or		Beta	t	Sig.	
1	(Co	nstant)		2.190	•	512			4.278	.000	
	Stra	tegic planning		.500	•	118		.360	4.225	.000	
	Domo	ndont Voriable.	Differentiation ed	ventege			L		11		

a. Dependent Variable: Differentiation advantage

Source: Research Data (2018)

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The overall model had a p-value of 0.000 (F = 17.854), thus revealing a statistically significant model. This indicates that on an overall basis, strategic planning has a significant influence on differentiation advantages. The results also indicate that strategic planning had a positive contribution with a beta value of 0.360 to a unit change in differentiation advantages. The results further indicate statistically significant results with a p-value of 0.000 (t-value = 4.225) for strategic planning on differentiation advantage. The model for the overall strategic planning and differentiation advantage is shown below:

DA = 2.190 + 0.360 SPWhere: DA = Differentiation Advantage SP = Strategic Planning

### 5.2.3 Strategic Planning and Focus Advantages

Table 5.5 presents the regression results of the dimensions of strategic planning on focus advantages. The results in Table 5.5 indicate that the strategic planning dimensions have a moderate but positive influence on focus advantages (R = 0.540). The coefficient of determination at 0.292 indicates that the dimensions of strategic planning explained 29.2% of variation in focus advantages. The remaining 70.8% was explained by other factors not considered in this model.

T	ab	ole	5.	5:	Influence	of St	rategic	Plannir	ıg dime	nsions	on Focu	s Advantag	es
			•••	•••	11111401100		avegie		5			DITE TOTIONS	00

Μ	Model Summary											
		•							Sto	1. I	Error of	
M	odel		R	R	Square	A	djuste	ed R Squa	re the	۶E	stimate	
1			.540ª	.292 .274 .34419								
a. str	a. Predictors: (Constant), Strategic planning process, Strategy formulation, Planning for strategy implementation											
A	ANOVA <sup>a</sup>											
								Mea	n			
M	Model Sum			of Squares			df	Squar	e	F	Sig.	
1	R	Regression		5.757	,		3	1.91	9 16.19	8	.000 <sup>b</sup>	
1	R	Residual	13.979	•	11		.11	8				
	Total			19.736	;		121					
a. 1	Deper	ndent Variable	e: Focus adva	antage	1						<u></u>	
b. str	Predic ategy	ctors: (Consta implementati	nt), Strategic on	planning	process,	strat	egy fo	ormulation	, Plannin	g f	or	
Co	oeffici	ents <sup>a</sup>										
				Unstar Coef	ndardized ficients	đ	Stan Coe	dardized fficients	t		Sig.	
M	odel			В	Std. En	rror		Beta				
	(Con	istant)		.626		597			1.048		.297	
1	1 Strategic planning process		.094	•	140		.067	.672		.503		
	Strategy formulation			030	•	118		022	259		.796	
	Planning for implementation.773.156.5054.957.000											
a. 1	Deper	ndent Variable	e: Focus adva	antage	-							

Source: Research Data (2018)

The ANOVA results reveal a statistically significant model (F = 16.198, p-value = 0.000), which indicates that strategic planning influences focus advantages. The results indicate that the strategic planning process dimension (beta = 0.067) and the planning for implementation dimension (beta =0.505) had positive contributions to unit changes in focus advantages. On the other hand, strategy formulation had a negative contribution to a unit change in focus advantages with a beta value of - 0.022.

The results in Table 5.5 further indicate statistically significant influence of planning for strategy implementation with a p-value of 0.000 (t-value = 4.957). The other two dimensions, that is, the strategic planning process and strategy formulation did not produce significant results. The p-value for the strategic planning process dimension was 0.503 (t-value = 0.672) while the p-value for the strategy formulation dimension was 0.796 (t-value = -0.259). These findings indicate that planning for strategy implementation has more importance in terms of achieving a competitive advantage position in the area of focus but also that large manufacturing firms in Kenya should closely watch the strategic planning process and strategy formulation if they want to compete effectively. The model for the independent influence of the strategic planning dimensions on focus advantage is given below:

FA = 0.626 + 0.067 SPP - 0.022 SF + 0.505 PIEC

Where:	FA	=	Focus Advantage
	SPP	=	Strategic Planning Process
	SF	=	Strategy Formulation
	PIEC	=	Planning for Implementation, Evaluation and Control

Table 5.6 below represents the regression results of the overall (composite) influence of strategic planning on focus advantage. The results in Table 5.6 indicate that composite strategic planning has a moderate influence on focus advantage with a coefficient of variation (R) of 0.458. This translates to a coefficient of determination ( $R^2$ ) of 0.210, indicating that 21.0% of the variation in focus advantages is explained by strategic planning with the remaining 79.0% being explained by other factors not in this model.

Model	Summary								
Model	R		R	L Squ	are	Adj	justed R Square	Std. Error of Estir	
1	.458ª			.2	210		.203		.36045
a. Predi	ctors: (Constant), Strategic	plannin	ng						
ANOV	A <sup>a</sup>								
Model			Sum Squa	n of ares	Ċ	lf	Mean Square	F	Sig.
1	Regression		4.	145		1	4.145	31.903	.000 <sup>b</sup>
	Residual		15.	591	12	0	.130		
	Total		19.	736	12	1			
a. Depe	ndent Variable: Focus adva	ntage							
b. Predi	ctors: (Constant), Strategic	plannir	ng						
Coeffic	ients <sup>a</sup>								
			Unsta Coe	andar efficie	dized ents	;	Standardize Coefficients		
Model			В	Std	Std. Error		Bet	a t	Sig.
1	(Constant)		.733		.623			1.177	.242

.814

.144

.458

5.648

.000

 Table 5. 6: Composite influence of Strategic Planning on Focus Advantage

**Source:** Research Data (2018)

Strategic planning

a. Dependent Variable: Focus advantage

The results in Table 5.6 further indicate that the composite ANOVA model had a p-value of 0.000 (F = 31.903), thus revealing a statistically significant model. This indicates that on a composite basis, strategic planning has an influence on focus advantages. The results further indicate that strategic planning had a positive contribution with a beta value of 0.458 to a unit change in focus advantages. Besides, the results indicate statistically significant results with a p-value of 0.000 (t-value = 5.648) for strategic planning on focus advantages. The model for the composite strategic planning and focus advantage is shown below.

	FA	=	0.733 + 0.458 SP
Where:	FA	=	Focus Advantage
	SP	=	Strategic Planning

# 5.2.4 Strategic Planning and the Combined Porter's CA Variables

Table 5.7 below shows the regression results of the dimensions of strategic planning on the combined Michael Porter (1993) competitive advantage variables including cost, differentiation and focus.

 Table 5. 7: Influence of the dimensions of Strategic Planning on the Combined

 Michael Porter Competitive Advantage variables of Cost, Differentiation and Focus

Мо	Model Summary											
Mo	del	R	R Square	Adi	iusted R Sc	mare	Std Error	of the Es	timate			
1	uei	599 <sup>a</sup>	359	110		343	Did. Lifor		23780			
a P	redic	ctors: (Cons	tant). Strateg	ic plann	ing proces	$\frac{10}{\text{s}}$ stra	ategy formul	ation pla	nning			
for	strate	egy implem	entation	ie praini	ing proces	<b>5, 54</b>	acegy ronnar	ution, pro				
AN	ANOVA <sup>a</sup>											
Mo	ModelSum of SquaresdfMean SquareFSig.											
1	F	Regression		3.739	3		1.246	22.038	.000 <sup>b</sup>			
	F	Residual		6.673	118		.057					
	Total 10.411 121											
a. D	a. Dependent Variable: Combined Michael Porter Competitive advantage variables											
b. P	redic	ctors: (Cons	stant), strategi	ic plann	ing proces	s, stra	ategy formula	ation, pla	nning			
for	strate	egy implem	entation									
Coe	effici	ents <sup>a</sup>							1			
				Unst	andardized	1	Standardized	l				
				Co	efficients		Coefficients					
Mo	del			В	B Std. Er	ror	Beta	ı t	Sig.			
1	(Co	nstant)		1.425	5 .4	-13		3.453	.001			
	Stra	ategic Plann	ing process	.103	3 .0	97	.101	1.063	.290			
	Stra	ategy formu	lation	052	2 .0	81	052	636	.526			
	Pla	nning for		614	L 1	08	553	5 698	000			
	imp	lementation	1	.017	· · · ·	~			.000			
a. D	)eper	ndent Varia	ble: Combine	d Micha	ael Porter (	Comp	etitive advar	ntage vari	ables			

Source: Research Data (2018)

Г
The results in Table 5.7 indicate that the strategic planning dimensions had a fairly strong positive relationship with the combined Michael porter's competitive advantage variables (R = 0.599). The coefficient of determination of 0.359 indicates that the dimensions of strategic planning explained 35.9% of variation in Porter's competitive advantage variables. The remaining 64.1% was explained by other factors not considered in this model.

The ANOVA model had a p-value of 0.000 (F = 22.038), which reveals a statistically significant position. This implies that strategic planning has a significant influence on Michael Porter's competitive advantage variables. The results in Table 5.7 further indicate statistically significant influence of the planning for strategy implementation dimension with a p-value of 0.000 (t-value = 5.698). The other two dimensions did not produce significant results. The p-value for the strategic planning process dimension was 0.290 (t-value = 1.063), while the p-value for the strategy formulation dimension was 0.526 (t-value = -0.636). These results imply that planning for strategy implementation is important to manufacturing firms if they wish to attain a competitive advantage position. This notwithstanding, the other two dimensions should be taken seriously because it is not possible to prepare to implement a poorly crafted strategy.

The results in Table 5.7 further indicate two dimensions, which had a positive contribution to competitive advantage. The strategic planning process dimension had a positive beta value of 0.101 while the planning for strategy implementation dimension had a positive beta value of 0.553.

The strategy formulation dimension had a negative influence on competitive advantage with a negative beta value of -0.052. The model for the independent influence of strategic planning dimensions on Michael Porter's competitive advantage variables is shown below:

	PCA	=	1.425 + 0.101 SPP – 0.052 SF + 0.553 PIEC
Where:	PCA	=	Porter's Competitive Advantage
	SPP	=	Strategic Planning Process
	SF	=	Strategy Formulation
	PIEC	=	Planning for Implementation, Evaluation and Control

The regression results in Table 5.8 indicate the combined influence of strategic planning on Porters competitive advantage variables. The results in table 5.8 indicate that composite strategic planning has a moderate influence on the combined Porter competitive advantage variables with a coefficient of variation (R) of 0.503. The coefficient of determination ( $R^2$ ) was 0.253, indicating that 25.3% of the variation in Porter's competitive advantage variables is explained by strategic planning with the remaining 74.7% being explained by other factors not in this model.

The composite ANOVA model had a p-value of 0.000 (F = 40.619), and it thus reveals a statistically significant model. On a composite basis therefore, strategic planning has a significant influence on Michael Porter's competitive advantage variables. The results further indicate that strategic planning had a positive contribution (beta value = 0.503) to a unit change in Porter's competitive advantage variables.

Table 5.	8:	Composite	influence	of	Strategic	Planning	on	Porter's	Compe	titive
Advanta	ge v	variables								

Model	Summary							
Model						Adjusted R	Std. H	Error of
Model		R	F	R Square		Square	the E	stimate
1		.503 <sup>a</sup>	.503 <sup>a</sup> .253			.247		.25460
a. Pred	ictors: (Constant	t), Strategic	planni	ing				
	X		1	0				
ANOV	A <sup>a</sup>							
						Mean		
Model	Sum of Sc	quares	(	df	Square	F	Sig.	
1	Regression		2.633		1	2.633	40.619	.000 <sup>b</sup>
	Residual		7.778	12	20	.065		
	Total	1	0.411	12	21			
a. Depe	endent Variable:	Combined	Porter	's compet	titiv	ve advantage va	riables	
b. Pred	ictors: (Constant	t), Strategic	c plann	ing				
Coeffic	cients <sup>a</sup>							
		τ	Jnstand	lardized		Standardized		
			Coeffi	icients		Coefficients		
Model	Iodel			Std. Erro	or	Beta	t	Sig.
1	(Constant)		1.503	.44	10		3.414	.001
	Strategic plann	ing	.649	.10	)2	.503	6.373	.000
a. Depe	endent Variable:	Combined	Porter	's compet	titiv	ve advantage va	riables	

**Source:** Research Data (2018)

The results in Table 5.8 further indicate statistically independent influence of strategic planning on Porter's competitive advantage variables with a p-value of 0.000 (t-value = 6.373). These findings imply that large manufacturing firms in Kenya have to take strategic planning seriously, if they have to remain competitive. The model for the independent influence of strategic planning on the combined Porter's competitive advantage variables is given below.

	PCA	=	1.503 + 0.503 SP
Where:	PCA	=	Porter's Competitive Advantage variables
	SP	=	Strategic Planning

### 5.2.5 Strategic Planning and Resources and Capability Advantages

Table 5.9 below shows the regression results for the dimensions of strategic planning

on resources and capability advantages.

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# Table 5. 9: Influence of Strategic Planning dimensions on Resources andCapability Advantages

Mode	el Summary									
Mode	l R	R Squar	e Adju	usted R Squ	uare	Std. Error	of the Es	timate		
1	.513ª	.26	3		245		.38972			
a. Pre	dictors: (Con	stant), Strategic	plannir	ng process,	strate	egy formula	ation, plar	ning		
for str	ategy implen	nentation								
ANO	ANOVA <sup>a</sup>									
Mode	1	Sum of	Squares	s df	Me	an Square	F	Sig.		
1	Regressio	on	6.407	7 3		2.136	14.061	.000 <sup>b</sup>		
	Residual		17.922	2 118		.152				
	Total		24.329	) 121						
a. Dep	pendent Varia	ble: Resources	and cap	ability adv	antag	jes				
b. Pre	dictors: (Con	stant), Strategio	c plannir	ng process,	strate	egy formula	ation, plar	nning		
for str	ategy implen	nentation								
~ ~	<b>Na a</b>									
Coeff	icients <sup>a</sup>									
			Unstar	ndardized	Sta	ndardized				
		-	Coef	ficients	Co	efficients				
Mode	1		В	Error		Beta	t	Sig		
1 (C	constant)		1 087	676		Deta	1 607	111		
St	rategic planni	ng process	1.007	158		112	1.007	273		
Strategic planning process			- 284	.130		.112	-2 125	.275		
DI	anning for str	ategy	204	.155		107	-2.123	.050		
im	plementation	angy	.833	.177		.490	4.716	.000		
a. Der	pendent Varia	ble: Resources	and cap	ability adv	antag	jes				

The results in Table 5.9 indicate that strategic planning dimensions have a fairly strong positive influence on resources and capability advantages (R = 0.513). The strategic planning dimensions explained 26.3% ( $R^2 = 0.263$ ) of the variability in resources and capability advantages. The remaining 73.7% was explained by other factors not considered in this model. The overall model showed a statistically significant influence of strategic planning dimensions on resources and capability advantages with a p-value of 0.000 (F = 14.061).

The results in Table 5.9 also indicate that two strategic planning dimensions had positive contribution to a unit change in resources and capability advantages while one dimension had a negative contribution. The positive contributions were from the strategic planning process dimension with a beta value of 0.112 and planning for strategy implementation with a beta value of 0.490. The negative contribution was from strategy formulation with a beta value of -0.187.

The results in Table 5.9 further indicate statistically significant results from two dimensions, strategy formulation with a p-value of 0.036 (t-value = -2.125) and planning for strategy implementation with a p-value of 0.000 (t-value = 4.716). The strategic planning process dimension had results which were not statistically significant with a p-value of 0.273 (t-value = 1.101). This implies that strategy formulation and preparing for strategy implementation are to be taken seriously by firms, which are pursuing competitive advantage in the area of resources and capabilities. The model of strategic planning and resources and capabilities advantages is shown below:

	RCA	=	1.087 + 0.112 SPP - 0.187 SF + 0.490 PIEC
Where:	RCA	=	Resources and Capabilities Advantages
	SPP	=	Strategic Planning Process
	SF	=	Strategy Formulation
	PIEC	=	Planning for Implementation, Evaluation and Control

Table 5.10 below represents the regression results of the composite influence of strategic planning on resources and capability advantages.

Table 5. 10: Composite influence of Strategic Planning on Resources andCapability Advantage

Model S	Summary									
Model	D	D	Squara	Adjust	ad D Sa	11050	Std Error	of the Ea	timata	
1	2508	Г		Aujust	eu K Sy		of the Ls	42020		
	.358"		.128			.121			.42038	
a. Predic	ctors: (Cons	stant),	Strategic	planning						
ANOVA	ANOVA <sup>a</sup>									
Model			Sum o	f Squares	df	Me	ean Square	F	Sig.	
1	Regression			3.122	1		3.122	17.667	.000 <sup>b</sup>	
	Residual			21.207	120		.177			
	Total			24.329	121					
a. Deper	ndent Varia	ble: R	esources	and capab	ility adv	antag	ge	1		
b. Predie	ctors: (Cons	stant),	Strategic	planning			-			
	X			<u> </u>						
Coeffici	ients <sup>a</sup>									
				Unstand	ardized	S	Standardized			
				Coeffi	cients	(	Coefficients			
					Sto	d.				
Model				В	Erro	or	Beta	t	Sig.	
1 (Constant)				1.172	.72	27		1.612	.110	
	Strategic p	olannii	ng	.707	.16	8	.358	4.203	.000	
a. Deper	ndent Varia	ble: R	esources	and capab	ilities ac	lvant	age			

The results in Table 5.10 show that composite strategic planning has a weak but positive influence on resources and capabilities advantage (R = 0.358). The coefficient of determination at 0.128 indicates that up-to 12.8% of resources and capability advantages are explained by strategic planning with other factors not in the model explaining 87.2%.

The composite ANOVA model had a p-value of 0.000 (F = 17.667), and therefore, there is a statistically significant influence of strategic planning on resources and capability advantages. The results also indicate that strategic planning had a positive contribution with a beta value of 0.358 to a unit change in resources and capability advantages. In addition, the results indicate statistically significant results with a p-value of 0.000 (t-value = 4,203) for strategic planning on resources and capability advantage. The model for the composite strategic planning and resources and capability advantage is shown below:

RCA = 1.172 + 0.358 SPWhere: RCA = Resources and Capability Advantage SP = Strategic Planning

### 5.2.6 Strategic Planning and Financial Performance Advantages

The regression results in Table 5.11 indicate the influence of the strategic planning dimensions on financial performance.

Table	5.	11:	Influence	of	Strategic	Planning	dimensions	on	Financial
Perior	man	ice A	uvantage						

M	odel S	ummary							
Mo	odel	R	R	Square Square	Adjusted R	Square 8	Std. E	Error of the	e Estimate
1		.494ª		.244			.34245		
<b>a.</b> ]	Predic	tors: (Constant	), Strategic	planning	process, str	ategy forr	nulatio	n, planning	g for
im	pleme	ntation							
AN	NOVA	a							
Mo	odel		Sum of	Squares	df	Mean S	Square	F	Sig.
1	]	Regression		4.477	3		1.492	12.727	.000 <sup>b</sup>
	I	Residual		13.838	118		.117		
		Гotal		18.315	121				
<b>a.</b> ]	Depen	dent Variable:	Financial I	Performan	ce advantag	e			-
b.	Predic	tors: (Constant	), Strategic	planning	process, str	ategy form	nulatio	n, plannin	g for
im	pleme	ntation							
Co	oefficio	ents <sup>a</sup>							
				Unsta	ndardized	Standar	rdized		
				Coef	fficients	Coeffic	cients		
					Std.				
Mo	odel			E	Error		Beta	t	Sig.
1	(Con	stant)		1.972	.594			3.318	.001
Strategic planning process			.152	.139		.113	1.091	.277	
Strategy formulation				310	.117		236	-2.643	.009
Planning for implementation.697.155.4734.493									.000
a. ]	Depen	dent Variable:	Financial p	performan	ce advantag	e			

The results in Table 5.11 indicate that the strategic planning dimensions have a moderately weak but positive influence on financial performance advantage (R = 0.494). The coefficient of determination ( $R^2$ ) was 0.244 and this shows that the dimensions of strategic planning explained 24.4% of the variation of financial performance advantage. The remaining 75.6% was explained by other factors not considered in this model.

The overall model revealed a statistically significant position with a p-value of 0.000 (F = 12.727). This indicates that strategic planning has a significant influence on financial performance. The results reveal further that two strategic planning dimensions had positive contribution to a unit in financial performance while one dimension had a negative contribution. The positive contributions were from the strategic planning process dimension ( $\beta = 0.113$ ) and the planning for implementation dimension ( $\beta = 0.473$ ). The negative contribution was from the strategy formulation dimension with a beta value of -0.236.

The results in Table 5.11 indicate statistically significant results on two dimensions. The first dimension with statistically significant results was planning for strategy formulation with a p-value of 0.009 (t-value = -2.643) while the other dimension was planning for implementation with a p-value of 0.000 (t-value = 4.493). This implies that strategy formulation and planning for strategy implementation are important and have to be taken seriously by firms if they want to achieve high financial performance. The model of strategic planning and financial performance is shown below:

	FPA	=	1.972 + 0.113 SPP - 0.236 SF + 0.473 PIEC
Where:	FPA	=	Financial Performance Advantages
	SPP	=	Strategic Planning Process
	SF	=	Strategy Formulation
	PIEC	=	Planning for Implementation, Evaluation and Control

The regression results in Table 5.12 indicate the composite influence of the strategic planning on financial performance.

Auvan	llage							
Mode	el Summary							
				Adjuste	ed R	S	Std. Error	of the
Mode	el I	R	R Square Squa			are E		
1	.307	va	.094		.087			37176
a. Pre	a. Predictors: (Constant), Strategic Planning							
ANO	VA <sup>a</sup>							
Mode	el	Sum	of Squares	df	Mean	Square	F	Sig.
1	Regression		1.730	1		1.730	12.520	.001 <sup>b</sup>
	Residual		16.585	120		.138		
	Total		18.315	121				
a. De	pendent Variable:	Financia	l Performanc	e		1		
b. Pre	edictors: (Constant)	), Strateg	gic Planning					
Coeff	ficients <sup>a</sup>							
			Unstand Coeff	lardized icients	Star Coe	Standardized Coefficients		
Model			В	Std. Error		Beta	t	Sig.
1	(Constant)		2.038	.643			3.170	.002
	Strategic plannin	g	.526	.149		.307	3.538	.001
a. De	pendent Variable:	Financia	1 performanc	e				

Table 5. 12: Composite influence of Strategic Planning on Financial PerformanceAdvantage

The regression results in Table 5.12 on the composite influence of strategic planning on financial performance indicate a moderately weak positive relationship (R =0.307). From the coefficient of determination ( $R^2 = 0.094$ ), it is evident that composite strategic planning explained 9.4% of financial performance. Other variables in the firms, which are not in this model, explained the remaining 90.6%. There is therefore a weak influence of strategic planning on firm performance advantages.

The overall ANOVA model had a p-value of 0.001 (F = 12.520) and therefore the results reveal a statistically significant model. This indicates that strategic planning influences financial performance advantages. The results further indicate a positive contribution to a unit change in financial performance advantages with a beta value of 0.307. Apart from this positive contribution, Table 5.10 indicates statistically significant results for the composite influence of strategic planning on financial performance advantage with a p-value of 0.001 (t-value =3.538). The model for the composite influence of strategic planning on financial performance advantage is shown below:

FPA = 2.038 + 0.307 SPWhere: FPA = Financial Performance Advantage SP = Strategic Planning

Table 5.13 shows the summarized results of the effect of strategic planning on Porter dimensions and then on the three dimensions of competitive advantage including Michael Porter (1985, 1993) advantages (cost, differentiation and focus), resources, capability advantages, and financial performance advantages.

	Variables	Summai	Summary model		ANOVA		Coefficients		
No	Test	R	<b>R</b> <sup>2</sup>	F	Sig F	Constant	Beta	t	Sig-p
1	SP influence on cost advantages (Table 5.2)	0.476	0.227	35.155	0.000	1.585	0.476	5.929	0.000
2	SP influence on differentiation advantage(Table 5.4)	0.360	0.130	17.854	0.000	2.190	0.360	4.225	0.000
3	SP influence on focus advantages (Table 5.6)	0.458	0.210	31.903	0.000	0.733	0.458	5.648	0.000
4	SP influence on Porter based advantages (Table 5.8)	0.503	0.253	40.619	0.000	1.503	0.503	6.373	0.000
5	SP influence on resources and capability advantages (Table 5.10)	0.358	0.128	17.667	0.000	1.172	0.358	4.203	0.000
6	SP influence on financial performance advantages (Table 5.12)	0.307	0.094	12.520	0.001	2.038	0.307	3.538	0.001
Predi	ctor: SP – Strategic Planning					•			

Table 5.	13:	Summary	of influen	ce of Strateg	ic Planning	on Dimensions	of Com	petitive A	dvantage
					· · ·				

The results in Table 5.13 indicate that the influence of strategic planning is strongest on cost related advantages followed by focus advantages and lastly differentiation advantages. The corresponding  $R^2$  are 0.227, 0.210 and 0.130 on cost, focus and differentiation advantages respectively. The F-values and t-values confirm this pattern that the influence of strategic planning is strongest on cost advantages. However, the influence of strategic planning produced significant results in the three areas. The pvalue under cost advantages was 0.000 (t-value = 5.929), while the p-value under focus advantages was 0.000 (t-value = 5.648). Lastly, the p-value under differentiation advantages was 0.000 (t-value = 4.225).

On the influence of strategic planning on the combined porter advantages, resources and capability advantages and financial performance advantages, Table 5.13 demonstrates that the strongest influence was on Porter based advantages, followed by resources and capability advantages and lastly on financial performance advantages. The coefficient of determination  $R^2$  on porter-based advantages was 0.253, and this was slightly above the influence on cost advantage alone, which was 0.227. The  $R^2$  on resources and capability advantages was 0.128 and it is important to note that this  $R^2$ is lower than that on the three Porter advantages taken singly. The  $R^2$  on financial performance advantages was 0.094. The regression models are fairly well predicted as demonstrated by the ANOVA results.

The results from Table 5.13 were statistically significant for the three dimensions of competitive advantage with the p-value of Porter related advantages being 0.000 (t-value = 6.373), while the p-value under resources and capability advantages was 0.000 (t-value = 4.203) and lastly, the p-value under financial performance advantages was 0.001 (t-value = 3.538).

#### 5.2.7 The influence of Strategic Planning on Competitive Advantage

It is from the overall influence of the composite strategic planning on competitive advantage that will indicate the results of testing the first hypothesis. The regression results in Table 5.14 indicate the overall influence of the dimensions of strategic planning on competitive advantage.

 Table 5. 14: Influence of Strategic Planning Dimensions on overall Competitive

 Advantage

Mode	el Summary										
Mode	el R	R Square	Ad	Adjusted R Square				Std. Error of the Estimate			
1	.599 <sup>a</sup>	.359		5		343				.25	5386
a. Pre	dictors: (Const	ant), Strategi	c plann	ing pro	cess, s	trate	gy fo	rmula	tion, pla	nni	ng
for in	for implementation										
ANO	VA <sup>a</sup>				[						
Model Sum of Sc		quares	df	Mea	n Sq	uare		F		Sig.	
1	Regression		4.262	3		1	.421	22.0	042	.(	$000^{b}$
	Residual		7.604	118			.064				
	Total	1	1.866	121							
a. De	pendent Variab	le: Competit	ive adva	antage							
b. Pre	dictors: (Const	ant), Strategi	c plann	ing pro	cess, s	strate	gy fo	rmula	tion, pla	nni	ng
for in	plementation										
Coeff	ficients <sup>a</sup>								[		
			Unst	andard	ized	Sta	ndard	ized			
				erncier			errici	ents			~.
Mode			В	Std.	Error		-	Beta		,	Sig.
1	(Constant)		1.467		.441				3.330	) .	.001
	Strategic plann	ing process	.127		.103			.117	1.230	) .	.221
	Strategy formu	lation	150		.087		-	.142	-1.723		.088
	Planning for										
	implementation	n	.675		.115			.568	5.863		.000
a. De	pendent Variab	le: Competit	ive adva	intage							

The results in Table 5.14 indicate that the strategic planning dimensions have a moderately strong and positive influence on competitive advantage (R = 0.599). The coefficient of determination represented by  $R^2$  was 0.359 and this indicates that the dimensions of strategic planning explained 35.9% of the variation in competitive advantage. The remaining 64.1% can be explained by other factors not considered in this model.

The overall (ANOVA) model had a p-value of 0.000 (F = 22.042) and these results reveal a statistically significant model indicating that strategic planning influences competitive advantage. The results further show that two strategic planning dimensions had a positive contribution to a unit change in competitive advantage while one dimension had a negative contribution. The positive contributions were from the strategic planning process dimension (0.117) and planning for strategy implementation (0.568). On the other hand, the negative contribution was from the strategy formulation dimension (-0.142).

The results in Table 5.14 further indicate statistically significant results on the planning for strategy implementation dimension (p-value = 0.000, t-value = 5.863). The other two dimensions had statistically no significant results. On the strategic planning process dimension, the p-value was 0.221 (t-value = 1.230), while on the strategy formulation dimension, the p-value was 0.088 (t-value = -1.723). The model of the strategic planning dimensions and competitive advantage is shown below:

	$CA^1$	=	1.467 + 0.117 SPP $- 0.142$ SF $+ 0.568$ PIEC
Where:	$CA^1$	=	Overall Competitive Advantage
	1.467	=	Constant (intercept)
	SPP	=	Strategic Planning Process
	SF	=	Strategy Formulation
	PIEC	=	Planning for Implementation, Evaluation and Control

The regression results in Table 5.15 indicate the overall (composite) influence of strategic planning on the overall competitive advantage.

Table 5. 15:	Composite influence of S	Strategic Planning on	<b>Overall Competitive</b>
Advantage			

Mode	Model Summary									
		<b>D</b> 0						•		
Model	R	R Squa	are Ad	Justed R S	quare	e Std. Erro	r of the E	stimate		
1	.462ª	.2	13		.207	1		.27895		
a. Prec	a. Predictors: (Constant), Strategic planning									
ANOV	VA <sup>a</sup>									
		a		10		G	Б	<i>a</i> .		
Model		Sum of S	quares	df	Me	ean Square	F	<u>S1g.</u>		
1	Regression		2.528	1		2.528	32.490	.000 <sup>b</sup>		
	Residual		9.338	120		.078				
	Total		11.866	121						
a. Dep	endent Varial	ole: Compe	titive adv	antage						
b. Prec	dictors: (Cons	tant), Strate	egic plan	ning						
				-						
Coeffi	cients <sup>a</sup>									
			Unsta	andardized	S	Standardized	1			
			Coe	efficients		Coefficients				
Model			В	Std. En	or	Beta	a t	Sig.		
	(Constant)		1.543	.4	82		3.200	.002		
1	Strategic pla	nning	.636	.1	12	.462	2 5.700	.000		
a. Dep	endent Variat	ole: Compe	titive adv	antage	I		L	1		

The results in Table 5.15 indicate that strategic planning has a moderately weak but positive influence on competitive advantage (R = 0.462). The coefficient of determination was 0.213 and this is an indication that strategic planning explained 21.3% of the variation in competitive advantage. The remaining 78.7% is to be explained by other factors not considered in this model.

The overall (ANOVA) model had a p-value which was less than 0.05 (p-value = 0.000, F = 32.490), and the results reveal a statistically significant model which implies that strategic planning significantly influences competitive advantage. The results also indicate that strategic planning had a positive contribution with a beta value of 0.462 to a unit change in competitive advantage from the standardized coefficients. The results further indicate statistically significant results with a p-value of 0.000 (t-value = 5.700) for strategic planning on competitive advantage. These results confirm hypothesis **H**<sub>1</sub> and lead to the conclusion that strategic planning has a significant influence on competitive advantage. The overall model for the composite strategic planning and competitive advantage is shown below:

	$CA^1 =$	$1.543 + 0.462 \text{ SP}^1$
Where:	$CA^1 =$	Overall Competitive Advantage
	1.543 =	Constant (Intercept)
	$SP^1 =$	Composite Index for Strategic Planning

#### 5.3 Strategic Planning, Employee Behaviour and Competitive Advantage

The second objective was to determine the influence of employee behaviour on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. The objective corresponds with the second hypothesis stated as:

 $H_2$  – Employee behaviour significantly influences the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.

To test this hypothesis and be able to achieve the objectives of the study, strategic planning (SP) was operationalized through the dimensions of the strategic planning process, strategy formulation and planning for strategy implementation, evaluation and control. Employee behaviour (EB) was operationalized through two main dimensions that is; strategically aligned behaviour and commitment.

The commitment dimension was further operationalized along the dimensions of affective, continuance and normative commitments. On its part, competitive advantage (CA) was operationalized along the dimensions of cost advantages, differentiation advantages, focus advantages, resources and capability advantages and financial performance advantages. The direct relationship between strategic planning and competitive advantage has been tested in section 5.2 and a significant influence established. Testing for the mediating influence of employee behaviour on the relationship between strategic planning and competitive advantage was made possible through the use of path analysis and hierarchical regression analysis.

The predictor variable (strategic planning) was regressed on the dependent variable (competitive advantage) using the third mediator variable (employee behaviour). This implies that instead of X (SP) causing Y (CA) directly, X (SP) is causing the mediator M (EB), and in turn, M (EB) is causing Y (CA). The relationship between the independent, mediator and the dependent variables are depicted in the form of a path diagram in figure 5.1 below:



Figure 5. 1: Path Diagram for Mediating (Intervening) Influence

**Source:** Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and Interpreting Interaction*. Thousand Oaks, CA: Sage.

According to Baron & Kenny (1986, p. 1177), "the four steps in the mediation process are when the independent variable predicts the dependent variable, when the independent variable predicts the mediating variable, when the mediating variable predicts the dependent variable and finally when the independent and mediating variables both predict the dependent variable." In statistical terms, the four steps are shown below:

Step 1: CA=
$$\beta_0 + \beta_1$$
SP + $\mathcal{E}$   
Step 2: EB= $\beta_0 + \beta_1$ SP+ $\mathcal{E}$   
Step 3: CA=  $\beta_0 + \beta_1$ EB+ $\mathcal{E}$   
Step 4: CA= $\beta_0 + \beta_1$ SP+ $\beta_2$ EB+ $\mathcal{E}$ 

The results from testing of data will be presented on a step-by-step basis, and then the overall results of the test of the second hypothesis will be presented after the results of step 4.

The overall results of the influence of strategic planning were given in Table 5.15 and it was confirmed that strategic planning has a significant influence on competitive advantage. The ANOVA model had a p-value of 0.000 (F = 32.490) and therefore it was strong and statistically significant. Furthermore, the results were statistically significant with a p-value of 0.000 (t-value = 5.700). The overall model for the composite strategic planning and competitive advantage is repeated below:

	$CA^1 =$	$1.543 + 0.462 \text{ SP}^1$
Where:	$CA^1 =$	Overall Competitive Advantage
	1.543 =	Constant (Intercept)
	$SP^1 =$	Composite Index for Strategic Planning

The second step in the mediation process is where the composite strategic planning is used to predict the mediator variable. The results of the regression model showing the influence of strategic planning on employee behaviour is shown in Table 5.16 below. The results of the model summary indicate that  $R^2$  was 0.203, which implies that 20.3% variation in employee behaviour can be explained by strategic planning. The remaining 79.7% is to be explained by factors not considered in this model. The overall ANOVA model had a p-value of 0.000 (F = 30.655) and this indicates that the regression model significantly predicts the mediating variable, employee behaviour. The results also show that strategic planning had a positive contribution of 0.451 to a unit change in employee behaviour from a standardized coefficient perspective.

Model Si	ummarv									
					Δ	diusted <b>P</b>		Std Erro	or of the	
Model		R	R So	uare	Л	Square		Stu. Error of the		
1	.45	51 <sup>a</sup>	11.54	.203		.197			.30053	
a. Predict	tors: (Constant). S	Strate	gic plan	ning		,				
	(00101(0001000000), 1		8-• p	8						
ANOVA	a									
			Sum of			Me	an			
Model			Squares		df	Squa	are	F	Sig.	
1	Regression		2.769		1	2.7	2.769		.000 <sup>b</sup>	
	Residual		10.838		120	.0	90			
	Total		13.607		121					
a. Depen	dent Variable: En	nploy	vee behav	viour						
b. Predic	tors: (Constant), S	Strate	egic Plan	ning						
Coefficie	ents <sup>a</sup>									
		Unsta Coe	ndard fficier	ized nts	Standardized Coefficients					
Model		В	Std.	Error	Beta		t	Sig.		
1	(Constant)		1.412		.520			2.717	.008	
	Strategic planni	ng	.665		.120		.451	5.537	.000	
a. Depen	dent Variable: En	nploy	vee behav	viour		1		•		

Table 5. 16: Influence of Strategic Planning on Employee Behaviour

Source: Research Data (2018)

From the coefficients section in Table 5.16, the results indicate statistically significant results with a p-value of 0.000 (t-value = 5.537) for strategic planning on employee behaviour. The overall model for the composite strategic planning influence on employee behaviour is shown below.

	$\mathbf{EB}^{1}$	=	$1.412 + 0.451 \text{ SP}^1$
Where:	$\mathbf{EB}^1$	=	Overall Employee Behaviour
	1.412	=	Constant (Intercept)
	$\mathbf{SP}^1$	=	Composite Index for Strategic Planning

The third step in the mediation process is where the composite employee behaviour is used to predict the outcome variable, competitive advantage. Before the overall composite influence of employee behaviour is tested on competitive advantage, three more related steps are done. The first one is testing the influence of the composite employee behaviour on Porter related advantages (Table 5.17). The Porter related advantages cover cost advantage, differentiation advantage and focus advantage. The second step is on testing the influence of the composite employee behaviour on resources and capabilities advantages (Table 5.18), and the third one is testing the influence of the composite employee behaviour on financial performance advantages (Table 5.19). The next Table (5.20), contains summarized results of the influence of strategically aligned behaviour and commitment on the dimensions of competitive advantage.

The fourth step is on testing the influence of the dimensions of employee behaviour on competitive advantage given in Table 5.21. The dimensions of employee behaviour include strategically aligned behaviour, affective commitment, continuance commitment and normative commitment. The fifth and last step is on testing the influence of the dimension of strategically aligned behaviour and the composite results under the commitment dimension on competitive advantage given in Table 5.22.

 Table 5. 17: Influence of Strategically Aligned Behaviour and Commitment on

 Michael Porter related Advantages

Mo	del S	Summary								
Mo	del	R	R Square	Ad	justed R S	Square	Std. Er	rror of the I	Estimate	
1		.847 <sup>a</sup>	.718			.713		.15716		
a. P	a. Predictors: (Constant), Strategically Aligned Behaviour, Commitment									
AN	OVA	<b>A</b> a								
Mo	del		Sum of Sq	Sum of Squares		Mean	Square	F	Sig.	
1	I	Regression		7.472	2		3.736	151.261	.000 <sup>b</sup>	
	I	Residual		2.939	119		.025			
	·	Fotal	1	0.411	121					
a. E	Deper	ndent Varia	ble: Michael	Porter	related A	dvantag	ges (Cost,	Differenti	ation	
and	Foc	us)				-				
b. F	redi	ctors: (Con	stant), Strateg	gically	Aligned H	Behavio	ur, Comr	nitment		
Co	effici	ents <sup>a</sup>								
			Unsta	ndardi	zed	Stand	ardized			
			Coe	fficien	ts	Coeff	ficients			
Mo	del		H	3 S	td. Error		Beta	t	Sig.	
1	(Co	onstant)	1.22	6	.199			6.153	.000	
	SA	В	.28	1	.080		.297	3.503	.001	
	Coi	nmitment	.43	8	.063		.587	6.919	.000	
a. E	Deper	ndent Varia	ble: Michael	Porter	related A	dvantag	ges (Cost,	Differenti	ation	
and	Foc	us)				-				

**Source:** Research Data (2018)

The results in Table 5.17 indicate that strategically aligned behaviour and commitment have a strong and positive influence on Michael Porter related advantages (R = 0.847). The coefficient of determination ( $R^2$ ) was 0.718 and this implies that 71.8% of the variation in the Porter related advantages can be explained by the two broad dimensions of employee behaviour, that is, strategically aligned behaviour and commitment. This leaves only 28.2% of the variation in the Porter related advantages to be explained by other factors not considered in this model.

Table 5.17 further indicates that the regression model predicts the dependent variable significantly well. This is because from the ANOVA model, the p-value is 0.000 (F = 151.261). The F-distribution value at 151.261 is quite large and this emphasizes how strong the prediction model is. From the coefficients section of Table 5.17, it is evident that both strategically aligned behaviour (SAB) and commitment had positive contributions to a unit change in the Porter related advantages. The beta ( $\beta$ ) values were 0.297 and 0.587 respectively.

Finally, from the coefficients section, the results indicated are statistically significant for both SAB and commitment. Strategically aligned behaviour had a p-value of 0.001 (t-value = 3.503) while commitment had a p-value of 0.000 (t-value = 6.919). The overall model for the influence of strategically aligned behaviour and commitment on Porter related advantages is given below:

	$PCA^1 =$	1.226 + 0.297 SAB $+ 0.587$ C <sup>1</sup>
Where:	$PCA^1 =$	Composite Michael Porter related Advantages
	1.226 =	Constant (Intercept)
	SAB =	Strategically Aligned Behaviour
	$C^1$ =	Composite Index for Commitment

The next section deals with the influence of the dimensions of employee behaviour, that is, strategically aligned behaviour and commitment on resources and capability advantages. Therefore, the regression results in Table 5.18 show the influence of strategically aligned behaviour and commitment on resources and capability advantages.

Table 5. 18: Influence of Strategically	Aligned	Behaviour	and	Commitment	on
<b>Resources and Capability Advantages</b>					

Mode	el Summarv							
Mode	l R	R Squar	e Ad	ljusted R S	Square	Std. Er	ror of the	Estimate
1	.805 <sup>a</sup>	.64	7	5	.642			.26845
a. Pre	dictors: (Const	ant), Strate	egically A	Aligned B	ehaviou	ır, Comm	itment	
ANO	VA <sup>a</sup>							
Mode	1	Sum of	f Squares	df	Mean	Square	F	Sig.
1	Regression		15.753	3 2		7.876	109.292	.000 <sup>b</sup>
	Residual		8.576	5 119		.072		
	Total		24.329	) 121				
a. Dep	pendent Variab	le: Resour	ces and (	Capability	Advan	tages		
b. Pre	dictors: (Const	ant), Strate	egically A	Aligned B	ehavio	ur, Comm	nitment	
Coeff	icients <sup>a</sup>							
			Unstandardized			indardize	d	
101			Coet	ficients	Co	befficient:	S	a.
Mode			В	Std. Erro	or	Bet	ta t	Sig.
1	(Constant)		.209		0		.615	.539
	SAB		.062		37	7 .043		.653
	Commitment		.878	.10	)8	.76	8.119	.000
a. Dep	pendent Variab	le: Resour	ces and (	Capability	Advan	tages		

**Source:** Research Data (2018)

The results in Table 5.18 indicate that  $R^2$  was 0.647 indicating that 64.7% of the variation in resources and capability advantages can be explained by strategically aligned behaviour and commitment variables. This leaves only 35.3% to be explained by other factors not included in the model.

The ANOVA model had a p-value of 0.000 (F = 109.292) and these results reveal quite a high statistically significant model. This indicates that that the two dimensions of strategically aligned behaviour and commitment influence resources and capability advantaged to quite a large extent.

From the coefficients section, it is evident that the two dimensions had a positive contribution to a unit change in resources and capability advantages, with strategically aligned behaviour contributing 0.043 while commitment contributed 0.769. The results in Table 5.18 further indicate statistically significant results on the commitment dimension with a p-value of 0.000 (t-value = 8.119). On the other hand, statistically non-significant results were recorded under the strategically aligned behaviour dimension with a p-value of 0.653 (t-value = 0.451). The model on the influence of strategically aligned behaviour and commitment on resources and capability advantages is given below:

$$RCA = 0.209 + 0.043SAB + 0.769C^{1}$$
Where:  

$$RCA = Resources and Capability related Advantages$$

$$0.209 = Constant (Intercept)$$

$$SAB = Strategically Aligned Behaviour$$

$$C^{1} = Composite Index for Commitment$$

In the next section, the influence of the two broad dimensions of employee behaviour on financial performance advantages is demonstrated. The two dimensions of employee behaviour include strategically aligned behaviour and commitment. In this regard therefore, the regression analysis in Table 5.19 shows the influence of these two dimensions on financial performance advantages.

## Table 5. 19: Influence of Strategically Aligned Behaviour and Commitment on Financial Performance Advantages

Mod	lel Summary								
Mod	lel	R	R Square	A	djusted R So	quare	Std. Error	of the Es	timate
1	.66	55 <sup>a</sup>	.442			.433		.29306	
a. Pr	a. Predictors: (Constant), Strategically Aligned Behaviour, Commitment								
ANG	OVA <sup>a</sup>								
Mod	lel	S	um of Squa	res	df	Mea	an Square	F	Sig.
1	Regression		8.0	95	2		4.047	47.124	.000 <sup>b</sup>
	Residual		10.2	21	119		.086		
	Total		18.315		121				
a. De	ependent Varial	ole: l	Financial per	rfor	mance relate	ed Adv	vantages		1
b. Pı	redictors: (Cons	tant)	), Strategical	ly A	Aligned Beh	aviour	, Commitm	ent	
Coe	fficients <sup>a</sup>								
						St	andardized		
		Uı	nstandardize	d C	oefficients	0	Coefficients		
Mod	lel		В		Std. Error		Beta	t	Sig.
1	(Constant)		1.195		.371			3.217	.002
	SAB		.217		.150		.173	1.452	.149
	Commitment		.511		.118		.516	4.325	.000
a. De	ependent Varial	ole: l	Financial Per	rfor	mance relate	ed Ad	vantages		·

Source: Research Data (2018)

The results in Table 5.19 indicate that the coefficient of determination  $R^2$  was 0.442. this means that 44.2% variation in financial performance related advantages can be explained by the two dimensions of employee behaviour, that is strategically aligned behaviour and commitment. This implies that 55.8% of financial performance related advantages can be explained by other factors not considered in this model. Table 5.19 further indicates that the regression model predicts the dependent variable, financial performance significantly well. From the ANOVA model, the p-value is 0.000 (F = 47.124). From the coefficients section, it is evident that the two variables that is, strategically aligned behaviour and commitment had positive contributions to a unit of financial performance advantages. The positive contributions were 0.173 and 0.516 for strategically aligned behaviour and commitment respectively.

Finally, from Table 5.19, it is evident that the results from the commitment dimension are significant, with a p-value of 0.000 (t-value = 4.325). On the other hand, the results from strategically aligned behaviour are not statistically significant. The pvalue is 0.149 (t-value = 1.452). This p-value for strategically aligned behaviour is greater than  $p \le 0.05$ . The model showing the influence of strategically aligned behaviour and commitment on financial performance advantages is shown below:

	FPA =	1.195 + 0.173SAB $+ 0.516$ C <sup>1</sup>
Where:	FPA =	Financial Performance related Advantages
	1.195 =	Constant (Intercept)
	SAB =	Strategically Aligned Behaviour
	$C^1$ =	Composite Index for Commitment

Table 5.20 shows the summarized results of the influence of strategically aligned behaviour and commitment on the three dimensions of competitive advantage including the Michael Porter (1985, 1993) advantages (cost, differentiation and focus), resources and capability advantages and financial performance advantages.

Table 5	. 20: Summary of influ	ence of Strategica	ally Aligned Behaviou	r and Commitment on Dimensions of Competitive				
Advant	Advantage							

		Sum	mary							
	Description	mo	del	ANC	OVA		(	Coefficients		
No	Test	R	<b>R</b> <sup>2</sup>	F	Sig F	Constant		Beta	t	Sig –p
	Influence of SAB & commitment on					_	SAB	0.297	3.503	0.001
1	Michael Porter	0.847	0.718	151.261	0.000	1.226				
	related advantages (Table 5.17)						C	0.587	6.919	0.000
	Influence of SAB and commitment on Resources and						SAB	0.043	0.451	0.653
2	Capability advantages (Table	0.805	0.647	109.292	0.000	0.209	C	0.769	8 110	0.000
	Influence of SAB and						C	0.707	0.117	0.000
	commitment on					_	SAB	0.173	1.452	0.149
3	Performance related	0.665	0.442	47.124	0.000	1.195				
	advantages (Table 5.19)						C	0.516	4.325	0.000
	SAB – Strategically Al	igned Bel	naviour							
	C – Commitment									

The results in Table 5.20 show that the influence of strategically aligned behaviour and commitment is strongest on the Porter related advantages. The  $R^2$  under Porter related advantages is 0.718, while that under resources and capability advantages is second strongest at 0.647 and the least in strength is under financial performance advantages at 0.442.

The strength of the regression model is also highest under the Porter related advantages with an F value of 151.261, followed by resources and capability advantages with an F value of 109.292 and then last is the financial related advantages with an F value of 47.124. The beta values, showing the contribution per variable to a unit of the dependent variable have revealed a mixed pattern although they are all positive. Finally, it is only under the porter related advantages where the two variables have turned out statistically significant results, with strategically aligned behaviour having a p-value of 0.001 while commitment had a p-value of 0.000. For the other two advantages, that is, resources and capability advantages and financial performance advantages, strategically aligned behaviour dimension returned statistically non-significant results.

Overall, from the results in Table 5.20, the commitment dimension, which covers affective, continuance and normative commitments, has a stronger influence on the competitive advantages dimensions than strategically aligned behaviour. The influence of the individual indicators of employee behaviour (including strategically aligned behaviour, affective commitment, continuance commitment and normative commitment) on the composite competitive advantage is shown in Table 5.21.

Table 5. 21:	Influence	of	Dimensions	of	Employee	Behaviour	on	Competitive
Advantage								

Мо	del S	Summary									
Mo	del	R	R Square	Ad	ius	ted R S	quare	Std. En	ror of	the Es	timate
1		.873 <sup>a</sup>	.763	`	,		.755	5			15506
a. P con	redic nmiti	ctors: (Const nent, contin	ant), Strate	gically al nitment,	ligı no	ned beh rmative	naviou e com	ır (SAB), a mitment	affect	ive	
AN	ANOVA <sup>a</sup>										
Mo	del		Sum of S	Squares		df	Mea	an Square		F	Sig.
1		Regression		9.053				2.263	94	.124	.000 <sup>b</sup>
		Residual		2.813				.024			
		Total		11.866		121					
a. D	a. Dependent Variable: Competitive advantage										
b. P con	Predio tinua	ctors: (Const ance commit	ant), Strate ment, norm	gically a ative con	lig nn	ned beł nitment	naviou	ır, affectiv	e con	nmitme	ent,
Coe	efficie	ents <sup>a</sup>		1							
				Unst Co	tano eff	dardizec icients	1	Standardi Coefficie	zed ents		
Mod	del				В	Std. E	Error		Beta	t	Sig.
1	(Co	nstant)		1.17	77		.215			5.477	.000
	SAI	3		.24	19		.080		.247	3.095	.002
	Affe	ective commi	tment	nent .08			.064		.086	1.252	.213
	Con	tinuance com	mitment	.15	51		.061		.215	2.483	.014
	Nor	mative comm	itment	.24	18		.054		.411	4.628	.000
a. D	Deper	ndent Variab	le: Compet	itive Adv	van	itage				•	•

Source: Research Data (2018)

The results in Table 5.21 indicate that the employee behaviour dimensions have a strong and positive influence on competitive advantage (R = 0.873). The coefficient of determination represented by  $R^2$  was 0.763 implying that the dimensions of employee behaviour explained 76.3% of the variation in competitive advantage. The remaining 23.7% is to be explained by other factors not considered in this model.

The overall ANOVA model predicted the depended variable significantly well. This model had a p-value of 0.000 and an F-value of 94.124. These results reveal a statistically significant model indicating that employee behaviour influences competitive advantage. The results further show that all the four employee behaviour dimensions had a positive contribution to a unit change in competitive advantage. Strategically aligned behaviour contributed 0.247, affective commitment 0.086, continuous commitment 0.215 while normative commitment contributed 0.411 to a unit change in competitive advantage.

From the coefficients section, Table 5.21 indicates statistically significant results on three out of the four employee behaviour dimensions. On the strategically aligned behaviour dimension, the p-value was 0.002 (t-value = 3.095), continuance commitment had a p-value of 0.014 (t-value = 2.483) while normative commitment had a p-value of 0.000 (t-value = 4.628). Affective commitment exhibited results that were not statistically significant with a p-value of 0.213 (t-value = 1.252). The model for the dimensions of employee behaviour and competitive advantage is shown below:

$$CA^{1} = 1.177 + 0.247SAB + 0.086AC + 0.215CC + 0.411NC$$

Where:	$CA^1$	=	Overall Competitive Advantage
	1.177	=	Constant (intercept)
	SAB	=	Strategically Aligned Behaviour
	AC	=	Affective Commitment
	CC	=	Continuance Commitment
	NC	=	Normative Commitment

The results in Table 5.22 show the influence of strategically aligned behaviour and

overall (composite) commitment on competitive advantage.

Table 5. 22: Influence of Strategically Aligned Behaviour (SAB) andCommitment on Competitive Advantage

Mode	el Summary								
Mode	l R	R Square	Adju	sted R S	quare	Std. Er	ror	of the I	Estimate
1	.869 <sup>a</sup>	.756				.15601			.15601
a. Pre	dictors: (Consta	ant), Strategio	cally ali	gned bel	haviou	r, commit	me	ent	
ANO	VA <sup>a</sup>			-					
Mode	1	Sum of S	Sum of Squares		Mear	n Square		F	Sig.
1	Regression		2		4.485	18	84.278	.000 <sup>b</sup>	
	Residual		119	.024					
	Total		121						
a. Dep	pendent Variab	le: Competiti	ve adva	ntage					
b. Pre	dictors: (Const	ant), Strategio	cally ali	gned be	haviou	r, commi	tme	ent	
Coeff	icients <sup>a</sup>								
		Unstar	ndardize	ed	Star	dardized			
		Coef	ficients		Coe	efficients			
Mode	1	-	B Sto	l. Error		Be	ta	t	Sig.
1	(Constant)	1.01	6	.198				5.140	.000
	SAB	.224		.080	.222		22	2.818	.006
	Commitment	.54	.063		.67	8	8.601	.000	
a. Dep	pendent Variab	le: Competiti	ve Adv	antage					

Source: Research Data (2018)

The results in Table 5.22 show that the two dimensions, that is, strategically aligned behaviour and commitment have a very strong and positive influence on competitive advantage (R = 0.869). The  $R^2$  was 0.756 and this indicates that the dimensions of strategically aligned behaviour and commitment explain 75.6% of the variation in competitive advantage. This leaves only 24.4% to be explained by other factors not in the model.

The ANOVA model had a p-value of 0.000 (F = 184.278) and these results reveal quite a high statistically significant model, which indicates that the two dimensions influence competitive advantage in a big way. From the coefficients section of Table 5.22, it is evident that the two dimensions had a positive contribution to a unit change in competitive advantage, with strategically aligned behaviour contributing 0.222 while commitment contributed 0.678.

The results in Table 5.22 further indicate statistically significant results on the two dimensions, with commitment showing the stronger significance with a p-value of 0.000 (t-value = 8.601) while strategically aligned behaviour had a p-value of 0.006 (t-value = 2.818). Although the two dimensions have to be embraced in order for firms to attain competitive advantage, commitment will give better results. The model of the employee behaviour dimensions and competitive advantage is shown below:

	$CA^1 =$	$1.016 + 0.222$ SAB $+ 0.678C^{1}$
Where:	$CA^1 =$	Composite Competitive Advantage
	1.016 =	Constant (Intercept)
	SAB =	Strategically Aligned Behaviour
	$C^1$ =	Composite Index Commitment

To predict whether employee behaviour significantly influences competitive advantage, the composite employee behaviour is tested against the composite competitive advantage. The results of the regression analysis showing the composite influence of employee behaviour on competitive advantage is shown in Table 5.23.

Model	Model Summary							
							6.1	
		D G	Ac	ijusted R		Std. Error of the		
Model	R	R Square	•	Square		Estimate		
1	.863 <sup>a</sup>	.745	i	.743			.15884	
a. Predi	ctors: (Constant), E	mployee behav	viour					
ANOV	A <sup>a</sup>						H	
		Sum of		Mean	L			
Model		Squares	df	Square		F	Sig.	
1	Regression	8.838	1	8.838		350.292	.000 <sup>b</sup>	
	Residual	3.028	120	.025				
	Total	11.866	121					
a. Depe	ndent Variable: Cor	npetitive advar	ntage					
b. Predi	ctors: (Constant), E	mployee behav	viour					
Coeffic	ients <sup>a</sup>						1	
				~	_			
		Unstand	lardized	Standardiz	zed			
		Coeffi	cients	Coefficier	nts			
Model	I	В	Std. Error	В	eta	t	Sig.	
1	(Constant)	.835	.185			4.514	.000	
	Employee behaviou	ır .806	.043	.8	363	18.716	.000	
a. Depe	a Dependent Variable: Competitive advantage							

# Table 5. 23: Composite influence of Employee Behaviour on CompetitiveAdvantage

Source: Research Data (2018)

The results from Table 5.23 indicate that the coefficient of determination ( $\mathbb{R}^2$ ) was 0.745. This implies that 74.5% variation in competitive advantage can be explained by employee behaviour. This is a very large percentage of competitive advantage which can be explained by employee behaviour, with only 25.5% of the variation being explained by other factors not considered in this model.

Table 5.23 further indicates that the regression model predicts the dependent variable significantly well. This is because from the ANOVA model, the p-value is 0.000 (F = 350.292). The F-distribution value at 350.292 is very large. From the coefficients section, the results indicate that employee behaviour had a large positive contribution with a beta ( $\beta$ ) value of 0.863 to a unit of competitive advantage. Finally, from the coefficients section, the results indicate statistically significant results with a p-value of 0.000 (t-value = 18.716). The overall model for the composite employee behaviour and competitive advantage is shown below.

	$CA^1 =$	$0.835 + 0.863 \text{ EB}^1$
Where:	$CA^1 =$	Composite Competitive Advantage
	0.835 =	Constant (Intercept)
	$\mathbf{EB}^1$ =	Composite Employee Behaviour

The fourth step in the mediation process is where both independent variable and the mediating variable are used to predict the outcome variable. The regression results in Table 5.24 show the combined influence of strategic planning and employee behaviour on competitive advantage.
# Table 5. 24: Composite influence of Strategic Planning and Employee Behaviour on Competitive Advantage

Model S	Summary								
	D	DC	A 1'	A divista d D. Carrona, Sta				6.1.1	<b>.</b> .
Model	R R	R Square	Adjus	ted R Sc	Juare	Std. Error of the Estimate			
1	.80/"	./51			./4/				.15/45
a. Predic	ctors: (Consta	ant), Strategic	e planning	g, emplo	oyee b	ehaviour	•		
ANOVA	<b>A</b> <sup>a</sup>								
		S	um of			Mean			
Model		So	quares	df		Square		F	Sig.
1	Regression			2		4.458	17	9.839	.000 <sup>b</sup>
	Residual		2.950	119		.025			
	Total 1			121					
a. Deper	ndent Variab	le: Competiti	ve advan	tage					
b. Predie	ctors: (Const	ant), employe	e behavi	our, stra	tegic j	planning			
Coeffici	ents <sup>a</sup>								
			Unstar	ndardized	d Sta	andardize	ed		
			Coef	ficients	C	oefficient	ts		
				Sto	1.				
Model			В	Erro	or	Be	ta		t Sig.
1	(Constant)		.459	.28	0			1.638	3 .104
	Strategic pl	.125	.07	1	.09	91	1.772	.079	
	Employee l	behaviour	.768	.04	8	.82	22	16.053	.000
a. Deper	ndent Variab	le: Competiti	ve advan	tage					

Source: Research Data (2018)

The results from the model summary in Table 5.24 show that  $R^2$  was 0.751. This implies that strategic planning and employee behaviour can explain 75.1% variation in competitive advantage. This is a very large percentage of competitive advantage explained and leaves only 24.9% to be explained by other factors not considered in this model.

From the ANOVA model, the p-value is 0.000 while the F value is 179.839. These parameters indicate that the regression model predicts competitive advantage from strategic planning and employee behaviour very well. From the coefficients section, the results indicate that employee behaviour had a large positive contribution to a unit of competitive advantage with a beta ( $\beta$ ) value of 0.822. Strategic planning had a small positive contribution to a unit of competitive advantage with a beta ( $\beta$ ) value of 0.091. The results in the coefficients section further indicate statistically significant results for the employee behaviour variable with a p-value of 0.000 (t-value = 16.053). The strategic planning variable returned results which were not statistically significant with a p-value of 0.079 (t-value = 1.772). The overall model for the composite strategic planning and employee behaviour influence on competitive advantage is shown below.

	$CA^1$	=	$0.459 + 0.091 \text{ SP}^1 + 0.822 \text{ EB}^1$
Where:	$CA^1$	=	Composite Competitive Advantage
	0.459	=	Constant (Intercept)
	$\mathbf{SP}^1$	=	Composite index in Strategic Planning
	$\mathbf{EB}^1$	=	Composite index in Employee Behaviour

The summarized results of the four mediating steps, that is, strategic planning influences competitive advantage, strategic planning influences employee behaviour, employee behaviour influences competitive advantage and both strategic planning and employee behaviour influence competitive advantage are shown in Table 5.25.

	Variable	Summary model	ANO	VA			Coeffici	ents	
Step	Description	R <sup>2</sup>	F	Sig F	Const	ant	Beta	t-value	Sig-p
	SP predicts CA								
1	(Table 5.15)	0.213	32.49	0.000		1.543	0.462	5.700	0.000
	SP predicts EB								
2	(Table 5.16)	0.203	30.655	0.000		1.412	0.451	5.537	0.000
	EB predicts CA								
3	(Table 5.23)	0.745	350.292	0.000	(	0.835	0.863	18.716	0.000
	SP and EB					SP	0.091	1.772	0.079
4	predict CA	0.751	179.839	0.000	0.459				
	(Table 5.24)					EB	0.822	16.053	0.000
SP - C	Composite index o	f Strategic P	lanning	ı.	ı.	1		11	
EB - 0	Composite index of	of Employee	Behaviou	r					

Table 5. 25: Summary of Combined Mediating effect of Employee Behaviour

Source: Research Data (2018)

CA - Composite index of Competitive Advantage

According to Baron and Kelly (1986, p. 1177), "mediation can take place in three ways. In order to explain the three ways, we will label the variables as follows: X will take the place of the independent variable, M will take the place of the mediating variable while Y, will take the place of the dependent variable. The first rule is on full mediation, and this one takes place when three conditions are met. These conditions are; one, X predicts M, two, X predicts Y and three X no longer predicts Y, but M does when both X and M are used to predict Y."

The second rule is on partial mediation (Baron & Kenny, 1986, p. 1177). "This takes place when three conditions are met and these conditions are: one X predicts M, two, X predicts Y and three, both X and M predict Y, but X has smaller regression coefficient when both X and M are used to predict Y than when X only is used. The third decision rule is no mediation taking place at all. This takes place when three conditions are met. The conditions are: one, X does not predict M, two, M does not predict Y and three, the regression coefficient of X remains the same before and after M is used to predict Y." The results in Table 5.25 indicate that significant results obtained in steps 1, 2 and 3. This means that strategic plan predicts competitive advantage as well as employee behaviour. Besides, employee behaviour predicts competitive advantage and in a very big way as demonstrated by the parameters in Table 5.23 ( $R^2 = 0.745$ , F = 350.292, sig F = 0.000, constant = 0.835, beta = 0.863, t-value = 18.716 and sig t = 0.000). On step 4, the last condition is determined by the parameters under the coefficients. It is evident that strategic planning is not statistically significant with a p-value of 0.079 (t-value = 1.772) while employee behaviour with a p-value of 0.000 (t-value = 16.053) is statistically significant. Therefore, step 4 fulfils condition three in the first rule. All the three conditions in the first rule are met and therefore employee behaviour completely mediates the strategic planning and competitive advantage relationship.

These results confirm hypothesis  $H_2$  and lead to the conclusion that employee behaviour has a significant influence on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. In fact, employee behaviour completely mediates the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.

#### **5.4 Strategic Planning, Organizational Structure and Competitive Advantage** To determine the moderating effect of organizational structure on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya, the following hypothesis was formulated:

**H**<sub>3</sub>: Organizational structure significantly affects the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.

To assess the moderating influence of organizational structure on the relationship between strategic planning and competitive advantage, the study used Baron and Kenny (1986) method. Baron and Kenny (1986) have defined a moderator as a variable that influences the direction and or strength of the relationship between a predictor (independent) variable and a criterion (dependent) variable. They posit that moderation can only be supported if path C (the interaction of paths A and B) is significant. For illustration purposes, the moderator model shown in Figure 2.3 is replicated below.



Figure 5. 2: Baron & Kenny (1986) Moderator Model Source: Adapted from Baron and Kenny (1986) model

Baron and Kenny (1986, p. 1174) proposed "three steps be taken when testing for moderating effect. Step one involves testing the direct effect between the independent and the dependent variable." In this study, step one involves testing the effect between strategic planning and competitive advantage. The results from this first step should be statistically significant for the researcher to proceed to the next step. Step two involves testing the effect of strategic planning and organizational structure on competitive advantage. Step three will involve testing the effect of strategic planning, organizational structure and the interaction term (between strategic planning and organizational structure) on competitive advantage.

The direct relationship between strategic planning and competitive advantage has already been established (Table 5.15) and it was statistically significant (p-value = 0.000, t-value = 5.700, beta = 0.462). The moderation test can therefore be undertaken because moderation can only be realized after first establishing a significant relationship between the independent and dependent variable. In statistical terms, the three steps are shown below:

Step 1:  $CA=\beta_0 + \beta_1SP + \varepsilon$ Step 2:  $CA=\beta_0+\beta_1SP+\beta_2OS+\varepsilon$ Step 3:  $CA=\beta_0+\beta_1SP+\beta_2OS+\beta_3SP.OS+\varepsilon$ CA=Competitive Advantage SP=Composite index for strategic planning OS= Composite index for organizational Structure SP.OS=Interaction term  $\beta_0$ =Constant term  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$  = regression coefficients Step two involves testing the effect of both strategic planning and organizational structure on competitive advantage. Before undertaking this composite test, the effect of the dimensions of organizational structure and strategic planning on the three dimensions of competitive advantage, that is Michael porter related advantages, resources and capability advantages and financial performance advantages are first demonstrated. This is followed by a demonstration of the results of the influence of the indicators of the dimension of organizational structure on composite competitive advantage and then the composite results are demonstrated.

Table 5.26 shows the effect of the dimensions of strategic planning and organizational structure on the Porter related advantages. The results in Table 5.26 indicate that strategic planning and organizational structure have a strong and positive effect on Michael Porter related advantages (R = 0.842). The  $R^2$  was 0.708 and this shows that both strategic planning and organizational structure explain 70.8% of the variation in Michael Porter related advantages. This leaves only 29.2% of the variation of Porter related advantage to be explained by other factors not considered in this model.

The Table further indicates that the regression model predicts the dependent variable significantly well. From the ANOVA model, the p-value is 0.000 (F = 144.602). The F – distribution model value at 144.602 is quite large and emphasizes how strong the prediction model is. From the coefficients section of Table 5.26, the results indicate that both strategic planning and organization structure had positive contributions to a unit of Porter related advantages. The beta ( $\beta$ ) values were 0.212 and 0.735 for strategic planning and organizational structure respectively.

Table	5.	26:	Effect	of	Strategic	Planning	and	Organizational	Structure	on
Micha	el F	Porte	r relate	d A	dvantages	;				

Mod	lel Summary									
Mod	lel R	R Square	Ad	justed R	Squ	are Std. H	Error of tl	ne l	Estimate	
1	.842 <sup>a</sup>	.708			.7	/04			.15970	
a. Pr	edictors: (Cons	stant), Strateg	ic Plan	ning, O	rgani	zational Str	ucture			
ANG	ANOVA <sup>a</sup>									
Mod	lel	Sum of Squ	ares	df	Me	ean Square	]	F	Sig.	
1	Regression			2		3.688	144.602	2	.000 <sup>b</sup>	
	Residual	3	.035	119		.026				
	Total	10	.411	121						
a. De	ependent Varia	ble: Michael	Porter	related	Adva	ntages				
b. Pr	redictors: (Cons	stant), Strateg	ic Plan	ning, O	rgani	zational Str	ucture			
Coe	fficients <sup>a</sup>									
			Unsta Coe	ndardiz	ed	Standardize Coefficient	d s			
Mod			D		otd.	Por		+	Sig	
1	(Constant)		D	LI		Del	a	ι ι	Sig.	
1	(Constant)		.358	.2	289		1.24	10	.218	
	Strategic plan	ning	.273	.0	070	.21	2 3.92	24	.000	
	Organizationa	l Structure	.652	.0	048	.73	5 13.63	37	.000	
a. De	ependent Varia	ble: Michael	Porter	related A	Adva	ntages				

Source: Research Data (2018)

From the coefficients section, it is evident that the results are statistically significant. Strategic planning had a p-value of 0.000 (t-value = 3.924) while organizational structure had a p-value of 0.000 (t-value = 13.637). Although the p-values are the same, the results of the t-values indicate that organizational structure has a stronger effect to the Porter related advantages than strategic planning. The overall model for the effect of strategic planning and organizational structure on Porter related advantages is shown below:

	$PCA^1$	=	0.358 + 0.212SP <sup>1</sup> $+ 0.735$ OS <sup>1</sup>
Where:	$PCA^1$	=	Michael Porter related Competitive Advantage
	0.358	=	Constant (Intercept)
	$\mathbf{SP}^1$	=	Composite Strategic Planning
	$OS^1$	=	Composite Organizational Structure

Table 5.27 shows the effect of the strategic planning and organizational structure on resources and capability related advantages. The results in Table 5.27 indicate that the coefficient of determination represented by  $R^2$  was 0.516. This implies that the effects of strategic planning and organizational structure can explain 51.6% of the variation in resources and capability advantage. This leaves 48.4% to be explained by factors not considered in this model.

 Table 5. 27: The effects of Strategic Planning and Organizational Structure on

 Resources and Capability Advantage

Mod	Model Summary											
Mode	el R	R Square	Adj	usted R Squ	iare	Std. Er	ror of the	Estimate				
1	.719 <sup>a</sup>	.516	y	.508				.31445				
a. Pre	edictors: (Constan	nt), Strategic	Planning	, Organizat	ional	Structure						
ANO	VA <sup>a</sup>											
Mode	el	Sum o	of Squares	df	Μ	lean Square	F	Sig.				
1	Regression		12.562	2		6.281	63.521	.000 <sup>b</sup>				
	Residual		11.767	119		.099						
	Total		24.329	121								
a. De	pendent Variable	e: Resources	and Capa	bility Adva	ntage	e						
b. Pre	edictors: (Constan	nt), Strategic	Planning	, Organizat	ional	Structure						
				-								
Coef	ficients <sup>a</sup>											
			Unsta	ndardized	S	Standardized						
			Coet	fficients	(	Coefficients						
Mode	el		В	Std. Error	r	Beta	ı t	Sig.				
1	(Constant)		444	.568	3		781	.437				
	Strategic Planning			.137	.089		1.287	.201				
	Organizational S	Structure	.919	.094	L	.678	9.771	.000				
a. De	pendent Variable	e: Resources	and Capa	bility Adva	ntage	e						

Source: Research Data (2018)

The ANOVA model had a p-value of 0.000 (F = 63.521) and the results reveal a statistically significant model. From the coefficients section of Table 5.27, the two variables, that is strategic planning and organizational structure have a positive contribution to a unit of resources and capability advantage. The contribution from strategic planning was 0.089 while that from organizational structure was 0.678.

Finally, from the coefficients section of Table 5.27, only one variable, organizational structure has returned statistically significant results with a p-value of 0.000 (t-value = 9.771). The p-value under strategic planning was not statistically significant with a p-value of 0.201 (t-value = 1.287). This indicates that organizational structure has a stronger effect on resources and capability advantage than strategic planning. The model of the effect of strategic planning and organizational structure on resources and capability advantage is shown below:

	RCA =	$-0.444 + 0.089$ SP $^{1}$ $+ 0.678$ OS $^{1}$
Where:	RCA =	Resources and Capability related Competitive Advantage
	-0.444 =	Constant (Intercept)
	$SP^1 =$	Composite Strategic Planning
	$OS^1 =$	Composite Organizational Structure

The regression analysis in Table 5.28 shows the effect of strategic planning and organizational structure on financial performance advantage. All the variables, that is, strategic planning, organizational structure and financial performance are on composite basis, implying that all the various dimensions are merged into one.

#### Table 5. 28: The effect of Strategic Planning and Organizational Structure on Financial Performance related Advantage

Mod	Model Summary										
		<b>v</b>		A diusted <b>D</b>							
Mod	el	R	R Square		Square	Std. Erro	r of the E	stimate			
1		.652 <sup>a</sup>	.425	i	.416			.29739			
a. Pr	edic	ctors: (Cons	tant), Strate	gic Planı	ning, Organ	izational Structu	ure				
ANC	<b>)V</b> A	a									
Mod	el		Sum of	f Square	s df	Mean Square	F	Sig.			
1		Regression	1	7.79	1 2	3.895	44.045	.000 <sup>b</sup>			
		Residual		10.524	4 119	.088					
		Total		18.31	5 121						
a. De	eper	ndent Varial	ole: Financia	al Perfor	mance Adv	antage					
b. Pr	edic	ctors: (Cons	tant), Strate	gic Plan	ning, Orgar	izational Struct	ure				
Coef	fici	ents <sup>a</sup>									
				Unsta Coe	ndardized fficients	Standardized Coefficients					
Mod	el			В	Std. Error	r Beta	t	Sig.			
1	(Co	onstant)		.743	.537	7	1.383	.169			
	Strategic Planning			.101	.130	.059	.780	.437			
	Or	ganizationa	l Structure	.737	.089	.627	8.278	.000			
a. De	eper	ndent Varial	ole: Financia	al Perfor	mance Adv	antage					

Source: Research Data (2018)

The results in Table 5.28 indicate that strategic planning and organizational structure have a moderately strong and positive influence on financial performance related advantages with a coefficient of variation (R) of 0.652. The coefficient of determination ( $R^2$ ) was 0.425, which implies that both strategic planning and organizational structure explain 42.5% of the variation in financial performance related advantages. This leaves 57.5% of the variation to be explained by other factors not considered in this model.

Table 5.28 also indicates that the regression model predicts the dependent variable significantly well. From the ANOVA model, the p-value is 0.000 (F = 44.045). From the coefficients section of Table 5.28, the results indicate that both strategic planning and organizational structure had a positive contribution to a unit of financial performance related advantages. The beta ( $\beta$ ) values were 0.059 and 0.627 under strategic planning and organizational structure respectively.

Finally, from the coefficients section of Table 5.28, there are statistically significant results from the variable of organizational structure with a p-value of 0.000 (t-value = 8.278). From the strategic planning variable, the results were not statistically significant with a p-value of 0.437 (t-value = 0.780). The overall model depicting the effect of strategic planning and organizational structure on financial related advantages is shown below:

	FPA	=	0.743 + 0.059SP <sup>1</sup> $+ 0.627$ OS <sup>1</sup>
Where:	FPA	=	Financial Performance related Competitive Advantage
	0.743	=	Constant (Intercept)
	$\mathbf{SP}^1$	=	Composite Strategic Planning
	$OS^1$	=	Composite Organizational Structure

Table 5.29 shows the summarized results of the effect of strategic planning and organizational structure on the three dimensions of competitive advantage including the Michael Porter (1985, 1993) advantages (cost, differentiation and focus), resources and capability advantages and financial performance advantages.

	Variables	Sumi mo	mary del	ANC	OVA		C	oefficients		
No	Test	R	<b>R</b> <sup>2</sup>	F	Sig F	Constant		Beta	t	Sig –p
1	Effect of SP & OS on Michael Porter	0.842	0.708	144.602	0.000	0.358	SP	0.212	3.924	0.000
	(Table 5.26)						OS	0.735	13.637	0.000
2	Effect of SP and OS on Resources and Capability advantages (Table 5.27)	0.719	0.516	63.521	0.000	444 —	SP	0.089	<u>1.287</u> 9.771	0.201
3	Effect of SP and OS on Financial Performance related advantages (Table 5.28)	0.652	0.425	44.045	0.000	0.743 —	SP	0.059	0.780	0.437
	SP – Strategic Planning	5			I					
	OS – Organizational St	ructure								

 Table 5. 29: Summary of the effect of Strategic Planning and Organizational Structure on Dimensions of Competitive Advantage

Source: Research Data (2018)

The results in Table 5.29 demonstrate that the effect of strategic planning and organizational structure is strongest on the Porter related advantages. The coefficient of determination ( $R^2$ ) under the Porter related advantages was 0.708, while the  $R^2$  under resources and capability advantages was 0.516. The weakest coefficient of determination ( $R^2$ ) was 0.425 and this was under the financial performance related advantages.

The strength of the regression model was also highest under the Porter related advantages with an F-distribution value of 144.602. This was followed by resources and capability advantages F value of 63.521 and lastly was the F value under financial performance related advantages at a value of 44.045. The beta values, which indicate the contribution per variable to a unit of the dependent variable were positive under the three tests. For example, they were positive under the Porter related related advantages at 0.212 and 0.735 for strategic planning and organizational structure respectively. The beta values were positive in the other two areas but at different values.

Finally, it is only under the Porter related advantages where both strategic planning and organizational structure have produced statistically significant results. On strategic planning, the p-value was 0.000 (t-value = 3.924) while under organizational structure, the p-value was 0.000 (t-value = 13.637). For the other two dependent advantages, that is resources and capability and financial performance related advantages, organizational structure produced statistically significant results while strategic planning did not. This implies that organizational structure had a stronger effect on the dimensions of competitive advantage than did strategic planning. Tables 5.26, 5.27 and 5.28 have demonstrated the effects of strategic planning and organizational structure on the three components of competitive advantage. The three components are Michael Porter related advantages, resources and capability advantages and financial performance related advantages. Before the final composite effects of strategic planning and organizational structure on competitive advantage are demonstrated, two results of two other regressions are demonstrated. One is the effect of the four dimensions of organizational structure on competitive advantage shown in Table 5.30, and two is the effect of composite organizational structure shown in Table 5.31.

 Table 5. 30: Effects of the Dimensions of Organizational Structure on Competitive

 Advantage

Mo	del Su	mmary								
Mode	el	R	R Square	Ac	ljusted R Squ	uare	Std. Err	or of the E	stimate	
1		.832ª	.693			.17651				
a. Pre	edictor	s: (Constar	nt), Formalizatio	on, cei	ntralization,	speci	ialization, integ	gration		
ANO	ANOVA <sup>a</sup>									
Mode	el		Sum of Sq	uares	df	N	Mean Square	F	Sig.	
1	Re	egression		8.221	4		2.055	65.971	.000 <sup>b</sup>	
	Re	esidual		3.645	117		.031			
	Total 11.86			1.866	121					
a. De	pende	nt Variable	: Competitive A	Advan	tage					
b. Pre	edictor	rs: (Constar	nt), Formalizati	on, Ce	entralization,	Spee	cialization, Inte	egration		
Coef	ficient	ts <sup>a</sup>	Ι					T		
			U	Jnstan	dardized		Standardized			
				Coeff	ficients		Coefficients	_		
Mode	el			В	Std. Erro	or	Beta	t	Sig.	
1	(Con	stant)		.794	.23	0		3.450	.001	
	Form	alization		.295	.06	5	.297	4.519	.000	
	Centralization			.168	.06	4	.231	2.630	.010	
	Specialization			.140	.05	6	.189	2.480	.015	
	Integ	ration		.219	.06	9	.269	3.200	.002	
a. De	pende	nt Variable	: Competitive A	Advan	tage					

Source: Research Data (2018)

The results in Table 5.30 indicate the four dimensions of organizational structure have a very strong and positive effect on competitive advantage (R =0.832). The coefficient of determination ( $R^2$ ) was 0.693, which implies that the four dimensions of organizational structure explain 69.3% of the total variation in competitive advantage. This means that 30.7% of the variation in competitive advantage is to be explained by other factors not in this model.

The ANOVA model had a p-value of 0.000 and an F-value of 65.971. These results reveal quite a high statistically significant model, which indicates that the dimensions of organizational structure affect competitive advantage in a big way. From the coefficients section of Table 5.30, it is evident that all the four dimensions had a positive contribution to a unit change in competitive advantage. Formalization contributed 0.297, centralization contributed 0.231, and specialization contributed 0.189 while integration contributed 0.269.

The results in Table 5.30 further indicate statistically significant results in all the four dimensions. Formalization had a p-value of 0.000 (t-value = 4.519), centralization had a p-value of 0.010 (t-value = 2.630) and specialization had a p-value of 0.015 (t-value = 2.480) while integration had a p-value of 0.002 (t-value = 3.200). This implies large manufacturing firms have to take the dimensions of organizational structure seriously if they want to achieve sustainable competitive advantage. The model of the four dimensions of organizational structure and competitive advantage is shown below:

	$CA^1$	=	0.794 + 0.297F+ 0.231C + 0.189S + 0.269I
Where:	$CA^1$	=	Composite Competitive Advantage
	0.794	=	Constant (Intercept)
	F	=	Formalization
	С	=	Centralization
	S	=	Specialization
	Ι	=	Integration

The regression model in Table 5.31 shows the composite effect of organizational structure on competitive advantage.

Mod	lel Summary								
Mod	lel R	R Square	e A	djusted R S	Squa	re Std. Er	ror	of the E	stimate
1	.826ª	.68.	3		.68	30			.17715
a. Pr	redictors: (Con	stant), Orga	nizatior	nal Structu	re				
ANG	<b>OVA</b> <sup>a</sup>								
Mod	lel	Sum of S	quares	df	M	ean Square		F	Sig.
1	Regression		8.100	1		8.100		258.122	.000 <sup>b</sup>
	Residual		3.766	120		.031			
	Total		11.866	121					
a. De	ependent Vari	able: Compe	etitive A	dvantage				L	
b. Pr	redictors: (Cor	istant), Orga	nization	nal Structu	re				
Coe	fficients <sup>a</sup>								
			Unst Co	tandardized befficients	1	Standardize Coefficient	d s		
Mod	lel		В	Std. Er	ror	Be	ta	t	Sig.
1	(Constant)		.968	.2	207			4.666	.000
	Organization	al Structure	.782	0.	949	.82	26	16.066	.000
a. De	a. Dependent Variable: Competitive Advantage								

Table 5. 31: Composite effect of Organizational Structure on CompetitiveAdvantage

Source: Research Data (2018)

The results from Table 5.31 indicate that the coefficient of determination ( $\mathbb{R}^2$ ) was 0.683. This implies that 68.3% variation in competitive advantage can be explained by organizational structure. This is indeed a large percentage of competitive advantage, which can be explained by organizational structure. It leaves only 31.7% of the variation to be explained by other factors not considered in this model.

Table 5.31 further shows that the regression model predicts the dependent variable significantly well. From the ANOVA model, the p-value is 0.000 (F = 258.122). The F distribution value at 258.122 is very large which goes to reinforce the fact that the regression model predicts the dependent variable significantly well. From the coefficients section, the results indicate that organizational structure had a large and positive contribution with a beta ( $\beta$ ) value of 0.826 to a unit change in competitive advantage.

Finally, from the coefficients section, the results are statistically significant. The p-value on organizational structure 0.000 (t-value = 16.066). The overall model for the effect of the composite organizational structure on competitive advantage is shown below:

 $CA^{1} = 0.968 + 0.826 OS^{1}$ Where:  $CA^{1} = Composite Competitive Advantage$  0.968 = Constant (Intercept)  $OS^{1} = Composite Organizational Structure$ 

The regression model of the composite strategic planning and composite organizational structure on competitive advantage is shown in Table 5.32:

Mode	l Summary							
Mada		D.C		A dimente d D	C	C( 1 )	<b>E</b>	Estimate.
Node		K Squ	are	Adjusted R	Square	Sta.	Error of the	Estimate
1	.839ª	.7	/04		.699			.17180
a. Pre	dictors: (Constan	t), Strategic	Plannin	g, Organiza	ational St	ructure		
ANO	VA <sup>a</sup>							
Mode	1	Sum of S	Squares	df	Mean	Square	F	Sig.
1	Regression		8.354	2		4.177	141.506	.000 <sup>b</sup>
	Residual		3.513	119		.030		
	Total		11.866	121				
a. Dep	pendent Variable:	Competitiv	ve Advar	ntage		·		
b. Pre	dictors: (Constan	t), Strategic	Plannin	g, Organiz	ational S	tructure		
Coeff	icients <sup>a</sup>							
			Unsta	andardized	Stan	dardized		
			Coe	efficients	Coet	fficients		
Mode	1		В	Std. Erro	or	Beta	t	Sig.
1	(Constant)		.275	.31	0		.884	.378
	Strategic plannin	g	.219	.07	5	.159	2.929	.004
	Organizational st	ructure	.722	.05	1	.763	14.048	.000
a. Der	pendent Variable:	Competitiv	ve Advar	ntage				

 Table 5. 32: Effect of Strategic Planning and Organizational Structure on

 Competitive Advantage

Source: Research Data (2018)

The results in Table 5.32 indicate that strategic planning and organizational structure have a strong and positive influence on competitive advantage (R=0.839). The  $R^2$  representing the coefficient of determination was 0.704 and this shows that both strategic planning and organizational structure explain 70.4% of the variation in competitive advantage. This leaves only 29.6% of the variation of competitive advantage to be explained by other factors not considered in this model.

Table 5.32 further indicates that the regression model predicts the dependent variable significantly well. This is because from the ANOVA model, the p-value is 0.000 (F = 141.506). The F-distribution value at 141.506 is quite large and emphasizes how strong the prediction model is. From the coefficients section of Table 5.32, the results indicate that both strategic planning and organization structure had positive contributions to a unit of competitive advantage. The beta value under strategic planning was 0.159 while that under organizational structure was much higher at 0.763.

Finally, from the coefficients section, the results indicate statistically significant results for both the variables. Strategic planning had a significant p-value of 0.004 (t-value = 2.929) while organizational structure had a significant p-value of 0.000 (t-value = 14.048). The overall model for the effect of strategic planning and organizational structure on competitive advantage is shown below:

	$CA^1 =$	0.275 + 0.159SP <sup>1</sup> $+ 0.763$ OS <sup>1</sup>
Where:	$CA^1 =$	Composite Competitive Advantage
	0.275 =	Constant (Intercept)
	$SP^1 =$	Composite Strategic Planning
	$OS^1 =$	Composite Organizational Structure

The third step in the moderation model is where the interaction term is added to both strategic planning and organizational structure and the three tested against the dependent variable, competitive advantage. The regression model comprising strategic planning, organizational structure and the interaction of the two on competitive advantage is shown in Table 5.33.

## Table 5. 33: Effect of Strategic Planning, Organizational Structure andInteraction Term on Competitive Advantage

Mod	el Summary									
N 1		ЪС	A 1	· . 1 T		C ( 1	Б	6.4	г.	•
Mode		R Squar	K Square Adjusted K Square Std. Error					of the	Est	imate
1	.842ª	.70	19		.7	02			•	17107
a. Pre	a. Predictors: (Constant), Strategic Planning, Organizational Structure, Interaction									
betwe	een Strategic Pla	anning and	Organız	ational	Struc	ture				
ANO	VA <sup>a</sup>				1					
Mode	el	Sum of S	Squares	df	Me	an Squar	e	F		Sig.
1	Regression		8.413	3		2.804	4 95	5.824		.000 <sup>b</sup>
	Residual		3.453	118		.029	)			
	Total		11.866	121						
a. De	pendent Variab	le: Compet	itive Adv	vantage	;					
b. Pre	edictors: (Consta	ant), Strate	gic Planr	ning, O	rganiz	ational S	tructur	e, Inte	racti	on
betwo	een Strategic Pla	anning and	Organiz	ational	Struc	ture				
Coef	ficients <sup>a</sup>									
			Unsta	ndardiz	zed	Standar	dized			
			Coe	fficient	S	Coeffic	ients			
Mode	el		В	Std. I	Error		Beta	t		Sig.
1	(Constant)		-1.593	1	.349			-1.1	81	.240
	Strategic Plann	ing	.667		.324		.484	2.0	)62	.041
	Organizational	Structure	1.245		.371		1.315	3.3	857	.001
	Interaction SP.	OS	124		.087		747	-1.4	23	.157
a. De	pendent Variab	le: Compet	itive adv	antage		•		•		•

Source: Research Data (2018)

The results in Table 5.33 indicate that  $R^2$  was 0.709 indicating that strategic planning organizational structure and the interaction between the two could explain 70.9% of the variation in competitive advantage. This leaves only 29.1% to be explained by other factors not considered in this model. Table 5.33 further indicates that the regression model predicts the dependent variable significantly well. From the ANOVA model, the p-value is 0.000 (F = 95.824) and therefore the model is statistically significant.

From the coefficients section, the results indicate that strategic planning and organizational structure had positive contributions to a unit of competitive advantage. The beta value under strategic planning was 0.484 while under organizational structure, the beta value was 1.315. The interaction term between strategic planning and organizational structure had a negative contribution to a unit of competitive advantage with a beta value of -0.747.

Finally, from the coefficients section, the results indicate statistically significant results for the composite strategic planning and organizational structure. The p-value under strategic planning was 0.041 (t-value = 2.062) while under organizational structure, the p-value was 0.001 (t-value = 3.357). The interaction term between strategic planning and organizational structure did not produce significant results, with a p-value of 0.157 (t-value = -1.423). The overall model showing the effect of strategic planning, organizational structure and the interaction term SP.OS on competitive advantage is shown below:

	$CA^1 =$	$-1.593 + 0.484 \text{ SP}^1 + 1.315 \text{ OS}^1 - 0.747 \text{SP}^1.\text{OS}^1$
Where:	CA <sup>1</sup> =	Composite Competitive Advantage
	0.484 =	Constant (Intercept)
	$SP^1 =$	Composite index in Strategic Planning
	$OS^1 =$	Composite index in organizational structure
	$SP^1.OS^1 =$	Composite SP X Composite OS (interaction term)

The summarized results of the three moderating steps are shown in Table 5.34.

		Summary									
	Variables	model	ANO	VA	Coefficients						
					Cons-				р-		
Step	Description	<b>R</b> <sup>2</sup>	F	Sig F	tant		Beta	t	value		
1	SP predicts CA										
1	(Table 5.15)	0.213	32.490	0.000	1.543	SP	0.462	5.700	0.000		
2	SP and OS on	0.704	141 506	0.000	0.275	SP	0.159	2.929	0.004		
2	CA (Table 5.32)	0.704	141.500	0.000	0.275	OS	0.763	14.048	0.000		
	SP, OS and					SP	0.484	2.062	0.041		
3	SP.OS on CA	0.709	95.824	0.000	-1.593	OS	1.315	3.357	0.001		
	(Table 5.33)					SP.OS	-0.747	-1.423	0.157		
SP - 0	Composite Strategic	Planning									

 Table 5. 34: Summary of Combined Moderating effect of Organizational

 Structure

OS - Composite Organizational Structure

SP.OS - Interaction term Strategic Planning X Organizational Structure

CA - Composite Competitive Advantage

Source: Author (2018)

Table 5.34 contains the summarized results under the three moderation steps. Under step one,  $R^2$  equals 0.213 indicating that strategic planning explains 21.3% of the variation in competitive advantage. The overall strength of the model in step one was 0.000 (F = 32.490). Furthermore, the p-value at 0.000 (t-value = 5.700) indicates significant results.

Step two shows the results of the combined effect of strategic planning and organizational structure on competitive advantage. It is evident that the combined effects are far higher than for the single effect of strategic planning on competitive advantage. The coefficient of determination  $R^2$  for the combined effect is 0.704 implying that both strategic planning and organizational structure can explain 70.4% of the variation in competitive advantage.

The overall strength of the combined model is much stronger with a significance of 0.000 but a very high F-value of 141.506. The beta ( $\beta$ ) coefficients are also different under the combined value with strategic planning having a beta value of 0.159 while organizational structure has a beta value of 0.763. Under the combined effect, the results were still statistically significant but had changed for the strategic planning variable. Under step one, the p-value under strategic planning was 0.000 (t-value = 5.700) but in step two, the p-value under strategic planning was 0.000 (t-value = 2.929). The p-value for organization structure in step two was 0.000 (t-value = 14.048).

Step three indicates the results after the introduction of the interaction term (SP.OS). The coefficient of determination  $R^2$  is higher than in the other two steps at 0.709 indicating that with the interaction term included, 70.9% of the variation in competitive advantage can be explained. The overall strength of the model remains quite strong with the introduction of the interaction term at a significance of 0.000 and an F-value of 95.824. However, this F-value is lower than in step two where it was 141.506. The constant term ( $\beta_0$ ) has also changed into a negative (-1.593) after the introduction of the interaction term. In the first step, the constant factor was 1.543 while in step 2, it was 0.275. Both strategic planning and organizational structure have retained their statistically significant results after the introduction of the interaction term at 0.041 (t-value = 2.062) for strategic planning and 0.001 (t-value = 3.357) for organizational structure. However, the interaction term shows non-statistically significant results with a p-value of 0.157 (t-value = -1.423).

There are three decision rules to checking whether moderation has occurred (Baron & Kenny, 1986). These rules are; one, after adding the interaction term, if there is a significant change in  $\mathbb{R}^2$  as well as significant effect by the new interaction term, then moderation is occurring. Decision rule number two is if the predictor and moderator are not significant with the interaction term added, then complete moderation has occurred. Decision rule number three is that if the predictor and moderator are significant with the interaction has occurred, however, the main effects are also significant.

In the study model, there was a significant change in  $R^2$  as compared to the first step, but the change was not as big as compared to the second step (with interaction term,  $R^2$  was 0.709, while under step one,  $R^2$  was 0.213 and in step two,  $R^2$  was 0.704). After the introduction of the interaction term, there was a significant change in the F-value (95.824 with interaction term, 141.506 with the predictor (SP) and moderator [OS] and 32.49 with strategic planning only). This implies that the first condition for a moderation effect to exist was met. The other condition, which has been met is the third one. Under this condition, the predictor (SP) and moderator (OS) have to be significant with the interaction term added and the main effects are also significant. Strategic planning produced statistically significant results with a p-value of 0.041 (t-value = 2.062) while organizational structure had a p-value of 0.001 (t-value = 3.357). The interaction term produced statistically non-significant results with a p-value of 0.157 (t-value = -1.423). With introduction of the interaction term, the main effect of the ANOVA model is still significant with a p-value of 0.000 and an F-value of 95.824.

The overall results from hypothesis three were therefore that partial moderation had taken place. These findings were sufficient to support hypothesis three ( $H_3$ ), which states that, organizational structure significantly affects the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.

#### 5.5 Joint Influence of Employee Behaviour and Organizational Structure on the relationship between Strategic Planning and Competitive Advantage

The fourth and final objective of the study was to establish the joint influence of employee behaviour and organizational structure on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. This objective corresponds with hypothesis **H**<sub>4</sub>, which states as follows:

**H**<sub>4</sub>: The joint influence of employee behaviour and organizational structure is different from the influence of individual variables on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.

To test this hypothesis, stepwise multiple regression analysis was used. There are two steps in testing this hypothesis and in statistical terms, the steps are shown below:

Step 1:  $CA=\beta_0 + \beta_1SP + \varepsilon$ Step 2:  $CA=\beta_0+\beta_1SP+\beta_2EB+\beta_3OS+\varepsilon$ CA=Competitive Advantage SP=Composite index for strategic planning EB=Composite index for employee behaviour OS=Composite index for organizational structure  $\beta_0$ =Constant term  $\beta_1, \beta_2, \text{ and } \beta_3$  = regression coefficients  $\varepsilon$  = Error term

To test the hypothesis and achieve the study objective, composite indices for each variable were first developed. Thereafter regression analyses were done to test the results. Step one on strategic planning and competitive advantage has already been tested and the results shown in Table 5.15.

From Table 5.15,  $R^2$  was 0.213, the overall ANOVA model was significant with a p-value of 0.000 (F=32.490) while from the coefficients section, the results were statistically significant with a p-value of 0.000 (t-value = 5.700). The overall model for the composite strategic planning and competitive advantage given under Table 5.15 is replicated below:

$$CA^{1} = 1.543 + 0.462 \text{ SP}^{1}$$
Where:  

$$CA^{1} = \text{Overall Competitive Advantage}$$

$$1.543 = \text{Constant (Intercept)}$$

$$SP^{1} = \text{Composite Index for Strategic Planning}$$

Step two captures the results of the joint influence of composite strategic planning, employee behaviour and organizational structure on composite competitive advantage. Before the overall results are shown in Table 5.38, the regression results on Porter related advantages are shown in Table 5.35, regression results on resources and capability advantages are shown in Table 5.36 and then the regression results on financial performance advantages are shown in Table 5.37.

The regression results in Table 5.35 on the composite influence of strategic planning, employee behaviour and organizational structure on Porter related advantages indicate a strong positive relationship (R = 0.886). The  $R^2$  was 0.785 and this implies that the three composite variables explained 78.5% of the Porter related advantages. Other variables not in this model explained the remaining 21.5%. There is therefore a very strong influence of the three variables on the Porter related advantages.

Table 5.	35:	Joint	influence	of	Strategic	Planning,	Employee	Behaviour	and
Organiza	ation	al Stru	icture on P	ort	ter related	Advantage	es		

N	-1 C								
Moa	el Summary								
Mode	el R	R Square	Ad	ljusted R	Squa	are Std.	Error	of the E	Estimate
1	.886 <sup>a</sup>	.785			.7	79			.13776
a. Pre	edictors: (Const	ant), Strateg	ic Plan	ning, En	nploy	ee Behav	iour, (	Organiza	ational
Struc	ture								
ANO	VA <sup>a</sup>								
Mode	el	Sum of Sq	uares	df	Mea	an Square	;	F	Sig.
1	Regression	5	8.172	3		2.724	- 14	3.524	.000 <sup>b</sup>
	Residual		2.239	118		.019	)		
	Total	1(	).411	121					
a. De	a. Dependent Variable: Porter related Advantages (Cost, Differentiation, Focus)								
b. Pre	b. Predictors: (Constant), Strategic Planning, Employee Behaviour, Organizational								
Struc	ture			<u> </u>	1 0			C	
Coef	ficients <sup>a</sup>								
			Unsta	ndardize	ed	Standard	lized		
			Coe	efficients		Coeffic	ients		
Mode	el		В	Std. Er	ror		Beta	t	Sig.
1	(Constant)		.318	.4	249			1.277	.204
	Strategic Plann	ing	.176		062		.136	2.840	.005
	Employee Beh	aviour	.418	).	)65		.477	6.475	.000
	Organizational	Structure	.339		064		.382	5.329	.000
a. De	pendent Variab	le: Michael	Porter	related a	dvant	tages		•	1

Source: Research Data (2018)

Table 5.35 further indicates that the regression model predicts the Porter related advantages significantly well. This is because from the ANOVA model, the p-value is 0.000 (F = 143.524). The F-distribution value at 143.524 is quite large and emphasizes how strong the prediction model is. From the coefficients section, the results show that all the three variables, strategic planning, employee behaviour and organizational structure had positive contributions to a unit of Porter related variables. The beta ( $\beta$ ) values were 0.136, 0.477 and 0.382 for strategic planning, employee behaviour employee behaviour and organizational structure respectively.

As is evident from the coefficients section, the results indicate statistically significant results for the three variables. Strategic planning had a significant p-value of 0.005 (t-value = 2.840), employee behaviour had a p-value of 0.000 (t-value = 6.475) while organizational structure had a p-value of 0.000 (t-value = 5.329). The overall model for the influence of three variables on Porter related advantages is shown below.

$$PCA^{1} = 0.318 + 0.136SP^{1} + 0.477EB^{1} + 0.382OS^{1}$$

Where:	PCA <sup>1</sup>	=	Composite Porter related Advantage
	0.318	=	Constant (Intercept)
	$\mathbf{SP}^1$	=	Composite index in Strategic Planning
	$\mathbf{EB}^1$	=	Composite index in employee behaviour
	$OS^1$	=	Composite index in organizational structure

Table 5.36 shows the regression results for strategic planning, employee behaviour and organizational structure on resources and capability advantages. The regression results in Table 5.36 indicate that the joint influence of strategic planning, employee behaviour and organizational structure had a strong and positive relationship with the resources and capability advantage variable (R = 0.795). The coefficient of determination ( $R^2$ ) was 0.632 indicating that the three variables explained 63.2% of the variation in resources and capability advantages. The remaining 36.8% was to be explained by other factors not considered in this model.

## Table 5. 36: Joint influence of Strategic Planning, Employee Behaviour and Organizational Structure on Resources and Capability Advantages

Mod	el Summary								
Mod	el R	R Square	Adj	usted R	Square	Std. Er	ror of	the I	Estimate
1	.795 <sup>a</sup>	.632			.623				.27528
a. Pre	edictors: (Cons	stant), Strateg	gic Plann	ing, Emp	oloyee l	Behaviou	r, Org	aniz	ational
Struc	ture								
ANC	ANOVA <sup>a</sup>								
Mod	el	Sum of	Squares	df	Mean	Square		F	Sig.
1	Regression	n	15.387	3		5.129	67.6	82	.000 <sup>b</sup>
	Residual		8.942	118		.076			
	Total		24.329	121					
a. De	a. Dependent Variable: Resources and Capability Advantage								
b. Predictors: (Constant), Strategic Planning, Employee Behaviour, Organizational									
Struc	cture								
Coef	ficients <sup>a</sup>		T						- 1
			Unsta	ndardize	d St	andardize	ed		
			Coe	fficients	C	oefficient	s		
Mod	el		В	Std. Er	ror	Be	ta	t	Sig.
1	(Constant)		518	.4	-98		-1	.042	.300
	Strategic Plan	ning	007	.1	24	00	)4 -	.057	.954
	Employee Bel	haviour	.787	.1	29	.589		.105	.000
	Organizationa	l Structure	.329	.1	27	.24	3 2	.595	.011
a. De	pendent Varia	ble: Resource	es and Ca	apability	Advan	tage			•

**Source:** Research Data (2018)

The ANOVA model had a p-value of 0.000 (F = 67.682), and this reveals a statistically significant position. This implies that the three variables, strategic planning, employee behaviour and organizational structure have a significant influence on resources and capability advantages. The results in Table 5.36 further indicate statistically significant influence of employee behaviour and organizational structure on resources and capability advantages. The p-value of employee behaviour was 0.000 (t-value = 6.105) and the p-value of organizational structure was 0.011 (t-value = 2.595).

The strategic planning variable returned results which were not significant, with a pvalue of 0.954 (t-value = -0.157). These results imply that employee behaviour and organizational structure have a greater impact on resources and capability advantages than does strategic planning.

The results in Table 5.36 further indicate that two variables, that is employee behaviour and organizational structure, had positive contributions to a unit of resources and capability advantages. The beta ( $\beta$ ) values were 0.589 and 0.243 on employee behaviour and organizational structure respectively. The strategic planning variable had a negative contribution of -0.004 to a unit of resources and capability advantages. The overall model of the influence of strategic planning, employee behaviour and organizational structure on resources and capability advantages is shown below.

	$RCA^1 =$	- $0.518 - 0.004SP^1 + 0.589EB^1 + 0.243OS^1$
Where:	$RCA^1 =$	Composite Resources and Capability related Advantage
	-0.518 =	Constant (Intercept)
	$SP^1 =$	Composite index in Strategic Planning
	$EB^1 =$	Composite index in employee behaviour
	$OS^1 =$	Composite index in organizational structure

Table 5.37 shows the regression results for strategic planning, employee behaviour and organizational structure on financial performance related advantages. The variables here are taken on a composite basis.

#### Table 5. 37: Joint influence of Strategic Planning, Employee Behaviour and Organizational Structure on Financial Performance related Advantage

Model Summary													
Mod	del	R	R	Square	Ac	ljusted R So	juare	Std. Error of the Estimate					
1		.690 <sup>a</sup>		.476		5	.463		.28508				
a. P stru	a. Predictors: (Constant), Strategic Planning, employee behaviour, organizational structure												
AN	ANOVA <sup>a</sup>												
Mo	del		Sum	n of Squa	ares	df	Mea	in Square	F	Sig.			
1		Regression		8.	725	3		2.908	35.788	.000 <sup>b</sup>			
		Residual		9.	590	118		.081					
		Total		18.	315	121							
a. D	eper	ndent Variabl	e: Fin	ancial Po	erfo	rmance rela	ted Ac	lvantage		1			
b. P	b. Predictors: (Constant), Strategic Planning, Employee behaviour, organizational												
stru	structure												
Coe	effici	ents <sup>a</sup>					1						
				Uns Co	Unstandardized Standardized Coefficients Coefficients								
Model					В	Std. Error		Beta	t	Sig.			
1	(Co	onstant)		.70	00	.515			1.359	.177			
	Strategic Planning			00	04	.128		003	034	.973			
	Employee Behaviour			.4	53	.133		.390	3.391	.001			
Organizational Structure			.39	97	.131		.338	3.022	.003				
1 a. D	a. Dependent Variable: Financial Performance related Advantage												

Source: Research Data (2018)

The results in Table 5.37 indicate that the coefficient of determination ( $\mathbb{R}^2$ ) was 0.476. This implies that the influence of strategic planning, employee behaviour and organizational structure can explain 47.6% of the variation in financial performance related advantage. This leaves 52.4% to be explained by other factors not considered in this model.

The ANOVA model had a p-value of 0.000 (F = 35.788) and these results reveal a statistically significant model. From Table 5.37, it is evident that two variables that is employee behaviour and organizational structure have a positive contribution to a unit of financial performance advantage. The contribution from the employee behavior variable was 0.390 while the contribution from organizational structure was 0.338. On the other hand, the strategic planning variable had a negative contribution to one unit of financial performance related advantage with a beta value of -0.003.

Finally, from Table 5.37, two variables, that is employee behaviour and organizational structure had statistically significant results. Employee behaviour had a p-value of 0.001 (t-value = 3.391) while organizational structure had a p-value of 0.003 (t-value = 3.022). The strategic planning variable had results which were not statistically significant with a p-value of 0.973 (t-value = -0.034). The model showing the influence of strategic planning, employee behaviour and organizational structure on financial performance related advantages are shown below:

$$FPA^{1} = 0.700 - 0.003SP^{1} + 0.390EB^{1} + 0.338OS^{1}$$

Where:	FPA <sup>1</sup>	=	Composite Financial Performance related Advantage
	0.700	=	Constant (Intercept)
	$\mathbf{SP}^1$	=	Composite index in Strategic Planning
	$\mathbf{EB}^1$	=	Composite index in employee behaviour
	$OS^1$	=	Composite index in organizational structure

Finally, the regression analysis showing the composite influence of strategic planning, employee behaviour and organizational structure on the composite dependent variable of competitive advantage is shown in Table 5.38.

Table 5. 38: Joint influence of Strategic Planning, Employee Behaviour andOrganizational Structure on Competitive Advantage

Model Summary														
								Std.		Cha	nge S	tics		
							Error of		R					
				R	Adju	sted	the		Square		F			Sig. F
Model R		R	Squa	re	R Sq	uare	Est	imate	Change	Chang	ge	df1	df2	Change
1		.894ª	.80	00		.794	.14199		.800	156.8	57	3	118	.000
a. Predictors: (Constant), Strategic planning, Er									loyee Ben	efits, Or	gani	zatio	nal St	ructure
AN	ANOVA <sup>a</sup>													
Mo	del			S	Sum of	Squa	res	df	Mean	Mean Square			F S	
1	Re	gression			9.487		87	3		3.162	1	156.857		.000 <sup>b</sup>
	Residual				2.379		379	118		.020				
	То	tal				11.8	366	121						
a Dependent Variable: Competiti							dvan	tage						
h P	redi	ctors: (C	onstan	t) S	Strategi	c Pla	nning	y Fmr	lovee Beh	aviour	Orga	nizat	ional	Structure
0.1	b. Predictors: (Constant), Strategic Planning, Employee Behaviour, Organizational Structure													
Coe	Coefficiente													
		CIILS					Unst	tandard	lized	Standa	rdize	hd		
						Co	Coefficients							
											lS		C.	
Model					1	B	Std. Error Beta		eta	t	Sig.			
1	(Co	(Constant)				.22	7	.257				.885	.378	
	Strategic Planning				.10	3	.064 .075		75	1.617	.109			
Employee Behaviour				.49	8	.066 .534		34	7.498	.000				
Organizational Structure					.34	9	.065		.36	58 5	5.322	.000		
a. D	a. Dependent Variable: Competitive Advantage													

Source: Research Data (2018)

The results in Table 5.38 show clearly that strategic planning, employee behaviour and organizational structure have a very strong and positive influence on competitive advantage (R = 0.894). The coefficient of determination represented by  $R^2$  was 0.800 and this indicates that the three variables combined explain 80.0% of the variation in competitive advantage. This leaves only 20.0% of the variation of competitive advantage to be explained by other factors not considered in this study.

Table 5.38 further indicates that the regression model predicts the dependent variable, competitive advantage significantly well. In the ANOVA model, the p-value is 0.000 (F = 156.857). The F-distribution value at 156.857 is quite large and emphasizes how strong the prediction model is. From the coefficients section of Table 5.38, the results clearly show that the three variables, strategic planning, employee behaviour and organizational structure had positive contributions to a unit of competitive advantage. The beta ( $\beta$ ) values were 0.075, 0.534 and 0.368 for strategic planning, employee behaviour employee behaviour and organizational structure respectively.

Finally, the results indicate statistically significant results in two areas, that is on employee behaviour with a p-value of 0.000 (t-value = 7.498) and on organizational structure with a p-value of 0.000 (t-value = 5.322). The area of strategic planning did not show significant results. The p-value was 0.109 (t-value = 1.617). The overall model showing the effects of all the three variables on competitive advantage is shown below:

	$CA^1 =$	$0.227 + 0.075SP^{1} + 0.534EB^{1} + 0.368OS^{1}$
Where:	$CA^1 =$	Composite Competitive Advantage
	0.227 =	Constant (Intercept)
	$SP^1 =$	Composite index in Strategic Planning
	$EB^1 =$	Composite index in employee behaviour
	$OS^1 =$	Composite index in organizational structure

The model above shows that in the absence of strategic planning, employee behaviour and organizational structure, competitive advantage of 0.227 would be realized. Thereafter, a unit change in competitive advantage would be impacted by factors of 0.075 by strategic planning, 0.534 by employee behaviour and 0.368 by organizational structure.

Table 5.39 shows the individual effects of strategic planning, employee behaviour and organizational structure on competitive advantage as compared with the overall influence of the three variables on competitive advantage.

							р-
Variable relationship	R	<b>R</b> <sup>2</sup>	F	F - si	g	t	value
Strategic planning (SP) on CA	0.462	0.213	32.490	0.00	0	5.700	0.000
Employee behaviour (EB) on CA	0.863	0.745	350.292	0.00	0	18.716	0.000
Organizational structure (OS) on CA	0.826	0.683	258.122	0.00	0	16.066	0.000
Total	2.151	1.641	640.904				
					SP	1.617	0.109
Joint effect of SP, EB and OS on CA	0.894	0.800	156.857	0.000	EB	7.498	0.000
					OS	5.322	0.000

 Table 5. 39: Summary of the sum total of the influence of the three variables on

 Competitive Advantage

Source: Author, 2018
The results in Table 5.39 indicate statistically significant results for the individual influence of strategic planning, employee behaviour and organizational structure at p-values of 0.000 for all the three respectively. On the joint effect of the three variables on competitive advantage, strategic planning turns out non-significant results with a p-value of 0.109 (t-value = 1.617) while employee behaviour has significant results with a p-value of 0.000 (t-value = 7.498) and organizational structure has a p-value of 0.000 (t-value = 5.322).

The variable that explains the biggest variation of competitive advantage on its own is employee behaviour, explaining 74.5%. This is followed by organizational structure, which explains 68.3% while on its own, strategic planning explains only 21.3% of competitive advantage. The three variables jointly explain 80.0% of the variation in competitive advantage.

When the  $R^2$  of the three variables, that is strategic planning, employee behaviour and organizational structure are added together, the total is 1.641. This would imply that if their effect on competitive advantage could be taken sequentially, that is, one variable after the other, they would explain 1.641 of the variation in competitive advantage.

The stepwise multiple regression analysis has two steps. Step one is on the influence of the independent variable, strategic planning, on competitive advantage. The  $R^2$ under this step was 21.3%. Step two was on the joint effect of the three variables, strategic planning, employee behaviour and organizational structure on competitive advantage. The  $R^2$  on the joint effect was 80.0%. The overall strength of the model in step one was 0.000 but with an F distribution value of 32.490 while under step two, the strength of the model was still 0.000 with an F distribution value of 156.857. The models under steps one and two were different as shown below:

Step one model:

	$CA^1 =$	$1.543 + 0.462 \text{ SP}^1$
Where:	$CA^1 =$	Composite Competitive Advantage
	1.543 =	Constant (Intercept)
	$SP^1 =$	Composite Index for Strategic Planning

Step two model:

	$CA^1$	=	$0.227 + 0.075 SP^1 + 0.534 EB^1 + 0.368 OS^1$
Where:	$CA^1$	=	Composite Competitive Advantage
	0.227	=	Constant (Intercept)
	$\mathbf{SP}^1$	=	Composite index in Strategic Planning
	$EB^1$	=	Composite index in employee behaviour
	$OS^1$	=	Composite index in organizational structure

From the foregoing, it is evident that the joint effect of the three variables is different from the effect of strategic planning on competitive advantage; and different from the sequential effects of the three variables taken singly and then their effects added together. These findings were sufficient to support hypothesis four (H4), which states that, the joint influence of employee behaviour and organizational structure is different from the influence of individual variables on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.

## 5.6 Summary of Tests of Hypotheses

There were four objectives to be tested in this study. These four objectives corresponded to the four hypotheses, which were developed and tested. The study sought to determine whether the relationship between strategic planning and competitive advantage of large manufacturing firms is influenced by employee behaviour and organizational structure. The hypotheses were stated in the alternative form and not the null form. A summary of the tests of hypotheses and the results from those tests is given in Table 5.40.

Research objective	Hypotheses	Analytical model	Results	Interpretation and comments
Objective 1:	H <sub>1</sub> : Strategic	Simple regression analysis:	$R = 0.462$ and $R^2 = 0.213$	Hypothesis confirmed.
Determine the influence of strategic planning on the competitive advantage of large manufacturing firms in Kenya	planning significantly influences the competitive advantage of large manufacturing firms in Kenya	By averaging the components of strategic planning: $CA=\beta_0 + \beta_1 SP + \mathcal{E}$ CA= Competitive Advantage $\beta_0 = Constant$ $\beta_1 = Regression coefficient forstrategic planningSP = Composite index for SP$	F = 32.490,  p-value = 0.000 $t = 5.700,  p-value = 0.000$ There is a moderate significant relationship on competitive advantage.	The results indicate a statistically significant influence of strategic planning on competitive advantage
		$\mathcal{E} = \text{Error term}$		

## Table 5. 40: Summary of the Tests of Hypotheses

Table 5	5.40 cor	ntinued
I HOIC C		i ti ii u tu ti i

Research objective	Hypotheses	Analytical model	Results	Interpretation and comments
Objective 2: Determine the influence of employee behaviour on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya	H <sub>2</sub> : Employee behaviour significantly influences the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya	Path analysis: There are four steps in this path analysis shown below. Step 1: $CA=\beta_0 +\beta_1SP + \varepsilon$ Step 2: $EB=\beta_0+\beta_1SP+\varepsilon$ Step 3: $CA=\beta_0+\beta_1EB+\varepsilon$ Step 4: $CA=\beta_0+\beta_1SP+\beta_2EB+\varepsilon$ CA=Competitive Advantage SP=Strategic Planning EB=Employee Behaviour $\beta_0, \beta_1$ = Regression coefficients $\varepsilon$ =Error term	Step 2: $R = 0.451$ and $R^2 = 0.203$ $F = 30.655$ , p-value = 0.000 $t = 5.537$ , p-value = 0.000         Results are significant         Step 3: $R = 0.863$ , $R^2 = 0.745$ $F = 350.292$ , p-value = $0.000$ $t = 18.716$ , p-value = 0.000         Results are significant         Step 4: $R = 0.867$ , $R^2 = 0.751$ $F = 179.839$ , p-value = $0.000$ $t_{SP} = 1.772$ , $p_{SP} = 0.079$ $t_{EB} = 16.053$ , $p_{EB} = 0.000$ Results are significant         except for strategic	<ul> <li>Hypothesis confirmed.</li> <li>Full mediation took place.</li> <li>Conditions for full mediation:</li> <li>1) Strategic planning predicts competitive advantage.</li> <li>2) Strategic planning predicts employee behaviour.</li> <li>3) Employee behaviour predicts competitive advantage.</li> <li>4) Predictor variable under step 4 (strategic planning) not statistically significant, while mediator variable was statistically significant.</li> </ul>

<b>Research</b> objective	Hypotheses	Analytical model	Results	Interpretation and comments
Objective 3:	H3: Organizational	Stepwise multiple	Step 2:	Partial moderation was
Establish the effect of	structure	regression analysis:	$R = 0.839, R^2 = 0.704$	confirmed after the following
organizational structure	significantly affects	There are three steps.	F = 141.506, p-value =	conditions were met:
on the relationship	the relationship	Step 1: $CA = \beta_0 + \beta_1 SP + \varepsilon$	0.000	
between strategic	between strategic	Step 2: $CA = \beta_0 + \beta_1 SP + \beta_2 OS + \mathcal{E}$	$t_{SP} = 2.929, p_{SP} = 0.004$	1) After adding the interaction
planning and	planning and	Step 3: CA=	$t_{OS} = 14.048$ , $p_{OS} = 0.000$	term, there is a significant
competitive advantage	competitive	$\beta_0 + \beta_1 SP + \beta_2 OS + \beta_3 SP.OS + \varepsilon$	There is a strong significant	change in $\mathbb{R}^2$ .
of large manufacturing	advantage of large		relationship between	2) The predictor (SP) and
firms in Kenya	manufacturing	CA=Competitive Advantage	strategic planning,	moderator (OS) are
	firms in Kenya	SP=Composite index for	organizational structure and	significant with the
		strategic planning	competitive advantage.	interaction term added but
		OS= Composite index for	Step 3:	the interaction term effect
		organizational Structure	$R = 0.842, R^2 = 0.709$	is not significant.
		SP.OS=Interaction term	F = 95.824, p-value = 0.000	3) The ANOVA model with
		$\beta_0$ =Constant term	$t_{SP} = 2.062,  p_{SP} = 0.041$	the interaction term
		$\beta_1$ , $\beta_2$ , and $\beta_3$ = regression	$t_{OS} = 3.357, p_{OS} = 0.001$	included was significant
		coefficients	$t_{SP.OS} = -1.423, p_{SP.OS} =$	with a p-value of 0.000 and
			0.157	F-value of 95.824.
			There is a strong	
			relationship between SP,	
			OS and interaction term	
			SP.OS. However, the	
			interaction term results are	
			not significant.	

<b>Research Objective</b>	Hypothesis	Analytical Model	Results	Interpretation and Comments
Objective 4: Establish the joint influence of employee behaviour and organizational structure on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya	H4: The joint influence of employee behaviour and organizational structure is different from the influence of individual variables on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya	Stepwise multiple regression analysis: There are two steps under the joint effect: Step 1: $CA=\beta_0+\beta_1SP+\xi$ Step 2: $CA=\beta_0+\beta_1SP+\beta_2EB+\beta_3OS+\xi$ CA=Competitive Advantage SP=Composite index for strategic planning EB=Composite index for employee behaviour OS=Composite index for organizational structure $\beta_0$ =Constant term $\beta_1$ , $\beta_2$ , and $\beta_3$ = regression coefficients	Step 2: Joint effect: $R = 0.894, R^2 = 0.800$ F = 156.857, p-value = 0.000 $t_{SP} = 1.617, p_{SP} = 0.109$ $t_{EB} = 7.498, p_{EB} = 0.000$ $t_{OS} = 5.322, p_{OS} = 0.000$ Single effects: SP on CA: $R = 0.462, R^2 = 0.213$ F = 32.490, p-value = 0.000 $t_{SP} = 5.700, p_{SP} = 0.000$ EB on CA: $R = 0.863, R^2 = 0.745$ F = 350.292, p-value = 000 $t_{EB} = 18.716, p_{EB} = 0.000$ OS on CA: $R = 0.826, R^2 = 0.683$ F = 258.122, p-value = 0.000 $t_{OS} = 16.066, p-value = 0.000$ Sum total for single effects: $R = 2.151, R^2 = 1.641$ F = 640.904 There is a strong significant and positive influence on the single (independent) effects as compared to the joint effects	<ul> <li>Hypothesis confirmed.</li> <li>1) The influence of SP on CA is different.</li> <li>2) The individual variables when added together contribute more than the joint effects.</li> <li>3) The joint effects are different from the sum total of the independent effects of the variables, and also different from the effect of SP (singly) on CA.</li> </ul>

Table 5.40 gives the results, interpretation and comments on the tests of hypotheses. The first hypothesis was to test whether strategic planning significantly influences the competitive advantage of large manufacturing firms in Kenya. The results indicated a statistically significant influence and therefore the hypothesis was confirmed. The second hypothesis was to test whether employee behaviour significantly influences the relationship between strategic planning and competitive advantage. Full mediation was established from the tests performed after all the four full mediation conditions determined by Baron and Kenny (1986) were met. Therefore, the second hypothesis was confirmed.

The third hypothesis was to test whether organizational structure significantly affects the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. Partial mediation was established after the partial mediation conditions determined by Baron and Kenny (1986) were met. The results were sufficient to confirm the second hypothesis and therefore organizational structure significantly affects the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.

The fourth hypothesis was to test whether the joint influence of employee behaviour and organizational structure was different from the influence of individual variables on the relationship between strategic planning and competitive advantage. This hypothesis was also confirmed after it was established that the joint effects of the three variables, that is, strategic planning, employee behaviour and organizational structure on competitive advantage was different from the sum total of the individual effects of the three variables, and also different from the effect of strategic planning on competitive advantage.

## 5.7 Discussion of Findings

The previous sections in this chapter have focused on presentation of results of tests of hypotheses. This section will lay emphasis on discussion of the findings. The results of tests of hypotheses are compared with results of previous empirical studies as well as theoretical propositions. The discussion points out areas of agreement and disagreement between the results of the current study and those of other studies undertaken earlier as well as postulations of the anchoring theories. The discussion is organized along the various hypotheses.

### 5.7.1 Strategic Planning and Competitive Advantage

The first hypothesis was to test whether strategic planning (including the strategic planning process, strategy formulation and planning for strategy implementation, evaluation and control) had a significant influence on the competitive advantage of large manufacturing firms in Kenya. The indicators of competitive advantage where cost, differentiation and focus (from the Michael Porter model); resources and capability and lastly, financial performance.

The results obtained confirm that strategic planning has statistically significant influence on cost advantages, differentiation advantages, focus advantages, resources and capability advantages and lastly on financial performance of large manufacturing firms in Kenya. In addition to statistically significant results being produced on individual or combined dimensions, composite strategic planning has statistically significant influence on the composite (overall) competitive advantage. These results confirm the results of Awino (2013), who established that a significant number of ICT SMEs in Nairobi did strategic plans for their firms in order to attain competitive advantage. They also confirm the findings by Arasa and K'Obonyo (2012, p. 211) who "established the existence of a relationship between strategic planning and firm performance of Insurance Companies in Kenya."

It is usually at the strategic planning stage when firms determine what strategies to pursue. In this regard, firms can choose to pursue the Porter-based strategies. This study established that cost, differentiation and focus were sources of competitive advantage and thus confirmed assertions by Porter (1985) and Thompson (1984), who had indicated that a number of sources of competitive advantage can be found and they include producing goods at lower cost, producing goods of highest quality and offering superior service to customers. The study also confirms findings by Parajogo (2007, p. 69) who established that "to compete on cost leadership strategy, firms have to put considerable effort in controlling production cost, increasing their capacity utilization, controlling material supply or product distribution, and minimizing other costs including research and development costs."

Parajogo (2007, p. 69) also found out that "to compete on differentiation strategy, firms needed to offer unique products, which are characterized by valuable features such as quality, innovation and a broad range of other differentiation features. He also established a link between quality and competitive strategy since quality is categorized as a primary basis for differentiation. Firms adopting the differentiation strategy will uniquely position their products based on several attributes leading to a premium price."

The results also established that resources and capabilities were sources of sustainable competitive advantage, thus confirming assertions by Peteraf and Barney (2003), and Teece (1997). Lorange (1980) has argued that formal strategic planning systems are unlikely to be a source of sustained competitive advantage. Even if these planning systems are valuable because they enable firms to recognize opportunities and threats in their environment, there is empirical evidence to suggest that many firms engage in such formal planning exercises, and as a result, such planning systems cannot be said to be rare (Kudla, 1980; Steiner, 1979).

Arguments have been advanced further that even if in a particular industry like manufacturing, formal planning is rare, the formal planning process has been thoroughly described and documented in a wide variety of public sources (Steiner, 1979). According to Barney (1992, p. 112), it seems likely "that apart from substitutability considerations, formal strategic planning by itself is not likely to be a source of sustained competitive advantage." The forgoing arguments notwithstanding, the results of this study show that formal strategic planning does contribute to competitive advantage, especially because at the planning stage, the resources of the firm can be clearly identified and appropriately applied for the benefit of the firm.

On the other hand, Wernerfelt (1984, p. 172) argues that, "the resource-based view (RBV) is a perspective that examines the link between a company's internal characteristics and its competitive advantage or performance." Proponents of the RBV (Wernerfelt, 1984, p. 179; Barney, 1991, p. 117) argue that "organizations should look inside the company to find sources of competitive advantage."

This looking inward to the organization is usually done better during the strategic planning process and in particular, when the SWOT analysis is being undertaken. "Firm resources can be taken to include all assets, capabilities, organizational processes, firm attributes, information and knowledge controlled by the firm that enables it to improve its efficiency and effectiveness" (Alimin et al., 2012 p. 153). It therefore becomes difficult to disengage completely the resources that contribute to a position of competitive advantage from the strategic planning process. From this perspective therefore, the results of this study have demonstrated that strategic planning leads to resource-based competitive advantages.

The study findings also indicated the existence of a significant relationship between strategic planning and financial performance indicators. These results confirm the findings of Kumar (2015, p. 73) who in his empirical research established "that firms that exhibit higher levels of strategic planning perform better in their financial indicators than those exhibiting lower levels of strategic planning. The results of this study also confirm the findings of Miller and Cardinal (1994, p. 1649) who "established that strategic planning positively affected firm performance." Miller and Cardinal (1994, p. 1649) asserted that researchers like Greenly (1986) and Mintzberg (1990) may have been incorrect in their conclusion that strategic planning does not affect performance of firms. They cited methodological differences across studies as being the cause of inconsistent findings in the literature and largely responsible for the debate concerning the value of strategic planning.

#### 5.7.2 Strategic Planning, Employee Behaviour and Competitive Advantage

The second objective of the study was to determine the influence of employee behaviour on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. This objective corresponded with the second hypothesis, which stated that employee behaviour significantly influences the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. The results of this study were that employee behaviour completed mediated the relationship between strategic planning and competitive advantage according to the conditions of mediation set out by Baron and Kenny (1986).

Rucker, Preacher, Tormala and Petty (2011, p. 367) have observed that, "in a simple mediation model with one mediator, full mediation suggests that a researcher has completely explained the process by which the independent variable influences the dependent variable and there is no need to test for further indirect effects." The results of hypothesis two imply that it is impossible to achieve the objectives set out in the strategic plan unless employees' behaviour is strategically aligned to the strategy. These results confirm the findings of Cees et al. (2009, p. 1197) "who found that there was a positive relationship between stimulating strategically aligned behaviour from employees, and achieving the objectives of the strategic plan." The results also confirm Locke's (1978) goal setting theory assertion that providing employees with clear and difficult goals increase their motivation and performance thus enhancing competitive advantage. The results of hypothesis two also confirm the findings of Irefin and Mechanic (2014), who established that employee commitment affected organizational performance.

It has been found out that the commitment of employees to the organization enhances the success of that organization because it makes the employees to be devoted to achieving its goals (Grawe et al., 2012). It has also been noted that high levels of dedication play a big role in cultivating favourable attitudes and behaviours in organizations (Chungtai & Zafar, 2006; Sinclair et al., 2005). Employee commitment can benefit an organization in several ways including improved performance, reduced absenteeism and turnover resulting to sustained productivity.

Commitment to an organization is positively related to desirable outcomes such as motivation (Mowday, Porter & Steers, 1982) and attendance (Mathieu & Zajac, 1990) and is negatively related to outcomes such as absenteeism and turnover (Clegg, 1983; Cotton & Tuttle, 1986). Employees with a high level of organizational commitment provide a secure and stable workforce (Wiener & Gechman, 1977) and thus providing competitive advantage to the organization. The results of this study have confirmed the value of high levels of commitment, dedication and cultivating favourable attitudes and behaviours as the main determinants of sustained competitive advantage in the organization.

This study has further confirmed the findings of Meyer and Allen (1991, 1997) who found that organizational commitment was a multi-dimensional construct comprising three distinct attitudinal components. The three attitudinal components are affective commitment, continuance commitment and normative commitment. These three components combined had the greatest impact on employee behaviour in this study. Normative commitment was found to be of highest impact among the three organizational commitment constructs in this study. This differed with other studies conducted earlier, which seemed to put emphasis on affective commitment more than the other two constructs (Meyer & Allen, 1991, Mowday et al., 1982). **5.7.3 Strategic Planning, Organizational Structure and Competitive Advantage** This study sought to establish the effect of organizational structure on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. The hypothesis of the study was that organizational structure significantly affects the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.

The overall findings from this study were that partial moderation had taken place and therefore that organizational structure affects the relationship between strategic planning and competitive advantage. Johnson et al. (2008, p. 434) have argued that, "the fit between strategy, structure, environment and the capacity of the firm should be nurtured in order to generate a strategic fit." The results of this study tend to agree with this assertion because if organizational structure is not considered, then the results obtained between strategic planning and competitive advantage are far lower than when the component of organizational structure is considered and dealt with adequately. In this study, the effect of organizational structure when combined with strategic planning was far stronger than that from strategic planning alone.

The findings confirm the assertions by Grant (1998) that the main structure of a firm is one of the fundamental ways used by strategists to try and position the firm in order to implement the strategy in a way that balances internal efficiency and effectiveness. The results further tend to confirm that when strategy is changed, then what everyone does in the organization should be changed (Ansoff, 1965). This is because of the big impact organizational structure has on the competitive advantage of an organization. The results also lend their support to the assertion by Chandler (1962), that structure follows strategy. It has already been indicated that when strategic planning and organizational structure are taken together, organizational structure has a stronger effect. This would seem to suggest that it would be a poor exercise to develop a strategic plan for an organization and fail to consider whether the structure in place was sufficient to assist in implementing the plan. The results also confirm the studies by Manar (2014, p. 35) who concluded that, "all the dimensions of structure were related to organizational commitment. It is through commitment to the organization's ideals that higher levels of competitiveness are achieved."

# 5.7.4 Strategic Planning, Employee Behaviour, Organizational Structure and Competitive Advantage

The fourth objective was to establish the joint influence of employee behaviour and organizational structure on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. The hypothesis was that the joint influence of employee behaviour and organizational structure was different from the influence of individual variables on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. The results indicate that the sum total of the independent influence of the variables on competitive advantage and greater than the joint influence of strategic planning on competitive advantage.

The findings and interpretations revealed that competitive advantage results from relationships among factors from various variables. The planning for implementation, evaluation and control dimension has a significant influence on competitive advantage. Because of the significant influence of this dimension, the composite strategic planning variable had a significant influence on competitive advantage. This confirms the results of Awino (2013, p. 201) who found out "that a large number of ICT SMEs in Nairobi did strategic plans in order to attain competitive advantage."

It is at the strategic planning stage when firms evaluate the internal resources they have and determine which ones would assist the firm in attaining competitive advantage. This approach supports the resource-based view (Wernerfelt, 1984, p. 179; Barney, 1991, p 112), "that resources can be a major source of competitive advantage." Some factors including the elements from Porters (1985) model are causes of competitive advantage and they include firm costs, differentiation and focus. According to Barney and Peteraf (2003), competitive advantage can emanate from unique resources owned and utilized by the firm in a certain way. Unique capabilities according to Teece et al. (1997) can be a source of competitive advantage. This is because unique human resources capabilities can be hard to copy by competitors.

Employee behaviour, which included strategically aligned behaviour and commitment was found to have the highest significant influence on the relationship between strategic planning and competitive advantage. Indeed, as a single variable, employee behaviour had the highest significant effect on competitive advantage. This confirms studies undertaken earlier by a number of scholars (Cees et al., 2009; Meyer & Allen, 1991; Locke, 1978) indicating that employee behaviour and commitment had significant influence on the performance and consequently competitive advantage of various organizations. Organizational structure was also found to have a partial moderating effect in the relationship between strategic planning and competitive advantage. Indeed, from the coefficient of determination, ANOVA and t-values results, organizational structure had a stronger effect on competitive advantage than strategic planning. This confirms results of other studies (Kavale, 2012, Grant 1998; Chandler, 1962) that the organizational structure of an organization is a significant component which if well-conceived can lead to a competitive advantage position.

This therefore leads to the conclusion that taken singly, the influence of the variables on competitive advantage will be greater than for the joint effect. This is a confirmation that all firms at some time or another, have to face the challenges of multiplicity of factors in an attempt to improve on competitive advantage and ultimately performance. This fact is critical to managers as they try to take synergistic advantages of combining employee behaviour and organizational structure issues as they attempt to maximize the influence of strategic planning on competitive advantage.

The findings in this chapter focused on the tests of the four hypotheses that corresponded with the four objectives of the study. Simple, stepwise, and hierarchical multiple regressions were used in the analyses. Hypothesis one on whether strategic planning influences the competitive advantage of large manufacturing firms in Kenya was confirmed. Hypothesis two on whether employee behaviour influences the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya was also confirmed. Full mediation occurred under hypothesis two after three conditions were met. These conditions are, one that strategic planning predicted employee behaviour, two that strategic planning predicted competitive advantage and three that strategic planning did not predict competitive advantage when both strategic planning and employee behaviour were used to predict competitive advantage.

The third hypothesis was on whether organizational structure affects the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. This hypothesis was confirmed on a partial moderation basis after satisfying the following factors; firstly, that after adding the interaction term, if there is a significant change in  $\mathbb{R}^2$  as well as significant effect by the new interaction term, then moderation is occurring. Secondly, that if the predictor and moderator are significant with the interaction term added, then moderation has occurred. These two conditions were met for partial moderation to have occurred.

The fourth hypothesis on whether the joint influence of employee behaviour and organizational structure is different from the influence of individual variables on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya was confirmed. Overall, the four hypotheses the study set out to test were all confirmed. Therefore, the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya was confirmed. Therefore, the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya is influenced by employee behaviour and organizational structure.

The chapter also presented hypotheses testing and discussion of the results. The discussions focused on the results and whether they were consistent or inconsistent with other empirical studies. The discussion also covered areas of suggestions to management on what to take keen interest on in their firms in order to sustain competitive advantage. The next chapter presents summary of findings, conclusion and recommendations.

## CHAPTER SIX

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 6.1 Introduction

The overall objective of this study was to determine whether the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya is influenced by employee behaviour and organizational structure. From this overall objective, four specific objectives were developed. The first specific objective was to determine the influence of strategic planning on the competitive advantage of large manufacturing firms in Kenya while the second objective was to determine the influence of the second objective was to determine the influence of employee behaviour on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya.

The third specific objective was to establish the effect of organizational structure on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. The fourth and final specific objective was to establish the joint influence of employee behaviour and organizational structure on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. Four hypotheses stated in the alternative form and corresponding to the four objectives were developed for further testing.

This chapter presents the summary of findings, which are in two sections; one section based on frequency statistics and the other one on inferential statistics. It goes on to present the conclusion, recommendations and implications for theory, policy, practice and methodology. The chapter ends with limitations of the study as well as suggestions for further research based on the identified limitations.

#### 6.2 Summary

This section presents a summary of the findings of the study. The summary is in two sections. Section one is based on frequency statistics while section two is based on inferential statistics. The population of study was all large manufacturing firms in Kenya in this census study. Out of the 124 large manufacturing firms as per the KAM Directory (2015), 122 valid responses were received and analyzed. Out of the total respondents, 91.0% were from the top management category while 5.7% were from middle management. Only 3.3% of the respondents failed to indicate their category in management.

Out of the total respondents, 59.8% had Masters level of education, 29.5% had Bachelors level, 2.5% had Doctorate level while only about 1.0% had Diploma level of education. About 7.4% of the respondents did not indicate their level of education. From these results, it is evident that large manufacturing firms in Kenya have high caliber employees who are able to cope with the complexities of strategic planning and competitive advantage. Out of the responses received, 51.6% of the firms had between 100 and 300 employees, 31.2% had over 500 employees while only 2.5% of the responding firms had less than 100 employees. These results on number of employees confirm other studies, which indicated that large manufacturing firms employed over 100 persons (Ondiek & Odera, 2012; KAM Directory, 2013).

From the responses received, 16.4% of the respondents had been with their firms for between 5 and 10 years, 58.2% had been with their firms for between 10 and 15 years and 15.6% had been with their firms for over 15 years. it is only 3.3% of the respondents who had been with their firms for less than five (5) years. This suggests high retention levels of employees in large manufacturing firms and has a large bearing on the results obtained from the employee behaviour variable.

On ownership of the firms, it was established that 84.4% were locally owned, 4.1% were foreign owned while 11.5% had both local and foreign ownership. 85.2% of the firms operated within Kenya, 6.6% operated within East Africa while 8.2% of the firms were global in their scope. On firms existence, 3.3% of the firms had been in existence for between 6 to 10 years, 14.8% had been in existence for between 11 to 15 years, 33.6% had been in existence for between 16 to 20 years while 37.7% of the firms had been in existence for over 20 years.

The results indicate that the firms have gained a lot of experience over the years in doing business. As for the years of practising strategic planning, 80.4% of the firms indicated a practice of over 10 years and 4.9% indicated a practice of between 6 and 10 years. These results reinforce the fact that these large manufacturing firms have learnt the value strategic planning adds to the competitiveness of the firms. Firms from all sectors of the manufacturing industry participated in this study and therefore the results can be generalized across the industry.

The overall mean score for the four areas that were being studied was 4.28 (to a large extent or to a high extent). The area with the highest mean score of 4.32 was strategic planning while the area with the lowest mean score was organizational structure. The higher mean score in the area of strategic planning might indicate the importance attached to it as compared with the lower mean score on organizational structure. The standard deviations were close to the mean ranging from 0.23 on the area of strategic planning to 0.34 on employee behaviour. The variability of responses from the respondents were low as exemplified by the coefficients of variation. The lowest variability of 5.0% was on the strategic planning area while the highest variability of 8.0% was on two areas, employee behaviour and organizational structure.

There were four objectives in this study. These four objectives corresponded to four hypotheses, which were developed and tested. The hypotheses were stated in the alternative form and therefore, when the results obtained were significant, the hypothesis was accepted. Conversely, when the results obtained were not significant, the hypothesis was rejected. The detailed results of the tests of hypotheses are given below.

#### 6.2.1 Strategic Planning and Competitive Advantage

The results of the relationship between the composite strategic planning and composite competitive advantage were found to be statistically significant with a p-value of 0.000 (t-value = 5.700) as shown in Table 5.15. The results showed further that composite strategic planning had a positive contribution with a beta value of 0.462 to a unit change in competitive advantage on the standardized coefficients.

However, the results of the strategic planning dimensions on composite competitive advantage showed a different picture as indicated on Table 5.14. The three distinct dimensions of strategic planning tested in this study were the strategic planning process, strategy formulation and planning for strategy implementation. From Table 5.14, the only dimension which produced statistically significant results was planning for strategy implementation, with a p-value of 0.000 (t-value = 5.863).

The other two dimensions, that is strategic planning process and strategy formulation produced results, which were not statistically significant. The results were at a p-value of 0.221 (t-value = 1.230) for the strategic planning process and a p-value of 0.088 (t-value = -1.723) for strategy formulation. The standardized beta coefficients were also low at 0.117 for the strategic planning process and -0.142 for strategy formulation.

#### 6.2.2 Strategic Planning, Employee Behaviour and Competitive Advantage

The hypothesis was to determine whether employee behaviour influences the relationship between strategic planning and competitive advantage. What was being tested was whether there was a mediating influence of employee behaviour on the relationship between strategic planning and competitive advantage. The results obtained indicated that employee behaviour fully mediated the relationship between strategic planning and competitive advantage. This is after the four conditions necessary for a full mediation to take place were met.

The four mediation conditions met were; first, that strategic planning significantly influenced competitive advantage and secondly that strategic planning significantly influenced employee behaviour. The third condition was that employee behaviour significantly influenced competitive advantage and the fourth and last condition was that strategic planning was not statistically significant but employee behaviour was when the influence of the two variables on competitive advantage was tested as shown in Table 5.24. In this fourth condition, the p-value of strategic planning was 0.079 (t-value = 1.772) which was greater than p≤ 0.05; while the p-value of employee behaviour was 0.000 (t-value = 16.053).

The composite results on step 3 of the mediation process (CA =  $\beta_0 + \beta_1 EB + \varepsilon$ ) were highly statistically significant with a p-value of 0.000 (t-value = 18.716) as shown in Table 5.23. Furthermore, the results of the two main dimensions of employee behaviour, that is, strategically aligned behaviour and commitment were also highly significant as is shown in Table 5.22. From this Table, it is evident that the p-value under strategically aligned behaviour was 0.006 (t-value = 2.818) while under commitment, the p-value was 0.000 (t-value = 8.601).

## 6.2.3 Strategic Planning, Organizational Structure and Competitive Advantage

The third objective was to establish the effect of organizational structure on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. The hypothesis set up was to test for the moderating effect of organizational structure on the relationship between strategic planning and competitive advantage. "The three decision rules for checking on moderation" by Baron and Kenny (1986, p. 1174), were used.

From the results obtained, partial but not full moderation was established after two out of the three set conditions were met. The first condition was that the two variables, that is, strategic planning and organizational structure taken together cause a significant change in  $\mathbb{R}^2$  than when strategic planning is taken alone. This condition was met once  $\mathbb{R}^2$  went up to 0.704, from the previous one of 0.213 as indicated in Table 5.34.

The other condition was that strategic planning and organizational structure were significant when the interaction term was added but that the interaction term itself was not significant. The p-value of strategic planning after introducing the interaction term was 0.041 (t-value = 2.062), the p-value of organizational structure was 0.001 (t-value = 3.357) while the p-value of the interaction term was 0.157 (t-value = -1.423). The supporting details are contained in Table 5.33 and Table 5.34.

# 6.2.4 Strategic Planning, Employee Behaviour, Organizational Structure and Competitive advantage

The fourth objective was to establish the joint influence of employee behaviour and organizational structure on the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. The hypothesis was to test whether the joint effects of the three variables, that is strategic planning, employee behaviour and organizational structure was different from the effect of strategic planning on competitive advantage, but also that the independent variables added together had a different contribution than for their joint effect.

The hypothesis was confirmed that the influence of strategic planning on competitive advantage with an  $R^2$  of 0.213 was different from that of the joint effect of the three variables on competitive advantage with an  $R^2$  of 0.800. In addition, the sum total of the  $R^2$  of the three variables at 1.641 was different from the  $R^2$  of the joint effects. The detailed statistics on this hypothesis are shown in Table 5.39.

## 6.3 Conclusion of the Study

The overall objective of the study was to determine whether the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya is influenced by employee behaviour and organizational structure. A conceptual model was developed to empirically test these relationships. This was a census study and data was to be collected from senior managers (top managers) in the 124 large manufacturing firms in Kenya as per the KAM Directory (2015) in order to test the model that had been developed.

Four specific objectives had been formulated to test the relationships between the four variables. Against the four specific objectives were developed four hypotheses for further testing. The results indicated a statistically significant relationship on the first hypothesis which stated that strategic planning influenced the competitive advantage of large manufacturing companies in Kenya. However, when the dimensions of strategic planning were tested against competitive advantage, it is only the planning for strategy implementation, evaluation and control dimension, which returned statistically significant results. The other two dimensions including the strategic planning process and strategy formulation produced results, which were not statistically significant.

On the second hypothesis that was testing whether employee behaviour influenced the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya, the results were statistically significant. It was established that employee behaviour completely mediates the relationship between strategic planning and competitive advantage. The third hypothesis was on whether organizational structure affected the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya. Partial moderation of the relationship between strategic planning and competitive advantage by organizational structure was established.

The fourth hypothesis was on whether the joint influence of employee behaviour and organizational structure was different from the influence of individual variables on the relationship between strategic planning and competitive advantage. This hypothesis was confirmed. It was established that the influence of strategic planning on competitive advantage was different from the joint effects of the three variables on competitive advantage. Further, the effect of the three variables when added together was different from the joint effect.

The strongest influence on competitive advantage was from employee behaviour followed by organizational structure. Somehow, the influence of strategic planning on competitive advantage was weaker as compared to the other two variables. In addition, it was established that the influence on the Porter related advantages (cost, differentiation and focus) was stronger than that on resources and capability related advantages. Besides, the influence on the resources and capability advantages was stronger than that on financial performance related advantages.

These findings inform the senior managers of large manufacturing firms that they need to focus on the three study variables if they have to influence competitive advantage and ultimately the performance of their firms significantly. The study established that the joint effect of the three variables, strategic planning, employee behaviour and organizational structure explain 80.0% of the variation in competitive advantage. This implies that senior managers of large manufacturing firms would be losing quite a large portion of what would generate competitive advantage for them if they ignored the three variables.

It was established that strategic planning, employee behaviour and organizational structure independently contribute more to competitive advantage than the joint effects of the variables. It can be argued that the independent effects of the variables influence firm's competitive advantage by creating synergy. In effect, no single variable can effectively influence the competitive advantage of a firm. The study has attempted to establish the synergistic effect of the study variables to create competitive advantage. This conclusion is consistent with findings from previous research and lends credence to the fact that the performance of a firm is determined, in part, by the combination of factors from both the external environment and internal capabilities.

## 6.4 Implications of the Study

The broad objective of this study was to determine whether the relationship between strategic planning and competitive advantage of large manufacturing firms was influenced by employee behaviour and organizational structure. Strategic planning was hypothesized as the independent variable, employee behaviour as the mediating (intervening) variable, organizational structure as the moderating variable and competitive advantage was taken as the dependent variable. The study came up with findings that will enhance the understanding of the drivers of competitive advantage in large manufacturing firms in Kenya. The results have implications on theory, policy, practice and methodology.

## 6.4.1 Implications on Theory

The results of this study contribute to strengthening the existing body of literature by confirming empirically that strategic planning influences competitive advantage of large manufacturing firms in Kenya both directly and indirectly through the mediating and moderating variables. Goal setting theory (Locke & Latham, 1990; 2002) was the anchoring theory. It was used to support both strategic planning and employee behaviour. In their studies, Locke and Latham (1990, 2002, p. 705), found that "specific high goals led to a higher level of task performance than do easy goals or vague, abstract goals. This is as long as a person is committed to the goal, has the requisite ability to attain it, and does not have conflicting goals." In this study, strategic planning was measured using three dimensions, which are, strategic planning process, strategy formulation and planning for strategy implementation, evaluation and control.

Employee behaviour was measured using two dimensions, which are; strategically aligned behaviour and commitment. Strategic planning was the independent variable and the hypothesis testing the relationship between strategic planning and competitive advantage returned significant results. This implies that large manufacturing firms in Kenya have to take strategic planning seriously, as it has a big influence on competitive advantage.

Employee behaviour was the mediating variable and in this study, there was a total mediation of the relationship between strategic planning and competitive advantage. This implies that employees in large manufacturing firms have to exemplify strategically aligned behaviour and be totally committed to the goals and objectives set in order to attain a position of competitive advantage. The study has therefore helped in advancing the theory of goal setting as it relates to large manufacturing firms in Kenya as they strive to attain competitive advantage.

Michael Porter's (1993) competitive advantage typology/theory was used to support competitive advantage. Porter (1993) has argued that the foundation for above average performance within an industry is sustainable competitive advantage, which can be achieved through cost leadership, differentiation or focus. This study has established that the strongest effects by the independent, mediating and moderating variables was on Porter's (1993) related advantages. Therefore, this study has confirmed Michael Porters typology/theory of competitive advantage. In this study, resources and capability type of advantages were also tested. Two theories were used, one the resource-based theory (Peteraf & Barney, 2003) and second, the dynamic capabilities theory (Teece et al., 1997). According to Barney and Hesterly (2012), four conditions have to be met for sustained competitive advantage to exist. These are the resources have to be valuable, rare, inimitable and non-substitutable. On the other hand, the dynamic capabilities theory underscores the deployment of the capabilities of the firm so as attain higher levels of performance. In this study, the influence of the various variables on resources and capability advantages was significant. This goes a long way in helping to advance resource-based theory and dynamic capabilities theory as they relate to large manufacturing firms in Kenya.

The contingency theory was used to support organizational structure. The theory is founded on the premise that there is no one form of organizational structure, which can be applied to different types of organizations (Van de Ven & Drazin, 1985). Instead, how effective an organization is depends on a fit between the technology use, its information system, the volatility of the environment, the organization size and the components of the organizational structure. In this study, organizational structure was operationalized using four constructs, these being, formalization, centralization. Specialization and integration. The results of the study were that there was partial moderation of the relationship between strategic planning and competitive advantage. In fact, there was a significant relationship between organizational structure and competitive advantage. These findings enhance the importance of having the right organizational structure if large manufacturing firms are to attain a position of competitive advantage. This study has helped in advancing the contingency theory as it relates to large manufacturing firms in Kenya.

#### 6.4.2 Implications on Policy

Findings of this study have policy implications for large manufacturing firms in Kenya. The manufacturing industry is one of the key sectors identified to assist spur growth of the Kenyan economy and help achieve the country's vision 2030. The performance of the manufacturing industry is important and therefore the results of this study will assist policy makers to make sound decisions regarding which variables to focus on in order for firms to achieve sustainable competitive advantage.

The large manufacturing firms have in the past embraced the practice of preparing strategic plans so as to identify the goals and objectives to pursue in order to remain competitive. The results of this study have shown that planning for the implementation, evaluation and control of the elements in the strategic plan is the most significant factor as compared to the planning process and strategy formulation. Knowledge of this fact should assist policy makers to ensure policies are in place to assist in implementing the strategic plan early on as the strategic plans are being prepared.

Findings from this study have indicated the significance of employee behaviour and organizational structure in mediating and moderating the influence of strategic planning on competitive advantage. This requires senior management to develop appropriate organizational structures as well as ensuring that there are conducive human resource policies, which will ensure employees adopt strategically aligned behaviour and that they are committed to the goals and objectives of the firms. As shown in this study, without strategically aligned behaviour and the right levels of commitment, and without an organizational structure that fits the requirements of the firm, the contribution by strategic planning alone to competitive advantage will be very small.

Because of the contribution of the manufacturing sector to the Gross Domestic Product (GDP) of the country, the government is very keen to ensure there are conducive government policies to support the development of this sector. As the results of this study have shown, human capital is one of the key ingredients in the success of the sector. The government can use these results to develop policies on which courses to emphasize moving forward, but also to enhance the labour relations laws and regulations. The enhanced labour laws and relations should not only be conducive to the individual employees, but should also assist senior managers in the manufacturing sector to provide conducive environments in the workplace so that employees can get more committed to their jobs.

Another area the government should look at is that of minimum wages. This is because pay, especially for lower cadre staff goes some way in enhancing commitment of employees in the workplace. Other policies or regulations that the government should review in order to ensure workers are committed to their jobs is safety in the workplace and what compensation employees should get in case an accident occurred on the job. The government should also improve its policies towards employers (owners of industries) in the country. Such policies could touch on taxation for example. Conducive tax regulations could enable employers in the manufacturing sector to pass some of the benefits to employees and this might elicit more commitment from those employees. With the right policies either from the employers in the manufacturing sector or from government, there is likely to be increased productivity. Senior managers should take the area of strategic planning and competitive advantage in its corrective perspective. In doing so, the contribution of employee behaviour and organizational structure will correctly be taken into account. Without the three variables being taken into account and in the right mix, it will be difficult for the manufacturing sector in Kenya to compete effectively in the global marketplace.

#### 6.4.3 Implications on Management Practice

The dimensions of strategic planning and their influence on competitive advantage manifest themselves differently. The results of this study have shown that planning for strategy implementation, evaluation and control is the most significant. Senior managers in large manufacturing firms need to be aware of this. This will enable them to do an exhaustive job at the strategic planning stage in this area of preparing to implement, evaluate and control the issues picked up at the strategy formulation stage.

As a management practice, more emphasis will have to be put on preparing the strategy implementation matrices. Theses matrices indicate the objectives to be achieved, the strategies to assist in achieving these strategies, the action plans, the staff to be responsible and the time deadlines provided. Otherwise, senior managers should know that merely spending a lot of time on the strategic planning process does not add a lot of value in terms of the final performance.

Out of the five dimensions of competitive advantage, the first three that had the highest significant results were cost, focus and differentiation in that order. The last two were resources and capability and financial performance advantages in that order as well. Managers will have to have practices that will ensure they enhance cost and focus advantages as a priority before embarking on getting the other advantages in place. This means managers may have to review the efficiency of their production lines, the efficiency of the employees, the efficiency of the distribution network for their goods and any other area where costs can be minimized.

Managers should also be explicitly aware of the contribution of employee behaviour to the success of the strategic plan. They should know that employees' behaviour has a big mediating influence between the strategic plan prepared and the output expected which in this study was competitive advantage. Managers should set high but realistic goals, communicate these goals to the employees and have the employees accept and own them. Managers should also have policies in place, which motivate employees so that they get committed to achieving the goals and objectives set. It should be clear to managers that the strongest effect towards achieving competitiveness is through strong employee commitment to the goals and objectives of the firm.

The results of this study have brought into focus the importance of organizational structure. Apart from employee behaviour, organizational structure is the other variable with quite a strong effect on competitive advantage. As has been indicated elsewhere in this study, structure is not just represented by the chart of organization. Instead, it is represented by all the personnel, rankings, systems, processes, technology, culture, and other related elements that constitute an organization (Kavale, 2012).

Managers in large manufacturing firms should strive to ensure that the items that affect structure, in order to make it fit for serving their firms, are properly put in place. In the absence of an organization structure that fits the needs of the firm, it will be difficult for the managers to achieve competitive advantage.

### 6.4.4 Implications on Methodology

This study adopted a descriptive cross-sectional approach with a view of establishing the link between strategic planning and competitive advantage, the mediating influence of employee behaviour and the moderating effect of organizational structure on this relationship in large manufacturing firms in Kenya. The study was to explore and establish the causal relationships among and between the variables. The descriptive cross-sectional design was deemed appropriate because it covered the "objective of the study, the scope, the nature of data to be collected and the type of analyses to be performed" (Saunders et al., 2012, p. 190).

The study population was all large manufacturing firms in Kenya according to the KAM Directory (2015). There were 124 large manufacturing firms and data was collected using a questionnaire. This questionnaire was tested for validity and reliability in order to ensure that the data collected was fit for analyses and interpretation. The questionnaires were mostly administered on a face to face basis with the respondents, but where this was not possible, they were dropped and picked after being completed.

The analytical tool used was mainly the regression analysis. This is a very powerful analytical tool and especially on studies whose conceptualization have cause and effect relationships between and among the variables. Using regression analyses, various statistical reports were generated and these were used as a guide to determine the statistical significance of the results. Regression analysis allows drawing of conclusions based on verifiable empirical evidence. By using regression analyses, all the four hypotheses of the study were tested and statistically significant results obtained.

Adopting a descriptive cross-sectional approach and the use of a questionnaire was appropriate in this study. The number of valid questionnaires returned and analyzed were 122 giving a success rate of 98.4%. Because of the large number of valid questionnaires returned, it was possible to make inferences from the results obtained after using regression analyses to test the relationships among and between the variables of study.

#### 6.5 Limitations of the Study

The main aim of the study was to establish the relationship of variables that have an impact on competitive advantage. It was targeted towards large manufacturing firms in Kenya. The study used a survey approach and out of the 124 firms targeted, 122 responded giving a response rate of 98.4% and this was an excellent response rate. The results of the study can thus be generalized to other similar contexts. However, the study lacked comparison of other similar studies done locally and had to rely on studies carried out in other countries. Even from other countries, it was difficult to come across a similar study although studies on some combination of the variables could be found. It was therefore difficult to generalize the findings.
The study utilized a cross-sectional survey because it was the most appropriate method available to address the issues of time and financial constraints. Crosssectional studies however, do not allow for causal effects on the observed relationships over time and therefore could not give actual relationships that exist between strategic planning, employee behaviour, organizational structure and competitive advantage of large manufacturing firms in Kenya over a period of time.

Future researchers could consider using other approaches like longitudinal studies. Such studies can give the change in competitive advantage of large manufacturing firms over time. The study was designed to capture the response of one respondent per firm at a given point in time. Using a single respondent for research has limitations because of the possibility of the common method bias. Although the respondents are thought and expected to give objective responses, they could have their own biases and perceptions, which could lead to misleading and subjective responses. It therefore becomes difficult to tell whether the perception was the respondents in order to compare views of other respondents in the firms being surveyed.

The study focused on large manufacturing firms. It did not consider small and medium-sized manufacturing firms. The small to medium-sized manufacturing firms may be faced with different challenges as compared to the large manufacturing firms. It may therefore be difficult to generalize the results obtained from the large manufacturing firms to the small and medium-sized firms. The study was also focused on the manufacturing sector, which deals mainly in goods. Similar studies could be carried out on the small to medium-sized manufacturing firms as well as in other sectors in the economy. Such sectors could be in the service industry like in banks and insurance companies in order to establish whether similar results can be obtained.

The study tried to combine pure competitive advantage indicators with financial performance indicators. On the financial indicators side, respondents were required to provide historical performance-based results for five years. However, most respondents were only able to provide results for the last three years. The tangible historical data was required to corroborate the information requested for in the questionnaire. This prevented the researcher from authoritatively confirming the results indicated in the Likert-type qualitative questionnaire. Future researchers could find ways and means of obtaining more tangible and objective historical financial information from the firms being surveyed.

Finally, the study operationalized competitive advantage on five perspectives of cost advantages, differentiation advantages, focus advantages, resources and capability advantages, and financial performance advantages. These indicators are highly business specific. The study did not consider environmental and social aspects as indicators. These would cover areas like legality and freedom of action among others, which are exposures on environmental and social nature. Future studies could consider including environmental and social aspects as indicators of competitive advantage.

### 6.6 Suggestions for Further Research

The study used a cross-sectional approach in its design. Cross-sectional studies do not detect causal effects of variables over time. Future researches could use a longitudinal design to be able to provide a more in-depth understanding of the strategic planning – competitive advantage relationship over time. A longitudinal survey will also give causal effects of the variables.

The study was only able to capture responses from one respondent per firm at a given point in time. This is because the unit of measurement was the firm. To avoid getting biased and subjective results in future, researchers should consider using multiple respondents. This would enhance the quality of the results, as it will address the common method bias, which occurs when one respondent is interviewed.

The population of interest was all large manufacturing firms in Kenya. These, according to KAM Directory (2015) were only 124 in number. There are more small and medium-sized manufacturing firms in Kenya, which were not targeted by this study. Future research could be carried out on the same variables studied but using the small to medium-sized manufacturing firms as the unit of study. Further, to try and get more representative results, a similar study can be carried out using all manufacturing firms in Kenya as the population of study.

The same study, using the same variables can be carried out in other sectors of the economy including banks, insurance companies and even government departments. The variables used in this study are quite applicable to a wide spectrum of organizations and it would be interesting to see whether the same results as have been obtained in this study would be obtained from those other industries. The same variables can be tested in other countries and especially in the developed economies to test whether the same results are obtained.

The results of the study revealed that the mediating variable (employee behaviour) and moderating variable (organizational structure) had stronger effect on competitive advantage than the independent variable (strategic planning). It would be interesting to rearrange the variables and make employee behaviour the independent variable for one study and then for another study, make organizational structure the independent variable and test to see the results.

On the request for tangible financial performance information, a number of firms indicated that the information was confidential and as a result, a number of respondents did not respond to that quantitative part of the questionnaire. Future researchers should consider how to collect the quantitative data, which would give more objective and verifiable results.

The chapter has presented the summary of the findings of the study and these findings were discussed based on the objectives and hypotheses set. Most of the findings supported previous research findings while a few were contrasting. The chapter also presented implications of the study on policy, management practice and methodology in the field of strategic management.

As for policy, the chapter has suggested that there should be right policies from both employers in the manufacturing industry and by the government. Managers will have to ensure they have right policies in place to motivate employees and make them committed to the goals and objectives of the various firms. Further, managers will have to ensure the right organizational structures in all their facets are in place. It is by having the right mix of policies affecting strategic planning, employee behaviour and organizational structure that manufacturing firms will achieve sustained competitive advantage, not only locally but also globally. The government has a role to play in supporting the manufacturing sector in Kenya to move forward. There is need for government to look at the minimum wages especially for lower cadre employees. The government also needs to have policies in place, which can reduce the cost of doing business and especially electricity/power costs. If the cost of power is reduced, the employers can pass some of the savings on to the employees as they create more conducive environments in the workplace.

The results of the study have demonstrated that different variables and dimensions of variables have different effects. Management should consider the various effects and influences from the various variables in order to determine how to manage their firms. For example, it would be pointless for managers to concentrate very hard on the strategic planning process and forget to plan for implementation of the strategies formulated. This is because the highest impact and results come from planning carefully how to implement, evaluate and control the strategies formulated.

Furthermore, it is pointless for managers not to have committed employees with the right strategically aligned behaviour because the study has demonstrated that the dimensions of employee behaviour have the greatest effect on competitive advantage. Managers of firms would also be advised to consider the organizational structure in place because structure has been demonstrated to have a significant effect on competitive advantage.

As for methodology, the cross-sectional survey used in this study worked well in the Kenyan context. The response rate was high at 98.4%. It would be useful for this study to be replicated in other contexts, for example, in other sectors of the Kenyan economy like Banks and Insurance companies, but also in other countries. It can also be useful and interesting to carry out some longitudinal studies using the same variables in this study and to see what the results would be like.

Finally, the study presented the limitations encountered. It is however worthy noting that the limitations did not affect the validity of the findings in any way. Areas for further research have also been enumerated. It would be interesting for further research to be undertaken in the recommended areas and the findings compared with those of this study.

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## **APPENDICES**

Appendix I: Letter of Introduction from University of Nairobi



#### UNIVERSITY OF NAIROBI COLLEGE OF HUMANITIES AND SOCIAL SCIENCES SCHOOL OF BUSINESS DOCTORAL STUDIES PROGRAMME

Telephone: 4184160/1-5 Ext. 225 Email: dsp@uonbl.ac.ke P.O. Box 30197 Nairobi, Kenya

29th January, 2018

#### TO WHOM IT MAY CONCERN

#### JACKSON KIIYO MAINGI - REGISTRATION NO. D80/97132/2015

This is to confirm that the above named is a Doctor of Philosophy (PhD) student at the School of Business, University of Nairobi.

He is required to submit as part of his assessment a research thesis whose title is "Strategic Planning, Employee Behaviour, Organizational Structure and Competitive Advantage of Large Manufacturing Firms in Kenya".

The purpose of this letter, therefore, is to kindly request you to assist and facilitate the student in carrying out the research/study in your organization. A questionnaire is herewith attached for your kind consideration and necessary action.

Data and information obtained through this exercise will be used for academic purposes only. Hence, the respondents are requested not to indicate their names anywhere on the questionnaire.

Any assistance accorded to him is highly appreciated.

Associate Dean, GBS SCHOOL OF BUSINESS

#### **Appendix II: Researcher's Letter of Introduction**

# Jackson Kiiyo Maingi

University of Nairobi P.O Box 30197 – 00100 NAIROBI 30<sup>th</sup> January, 2018

Dear Respondent,

#### **RE: REQUEST FOR ACADEMIC RESEARCH DATA**

I am a PhD candidate at the University of Nairobi, School of Business. As part of the requirements for the award of this degree, one is expected to undertake a research study. To this effect, I am undertaking an academic research thesis on; **Strategic Planning, Employee Behaviour, Organizational Structure and Competitive Advantage of Large Manufacturing Firms in Kenya.** 

Your firm is part of the population of interest. As a result, I request for your participation in the study. The information collected will be used for this academic research and will be treated with utmost confidentiality. The target respondents are senior managers in your organization. I will be very grateful if you could spare part of your time to answer the questions as honestly as possible. In addition, I humbly request you if possible to let us have a copy of your latest financial statements (say for year 2016) and your current strategic plan.

I have retained **Mr. Alfred Nyawir** to assist me in collecting the data. In this regard, I politely request you to please accord him the necessary assistance.

Thank you very much for your cooperation and participation in this research.

Yours faithfully,

Jk Maingi

Jackson Kiiyo Maingi PhD Candidate Tel: 0722527877 Email:jkmaingi84@gmail.com

#### **Appendix III: Research Questionnaire**

The Role of Employee Behaviour and Organizational Structure in the Relationship Between Strategic Planning and Competitive Advantage of Large Manufacturing Firms in Kenya

#### Dear Respondent,

The purpose of this questionnaire is to collect data to establish how the relationship between strategic planning and competitive advantage of large manufacturing firms in Kenya is influenced by employee behaviour and the organizational structure. The data collected will be used for academic purposes only and will be treated with strict confidence. Kindly spare some time and respond to the questions as best as you can. Where you require further clarification before responding, you can get such clarification from the researcher. Please note that there are no right or wrong answers.

#### SECTION A: GENERAL INFORMATION

### Please insert a tick $[\checkmark]$ as necessary

#### **Respondent Particulars**

- 1. Position of respondent \_\_\_\_\_
- In which category do you belong?
  Top management [ ] Middle level management [ ]
- How many years have you worked for the company in your current position? Less than 5 years [ ] 5-10 years [ ] 10-15 years [ ] over 15 years [ ]
- Please indicate your highest level of education.
  Postgraduate [ ] Bachelors [ ] Diploma [ ] Secondary [ ]
- For how long has your organization practiced strategic planning?
  0-5 years [ ] 6-10 years [ ] over 10 years [ ]

### Information on the firm

6. Name of the firm (Optional).

.....

7. Scope of operation of your firm.

	1	1 2					
		1) National (within Kenya)				[]	
		2) Regional (within East Afr	ica	)		[]	
		3) Continental				[]	
		4) Global				[]	
8.	Own	ership structure.					
		1) Fully Locally owned				[]	
		2) Fully Foreign owned				[]	
		3) Both Locally and Foreign	ow	nec	1	[]	
		Percentage of ownership:	Lo	cal		_%; Foreign%	
9.	How	many years has the firm been	in e	xis	tence	?	
	0-5	[] 6-10 [] 11-	-15	ſ	1	16-20 [ ] Over 20 [	1
10.	To w	which sub-sector(s) does your fi	rm	bel	ong?	Please tick as appropriate.	-
	1)	Building, Construction & Mining	Γſ	1	8)	Paper and Board Sector	[ ]
	2)	Chemical and Allied products	ſ	1	9)	Pharmaceuticals & Medical	[ ]
	2)	Energy Electrical & Electronic		1	10)		
	3)	Energy, Electrical & Electronics	L	]	10)	Plastic and Rubber	lJ
	4)	Food, Beverages and Tobacco	[	]	11)	Fresh Produce	[ ]
	5)	Leather and Footwear	[	]	12)	Textile and Apparels	[ ]
	6)	Metal and Allied	[	]	13)	Timber, Wood and Furniture	[ ]
	7)	Motor Vehicle and Accessories	[	]			
	L	1	<u> </u>		1	1	
11.	Num	ber of employees.					
	Less	than 100 [ ] 100-300 [	]			301-500 [ ] 0ver 50	0[]

12. Kindly list the products your firm offers in the market:

1)	
2)	
3)	
4)	
5)	

### SECTION B: STRATEGIC PLANNING

13. Strategic planning has been viewed as the systematic and organized effort of a firm to institute basic company goals & objectives, policies and strategies. It involves the development of detailed plans to implement policies and strategies to achieve objectives and basic organization purposes.

Please indicate the extent to which the following statements on strategic planning apply to your firm from year 2011 to-date. Tick ( $\lor$ ) as appropriate using the key below. For each question, please tick one option only.

Key:

1-Not at all; 2-Less extent; 3-Moderate extent; 4-Large extent; 5-Very large extent

No	Statement	1	2	3	4	5
A	Strategic Planning process					
1	A formal and systematic strategic planning process is					
	practiced in the firm					
2	Adequate financial resources are allocated to the strategic					
	planning process					
3	All departments and autonomous sections are involved in					
	the strategic planning process					
4	Management is involved in the strategic planning process					
5	Working time is spent in the strategic planning process					
	when the strategic plan is being prepared					
6	The time management devotes in strategic planning process					
	is adequate					
7	There is a formal review or determination of the firm's					
	vision and mission during the strategic planning process					
8	A systematic search for strengths and weaknesses is done					
	when planning					
9	A systematic search for opportunities and threats is done					
	when planning					
10	The strategic plan is formally written and approved by the					
	Board of directors					

No	Statement	1	2	3	4	5
В	Strategy formulation					
11	There is clear identification and analysis of the strategic issues facing the firm					
12	There is clear delineation of goals and objectives of the firm					
13	There is clear delineation of the strategies to meet the objectives of the firm					
С	Planning for Strategy implementation					
14	Relevant experience is available from either in-house or outsourced resources to implement strategies in your firm					
15	The criteria for assessing the success of strategy implementation is clear – there are clear key performance indicators					
16	The implementation tasks to be performed are specified beforehand so as to ensure effective strategy implementation					
17	Adequate resources which include human, financial and time, are always available for the strategy implementation process					
18	What is to be done during the implementation process is acceptable to those involved					
19	A system has been put in place to monitor progress of the implementation process					
20	Strategy implementation was well received from the start due to conditions within and/or external to my firm					
21	Activities and responsibilities for strategy implementation are assigned to staff with expertise and authority who are consequently accountable for the results					
22	The board of directors is supportive of the strategy implementation process					
23	Strategy implementation is given priority over other commitments					

## SECTION C: EMPLOYEE BEHAVIOUR

14. Please specify to what extent the following employee behaviours are exemplified in your firm. Use the key below and TICK as appropriate. For each statement, please tick one option only in the corresponding box.

Key: 1=Not at all; 2=Small	extent; 3=Moderate	extent; 4=High	extent; 5=Very
high extent			

No	Statement	1	2	3	4	5
Α	Strategically Aligned Behaviour					
1	Employees participate in making decisions impacting					
	on their jobs					
2	Employees are energized by challenging but realistic					
	goals and objectives					
3	Employees take action without being directed					
4	Employees are always ready and enthusiastic for change					
5	Employees embrace open and detailed communication					
	on issues affecting the strategic plan of the organization					
6	Employees do not always have to check or ask for					
	permission before proceeding with their tasks					
7	Employees take responsibility for their actions					
8	Employees are prepared to work beyond the scope of					
	their job					
9	Employees are involved in continuous learning in order					
	to improve work performance					
10	Some employees find new approaches to execute tasks					
11	Some employees systematically introduce innovative					
	ideas into work practices					
12	Some employees with specialized skills search out new					
	working methods, techniques or instruments					

No	Statement	1	2	3	4	5
В	Employee commitment					
	Affective Commitment					
13	Employees would be very happy to spend the rest of					
	their careers in the organization					
14	Employees really take the organization's problems as					
	their own					
15	Employees do not feel like part of the family of the					
	organization					
16	Employees do not get emotionally attached to the					
	organization					
17	Employees feel the organization has a great deal of					
	personal meaning to them					
18	Employees do not have a sense of belonging to the					
	organization					
	Continuance Commitment					
19	It would be very hard for the employees to leave the					
	organization immediately even if they wanted to					
20	Employees feel their lives would be disrupted if they					
	decided to leave the organization immediately					
21	Employees stay at the organization is more out of					
	necessity than desire					
22	Employees have too few options to consider leaving the					
	organization					
23	Employees would consider working elsewhere if they					
	had not invested so much in the organization					
24	Employees feel leaving the organization would require					
	considerable personal sacrifice because the overall					
	benefits cannot be matched elsewhere					
25	Employees feel one of the negative consequences of					
	leaving the organization is the scarcity of available					
	alternatives					

No	Statement	1	2	3	4	5
	Normative Commitment					
26	Employees do not feel obligated to remain with the					
	organization					
27	Even if it were to their advantage, employees do not feel it					
	would be right to leave the organization at this time					
28	Employees would feel guilty if they left the organization					
	at this time					
29	Employees feel the organization deserves their loyalty					
30	Employees would not leave the organization right now					
	because they have a sense of obligation to the people in it					
31	Employees feel they owe a great deal to the organization					

## SECTION D: ORGANIZATIONAL STRUCTURE

15. Please indicate the extent to which each of the following statements relating to organizational structure is relevant in your firm. Use the key below and TICK as appropriate. For each question, please tick one option only.

## Key:

1=Not at all;	2=Small	extent;	3=Moderate	extent;	4=High	extent;	5=Very	high
extent								

Α	Organizational Structure constructs	1	2	3	4	5
	Formalization					
1	The organization has many rules defining what					
	employees should do					
2	Employees have job descriptions defining their roles					
	and responsibilities					
3	There are procedures in place defining what is to be					
	done under the various organization jobs					
4	Organizational control systems are enforced according					
	to the rules and procedures and not shared norms					
5	Coordination of work is done according to work					
	standards and not mutual agreements					
6	Written communication is the normal mode of					
	communication in the organization					
	Centralization					
7	Decision-making is in the hands of top managers					
8	Lines of communication and responsibilities are clear					
	and the route to the final approval can be travelled					
	quickly					
9	Most communication in the organization is one-way,					
	from management to the employees					

No	Statement	1	2	3	4	5
10	Employees participate in making decisions involving					
	the tasks associated with their positions					
11	Employees participate in making decisions involving					
	their work and work environment					
12	Views from lower ranking employees in the					
	organization are not encouraged					
13	New ideas and program changes from lower ranking					
	employees are usually not encouraged because they					
	could delay decision-making					
	Specialization					
14	Departmentalization is done according to similarities					
	in tasks and activities in the organization					
15	Line staff responsibilities in the organization are					
	distinct and not blurred					
16	Employees have control in carrying out tasks in their					
	departments					
17	The organization has specialists who direct their					
	efforts towards well-designed set of activities					
18	The specialists in the organization have expertise in					
	their respective areas and are given substantial					
	authority to determine the best approach to complete					
	their tasks					
	Integration					
19	The organization's business process are integrated					
	across functionally specialized groups using					
	connection devices, cross-functional teams and inter-					
	departmental committees					
20	The organization structure hierarchy has many layers					
21	There is a strong tendency in the organization to let					
	the demands of the situation define what the proper					
	behaviour on the job should be					
22	There is a strong tendency in the organization to let			L		
	the personality of the individual define what proper					
	behaviour on the job should be					

## SECTION E: FIRM COMPETITIVE ADVANTAGE

16. Please indicate the extent to which the following statements describe your firm's competitive advantage. Use the key below and TICK as appropriate. For each question, please tick one option only.

1=Not at all; 2=To a less extent; 3	=To a moderate	e extent; 4=To a	a large extent;
5=To a very large extent			

No	Statement		2	3	4	5
Α	Cost advantage					
1	The firm is a low cost producer					
2	The firm has a unique and efficient production line					
3	The firm has a high market share					
4	The firm enjoys economies of scale in its production capacity					
5	The firm has retained its customers for extended periods					
6	The firm has set the stage for price discipline in the industry					
7	The firm has kept potential competitors out of the industry through price cutting					
8	The firm has sustained price increases passed on to it by the suppliers					
9	The firm has enjoyed above-average profitability over extended periods					
B	Differentiation advantage					
10	The firm is insulated from competitive rivalry in the industry					
11	The firm has built a strong brand reputation for its products and services					
12	The firm has built a pool of loyal customers					
13	The customers are satisfied with the firm's products and services					
14	The firm has been able to increase its market share					
15	The firm is able to pass along price increases to its customers					
16	The firm does not experience difficulty in sustaining a price premium as the product becomes familiar in the market					

No	Statement	1	2	3	4	5
С	Focus advantage					
17	The firm serves a special market segment(s)					
18	The firm enjoys high prices for its products and services					
19	The firm offers products specially made for a particular					
	segment of customers or users					
20	The firm offers unique products (performing a unique					
	function or uniquely designed) to its customers					
21	The firm has utilized its distinctive competencies to create					
	new markets					
22	The firm has used its distinctive assets to create new					
	markets					
D	Resources and capability advantage					
23	The firm offers a valuable resource not being offered by					
	other firms					
24	The firm has rare source of raw materials and has control					
	over the suppliers					
25	The firm does not have competition from similar products					
	and services					
26	The firm has a high retention of skilled employees					
27	The firm has highly skilled and experienced top managers					
28	The firm has erected barriers to entry into similar business					
	because of the large size of the manufacturing plant					
29	The firm encourages and supports innovation in new					
	products and services					

No	Statement	1	2	3	4	5
E	Financial measures					
30	The sales revenue of the firm have been increasing in the last three years					
31	The profits of the firm have been increasing in the last three years					
32	The sales revenues of the firm have improved due to repeat sales					
33	The firm has achieved good returns by improving its asset utilization in the last three years					
34	The firm has increased its market share in its industry in the last three years					
35	The return on equity has been increasing in the last three years					

## Please provide the following information on the firm's performance:

Criteria	Unit of	5 year achievement				
	measurement	2013	2014	2015	2016	2017
Growth in sales revenue	%					
Growth in profits before tax	%					
Growth in market share in						
the industry	%					
Growth in return on equity	%					

## **General Comments**

Please put down any comments you might have with respect to the subject of this study.

Do you wish to receive a complimentary copy of the results of this study? Yes [ ] No [ ]

## THANK YOU FOR YOUR PARTICIPATION IN THIS STUDY \*THE END\*

Sector: Building, Mining & Construction (5)								
No	Firm	Operation	No	Firm	Operation			
1	Athi River Mining Ltd	Nairobi	4	East African Portland Cement Company Ltd	Athi River			
2	Bamburi Cement Limited	Nairobi	5	Mombasa Cement Ltd	Nairobi			
3	Central Glass Industries Ltd	Nairobi						
Sector: Chemical & Allied (18)								
6	Beiersdorf East Africa Ltd	Nairobi	15	Reckitt Benckiser (E.A.) Ltd	Nairobi			
7	BOC Kenya Limited	Nairobi	16	Sadolin Paints (E.A.) Ltd	Nairobi			
8	Crown Berger Kenya Ltd	Nairobi	17	Sara Lee Kenya Limited	Nairobi			
9	Eveready Batteries East Africa Ltd	Nairobi	18	Strategic Industries Limited	Nairobi			
10	Haco Tigerbrands East Africa Ltd	Nairobi	19	Syngenta East Africa Ltd	Nairobi			
11	Interconsumer Products Ltd	Nairobi	20	Tata Chemicals Magadi Ltd	Magadi			
12	Osho Chemicals Industries Ltd	Nairobi	21	Twiga Chemical Industries Limited	Nairobi			
13	Pyrethrum Board of Kenya	Nakuru	22	Unilever Kenya Ltd	Nairobi			
14	PZ Cussons EA Ltd	Ruaraka	23	Vitafoam Products Limited	Nairobi			
	Sector:	Energy, Elect	rical &	Electronics (6)				
				Kenya Power & Lighting Co.				
24	East African Cables Ltd	Nairobi	27	Ltd Libua Oil Kanya Limitad	Nairobi			
25	IberaAfrica Power (EA) Ltd	Nairobi	28	(Formerly Mobil Oil Kenva)	Muthaiga			
26	International Energy Techik	Nairobi	29	Nationwide Electrical Industries Ltd	Nairobi			
			-					
	Sector:	Food, Bevera	ges and	Tobacco (52)				
30	Beverage Services (K) Ltd	Nairobi	39	Kenya Tea Packers Ltd (KETEPA)	Kericho			
31	Bidco Oil Refineries Ltd	Thika	40	Kenya Wine Agencies Limited	Nairobi			
32	British American Tobacco Kenya Ltd	Nairobi	41	Keroche Industries Ltd	Naivasha			
33	Broadway Bakery Ltd	Thika	42	Kitui Flour Mills Ltd	Mombasa			
34	Brookside Dairy Ltd	Ruiru	43	Krystalline Salt Ltd	Mombasa			
35	Cadbury Kenya Ltd	Nairobi	44	London Distillers (K) Ltd	Nairobi			
36	Chemelil Sugar Company Ltd	Kisumu	45	Mastermind Tobacco (K) Ltd	Nairobi			
37	Coastal Bottlers Limited	Mombasa	46	Menengai Oil Refineries Ltd	Nakuru			
38	Coca-Cola East Africa Ltd	Nairobi	47	Mini Bakeries (Nbi) Ltd	Nairobi			

# Appendix IV: Large Manufacturing Firms in Kenya

Source: KAM Directory (2015)

No	Firm	Operation	No	Firm	Operation				
Sector: Food & Beverage -52 (continued)									
48	Del Monte Kenya Ltd	Thika	65	Mombasa Maize Millers Ltd	Mombasa				
49	East African Breweries Ltd	Nairobi	66	Mount Kenya Bottlers Ltd	Nyeri				
50	East African Sea Food Ltd	Nairobi	67	Mumias Sugar Company Limited	Mumias				
51	Eldoret Grains Ltd	Eldoret	68	Nairobi Bottlers Ltd	Nairobi				
52	Excel Chemicals Ltd	Nairobi	69	NAS Airport Services Ltd	Nairobi				
53	Farmers Choice Ltd	Nairobi	70	Nestle Foods Kenya Ltd	Nairobi				
54	Frigoken Ltd	Nairobi	71	Nutro Manufacturing Epz Ltd	Athi River				
55	Githunguri Dairy Farmers Co- operative Society	Githunguri	72	Premier Flour Mills Ltd	Nairobi				
56	Gold Crown Foods (EPZ) Ltd	Mombasa	73	Procter & Gamble East Africa Ltd	Nairobi				
57	James Finlay Kenya Ltd	Kericho	74	Pwani Oil Products Ltd	Mombasa				
58	Kapa Oil Refineries Ltd	Nairobi	75	Rafiki Millers Ltd	Nairobi				
59	Kenafric Industries Limited	Nairobi	76	Rift Valley Bottlers Ltd	Nairobi				
60	Kenblest Limited	Nairobi	77	Unga Group Ltd	Nairobi				
61	Kenchic Ltd	Nairobi	78	United Millers Ltd	Kisumu				
62	Kensalt Ltd	Mombasa	79	W. E. Tilley (Muthaiga) Ltd	Nairobi				
63	Kenya Seed Company Ltd	Kitale	80	West Kenya Sugar Company limited	Kakamega				
64	Kenya Tea Development Agency	Nairobi	81	Wrigley Company (E.A.) Ltd	Nairobi				
Sect	or: Leather & Footwear (2)								
82	Alpharama Ltd	Athi River	83	Bata Shoe Co (K) Ltd	Limuru				
<b>G</b> (									
84	ASL Ltd	Nairobi	91	Mabati Rolling Mills Limited	Athi River				
85	Corrugated Sheets Limited	Mombasa	92	Metal Crowns Limited	Nairobi				
86	Devki Steel Mills Ltd	Nairobi	93	Nampak Kenya Ltd	Thika				
87	Greif Kenya Limited	Mombasa	94	Standard Rolling Mills Ltd	Mombasa				
88	Insteel Limited	Nairobi	95	Steel structures Ltd	Nairobi				
89	Kaluworks Limited	Nairobi	96	Steelmakers Ltd	Nairobi				
90	Kenya United Steel Company (2006) Ltd	Mombasa	97	Tononoka Steel Ltd	Nairobi				
Secto 98	r: Motor Vehicle & Accessories Foton East Africa Ltd	(4) Nairobi	100	Kenya Grange Vehicle Industries Ltd	Nairobi				
99	General Motors East Africa Limited	Nairobi	101	Toyota East Africa Ltd	Nairobi				

Source: KAM Directory (2015)
No	Firm	Operation	No	Firm	Operation
Sector: Paper, Packaging & Board (11)					
102	Allpack Industries	Nairobi	108	General Printers Limited	Nairobi
103	Chandaria Industries Limited	Nairobi	109	Pan African Paper Mills (E.A) Limited	Webuye
104	Dodhia Packaging Limited	Nairobi	110	Standard Group Ltd	Nairobi
105	East Africa Packaging Industries Limited	Nairobi	111	Tetra Pak Ltd	Nairobi
106	English Press Limited	Nairobi	112	Twiga Stationers & Printers Ltd	Nairobi
107	General Plastics Limited	Nairobi			
Sector: Pharmaceutical & Medical Equipment (1)					
113	Glaxo Smithkline Kenya Ltd	Nairobi			
Sector: Plastics & Rubber (6)					
114	Blowplast Ltd	Nairobi	117	Sameer Africa Ltd	Nairobi
115	Packaging Industries Ltd	Nairobi	118	Umoja Rubber Products Ltd	Mombasa
116	Polly Propelin Bags Ltd	Mombasa	119	Uni-plastics Limited	
Sector: Textile & Apparels (4)					
120	Hantex Garments EPZ Limited	Mazeras	122	Spinknit Dairy (Ltd withour Dairy)	Nairobi
121	Kenya Trading EPZ Ltd	Nairobi	123	Spinners & Spinners Ltd	Nairobi
Sector: Timber, Wood & Furniture (1)					
124	Rai Plywoods (Kenya) Ltd	Eldoret			

Source: KAM Directory (2015)