STRATEGIC ORIENTATION AND COMPETITIVENESS OF MANUFACTURING FIRMS IN KENYA

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Strategic Orientation and Competitiveness of Manufacturing Firms in Kenya

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DECLARATION

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

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DEDICATION

This thesis is dedicated to my grandmother Loice Mudambi Gogo for her love, guidance and support. Instilling in me the values of patience, respect, endurance and having remained a key pillar in my life. Thanks for making sure that I took my education with the seriousness it deserved and always being keen on my studies. Our matriarch we honor you!

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ACRONYMS AND ABBREVIATIONS

ANOVA	Analysis of Variance
BRICS	Brazil, Russia, India, China and South Africa
GDP	Gross Domestic Product
GOK	Government of Kenya
JKUAT	Jomo Kenyatta University of Agriculture and Technology
KAM	Kenya Association of Manufacturers
KITP	Kenya Industrial Transformational Programme
KNBS	Kenya National Bureau of Statistics
MTP	Medium Term Plan
NACOSTI	National Commission for Science, Technology and Innovation
RBT	Resource Based Theory
SME	Small and Medium Enterprises
TMT	Top Management Team
USA	United States of America
UK	United Kingdom

DEFINITION OF OPERATINAL TERMS

Competitiveness	This is the ability to compete with other firms, achieve a favourable competitive position, which allows to have a superior performance to that of the competitors (Rubio, 2004).
Entrepreneurial Orientation	A set of decision making styles, processes, practices, rules and norms for which an organization uses to make decisions (Etim et al., 2017).
Learning Orientation	A process that improves individual acquisition, and dissemination of information through transforming it into part of knowledge system of the organization in an organized and understandable way (Lita & Faisal, 2018).
Manufacturing firms	This is any business that uses components, parts or raw materials to make a finished product. These finished products can be sold directly to consumers or other manufacturing firms to allow them to make different products (Ondieki & Oteki, 2015).
Market Orientation	This refers to the organization culture where employees are committed to continuously create superior customer value (Gudlaugsson & Schalk, 2009)
Medium and Large Enterprises	Medium enterprise is any firm with an annual turnover of between Ksh. 5 to 100 Million and engaging between 50-99 employees while Large enterprises employees over 100 employees (KNBS, 2016).

Strategic Orientation	Decisions and principles undertaken by a firm which directs its activities and generate behavior intended to achieve sustainable competitive advantage and improve firm's performance (Hakala, 2011).
Technology Orientation	Technology orientation refers to the predisposition to introduce or employ new technologies, products or innovation (Hutt et al., 2004).
Top Management Commitment	Top management commitment is a term used to describe how top management team of a given firm participates and supports the organization strategy and operations (Amoako-Gyampah et al., 2018).

ABSTRACT

Manufacturing as any other sector in the economy is affected by the complexity and dynamism in the business environment. In order to endure the rivalry and remain competitive, manufacturing firms have to adopt improved approaches to management that will makes them strategic in their operations, and this therefore calls for adoption strategic orientation. Strategic orientation is an important pillar on firm's structure, activities, investment and its competitiveness as it helps in finding solutions to challenges that exists in the operating environment. The main emphasis of this study was to establish the role of strategic orientation on competitiveness of manufacturing firms in Kenya. Specifically, the study was guided by the following objectives; to assess the role of market orientation on competitiveness, to determine the role of technology orientation on competitiveness, to examine the role of learning orientation on competitiveness, to establish the role of entrepreneurial orientation on competitiveness and finally, to determine the moderating role of the top management commitment on the relationship between strategic orientation and the competitiveness of manufacturing firms in Kenya. To achieve the set objectives, null hypotheses were developed and used. Dynamic capability theory, game theory, resource based theory, diffusion of innovation theory and finally, the upper echelon theory were adopted as the theoretical frameworks that guided this study. The study adopted descriptive and correlational research designs while the research philosophy was positivism. The target population of the examination were the one hundred and thirty four (134) manufacturing firms that are registered members of Kenya Association of Manufacturers, Machakos and Central Kenya Region Chapters. A census was undertaken of all the 134 firms that are classified as medium and large manufacturing enterprises in the two regions. Semi structured questionnaires were dropped to the office of the chief executive officers/directors who latter marked them to relevant technical department in the firm for response. Quantitative and qualitative data was generated of which was coded, processed and evaluated for both descriptive and inferential statistics generation. Regression Analysis was used to determine the association between the hypothesized variables whereas the Analysis of Variance (ANOVA) was used to determine the relationship between independent and dependent variables. The major findings of the study show that market orientation, technology orientation, learning orientation, entrepreneurial orientation have a positive and statistically substantial role on competitiveness of manufacturing firms in Kenya. The study also found that top management commitment has a moderating role on strategic orientation and competitiveness of manufacturing organizations in Kenya. The research recommends that manufacturing firms should put in place well guided initiatives that will assist in gathering information in regard to customers' needs and requirements. A strong investment in technology as this is critical in production of goods in a faster and efficient way thereby responding to the market demands appropriately. Firms also need to enhance knowledge generation and sharing within departments. Employees need to be given some autonomy in making operational decisions. Finally, the top management should support initiatives that are geared towards making the firm competitive through provision of resources, communication and involvement of everybody. The study concluded that firms in which

the top management allocate resources and are involved are in a better position to be competitive in the market. The study findings will benefit the government, financiers and policy makers in having a better understanding of the sector. It also adds to the existing body of knowledge hence researchers and academicians will use the findings to undertake further research in areas of strategic orientation in other areas and sectors.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Manufacturing sector in any nation plays a key catalytic role and it's critical for economic transformation. Any advanced economy in the world despite the high inflation rates, currency depreciation, global supply chain disruptions and escalating public and other macro-economic issues manufacturing sector remains a crucial driver of growth (Wan et al., 2022). The sector is a leading avenue for increased productivity in relation to import substitution and export expansion, source for foreign exchange earnings, employment generator and promotion of growth in investment for the country (Opaluwa et al., 2010). Despite its importance, the Kenya's manufacturing environment has become dynamic and competitive and this calls for adoption of new way of undertaking business as the sector faces stiff competition from well-established global economies. This change emanates from new technological advances that are being adopted, rate of innovation changes and rapid development being experiences in the sector and globally.

Due to these changes in the operating environment manufacturing firms are required to come up with new strategies, operation decisions and choices that will make them compete constructively in the market place and ensure their existence and improve performance (Ketema, 2015). This is because what used to work previously may have now become ineffective or obsolete in the current situation and needs to re-engineered or be done away with. The rate at which business environment and in particular the manufacturing sector is changing, it's in a continuous and rapid state. This calls for rethinking of how the business operation will be undertaken so as to serve the customers better and remain relevant and competitive. Today's business environment is experiencing accelerating turbulence characterized by increasing competitive intensity and rapid changes in the market and customer expectations. Turbulence in the business environment can erode a company's competitiveness and cause it to become more challenging to maintain. The

business environment which encompasses manufacturing firms has become complex and turbulent due to the multifaceted relationship and interactions that occur within it. This has been compounded by the fact that reduction in the cost of transactions such as moving of goods, capital, technology and people globally (Mason, 2007) makes it very erratic and the constant demands of the consumers for improved products.

This changes in nature and the scope of competition that have been necessitated by the environmental demands, consumer needs and preferences call for adoption of new or improved managerial and theoretical approaches. This means manufacturing firms as any other business organizations that aims at serving the customers effectively and making profit have to re-adjust and adopt strategies that will make them improve their competitiveness. Because of such adoption they will be able to remain relevant in the environment by being competitive as the modern day economic conditions are currently characterized by rapid and often unforeseen changes. The external environment as a result of major shifts in economic and political forces change the rule of the game and bring a lot of uncertainty to organizations as observed by Akter et al. (2021). This means that organization and especially those in the manufacturing sector have to come up with strategies or initiatives that will guide them to overcome these challenges.

Conditions such as unforeseen changes in the operating environment, shift in consumer preferences, political and economic forces have forced organizations to respond. The response to the situation has been by adjusting their strategies and behavior to suit existing environmental challenges and opportunities. Manufacturing firms if they do not realign with the existing realities this may be a threat to the firm's survival, performance and viability in the long run (Akter et al., 2021). Due to these uncertainties, it is paramount for the manufacturing firms to undertake strategies that will enhance their competitiveness. This has pushed strategic management from concentrating on the future routines to embracing of orientations that lead to business success in highly charged or volatile and dynamic environment.

1.1.1 Strategic Orientation

The business environment world over is very dynamic and has become more multifaceted. This obligates manufacturing organizations to develop approaches that can help them survive and respond to the changes that may arise and the nature of competition in terms of scope and intensity which is uncertain. This calls for organizations to adapt new and improved approaches to management or come up with a strategy that in the long run makes them to be competitive. Organization's strategy is one of the central concepts of management, as it defines and communicates what is created, how, for whom and why it's valuable (Huff et al., 2009). A strategy is therefore, an important pillar on the firm's structure, activities and investments as it helps in identifying the organization's problems and developing solutions to them through creating new capabilities to improve its competitiveness.

A strategy is a specific mode of action that is adopted by an organization that determines its internal processes to suit the external environment demands. A strategy is defined as specific pathways that an organization can use to achieve its basic goals by shaping and directing its activities (Fulford & Fizzo, 2009). Once a strategy has been adopted it is influenced by firm's structure, activity and investments (Valos & Bednall, 2010). In essence a strategy taken will differ from one firm to the other depending on the business they are undertaking, resources available and the willingness of the management to undertake a given pathway.

Strategic orientations are defined as decisions and principles undertaken by a firm which directs their activities and generate a behaviour that is intended to help them achieve sustainable competitive advantage and improve its performance in the business environment (Silva & Cirani, 2020). In other words, they are procedures, operations, standards and choice implementation styles which directs and guides the organization activities and undertakings in its internal and external environment (Ifua et al., 2021). Fundamental assumptions underlying strategic orientation is that substantive strategy informs strategic actions that a firm will have to undertake (Lau & Bruton, 2011) and

organizations adopt different orientations depending on the circumstances they are operating in. This helps in identifying a certain inclination that a firm may undertake through giving of a strategic direction in order to improve competitiveness as firms that have undertaken strategic orientation stands 15% higher chances to be profitable than those who do not have (Chen et al., 2020).

In other words, strategic orientation is simply a reflection of how a firm operates (Cadogan, 2012) and for this reason it attempts to describe how resources are allocated and coordinated to accomplish a given goal. This leads to a deep rooted culture development that in the long run influences the internal processes and strategy adopted by the firm. Strategic orientation guides the firm on how to bundle and leverage on organizational resources (Storey & Hughes, 2013) which are mainly unique and can be valuable source of competitive advantage to the manufacturing firms (Hoq & Chauhan, 2011) in exploiting market opportunities. This means that strategic orientation is anchored on the concept that the organization's culture driven and influences its internal processes, thereby creating a trait that affects firms' capacity.

Various topologies have been developed by different scholars that aim at describing strategic orientations that can be undertaken by organizations. Sumer and Bayraktar (2012) for instance observed that Miles and Snow in 1978 developed a topology comprising of four types of strategies that can enhance its competitiveness of an organization. The topology argues that a firm develops a relatively stable patterns of strategic behavior that is compatible with perceived environmental conditions where it is operating from. The topology had the following dimensions prospector, analyzer, defender and reactor. Each of the strategy undertaken by the firm has a different orientation for instance; organizations that undertake the prospector strategy have a long-term orientation on research and development. Due to this they are flexible, good at coordination, diversification and they attain effectiveness through expanding their market share aggressively by seeking new market opportunities that is supported by product innovation (Arieftiara et al., 2019). Firms that undertake defender orientation focus on achieving efficiency through a focused market penetration.

This is done through the firm undertaking cost control and having sales economies that is characterized by fewer product innovation (Grasetti & Bhimani, 2013, Navissi et al., 2016). The main focus of such firms is to maintain the market by best serving their current customers through sustaining stable growth than challenging the competitors. Analyzers usually try a balance between flexibility besides stability, control effectiveness as well as efficiency and economies of scale scope which is geared towards minimization of risks involved. Through this they are relatively moderate in terms of aggressiveness as compared to prospectors (Rajaratnam & Chonko, 2015). Firms that have adopted reactor typology ineffectively respond to changes in the business environment as they do not have a consistent strategy for the business. The firms are passive to changes and rarely do they adjust unless they are forced to by circumstances, they are intolerant in facing risks in addition to uncertainties (Grasetti & Bhimani, 2013) and the focus is on business survival amid the market competition.

Venkatraman in 1989 introduced a multi-dimensional Strategic Orientation of Business Enterprises (STROBE) framework that examined more closely the influence of strategic orientation on organization innovativeness (Akman &Yilmaz, 2008). This framework incorporates a broader view of strategic orientation as it includes both competitive and major decision making dimensions within an organization. STROBE framework proposed the following six common strategic orientation dimensions or traits that can be exhibited by the firms namely analysis, futurity, defensiveness, aggressiveness, proactiveness and riskiness.

Aggressiveness trait in the firm is reflected by its propensity to face up and challenge other firms directly and intensely. This can be done through offering of low prices, product differentiation and targeting of competitors weaknesses that in the end destabilizes the market in their favour (Bordean, 2011). Analysis refers to the overall problem solving tendency of the organization. Such firms adopt a strategy of having a deep analysis of issues, so as to understand their internal and external operating environment effectively. As noted by Abiodun & Ibidunni (2014) alignment of resource allocation and competitive intelligence is key to an organization pursuing this. Defensiveness refers to the behaviour

of an organization that is exhibited by emphasis on efficiency, productivity and cost saving initiatives such firms focus is on the market domain that is narrow and relatively stable. Futurity places time focus dimension in decision making and this is reflected in key strategic decision where balance is kept between long term effectiveness versus short term efficiency. This is also reflected by engagement of suppliers or other strategic business partners on long term engagement.

Proactiveness which is defined as forward looking perspective characteristics is reflected through how organization reacts to market opportunities, thus acting with initiative that will opportunistically influence market trends, expectations and demands. Hence a proactive firm will be the firm that act as compared to a reactive firm that is mainly docile. Riskiness may be regarded as venturing into the unknown territories or in other cases the firm seeking funds through heavy borrowing and commitment of resources in the organization in areas that returns are not guaranteed.

Adoption of strategic orientation, leads to firms having a tendency of valuing and prioritizing certain intentionally relevant actions rather than others with an aim that they will increase firm's competitiveness. This in essence guides how a firm packages and controls resources it has in quest of emerging market opportunities and exploitation of existing markets (Hughes & Morgan, 2008; Menor & Roth, 2007). The ability of the firm to put in place any of the different forms of strategy is influenced by the organization's structure and the environment they are operating in. The behavior generated creates firm's approach which may include emphasis on driving down the costs, responding aggressively to the competitors' advances, seeking to provide maximal customer value or seeking to speed the pace of technological innovation. This acquired behavior may have the potential that result in favourable outcomes such as firm's growth (Cressy, 2009) and competitiveness.

Manufacturing firms once they have adopted strategic orientation, they do usually establish behavior that can be legitimized by social actors under circumstances of uncertainty, legitimacy pressure and firms aping those that are successful (Barreto &

Baden-Fuller, 2006). While strategic orientation can also be viewed as a cultural aspect of a firm, Weinzimmer et al. (2012) noted that strategic orientation can govern behavior of individual actors through formal planning processes or hierarchical procedures. Culture is an important intangible organization resource as it creates simple rules and informs strategic orientation that guide its actions (Nassani & Aldakhil, 2021) and decisions related to resource allocation and opportunities to be pursued. This is mainly determined on one hand by the internal dynamics and on the other hand external influences hence being an aspect of corporate culture as noted by Hurley and Hult, (2008) thereby representing intangible resources of the firm (Barney, 2011). Culture usually generates a given behavior that can only be distinct to a given firm which may constitute to an intricate set of shared values, norms and beliefs (Jones et al., 2005).

1.1.2 Competitiveness of Manufacturing Sector: Global Perspective

Manufacturing firms have a critical role to play in the development of any country as the sector help in creation of high and stable level of employment, generation of income and plays a key role in distribution of income. The manufacturing sector is also known to be an important engine for growth and antidote for unemployment, creator of wealth and threshold for sustainable development as observed by Bigsten and Söderbom (2006). The sector not only plays a catalytic role but also presents vital criteria that is used in assessing a nation development as most countries that are major players in the global economy have been transformed by developing a strong and virile manufacturing sector (Kauser et al., 2014).

Manufacturing is broadly defined as a process of transforming ideas into products and services. It is a wealth creating sector and a base for development of the tertiary segment in most developing countries (SEDA, 2012). Manufacturing sector is widely considered as the engine of economic growth (Bigsten & Söderbom, 2006) and a catalyst for national development through wealth and employment creation, contributions to Country's Gross Domestic Product (GDP) and poverty alleviation among the citizens (Shen et al., 2015). It is regarded as an essential and critical powerful economic force that in advanced

economies the sector is celebrated for creating a well-paid employment opportunities and maintenance technical prowess of these countries.

Manufacturing sector's contribution towards the global economy can't be understated as most of developed countries in the world are also highly industrialized for instance Germany, Japan, China and United States of America and since 1970's United States of America, has been leading in the manufacturing sector. Global manufacturing value of $10.4 trillion which translates to 71.7% is contributed by ten giant manufacturing countries. These countries contribution are as follows Indonesia 1.5%, France 1.7%, Italy 1.9%, United Kingdom 2.2%, India 3.0%, South Korea 3.2%, Germany 5%, Japan 7%, United States of America 16% and China 28.4% (Doughlas, 2023). China also leads in the gross manufacturing production at 35%, USA 12%, Japan 6%, India 3%, Italy 2%, Germany 4% and the Rest of the world at 31%. These statistics shows that China has in recent times been ranked first in the term of manufacturing performance (Levinson, 2015). The manufacturing sector in USA is highly diversified in nature and accounted for 10% translated to $ 2.9 trillion to the GDP in 2023. The sector is the fifth largest employer of which it has over 13 million employees and supports hundreds of local economies across the country accounting to 8.3% of all jobs in USA. Despite its impressive contribution, USA manufacturing output has continued to lag behind the Asian countries such as China, south Korea and Japan as observed by Levinson (2015).

Chinese economy is the fourth largest in the world and largest producer globally in terms of output which stands at 28.4%. Manufacturing sector contributed 31.7% to the Chinese GDP in 2023 and its characterized with diversity and covers a wide range of sectors such as electronics, automotive, textiles and machinery. Being largest global producer and exporter of consumer electronic and textiles. Manufacturing sector is the leading force of China's industrialization and modernization and it's also an important foundation for its economic growth and transformation.

In India manufacturing sector has been identified as an engine of the long run growth. The Government of India in 2014 in order to raise the competitiveness of the manufacturing

sector globally launched the NDA campaign ***"Make in India"*** in order to attract industrialist in the country. The rationale of the campaign was to make India a global manufacturing hub that in the long run will help in creating additional job opportunities and providing a boost to economic growth of the country. Manufacturing sector in India grew by 9.9% in the financial year 2023 which is attributed to reduced input prices due to availability of raw resources required. The sectors contribution to GDP during the second quarter of 2021 is at 16% which was valued at over 6.7 trillion Indian Rupees and employs almost 20% of the country's workforce (Mordor Intelligence, 2024).

The contribution of Germany manufacturing sector to the GDP is higher than any other country in Europe as it currently stands at 23% to the GDP and it also accounts for a relative higher share of total employment in the country. China on the other hand is the largest and fastest growing transitional economy in the world (Zhou et al., 2006) and its manufacturing sector contribution to its economy is at 10%. In Canada, manufacturing sector accounts for almost 11% of the GDP and directly employs 1.7 million and supports nearly 3 million more people through indirect and induced effect.

1.1.3 Competitiveness of Manufacturing Sector: Regional Perspective

Africa though abundantly endowed with natural resources that are raw materials of the manufacturing sector, it still relies heavily on imports due to lack of capabilities to transform these resources into industrial products and finished products (AfDB, 2014). Manufacturing firms operating in Africa face many challenges due to the modern global business environment and in this regard most of African Governments have put in place various measures that aim at transforming the sector to play its rightful role in the economy.

The Nigerian economy is ranked as 29th largest economy in the world currently and its manufacturing sector accounted for 13.8% of the Nigerian's GDP in 2022 (CBN, 2022). Manufacturing in Nigeria primarily focuses on the production of cement and building materials, food and beverages, tobacco, chemicals and fertilizers, woo and textile. Three

of this sub sectors namely food and beverages, cement and textile account for 77% of the manufacturing for Nigeria (Ogar, et al. 2024). This clearly demonstrates that the sector has the potential of generating massive economic payback in terms of creating employment opportunities and repositioning Nigeria as a key exporter in the world yet the sector is underutilized (Manyong et al., 2005).

In this regard, the Nigerian Government on realizing the importance of the sector, has initiated a series of programs that aims at enhancing the nation's manufacturing in order to boost the economy and create jobs for its growing population. Also, there is an increased pressure and need to diversify the Nation's economy and reduce overdependency on oil for foreign earning (Manyong et al., 2005) which has been the primarily key earner of foreign exchange in the country. It is noted that to cope with the challenges that affect the country's manufacturing sector such as high production costs due to taxes and levies, smuggling and damping of highly subsidized inexpensive and substandard imported goods (Simon & Awoyemi, 2010), there is a need to have the capacity to adjust and respond effectively and efficiently to these issues which can only be done by the firm undertaking strategic orientation.

In South Africa which is a member of BRICS, manufacturing sector contribution to the GDP in 2017 was 13% which is far much below to what other members in the same block presents (Kreuser & Newman, 2018). The sector's performance and contribution has been declining over years yet the government has identified it as a key player in solving the problem of unemployment. But despite the recognition, the sector has continued to register a decline both in terms of its contribution to economic growth and employment in the country. Manufacturing sector in South Africa has been competitive as compared to other countries in the region historically due to various factors such as low Labour costs, cheap and reliable electricity and government support through subsidies and tariffs (Williams et al., 2014).

Manufacturing sector in Egypt is the third largest sector that contributes 16.2% to the country's GDP, providing 27% of total employment and 74% of total exports in 2024

(World Bank, 2025). The government target is to have the sector contribution to the GDP increased to between 20-30% by the year 2030. The manufacturing sector in Egypt is dominated by key industries such as in motor vehicle, garment making and paper with a focus being on non-oil manufacturing sector (World Bank, 2025).

1.1.4 Competitiveness of Manufacturing Sector: Local Perspective

Impact of manufacturing on the economic development can't be overemphasized as very few countries have been able to grow their wealth without investing in the sector that precipitates industrialization. The manufacturing sector's in Kenya contribution towards the GDP was at paltry 7.3% in 2023 from 11.3% in 2011 (Economic Survey, 2025) despite the importance role it ought to contribute. Vision 2030, Kenya Industrial Transformation Programme, Big 4 Agenda and most recently Bottom up Economic Transformation Agenda (BETA) have been designed by the Government of Kenya to revamp the manufacturing sector and make it competitive by having it play its role in the development of the country. These strategies being undertaken by the Government aim at increasing the contribution of the sector from the current 7.3% to 20% by the year 2030 (KAM, 2024). Due to the fact that manufacturing firms are very critical to the attainment of Vision 2030 which aims at making Kenya an industrialized economy by the year 2030, deliberate efforts are being made to revamp the sector.

Manufacturing firms as noted by Awino (2013) worldwide are recognized as key providers of substantial contribution to the country's economic development. The sector is a great contributor in the generation of foreign exchange that is earned through exports and Kenya is not an exception. Manufacturing businesses in Kenya are involved in the production of a wide range of products and services. Kenyan manufacturing members are grouped into fourteen (14) sectors. Manufacturing sectors are defined based on the UNIDO classification, and the type of raw material import or products they manufacture (KAM, 2024). The fourteen key divisions include the following; building, mining and construction sector, chemical and allied sector, energy, electrical and electronic sector, food and beverage sector, leather and footwear sector, metal and allied sector, motor

vehicle assemblers and accessories sector, paper and board sector, pharmaceutical and medical equipment sector, plastic and rubber sector, services and consultancy sector, textile and apparel sector, timber, wood and furniture sector and finally fresh produce sector (KAM, 2024).

The sector is key to the economic growth in Kenya due to its potential to grow productive jobs, increase purchasing powers of the consumers and to absorb large number of workers that is the potential to create many jobs indirectly. However, the growth of this sector can be enhanced through adoption of strategic orientation as this helps in creation of capabilities that the manufacturing firm can adopt to become competitive as noted by Al-Barghouthi (2014). A firm that adapts strategic orientation can be able to predict the external changes in the business environment and come with a behaviour that will be favorable guiding them in strategy formulation to remain competitive.

1.2 Statement of the Problem

Manufacturing sector plays a key role in the economy of any country as it helps in stimulating, sustaining high productive growth, boosting employment opportunities and building the country's competitiveness through exports. Over the years Kenya has been able to develop a robust manufacturing sector which is primarily driven by agriculture and its contribution towards the GDP has reduced from 9.3% in 2016 to 7.3% in 2024 despite its potential to contribute 30% of the GDP (Economic Survey, 2025). The sector is vital in promotion of enterprise culture, creation of jobs and provision of goods and services to the public within the economy (Oyondo, 2004).

Despite the importance of manufacturing sector to the national development and various initiatives either regulatory or policy wise the Government has undertaken to improve the sector, manufacturing firms still face challenges such as competition, rising operational costs and difficulties in adoption of emerging technologies. This is detrimental to the manufacturing firms as they have led to increased competition being experienced in the business environment (Kithae et al., 2012). These challenges can be attributable to either

globalization, shortened product life cycle, advancement of technology, increased standard requirements or changing consumer needs (KAM, 2023; Kiraka, 2009). This has led some of the manufacturers registering stagnation and decline in profits for some time due to unpredictable business environment (Orege, 2016). According to Kenya Association of Manufacturers (2023) the sector dropped over 7,000 jobs in 2021 despite the various incentives the Government has initiated to market the country as an investment hub.

The decline in jobs can be attributed to unstable revenues, inability to meet operational expenses which has led to some of the manufacturing firms such as Bridgestone, Proctor and Gamble recording losses, downsizing their operations while other firms have exited Kenyan market all together (Nduati, 2020; Nyabiage & Kapchanga, 2016). Previous manufacturing giants in Kenya such as Eveready, Mumias Sugar Company have either wounded up their operations or are under receivership if not making losses and unable to meet their statutory obligations. Inspite all these challenges, the manufacturing sector has a great potential but it remains untapped of which can be harnessed by firms adopting strategies that can improve their competitiveness.

Empirical evidence on strategic orientation shows that it has a diverse influence on competitiveness of the manufacturing firms. Studies for instance, how does strategic orientation affect organizational competitiveness? Evidence from a large cement manufacturing firm in Kenya (Nduati & Kivale, 2015), effect of market orientation on performance of manufacturing sector in Kenya (Lagat et al., 2012) and influence of strategic orientation on performance of a firm by Otieno et al. (2012), all demonstrate that strategic orientation improves the performance and competitiveness of manufacturing organizations. Subsequently, some studies have apparently been clear that the connection between strategic orientations on organizations' competitiveness is not constantly positive (Hao & Song, 2016). Most of the studies undertaken on strategic orientation and competitiveness have been targeting a single or two dimensions of the strategic orientation and not as a whole besides they haven't taken into consideration the role of top

management. This study therefore, sought to examine the role of strategic orientation on competitiveness of manufacturing firms in Kenya by having a multifaceted approach.

1.3 Objective of the Study

1.3.1 General Objective

The general objective of the study was to establish the role of strategic orientation on the competitiveness of manufacturing firms in Kenya.

1.3.2 Specific Objectives

The following specific objectives guided the study;

1. To assess the role of market orientation on competitiveness of manufacturing firms in Kenya.
2. To determine the role of technology orientation on competitiveness of manufacturing firms in Kenya.
3. To examine the role of learning orientation on competitiveness of manufacturing firms in Kenya.
4. To establish the role of entrepreneurial orientation on competitiveness of manufacturing firms in Kenya.
5. To examine moderating role of the top management commitment on the strategic orientation and the competitiveness of manufacturing firms in Kenya.

1.4 Hypotheses

Given the above study's specific objectives, the following hypotheses were developed and statistically tested at the significance level of 5%.

H_{O1}: Market orientation has no statistically significant role on the competitiveness of manufacturing firms in Kenya.

H_{O2}: Technology orientation has no statistically significant role on the competitiveness of the manufacturing firms in Kenya.

H_{O3}: Learning orientation has no statistically significant role on the competitiveness of manufacturing firms in Kenya.

H_{O4}: Entrepreneurial orientation has no statistically significant role on the competitiveness of manufacturing firms in Kenya.

H_{O5}: Top management commitment has no statistically significant moderating role on the strategic orientation and competitiveness of manufacturing firms in Kenya.

1.5 Significance of the Study

The study explores the role of strategic orientation on the competitiveness of manufacturing firms in the Kenya economy and its implication cannot be over underscored. The study scrutinizes, deliberates various dimensions of strategic orientation and discloses the relation between and among the study variables. Manufacturing sector is very dynamic and competitive hence adoption of appropriate strategy will be beneficial for the organizations in their operations and survival. The findings of this study are useful to the following;

To the government who are the policy makers, the findings of the study is important as it provides insights on the challenges that manufacturing firms faces. These findings will guide what policy initiatives need to be undertaken to make the sector become competitive in Kenya so as to play its key role in the economy through provision of goods and services. This is not only limited to the attainment of the government goal that is aimed at reduction of unemployment in the country, but also what needs to be undertaken to make the sector competitive locally and globally. The study will also lead to reviewing of existing policies in regard to manufacturing sector to make them be aligned with the current condition globally and locally.

To the owners and management of manufacturing firms in Kenya, the study findings are useful as they help in identifying challenges that they encounter and how best they can navigate them in order to be competitive locally and globally. This can be done through adoption of an appropriate strategic orientation by the manufacturing firms that will enable them be able to improve their competitiveness. This is critically important since the current business environment manufacturing firms are operating in is very dynamic. Through adoption of appropriate orientation, the manufacturing firms in Kenya will be able to compete not only regionally but globally and this will lead to improved profitability and return on investments. When the sector becomes profitable then more investment will be undertaken by the business owners. The management will be able to undertake evaluation of which strategy best suits the firm as they are the one who are responsible for decision making in regard what approach should be adopted.

The financiers of manufacturing firms in Kenya, the study will be beneficial in that it helps them in understanding what happens in this sector they fund. This study can inform financiers to develop regulations, policies and market products that are specifically tailored towards the sector in order to serve them sustainably both in the short and long run.

To the general public, this study on strategic orientation will help them to know how to engage and relate with manufacturing firms. They are the prime consumers of the products and services that are produced by the sector. They are able to know how to escalate challenges they may encounter in order to allow the manufacturing firms serve them better by influencing product development. It also helps in highlighting the role of employees in decision making.

Finally, academicians and researchers will benefit from this examination as it helps in enhancing the existing knowledge especially in area of strategic orientation and its role on competitiveness. It will act as a foundation for those who wish to undertake further studies in the same area as they as this creates a database upon which other scholars can develop their research on. The study is also expected to add to the body of knowledge in regard to

strategic orientation besides filling the gap that exist in the area. The study can also be used for reference purposes for future research on as manufacturing firms are in a dynamic and competitive environment hence it provides insights on what can be done to navigate them.

1.6 Scope of the Study

This study sought to establish the role of strategic orientation on the competitiveness of manufacturing firms in Kenya. The independent variables considered for the study were market orientation, technology orientation, learning orientation, entrepreneurial orientation and the moderating role of the top management commitment on competitiveness of manufacturing firms in Kenya. The study's constructs were based on Noble (2002) work who defined strategic orientation as being the guiding principles that influence firms marketing and strategy making activities. He further identified strategic orientation dimensions to be market, learning, entrepreneurial and technology orientations.

Market orientation variable, the focus was on how the firm undertakes its marketing activities with the emphasis being on customer, competitor and inter-functional coordination orientations. Technology orientation was the other variable which in essence deals with how a firm utilizes new technologies. The focus was on the following constructs; new product, automation and research and development. Learning orientation for the sake of this study focused on the ability of an organization in developing new knowledge and using it. Its constructs were commitment to learning, open mindness and shared vision. Entrepreneurial orientation which majorly deals with decision making styles, processes and norms was also investigated. This variable focused on proactiveness, autonomy and risk taking. The moderating variable was the top management commitment where communication, resource allocation and involvement were examined in relation to strategic orientation and competitiveness of manufacturing firms in Kenya. Competitiveness of manufacturing firms in Kenya was the dependent variable of the study and was conceptualized in the aspects of productivity, quality products and market share.

The study restricted itself to the Kenya Association of Manufacturers registered members who operate as medium and large manufacturing firms and belong to Machakos and Central Kenya Chapters as per the KAM register of 2018. These manufacturing firms are located within the following counties Machakos, Kajiado, Murang'a, Meru, Kiambu and Nyeri. The study was undertaken outside Nairobi which hosts 80% of registered members of Kenya Association of Manufacturers (KAM, 2024) and it sought to examine the challenges they face and how they are able to solve them through the adoption of strategic orientation. This was to address the various disparities that exists in manufacturing sector so as to inform policy for a balanced economic growth. The secondary data collected was for the period of five years from 2017 to 2021 while the study was undertaken during the period of April, 2021 to December, 2021.

1.7 Limitation of the Study

Kothari (2010) defined limitations of a study as factors that may have an impact on the research and this relate to the process. During the undertaking of any research it is normal to encounter a number of limitations during the study (Kothari & Gaarg, 2014) and this researcher was not an exceptional as a number of them were encountered. In order to achieve the objective of the study, mitigation measures were put in place to ensure that the limitations don't negatively influence the study. The following limitations were encountered;

Manufacturing sector in Kenya is very competitive and this calls for firms to be very secretive in their undertakings. For this reason, some respondents were unwilling to give the information required as they claimed the data required were critical for the firms and they cannot be able to share it out. They stated that this information forms culture of the organization and sharing it exposes them to their competitors. To solve this the researcher had to clarify that the information given will be handled confidentially and it was purely for academic purpose and with the production of research permit from NACOSTI helped to solve the issue as this reinforced the fact that it is purely for academic purpose. Also, the researcher provided enough background information regarding the study on the

questionnaire and the letters of introduction from the University. The respondents were not required to give the name of the manufacturing firm so as to ensure confidentiality. Due to this some information required was given by the firms.

Second limitation encountered was delayed response to the questionnaires that had been dropped, even after promising to spare some time to have them filled when. To overcome this limitation, the researcher and the research assistants had to make a visit to the manufacturing firms that participating in the study as follow up to have them filled. In some instances, the research assistant had to take the respondents through the questionnaires and have it filled.

The other limitation was the negative perception towards the intention of the study in some instances the respondents were not willing to give any evidence especially in regard to the production, returns and other areas the firms considered critical to them. This was so serious that most of the organizations were not keen to give secondary data. To address this limitation, the researcher had to make clear that the information provided will not be shared with any other organizations or Government Agencies and some of the questions had to be framed in a general way.

During the period of data collection, most of the firms in Kenya were grappling with the effects of COVID-19. This necessitate organization to come up with containment measures in order to protect the employees from contracting the disease hence coming up with strict guidelines on operations which included limiting or banning of visitors in the business premises amongst other measures. To address this limitation the researcher had to contact the firms to be visited earlier through phone calls to allow for prior planning as time given for any engagement was limited. The researcher also had to fully comply with the Covid-19 protocols and requirements set by the firms and the government in general.

Finally, the study was undertaken in the following counties namely Machakos, Kajiado, Murang'a, Meru, Kiambu and Nyeri and this has limited the generalization of the study findings to firms in other parts of the country. Additionally, the study focused only on the

four components of strategic orientation specifically they were market orientation, technology orientation, learning orientation and entrepreneurial orientation. It is worth noting that this was not exhaustive as their exists other components of strategic orientation that were not examined by this study hence the conclusions and recommendations were limited to the four dimensions as used in the research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents an analysis of existing secondary sources of literature that have been undertaken in the area of strategic orientation and competitiveness with a special focus on manufacturing firms. Literature review is critical as it relates new study to the previous studies that have been undertaken in the same area. This chapter precisely covers the following areas; theoretical review, conceptual framework of the study showing the independent variables, moderating and dependent variables, review of study variables, empirical review, critical review, summary and research gaps.

2.2 Theoretical Review

A theory is a systematic interrelated concept, definitions and propositions that are advanced to explain and predict a given phenomenon (Coopers & Schindler, 2011) hence it offers an explanation of why and how something occurs. It can also be defined as a collection of related thoughts grounded on theories and it is usually a blue print or a guide to the researcher (Grant & Osanloo, 2014). Theoretical framework is critical in any study as it systematically describes the relationship among a given phenomenon for purposes of explaining, predicting and controlling as noted by Kothari (2010). In essence, theoretical framework refers to how the researcher questions and develops thoughts which are grouped together to frame the subject matter hence having a better understanding of previous works and analyzing important factors within the study.

The theories arguments and implications to strategic orientation and competitiveness are well explored by this research. This study used a multiple theoretical approach instead of a single theoretical approach as the latter gives a clear understanding of the study phenomena (Odollo et al., 2018). This investigation on the role of strategic orientation and the competitiveness of manufacturing organizations in Kenya was grounded on the

following theories; Dynamic Capability Theory, Game Theory, Innovation Diffusion Theory, Resource Based Theory and Upper Echelon Theory.

2.2.1 Dynamic Capability Theory

This theory was advanced by Teece et al., (1997) in a paper that explored dynamic capabilities and strategic management. The theory postulates that the competitive advantage of a firm rests on the processes it has, which vary and are different from one organization to another. The theory also incorporates how well the firm coordinate and combine resources they own and which are at their disposal. These resources they own are critical as they will always shape the organizations specific assets positions and the evolution path that will be adopted. The dynamic capability theory focuses on organization's ability on how it builds, integrate and configure their internal and external competencies to address challenges in the dynamic and competitive market environment.

A capability is defined as the capacity to utilize resources to perform a given task or an activity against opposition and circumstances as noted by Teece (2017). Dynamic capabilities on the other hand are defined as organizational capacity to assimilate, shape and revamp external and internal proficiencies with a view to quickly changing surrounding (Gicheru & Kariuki, 2019) to its sole advantage. This helps the organization to reconfigure its strategy that has been adopted and resources it owns to achieve competitive advantage and have superior performances in the environment they are operating from.

While resources according the Resource Based View (RBV) refer to the physical, human and organization assets, according to Cantwell (2016) dynamic capabilities are learnt and become stable patterns of behaviour through which a firm systematically generates and modifies its way of undertaking operations. Dynamic capability approach examines how firms are able to integrate, build and configure their specific competencies they own be they internal or external into new abilities that match changes taking place in the turbulent environment they are operating in (Teece, 2014). Dynamic capabilities are usually hard to

develop and difficult to transfer because they are tacit and usually embedded in a unique set of relationships that a firm has built over a long period of time. This is because dynamic capability regularly acts as a buffer between the resources an organization has and the fluctuating business situation by aiding the enterprises to change its resource base and thereby maintain a viable competitive advantage which might otherwise be eroded.

Dynamic capabilities are significant as they enable an organization to continuously renew its operational competences and therefore leading to attainment of long term competitive advantage (Protogerou et al., 2012). The theory is based on the assumption that firms with greater dynamic capabilities will always perform better than those with less dynamic capabilities and this therefore, calls for the firms that are operating in a competitive environment to continuously renew and regenerate their internal and external capabilities in order to remain competitive (Barretto, 2014) and this can only be done when a firm adapts its resource base to the changing environment. This theory assumes that competitiveness of a firm lies in using dynamic capabilities sooner more judiciously or more fortuitously than the competitors thus meaning in order to maintain competitiveness, firms are required to continually generate new competitive advantages (Deya, 2016) so as to be efficient and responsive to the market demands in the ever evolving environment.

The theory emphasizes that in order to be competitive, organizations have to focus on creation of policies and plans for executives that will guide them on successful implementation and development of organizations. Firms need adaption to a broad ranging sporadic change and advancement while upholding the fewest proficiency requirement to improve organization survival as noted by Ibrahim, et al. (2018). Dynamic capabilities have a positive impact on the firm's competitiveness in a variety of ways for example, it helps in aligning the resource base to the ever changing business environment, altering the market and supporting both the resource picking and capability building. It mainly emphasizes on resource development and renewal to be competitive. This theory is related to the all the variables of this study namely; market orientation, technology orientation, top management commitment, entrepreneurial orientation and learning orientation as they create capabilities that are unique to the manufacturing firms.

2.2.2 Game Theory

Game theory is a scientific modelling of interaction between diverse parties each pursuing their own goal (Craighead, 2016) and this theory is attributed to John Von Neumann in his papers of 1928 and 1937. The theory aims at predicting when given set of rules the strategies actors will use when interacting with each other in a competitive environment. The theory stems from the economics field and it's a mathematical theory of decision making by participants who are in a conflicting situation. It spans games of static and dynamic nature under perfect or imperfect information and decision made by each party is based on what they believe and do about each other. The theory assumes that actors are logical and will try to maximize their own payoffs.

Craighead (2016) noted that game theory is a study of how people make choices which is an important skill in the current business and corporate environment where decisions have to be made on daily basis. Game theory is applicable in the way business units compete in a given industry, their relationship and interactions in situations of an industry that has cut throat competition. In this theory a firm gain while the one loses within the same industry and this is based on decisions that have been made. This means two or more firms who have a range of action or similar freedom to a set of choices and also have certain information (Xu et al., 2013). The players have a set of preferences for diverse possible outcomes and their results of interactions depends on all players decisions. The choice of strategy depends highly on the information that one has, which can either be perfect or imperfect and strategic actions are simultaneously for the players. The assumption of rational behaviour builds this model.

In manufacturing sector, dilemma and rivalry are the normal daily occurrence, therefore the anticipated performance by the firm must be analysed in line with the differentiating their competitiveness depending on how opportunities they get are exploited and the challenges faced are overcomed. Many decisions that are made in an enterprise involve interdependent outcomes as they operate in the same industry that means the decisions and actions of the other player have a great impact on them also. This theory would be

associated to the three independent variables namely; market orientation, technology orientation, entrepreneurial orientation and the moderating variable of top management commitment.

2.2.3 Resource Based Theory

The Resource Based Theory has its origin from the organizational economics and it is associated with Penrose in 2009 which was preceded by the theory of growth of the firm. The theory proposes a model on effective management of organization's resources, diversification strategy, productive opportunities also it studies and scrutinize resource strategy relationship (Barney, 2011). The theory underscores the importance of firm's internal resources in achieving competitiveness and acknowledges that in order to achieve competitive advantage, a firm must have unique resources. The central principle of the RBT is that the foundation for a competitive advantage of an organization lies predominantly in the application of the bundle of treasured resources at the firm's disposal and which are different from each other (Barney, 2011; Helfat & Peterefat, 2003). The theory notes that to transform a short-run competitive advantage into a sustained competitive advantage requires resources that are heterogeneous in nature and not perfectly mobile.

According to Barney (2001) resources include all assets, capabilities, organizational processes, firm attributes and knowledge controlled and owned by a firm. These resources enable the firm to conceive and implement strategies that improve their efficiency and effectiveness and which sources can vary depending if they are internal or external. The resources can also be categorized as either tangible or intangible. Tangible resources refer to assets and this includes economics gains, products and commodities as noted by Lyons and Brennan (2019) while intangible resources relate to all assets owned by the firm related to the access to capabilities and knowledge (Keranen & Jalkala, 2013). Tangible resources deteriorate while intangible doesn't deteriorate (Molloy et al, 2011) in nature.

Amit and Shoemaker (2003) made a subsequent distinction that encompassed so called "resources" that an organization has its disposal which could be divided into resources and capabilities. The distinction is that resources are tradable and non-specific to the firm while capabilities are firm-specific. Resources refers to what an organization owns while capabilities refer to what an organization can do. Capabilities are non-transferable firm's specific resources that improve productivity and they manifest themselves in various forms and generally consist of tangible and intangible processes and the information it holds in order to create efficiency and improve its productivity as noted by Kozlenkova et al. (2014). In order for a resource to be able to generate competitive advantage, it must meet the following sets of conditions of being valuable, rare, difficult to imitate and difficult to imitate or substitute.

RBT provides the understanding that certain existing resources will result in superior performance and build a competitive advantage and the sustainability of such will be determined by ability of competitors to imitate such resources and however, the existing resources of a firm may not be adequate to facilitate the future market requirement. Due to polarity of contemporary market, there is a vital need to modify and develop resources in order to encounter the future market competition. An organization should exploit existing business opportunities using the present resources while generating and developing a new set of resources to sustain its competitiveness in the future market environment.

An organization should be engaged in resource management and development for them to be competitive and remain relevant in the market. Therefore, competitive advantage is crucial to development of resources that will strengthen the firm ability to continue with performance (Barney, 2011) in the business environment. This theory will be relevant to the market orientation, technology orientation, learning orientation as this are resources that a firm can use to sustain a competitive advantage against its peers in the same environment.

2.2.4 Diffusion of Innovation Theory

Diffusion of innovation theory is attributed to Everett Rogers who developed it in 1962 and it seeks to explain how, why and at what rate new ideas and technology spreads through different organization culture. Diffusion of innovation theory basically looks at how social change occurs, it has its origin in communication and it is used to explain how overtime an idea or product gains momentum and acceptance through a specific population or social system. This theory postulates that innovation is the progression of producing new technology devices or events (Rogers, 2003) and that diffusion is the process of distribution thoughts, ideas, skills and knowledge through the society. Diffusion of innovation theory describes how invention or technology becomes accepted and spreads through societies large or small (Rogers, 2003). The process of choosing to use technology is known as the innovation-decision process. Through this a person gains knowledge about innovation and forms an attitude about it (Demir, 2006) and once an attitude has been formed an individual makes the decision to accept or reject innovation.

The innovation decision process has the following five phases as proposed by Rogers (2003), Knowledge stage, this is when one is exposed to technology or innovation's presence and understands how it works. Second stage is Persuasion; this is when an individual creates favourable or unfavourable attitude towards innovation or technology (Roger, 2003). Evaluation is key at this stage to note the source that seems credible and peer attitudes towards technology. Third stage is decision; this is where one participates in activities that result in acceptance or rejection of technology or innovation (Roger, 2003). This stage allows one to verify if technology provides an advantage or not. Fourth stage is implementation; this is where there is actual use of technology. The final and fifth stage is confirmation and this is where one looks for support regarding their decision to use technology. This is done through acquisition and making it possible that technology is part and parcel of the firm's processes (Roger, 2003).

According to this theory, strategic orientation is critical in enabling the firm to be competitive. Through strategic orientation various strategies such as technology are

developed or acquired, need to be accepted and used to increase competitiveness. Use of technology in any organization can lead to altering of the existing culture and brings about change which can be resisted by both the management and the staff hence obstructing the diffusion of innovation delaying the adoption of invention (Murray, 2009; McGuire & Scott, 2017). This theory in essence explains how, why, what makes new ideas and technology spread through cultures operating at individual and at firm's level at different paces (Venkatesh et al., 2003). It acknowledges that at firm's level or individual persons have different degree of willingness to adopt innovation and put it in practise. Technology adoption and embracing it in any organization can be related to individual leader's attributes and outside characteristics of the organization.

This theory acknowledges that adoption of new idea, behaviour, product or strategy doesn't happen simultaneously in any given organization. In order for a strategy or innovation to succeed, gaining buy-ins from the team be it management or the workers and even the final users are critical. Through their buy in then an organization can be able to succeed by adoption of a given strategic orientation. The theory emphasis is on two main paradigms namely "perceived usefulness" and "perceived ease of use". Perceived usefulness is defined as the extent to which a person or an organization believes that using technology will enhance their performance. An individual perceived usefulness of a given technology increases, their intention to use it increases. Perceived ease of use is defined as the degree to which a person or an organization using technology will be free of effort. A firm has to be innovative so as to exceed the customer's needs and this can only be achieved if an organization adopts technology. This theory goes in line with the variable on technology orientation.

2.2.5 Upper Echelons Theory

Upper echelon theory was developed by Hambrick and Mason in 1984 as they were trying to provide perspective as to why organization act and perform the way they do. The theory holds that the organizations outcomes are the reflection of principles and intellectual reasoning of its top management (Carpenter et al., 2004). The upper echelons theory

premise that the firm's outcome is directly linked to the knowledge, experience and expertise of those individuals who hold leadership role in the organization (Carpenter & Fredrickson, 2001). The theory suggests that human have limited capacity of information processing at any given time, and as a result their decision on and response to certain elements in the environment are determined by leaders' disposition and personal tendencies.

This is a behavioural processing model that is based on two core ideas namely; executives act on the basis of their personalized interpretation of the strategic situation they face according to their own personal preferences and biases. The theory argues that the managers try to interpret strategic issues and device alternative courses of actions by taking mental shortcuts and relying on previous experiences (Hambrick, 2018). For instance, when faced with unprecedented environmental shock, the managers may utilize their previous experience when handling other type of business crisis. Secondly, this personalized understanding are a function of the executive experiences, values and personalities.

The crux of the model is that decision makers are unique given his or her knowledge, value biases, familiarities and preferences (Cannella & Holcomb, 2005) hence each manager brings on board their own set of cognitive base (experience) and a set of values (personality) to the decision making processes which serves as a way of filtering strategic situations. Though various firms may have resources in equal measure the competitiveness will be determined with the top leaders of the firm, how they do the investment or use the same resources. This means that the top management perceptions of their corporate environment influence the strategic choices they make which eventually affects the competitiveness of the firm. This theory will be used to inform the objective on top management commitment.

2.3 Conceptual Framework

Conceptual framework is defined by Ravitch and Riggan (2017) as an overall, logical orientation and association which formed the underlying thinking, structures, plan and practices that guide the implementation of a research study. Kombo and Tromp (2006) defined conceptual framework as a tool used by a researcher to develop awareness and understanding of the situation under scrutiny and to communicate. This means that a researcher uses conceptual framework as a tool to give a concise explanation of an occurrence accompanied by a visual or graphic representation of major variables of the study (Mugenda, 2008). The description of the variable emphasises the researchers view on how the independent, moderating and dependent variables are interacting or could be made to interact if the conditions are manipulated.

This study on strategic orientation and competitiveness of manufacturing firms had six sets of variables as shown in the conceptual framework (**Figure 2.1**). The independent variables were four namely; **1**. Market orientation comprising of the following constructs (i) customer orientation, ii). Competitor orientation, iii). Inter-functional coordination); **2**. Technology orientation comprising of the following constructs (i). new product, ii). Automation, iii). Research and development.) **3**. Learning orientation comprising of the following constructs i). Commitment to learning ii). Open mindness iii). Shared vision **4.** Entrepreneurial orientation comprising of the following constructs i). proactiveness, ii). Autonomy, iii). Risk taking. **5**. The moderating variable: Top management commitment comprising of the following i). Communication, ii). Resource allocation and iii). Involvement. Finally, **6.** The dependent variable: Competitiveness comprising of the following i). Productivity, ii). Quality, iii). Return on Asset.

The study hypothesized that strategic orientation (independent variable which comprised market, learning, technology and entrepreneurial orientations) linearly and directly influences competitiveness (dependent variable) of manufacturing firms in Kenya being moderated by top management commitment. It has been noted that relationship between study variables are often complex (Frazier, et al, 2014), hence the relationship between

the independent variable (strategic orientation) and dependent variable (competitiveness) was assumed to be moderated by top management commitment. The conceptual framework therefore, contributes to research by identifying the research variables (independent, moderating and dependent) and clarifying the relationship between and among them. The study's conceptual framework and variables were as shown below;

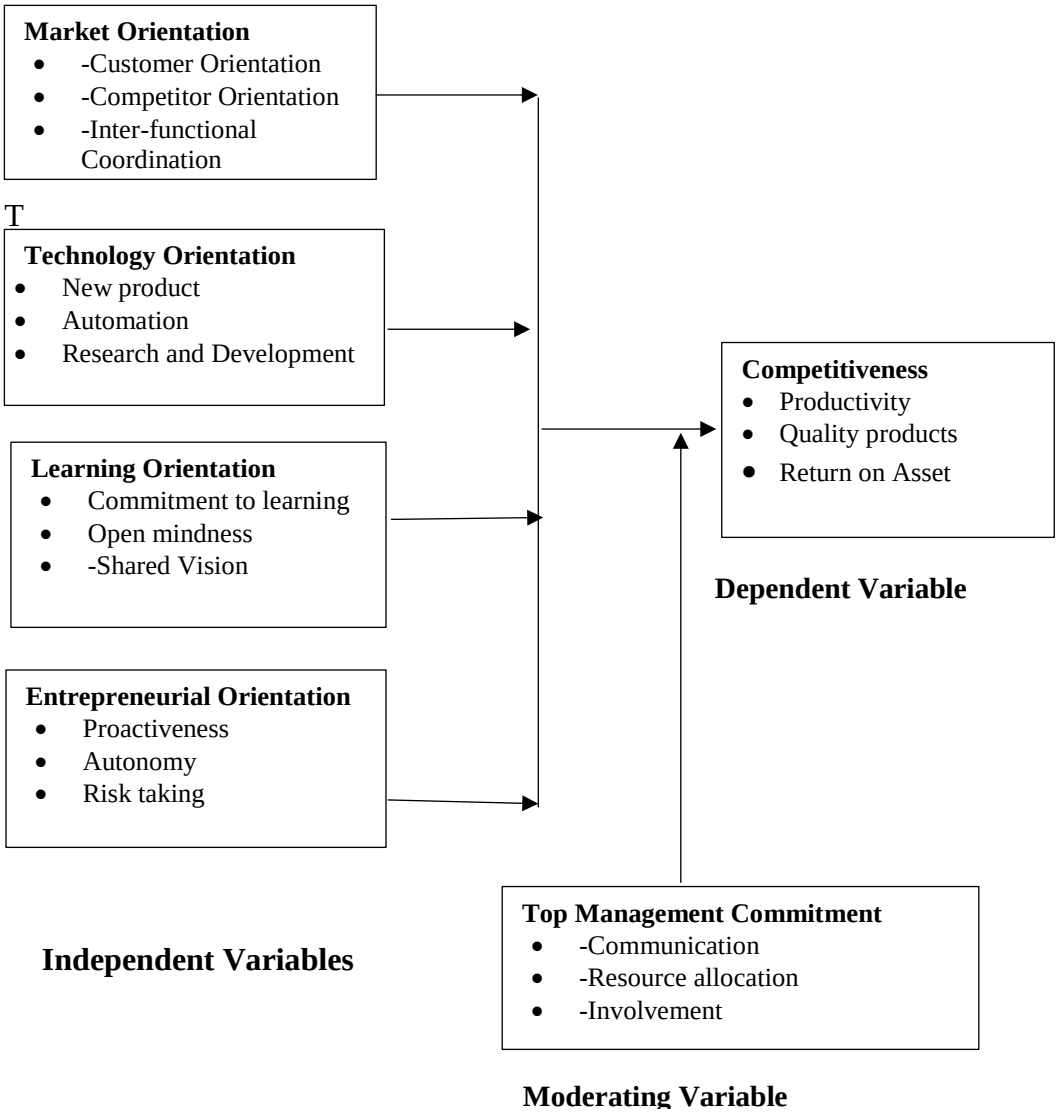

Figure 2.1: Conceptual Framework

2.3.1 Market Orientation

Market orientation is a business orientation that defines the marketing behaviour or posture of a firm and describes how the organization carries out its marketing activities (Otache & Mahmood, 2015). It is a management thought that overcame the theoretical limitation of marketing concepts hence it is a management philosophy that guides the firm's objective. This is done through determining the needs and preferences of the customer thereby leading to production of goods and services ultimately satisfy them. Market orientation is considered as a process of discovering and understanding the desires of not only the existing but also potential customers. Market oriented firm aims at understanding and satisfying customer's needs through seeking to prioritize their needs by improving the firm's ability to create and disperse information. In this regard it has been acknowledged that market orientation entails the culture and behaviours that are consistent with fact that the customer constitutes the center of firm's activity (Gatignon et al., 2016, Gnizy et. al., 2014) hence any initiative the firm undertakes focuses on the customer needs which aims at serving them better.

Market orientation can either be categorized in behavioral or cultural perspective as noted by Theodosius et al., (2012) who observed that behavioural perspective stresses organizational activities that focus on generation, dissemination and responsiveness to market intelligence in regard to customer desires. The cultural perspective focuses on the organizational norms and values that encourages adoption of behaviour that are consistent with market orientation. These perspectives inspire creation of behaviours that are consistent with the creating superior value for the customer that is brought about by clearly understanding the consumer.

Cultural view of market orientation can be classified into the following dimensions; customer orientation, competitors and inter-functional coordination. Customer orientation is when the firm's concern on understanding of customers' needs and preference is paramount. Market oriented firms engages the customers by identifying their preferences and market trends in order to understand both their current expressed needs and latent

ones (Gupta & Malhotra, 2020). Due to this customer orientation, the firm devotes to improve its capacity, continuously create services and products that are of superior in value for the customers. Competitor orientation involves identifying the competitors, who they are, technology they use and if the potential customers view them as alternatives. This is done by recognizing and analyzing both the current and future competitors by use of their strengths, weaknesses, opportunities and capabilities. In order to achieve this, firms will have to undertake competitor analysis and this enables it be able to contemplate possible solutions that might fulfil the current and future customers' needs and expectations. Market oriented firms are able to achieve competitiveness as the organization strives and intentionally aims at providing customers with products and services that are of superior value in comparison to other competitors and adjust it to satisfy their needs (Isaiah & Turyakira, 2019).

Inter-functional coordination involves synchronization of personnel or human resource and other resources in the organization to facilitate creation of value for the customers. This means essentially having a coordinated exploitation of firm's resources in generating superior value for the target clients. Inter-functional coordination demands for incorporation of marketing in all the production of goods and services hence all departments in the organizations have a critical role in satisfying the customers. Hence market orientation calls for a whole organization approach which entails a firm continually adapting its business systems to the changing environment and any emerging market opportunities and facilitating the company's ability to deliver superior products and services to internal and external customers (Lee et al., 2015)

2.3.2 Technology Orientation

Technology orientation is an important strategic orientation construct and it refers to the firm's proclivity to introduce or exploit new technologies, products or innovation (Hult et al., 2004) in its processes. This orientation is culture based and firm specific in nature. A firm that is technologically oriented is in a better position to introduce and utilize new advances in production of goods and services since they have a strong technological

infrastructure as noted by Tutar et al. (2015). Technology oriented firms holds to the view that for customer value to be sustained and long-term success achieved, new innovations and technological solutions need to be adopted as observed by Grinistein (2008) at all cost. This in essence means that technologically oriented firms are inclined to introduce or get new technologies or innovation (Ibobo & Nzewi, 2020) at any cost in their processes and are usually receptive to adopt ideas that depart from the status quo and invests highly in technology. A technologically oriented firm undertakes a proactive acquisition of advanced technology that can be used in new product development (Kanno & Shibata, 2019) as compared to other firms in the same industry.

It has been argued that a firm that is technologically oriented may be innovative in that they look for better ways of production that is cost effective and innovative. Innovation as defined by Menguc and Auh (2006) is the firm's readiness to relinquish old habits and try new untested concepts by committing resources in areas or avenues that seems to be unproven. Innovative firms always try and adopt new way of service delivery or production that in the long run makes the firm to be competitive. Through this they are able to serve the customers in an effective way through technology adoption. Technology adoption it has been noted positively affects the firms long term accomplishment as it improves organization flexibility, willingness to change and introduction of new products while decreasing the organizational apathy (Hult et al., 2005).

Innovation can be used as a strategic goal by a technologically oriented firms as it results to adaptability, skills acquisition, improved productivity and creativity in product development (Syahdan et al., 2020). Through this makes it makes them possible to serve the customers better through production of required goods and services within the shortest time possible and with ease. In order to continue being competitive, manufacturing firms need to constantly improve and enhance their product innovativeness (Salavou & Avlonitis, 2008) and this can only be achieved through the use of technology. Proactive organizations are innovative in that they invest heavily in technology and it should be appreciated that technologically focused firms always pursue and obtain new and advanced technologies to advance new processes, products and services (Gao et al., 2007).

Varis and Littunen (2010) noted that the ultimate reason as to why firms adopt technology is to be innovative as this improves their competitiveness and success in any dynamic environment. A firm that is technologically oriented is usually innovative by nature and investment in technology is not an issue but a critical for its advancement in research and development and its application to the development of new products and services.

2.3.3 Learning Orientation

Learning orientation denotes to the capability of a firm to advance new knowledge or insights that have the possibility of inducing strategic behavior and leads to the attaining of continuous competitive advantage (Sawaean & Ali, 2020). Learning orientation is an internal process that encourages learning activities of the members of the organization, share the vision and strives to create new knowledge. Learning orientation makes the organization to have the propensity to acquire knowledge through external linkages as well as distributing the acquired knowledge for organization change (Weerawardena et al., 2006). Learning orientation can also be defined as how a firm generates and use knowledge in order to achieve competitive gain (Calantone & Cavusgil, 2002) against its competitors in the industry. This involves both internal and external acquisition of information that can have an imperative effect and it is a shared capacity resulting from cognitive and experiential process and involves the acquisition, exchange and use of knowledge as noted by Baba (2015).

Learning oriented organization is mainly concerned with how to obtain and share information in marketplace, in regard to customers expectation based on their needs in order to create a product that are superior to what competitors offer as observed by Pett and Wolff (2016). Firms that adopt learning orientation often invest heavily in activities that create new knowledge such as encouraging their staff to adopt a cycle of continuous learning that enables them to “think outside the box”. They also offer support to staff in their quest to learn and acquire new technical skills that helps the organization to achieve competitiveness (Sawaean & Ali, 2020).

In other words, such firms invest in learning by either urging the staff to seek knowledge or supporting them through various training opportunities that may be available or may be created with a sole purpose of creating learning. The current business environment due to its dynamism and competitiveness requires firms to pursue learning which ultimately leads to change in behavior. Through this they are able to improve on performance faster than their competitors as learning orientation is a strategic resource that influence how an organization operate in the market place (Dukeov et al., 2020). Strong learning orientation helps the organization from being reactive as members are given opportunity to question the way it operates and assumptions underlying business practices (Mahmoud et al., 2016).

Constructs for learning orientation adopted by this study are based on Leta and Faisal (2018) classification which includes the following; commitment to learning, open mindness and shared vision. Commitment to learning is the degree to which a firm places value on knowledge and the capacity to reflect on their action and supports learning (Wang, 2008). Commitment to learning plays a significant part in promoting the principles of knowledge distribution within the organization and this can be well-thought-out as a long-term investment that becomes a survival factor (Calantone et al., 2002) for the firm in the competitive environment. This is because knowledge is considered as a resource that can be utilized by the firm to enhance its competitive advantage.

Commitment to learning helps the organization acquire relevant information about the internal and external environment which aids in making informed decisions (Rostini et al., 2016). A firm shows commitment to learning through proactively identifying market change trends that can affect its operation in future and actively adjusting business strategies and practices (Mishra & Mohanty, 2018) to suit the changes in the environment. Manufacturing sector with its dynamism, a robust guarantee to learning is critical for it to be competitive as shows the essential value it places on learning. In summary commitment to learning is the willingness of a firm to study the market dynamics and strategy updates.

The second dimension for learning orientation is open mindness which denotes to what extent a firm proactively interrogates long held procedures, traditions and opinions. Open mindness is a critical evaluation of the firm's daily operations, what has been held that is the ideas and procedures undertaken and how easily they accept new ideas. This leads the organization developing and holding universally understood focus which is then undertaken by the firm (Wang, 2008) as it operates. Manufacturing firms that have adopted open mindness construct, proactively disrupt the procedures, long held processes, assumptions beliefs, techniques and routines. They adopt new standards that makes the organization competitive (Adomu, 2014) in the operating environment.

It is an attitude that is open to new ideas, views, data and theories that occur in the market where employees are encouraged to come up with new ideas through brainstorming which allows them to question business practices that respond to market requirements (Dukeov et al., 2020). Through this the employees in the firm are allowed to make changes to seem not to be working. Zayed and Alawad (2017) noted that an organization with open doors for new views, ideas and knowledge provides employees with avenues to upscale their learning above the level required with the current situation and such firms perform better. Likewise, Herath and Karunaratne (2017) noted that firms and employees need to have an open mind since they are able to capture a variety of market information that may enhance the organization's competitiveness.

Shared vison has also been recognized as a building block for the learning orientation (Herath & Karunaratne, 2017) and it involves bringing all individuals in an organization to a similar level of understanding. Shared vison helps the employees of the organization to have a common understanding on what need to be captured or done for customers, competitors and other stakeholders in the industry. This leads to individuals' efforts being made towards the same route in order to share information that could influence in a positive way the information base of the firm. Shared vision, brings in high level of energy, dedication and resolution by all the individuals as focus is to a common goal and this ensures harmony thought the organization (Eshlaghy et. al., 2011). Learning oriented organization can get the market information and knowledge of threats and opportunities

and then position itself at an advantageous point. The harmony is enhanced since the thoughts of the leaders or results of the discussion between leaders and workers leads to production of common goals.

2.3.4 Entrepreneurial Orientation

Entrepreneurial orientation is a multi-dimensional measure of an organizations level entrepreneurship comprising of innovation, pro-action and autonomy. Entrepreneurial orientation has been defined by Etim et al. (2017) as a set of decision-making styles, processes, practices, rules and norms for which the organization uses to make decision that aims at enhancing its innovativeness, proactiveness and risky taking propensity. This orientation makes the firm to be willing to engage in innovative, risky and uncertain activities in the market place and discovering new opportunities before competitors do. This strategy is reflected through the firm's ability of seeking and exploiting new opportunities, trying and attaining new markets in addition to its existing market. Entrepreneurial orientation is a critical construct of strategic orientation that helps firms to be competitive in any dynamic environment that requires organization to be strategic in nature as the current dynamic business environment requires a firm to be entrepreneurially oriented in order to survive and have growth (Yoon, 2011).

An organization is entrepreneurial oriented when they change and shape the setting they are in and are keen to commit funds to exploit uncertain chances. Omisakin et al. (2016) conceptualized that entrepreneurial orientation as willingness of the entrepreneur to innovate, search for risks, take self-directed actions, proactive and aggressive than competitors towards new market opportunities so as to gain a sizeable market share. Firms that adopt this orientation are always out exploring new and inspired ideas that may lead to alteration in the market place and do so proactively as pioneers of the market in expectation of future demands.

Zhang (2012) observed that entrepreneurial oriented firm adopts any of the following three dimensions' namely; autonomy, proactiveness and risk taking. Proactiveness is defined as

an attempt to discover future opportunities even when they may seem be somewhat unrelated to existing operations (Kurgat et al., 2019). Firms that are proactive are always achievement oriented, undertake initiative and predict evolution. Proactiveness is opportunity seeking, forward looking perspective and a firm that adopts it can undertake the following initiatives such as introduction of new products ahead of competitors and creating an anticipation of future demands by creating change that may shape the environment (Kropp et al., 2008). Proactive oriented manufacturing firms have the capacity to anticipate the needs in the market place and ability to anticipate competitor's needs (Eggers et al., 2013). Such organizations will be able to introduce innovative products ahead of the competitors and they have desires of being pioneers (Reijonen et al., 2014) this can be done by acting in advance and capitalizing on the emerging opportunities in the market (Ketchen & Short, 2012) before the other manufacturing firms get to know about the opportunity and it is saturated by the products.

Entrepreneurial oriented firms also allow for employee autonomy which is the ability to make decisions and proceed with actions independently without any restriction from the organization (Hernandez-Perline et al., 2017). Through these employees are given freedom to instigate or initiate change which in one way or the other makes the firm to compete favorably in the market. Autonomy is reflected through a strong desire of a person to have freedom in development of ideas and its implementation without any restriction from the organization (Li et al., 2009). Autonomy is considered as the most important factor that helps the organization improve competitiveness and for a firm to act entrepreneurially employees must have autonomy (Coulthard, 2007).

Risk taking refers to the firm's tendency to engage and the willingness to commit a substantial amount of resources to opportunities with uncertain outcomes (Bran & Vaidis, 2019). Risk taking firms engage in well calculated risks, hire heavily and invests its resources to ventures that are uncertain and outcome unknown in order to grab a given business opportunity (Rauch et al., 2009). Risk taking according to Adisa et al. (2016) is all about taking audacious actions by submitting into unknown, taking of huge loans and committing substantial resources to undertakings in undefined regions.

Research suggests that organizations that undertake bigger risks are more entrepreneurial and may yield greater returns (Mishra et al., 2014). Organizations that have adopted entrepreneurial orientation are usually highly proactive hence able to gain from market opportunities that may exists, tolerant to risks and sensible to innovation. Firms that undertake entrepreneurial orientation usually adopts blue ocean strategy which entails creating a business where it never existed or creating uncontested market space, making competition irrelevant and creating or capturing new demand for the products. Manufacturing firms can discover and make use of any existing openings to gain access to a new market by developing innovative methods and practices as noted by Al-Mamun et al. (2018) and through this they can become competitive.

2.3.5 Top Management Commitment

Top management is usually a relatively small group of influential executives at the apex of the organization who are answerable directly to the Chief Executive Officer as noted by Filkenstein et al. (2010). Because of this stature and position, this group of senior officials have an enormous influence on the success of any given firm as they play a significant role on how organization are shaped in terms value and orientation. According to the strategic choice perspective this small group of influential executives play a very important role in organization action, outcomes and this is attributed to traits this team hold (Kinuu, 2014). These traits are key as the team make organization strategic decisions which affect performance, operation and the direction a firm undertakes.

This team faces the tasks of aligning the organization strategy to the continuously changing environment they are operating within as they are responsible for defining organization strategy for short term or long term. The top management team is capable of taking the organization to the next level through innovation and continually adaption to the changing needs of the operating environment (Ismail & Mamat, 2012). Due to their critical role in achievement of the firm's objective, top management need to have commitment in order to organize, control and manage its operations and activities in order to be competitive and achieve profitability. Top management commitment is an active and

continuous demonstration by the organizations top management in providing vision, through leadership and resource allocation so as to make the firm competitive. It may also be the management capability to organize and control the members within a given organization to achieve the objective already set. This can be demonstrated through communication of which the top management team has the responsibility of setting and communicating the firm's vision, goals and managing the firm (Amoako-Gyampah et al., 2018). It's the responsibility of the team to communicate effectively and appropriately and through this they are able to guide the organization to where they are to go.

The team has the responsibility of allocating resources, making sure that time is prudently managed, empowering and encouraging staff (Amoako-Gyampah et al., 2018). Resources are scarce and needs are enormous and competitive in nature, hence it is the responsibility of the top management to allocate resource where they are needed most and where results will be profound. Top management's main focus is in regard to controlling, allocating and directing resources and people to achieve competitiveness of the organization as they are critical to the organization's successful realization of the goals (Williams et al, 2014). They also have an important role in any organization as they make decisions in regard to what new products to be produced, when and how (Eisenhardt, 2013) through committing and allocating financial resources and time (Zu et al., 2008). They also influence culture that encourage achievement of specified goals (Feng & Zhao, 2014) within the organization.

Top management task in any organization is to align opportunities and threats in the external environment with its internal strengths and weakness. This greatly depends on the commitment the top management have towards the achievement of the goals. It is generally acknowledged that strategic decisions a firm undertakes are majorly influenced by the beliefs, values and management philosophies of the top management team who act as strategists (Kinuu, 2014) and this has a great influence to their commitment. Top management commitment in any undertaking of the organization helps in building trust between employees and other stakeholders. This is a clear indication that if the management are committed and allows employees to undertake given responsibilities

then, whatever that is undertaken has the full blessings of the organization top leadership. Organizations that are competitive have leaders who are totally committed to what they are undertaking and they are able to finance such activities through resource allocation, being involved and strategically communicating. Top management support and commitment has been acknowledged as a critical ingredient for competitive organizations as it aids in creating a supportive climate through provision of adequate human, physical and financial resources that lead to adoption of new technologies and improved performance.

2.3.6 Competitiveness of Manufacturing Firms

Competitiveness is the firm's capability to create, manufacture or sell goods and services that are better to those provided to the market by competitors. This is when you take into consideration both prices and non-price attributes of the products. Competitiveness enhances the firm position in the market and leads to generation of profit and creation of value through initiatives that drive the cost of production down and that lead to product differentiation. Competitiveness is very critical in the present dynamic economic environment as it is a key determinant of the firm's survival, growth and accomplishment as noted by Oral and Kettani, (2009). Due to the stiff competition in the manufacturing sector and the business environment in general, organization are required to undertake initiatives and strategies that will make them to be competitive in operations so as to survive. Through such initiatives the organization is enabled to be able to defend and enhance its position in the market.

Competitive firms are expected to exhibit higher growth in terms of sales, revenue, better returns on investment, higher market share, access and control over distribution channels that is delivery flexible as observed by Selcuk (2016). Kiraka et al. (2013) observed that competitiveness is essential and paramount to manufacturing firms as it helps them to compete effectively and benefit from the prospects that are existing within the environment. This study adopted measures of competitiveness from a study undertaken

by Aswini (2013) of which it was defined in terms of quality, return on assets and productivity.

Quality is defined in relation to the product being produced meeting and exceeding all requirements, standards and specifications. Through production of quality products, a manufacturing firm may be in a position increase customer loyalty, build reputation, be a leader in the industry and manage costs. Quality adoption is an important aspect in a globalized and competitive economy as it enhances and takes into consideration the expectation of the consumer when a product is being developed or offered and this has led to quality standards. Quality standards are essential strategy for continued existence of organization and achievement of their goals as Abdi et al. (2018) observed. A firm that doesn't produce what is required or products of poor quality usually lacks market as who would have been consumers shy away from either buying or using it. Quality is an important factor as it aligns customers' expectations and market perspectives of what constitutes competitiveness. Due to inferior quality and lack of standardization, products may be rejected by both local and international consumers hence leading to incurring huge expenses related to the production of the rejected products.

Firms that produce quality products have an enhanced market share and this is usually translated to improved return on assets. Return on assets which is a measure on how effectively a firm uses its assets to generate earnings is believed to be an essential indicator of competitiveness or how well the firm is doing in comparison to other businesses in the same industry (Farris et al., 2017). Firms need to build a company's client base as this has a great bearing towards market share, which in turn boosts customer's happiness as it assures effective supply of services at lowest possible relative costs (Aswini, 2013). Primary goal of any firm's competitiveness is to increase its effectiveness and efficiency in delivery of its core mandate and this helps in improving its ability to deliver goods and services to the customer (Kaplan & Norton, 2001). Competitive firms require to have effective and timely response to the ever-changing tastes and preferences of the consumer and this calls firms to focus on efficiency and flexibility in the manufacturing methods so

as to serve the customer appropriately (Awino & Gituro, 2011). This calls for different strategies that manages the flow of goods from point of production to the point of use.

Productivity has been defined as the relationship between output and input by Kale and Gawade (2016). Productivity of any given firm is affected or influenced by performance behaviour, external context and other opportunity factors (Zhang et al, 2020) within which the manufacturing firm is operating. In order for a manufacturing firm to be competitive, it has to put in place mechanisms that are geared towards monitoring of its production on daily basis and taking any corrective measures when need arises as soon as possible as noted by Bendor-Samuel (2020). Firm's productivity can be influenced by how communication is done, workforce talents and the external environment in which they are operating from.

2.4 Empirical Review

This segment reviews literature from previous studies undertaken by various academicians regarding the role of strategic orientation based on the four dimensions of strategic orientation. This includes the following orientations adopted namely market, technology, learning, entrepreneurial and top management commitment on the competitiveness of manufacturing firms. These examinations point a relation amongst the study independent, dependent and moderating variables. This section presents the study objectives as they were set in chapter one of this study.

2.4.1 Market Orientation and Competitiveness of Manufacturing Firms

A study undertaken in Malaysia by Sitinor et al. (2020) entitled market orientation and firm performance of manufacturing sector of which the independent variables was moderated by innovation and sampled 321 manufacturing firms. The study used multiple regression analysis to analyze the data and it aimed at exploring the understanding of market orientation of manufacturers operating in Malaysia. The research design employed was descriptive and used self-administered survey questionnaire which had six-point

Likert Scale. Key informant of the study were key senior management staff who were from manufacturing industries in Malaysia. The research concluded that market orientation and especially the cultural component significantly affect the firm's performance and it was noted that manufacturing sector in Malaysia is very competitive. It also confirmed that market orientation makes the firms to be dynamic in their operations. In order to carry on and serve the clients efficiently and competently it was noted that the firms need to be engaged in customer led approaches, monitor competitor strategies, improve and bank on competitive strategies through consolidation of inter-function integration. The research resolved that firms that have adopted market oriented approaches have a better performance as they are able to serve the clients aptly.

Vieira (2010) undertook a study in Brazil on antecedents and consequences of market orientation, a Brazilian meta-analysis and international mega analysis that aggregated a sample size of 4,537 in 27 papers. The study noted that manufacturing firms need to be in tandem with the business environment and this can be achieved by manufacturing firms being market oriented. The study noted that Market orientation is important as it help in understanding what the customer needs and through this enhance firms' ability to respond quickly and effectively to fast changing market conditions which are the ultimate determinant of competitiveness. The study concluded that market orientation facilitates the firm's ability to anticipate, react to and capitalize on environmental changes thereby leading to superior performance.

A study on how will market orientation and external environment influence the performance among the SME in the Agro food sector in Malaysia undertaken by Aziz and Yasin (2010), it appraised 102 firms that Agro food based that operated within the country. Through the study it was found that market-oriented firms have superior capability of achieving higher profits as compared to their counterparts who are not market oriented. This is because market oriented firm has the ability to respond promptly and effectively to fast fluctuating and dynamic economic conditions. The study concluded that the agro based firms require more of the market intelligence, as this gives a glimpse of what is

required and help in making them to be competitive in the market through having a focused dealing with the customers.

A study on market orientation and firm's performance in the manufacturing sector in Kenya by Lagat et al. (2012), investigated 220 manufacturing firms that are members of Kenya Association of manufacturers. The investigation used a casual research design of which questionnaires were developed and used to collect information from the respondents. Regression analysis was undertaken to verify the correlation between market orientation and performance. Through the research a validation was done that there is a positive relationship between market orientation and performance. The study recommended that manufacturing entities that have adopted market oriented approach need to put in action information collection mechanisms that relate to the clients and other participants in the environment where they are operating with special focus on the competitors.

Soniewicki (2017) undertook a study that focused on market orientation and competitiveness of Polish manufacturing companies. The study examined various kinds of manufacturing firms that had different market orientation and it aimed at finding out if their competitiveness was correlated to it. A total of 334 Polish manufacturing firms were investigated using the MKTOR scale that was developed by Narver and Slater and used questionnaires that were delivered to respondents which had the 5-point Likert scale. The study found out that for different manufacturing firms their competitiveness grew along with the adoption of market orientation whoever it differed based on company type. The study concluded that, it is important for the firms to adopt market orientation as improves and makes them to be among the competitive firms in the country.

2.4.2 Technology Orientation and Competitiveness of Manufacturing Firms

Ogbari et al. (2022) undertook a study on technological orientation as a strategy for entrepreneurial and SME economic impact. The research aimed at looking critically at technology orientation and its strategic role on the competitiveness of small and medium

enterprises entrepreneurial initiatives in Lagos State of Nigeria. One hundred and twenty small and medium enterprises were examined using multi-stage sampling method that incorporated purposive, stratified and simple random methods. Questionnaires were administered to randomly selected entrepreneurs who were from a given area within the Lagos state. Through the research it was revealed that technological orientation strategically influences the competitiveness of organizations significantly and that firms that have adopted it showed positive results. The study recommended that firms should be technological inclined in the market, as long as they are willing to learn, and produce better and perform better than the others in the environment as this will make them produce more products that the market requires.

A study by Therrien et al. (2011) on innovation novelty and commercial performance in the service industry that was undertaken in Canada. The study sought to find out whether technology has an impact on firm's performance in selected service industries. The result indicated that in order to derive more sales from innovation, firms need to enter the market early or introduce new products with high level of novelty which calls for investment in technology. Technology was noted to be critical to the competitiveness and survival of manufacturing firms as it changes the way business is done and how the consumers would receive the merchandises.

Al-Ansari et al. (2013) undertook a study entitled technology orientation, innovation and business performance, a study of SME in emerging markets namely Dubai in the United Arab Emirates. The study sampled 200 SME who are members of Dubai Chambers of Commerce and Industry in the sectors of ICT, health care services, construction, manufacturing amongst other industries. The findings of the study revealed that technology orientation has a significant positive correlation with innovation which has a positive effect on performance of business in the emerging markets. The study also revealed that emerging markets such as Dubai, technology influences the degree of emphasis placed on innovation, new product development and did not have a substantial direct effect on the business performance. The results showed that firms in Dubai are likely to use technology to improve performance. Technology policies and the adoption of new

technology plays a key role in improving their internal processes of a firm and this motivates them to allocate more resources for investment in technology.

Khan et. al. (2017) undertook a study on the impact of market and technology orientation on product innovation performance with innovation capability having a mediation role that focused on Pakistani's Small and Medium manufacturing enterprises. The intent of the enquiry was to look at the connection between market, technology orientation and product innovation performance in small and medium sized enterprises (SMEs) in Pakistan as well as the mediator effect of innovation capability. The survey targeted Pakistani export manufacturing SMEs who were registered members of Sialkot Chambers of Commerce and Industry and they were selected from those who were mainly involved in production of various goods such as in leather, surgical equipment and sportswear. A sample of 186 firms were selected from the target population which was done through purposive and convenient sampling. The research used questionnaires as a data collection tool and they were issued to 189 owners of the enterprises. The findings of the study were technology orientation should be embraced by SMEs as it lowers costs of operation, increases efficiency and gives the firm a competitive edge.

Artz et al. (2010) in a longitudinal study on impact of patent acquired and product innovation on firms' performance in different industries of United States of America and Canada found that product innovation had a significant impact on performance. The study noted that due to globalization, best way of stimulating, sustaining progress and competitiveness of manufacturing firms is through the adoption and use of technology. This in essence leads to the firms realizing high turnover of products and services being introduced within a short period of time and increases their competitiveness.

Osore et al. (2018) in a study influence of technological orientation on performance of conventional and Islamic banking in Kenya. The research adopted a mixed method research design that based on descriptive, non-experimental and casual approaches. The study used a census approach of its targeted population of 43 commercial banks that were operational in Kenya by 1st December, 2016 and a questionnaire was used to collect

primary data. The study noted that technological orientation has a considerable influence on the Kenyan's commercial banks performance. It was recommended that commercial banks should embrace technology to reach the untapped market through innovation so as to enable the customer to undertake banking services at their convenience.

2.4.3 Learning Orientation and Competitiveness of Manufacturing Firms

Sawaean and Ali (2020) undertook a study on the impact of entrepreneurial leadership and learning orientation on organizational performance of small and medium enterprises in Kuwait. The study sought to scrutinize the relationship amongst the determinants of organization performance such as learning orientation and innovation capacity of the country's small and medium enterprises. The investigation used a quantitative approach that was tested using a variance based structural equation modelling. A survey of 384 organizations was done by administering a standard questionnaire that was used as a primary data collection instrument. The study targeted the owners and chief executive officers of the Kuwait SMEs of which a sample was determined through simple random sampling method. Main data analysis was done using Smart PLS 3 and the measurement model tested the values of reliability and validity while the hypotheses were verified using bootstrapping technique that evaluated the relationships impact. Through the investigation, it was confirmed that learning orientation has a positive and significant impact to the organization performance and it recommended the adoption of it to enhance performance. The study concluded that in developing countries such as Kuwait, where regional entrepreneurship is on the rise, SMEs need to be supported to embrace and improve learning orientation which is critical in order to develop their abilities, competitive advantage and performance by ensuring they have long term success.

Suliyanto and Rahab (2012) undertook a study that investigated 150 small and medium enterprises in Bunyumas Regency on the role of market orientation and learning orientation in improving their innovativeness and performance. The research used quantitative approach as this was a confirmatory research and data collection was done through a survey. The target population for the study were SMEs in the Bunyumas

Regency and the sample was selected through non-probability convenient sampling method. The study concluded that performance is not influenced by learning orientation. Recommendation of the study was that for a firm to be competitive they must have learning capabilities and employees should identify with the organization's mission which can only be done when the knowledge is shared among the employees. The study also recommended that firms should strengthen their learning orientation and innovativeness as this improve business performance in the dynamic operating environment.

Sajjad et al. (2022) in a study that sought to establish the moderating role of environmental turbulence between learning orientation and small and medium enterprises performance in manufacturing sector of Pakistan. The investigation used simple random sampling to get 379 manufacturing firms that participated in the study. Data was collected by self-administering questionnaires that were distributed to firm owners or senior managers. The study noted that learning orientation has a significant positive effect on performance and the relationship is strengthened under the moderating influence of environmental turbulence. The study concluded that SMEs owners or managers ought to emphasize on the on continuous learning that accentuates the capability to compete with the environmental changes. Through this it is noted that a firm with a strong learning orientation is not simply a collector of knowledge but a processor of it and this improves the firm's capability to improve its competitiveness.

Martinez et al. (2020) undertook a study on the dimensions of learning orientation and its impact on organizational performance and competitiveness in small and medium enterprises in Mexico that targeted 400 enterprises. This quantitative research was undertaken through interviewing of the respondents who were randomly selected from the city of Aguascalientes. The respondents for the study were owners' managers or high level executives in the targeted firms. The study findings revealed that there is a substantial relationship that links commitment to learning as well as shared vision with competitiveness. The study concluded that learning orientation has a significant influence on the competitiveness of the small and medium enterprises. The study resolved that learning oriented enterprises encourage staff to question the already well-known

procedures and undertakings and are receptive to novel ideas that can positively impact competitiveness of the enterprises.

2.4.4 Entrepreneurial Orientation and Competitiveness of Manufacturing Firms

A research undertaken by Zeebaree and Siron (2017) in Kurdistan Region of Iraq on the influence of entrepreneurial orientation on competitiveness in small and medium sized enterprises as modulated by financial assistance. A total of 680 SMEs were sampled out of a population of 3,526 and the study used structural equation modelling to examine the connection between the variables. The statistical findings demonstrated a significant link between entrepreneurial orientation and competitiveness and the study concluded that firms that have adopted entrepreneurial orientation were competing effectively in the market as compared to firms that didn't have the behaviour.

Wegwu and Princewill (2022) undertook a study on entrepreneurial orientation and competitiveness of telecommunication firms in Nigeria that focused on Rivers State. A total of 139 managers working in four different telecommunication firms were targeted to participate in the study. The study had 109 participants who were randomly selected from the population and a structured questionnaire was used for primary data collection that were self-administered. The study found out that some aspects of entrepreneurial orientation for instance innovativeness and proactiveness had a significant effect on competitiveness. From the study it was recommended that management of telecommunication firms should develop and have an innovative plan to fund innovative ideas, experimentation and creative processes. It also recommended firms to make significant investments in research and development as this will enable them be able to produce and launch new products. Through this launching of new products firms will be competitive in the market as this enhances them to be recognized as an effective brand.

A study undertaken by Raparo and Fernandes (2014) on strategic entrepreneurial orientation and small business growth that sampled 211 Portuguese firms from different sectors and used questionnaire as data collection instrument. The study found out that

proactiveness, innovativeness and risk taking has positive impact on growth of firms. The study therefore, recommended that for firms to have a positive impact in the environment has to embrace the art of being proactive, innovative and have a risk taking attitude.

Baariu (2018) analyzed the competitive strategies, entrepreneurial orientation, external environment and performance of small and medium enterprises in the manufacturing sector that are operating in Nairobi County. The research used a cross section survey that covered 334 small and medium manufacturing enterprises in Nairobi County. Data was collected using semi structured questionnaires that were distributed to business owners or senior managers in the firms. The study found out that manufacturing firms are affected by a variety of interrelated factors which should be taken into consideration in order to achieve success and avoid business failure. Entrepreneurial orientation it was noted significantly influences performance and this is indicated by how manufacturing firms innovates, takes risks, proactively pursues market opportunities and adopts competitive aggressiveness. The study concluded that entrepreneurial orientation and the environment in which an organization operates in have an influence on the competitive approaches that are implemented to improve performance.

A study by Mkala et al. (2017) that sought to examine the mediating effect of entrepreneurial orientation on the relationship between decision making and firm's performance in Kenya. A cross sectional survey design was used and the study sampled eighty-three owners of food manufacturing firms who are registered members of the Kenya Association of Manufacturers. The study used a semi structured self-administered questionnaire to collect data from enterprise owners or managers. It was concluded from the study that entrepreneurial orientation had a significant relationship and is a critical strategy for enhancing firm's performance. The research resolved that combining decision making with entrepreneurial orientation forms a critical strategy for enhancing firm's performance and urged that manufacturing firms should develop and utilize employee's entrepreneurial orientation capabilities through such actions such as strategic delegation.

In a study that focused on entrepreneurial orientation and organization competitiveness in the hospitality sector in Port Harcourt, Nigeria undertaken by Ogueze et al. (2017), quasi-experimental research design was used. The study targeted 390 registered hotels in the area who were members of Hotel Owners Association Desk. Data was collected through use of questionnaires as a primary data source while journals, articles and textbooks were used to gather secondary data. The study findings revealed that their existed a positive and significant relationship between the dimensions of entrepreneurial orientation and measure of organization competitiveness which are correlated. It was also noted that organization competitiveness is very critical for any success to be attained in the operating environment and that innovativeness affects both customer and shareholders value. The study recommended that management of individual hotels should undertake proactive measures to invest in opportunities that are not open to others in order to gain competitiveness in the industry. Firms need to develop and adopt new products that should be generated through research and development.

A study undertaken in Taiwan entitled entrepreneurial orientation and performance of 165 enterprises by Li et al. (2009), it was established that competitiveness is absolutely influenced by entrepreneurial orientation. The study noted that entrepreneurial orientation was the ability of a firm to take advantage of emerging opportunities to make an impact. A similar study undertaken by Baba and Elumalai (2011) on entrepreneurial orientation of small and medium enterprises in Labuan and its effect on performance. It focused its examination on the entrepreneurial orientation dimensions and organization performance indicators. A total of 101 small and medium enterprises that operate in Labuan area were the centre of focus. The study found out that proactiveness has a strong influence to the firm's performance and competitiveness. It also concluded that risk taking, innovation, proactiveness and competitive aggressiveness have a significant positive relationship with organization performance.

Awang et al. (2010), in a study undertaken on entrepreneurial orientation among Bumiputera small and medium agro based enterprises in West Malaysia it was noted that the capability of a manufacturing firm to remain competitive is correlated to its passion to

undertake calculated risks. Research showed that when autonomy is given to employees, they are able to act independently which in turn improve firms' competitiveness. In another study undertaken by Margahana and Negara (2019) on self-efficacy, self-personality and self-confidence on entrepreneurial intention, a study on young enterprises. The study targeted young entrepreneurs who had started their own startups or owned conventional business enterprises. It was noted that autonomy is a necessary requirement for any firm that intends to be entrepreneurial since it allows for higher degree of self-governance.

2.4.5 Strategic Orientation, Top Management Commitment and Competitiveness of Manufacturing Firms

In a research undertaken in China by Feng and Zhao (2014) that focused on top management support, inter-organizational relationships and external involvement focusing on manufacturing firms. It was found that communication from the top management team, the way it flows is very critical in enhancing information exchange. The way communication is done it enables the visualization of the vision of the future (Oyagi & Mjomba, 2021) and hence enhances the firm competitiveness as it is critical during formulation, framing and expressing policies into objectives and goals that need to be pursued. This means that this is the top management commitment can take the organization to the next level or it's the team that makes the organization fail to achieve its potential. Decisions made by the top management affect the organizations operations hence the team is responsible for the any success or failure that may be attained (Obiefuna, 2014, William et al., 2014).

A study undertaken by Yunus et al. (2013) entitled green IT adoption, towards environmental sustainability: the moderating role of top management enforcement that was undertaken at Kang Valley, Malaysia. The study noted that top management commitment plays a vital role in achieving the vision of the organization. The study recommended that the top management team need to be conversant with the environmental requirements and align the organization vision to the reality. Based on the

study, it was noted that vision of the organization could be attained by encouraging the change of communication by focusing on the desired vision. Due to this the top management commitment is critical in achieving the organization vision of being competitive.

Kaaria et al. (2018) surveyed commercial state corporation in Kenya on the moderating effect of top management commitment on human resource information system and organizational performance. The study used a census technique to collect data of which both qualitative and quantitative information was generated. The study targeted 165 chief executive officers, directors and deputy directors in charge of human resource of the commercial state corporations in Kenya. From the study, it was found out that top management commitment had a moderating effect on human resource information system and organization performance. The study recommended that there is need to have a continuous assessment on the influence of human resource information system on organization performance as this is necessary if commercial state corporations are to maintain competitive advantage in the market.

In a study by Dauod et al. (2020) entitled moderating role of top management commitment in usage of computer assisted auditing techniques that was undertaken in Jordan. The study targeted the auditors from auditing firms and used an online questionnaire that was shared to all the sampled population to collect the required information. It was observed that top management in the sampled firms played a critical tole to the successful achievement of the organization initiatives, as they have the power to communicate, coordinate the planning and adoption of strategic orientation. It was also noted that top management have a direct influence on the audit performance as they are the one who dictate if the auditor will use technology or not and they are responsible especially for the acquisition. The study noted that top management have an influence on the choice of technology to be used hence playing a critical role on the adoption. This can be done through investment and realigning of the organization to a given direction that the top management deem fit.

In a study undertaken by Helpap (2016) in German on the impact of power distance orientation on recipients' reaction to participatory versus programmatic change communication, it focused on how communication affect change commitment and resistance intentions of the recipients while taking into consideration the power distance orientation. The study undertook an experimental simulation that involved 263 employees mostly from the lower hierarchical status in the firms. The study found out that when employees are involved and through adoption of participatory communication then they are more likelihood to lead to change as compared to organization that have adopted programmatic communication. The study noted that employees are likely to commit to change where leader's communication meets the employee's expectation in regard to power distance orientation. Research has also shown that employee's commitment to change is influenced by how change is communicated specifically, the quality of communication (Rogiest et al., 2015), direction of communication (Helpap, 2016, Hill et al., 2012) and leaders communication style (Luo et al, 2016). Barrick et al., (2017) noted that TMT which exhibit high cohesion and communicate positively influence organization performance.

2.5 Critique of Existing Literature

From the literature reviewed, several studies such as undertaken by Abiodun and Ibidiunn, (2014); Ireland et al. (2003); Lumpkin and Dess (2001) and Nakhola et al. (2015) have revealed that strategic orientation has a positive influence on the competitiveness of enterprises. While other studies have shown mixed results, for instance Hao and Song (2016), Matsuno et al. (2002), Morgan and Strong (2003) and Slater and Narver (2000) noted an adverse association between strategic orientation and firm's competitiveness in any country.

Nduati and Kavale (2015) undertook a research entitled how does strategic orientation affect organizational competitiveness? Evidence from a large cement manufacturing firm in Kenya. The study majorly dwelt on the following; product orientation, customer orientation, competitor orientation and technology orientation and emphasis was on the

large cement manufacturing firm in Kenya. Questionnaires were used to gather information and from the research it was found that there was no significant evidence of the effect of customer and competitor orientations on competitiveness of the firm. The study concluded that competitiveness of manufacturing firms is influenced by the level of product in addition to technology orientation. The study focused on the strategic orientation that was operationalized as product orientation, customer orientation, competitor orientation and technology orientation and was silent on other components of strategic orientation that organizations may embrace.

Ibobo and Nzewi (2020) undertook a study on strategic orientation and performance of selected manufacturing firms listed on the Nigerian stock market of which survey research design was used to collect data. The study findings noted that technology orientation had a significant and affirmative outcome on firm's performance and proposed that manufacturing firms to use the concept of strategic orientation to enhance their reactional capabilities.

Enyinnah et al. (2022) in a study on strategic orientation dimension and customer satisfaction, a case of selected deposit money banks in Nigeria. The study focused on the following dimensions of strategic orientation namely market, learning, entrepreneurial and technology orientations and it adopted survey research design. The study noted that strategic orientation has a positive outcome to consumer's satisfaction. The study core attention was the influence of strategic orientation dimensions on customer satisfaction on selected deposit taking banks. The study never focused on the competitiveness of the firm but its main attention was on the customer satisfaction.

Nakhola (2016) undertook a study on effect of strategic orientation on performance of small and medium enterprises in Nandi County. The study embraced explanatory research design technique and investigated 335 small and medium enterprises who were operating in Nandi County. The research noted that learning, customer, technology and entrepreneurial orientation have a role they play in making it possible for small and

medium enterprises attain competitive advantage and suggested that enterprises should put more emphasis on understanding customer needs.

Mwaura and Obonyo (2018) undertook a research that focused on the influence of strategy orientation on performance of medium manufacturing firms in Kenya which adopted a descriptive cross-sectional research design. The study targeted 179 manufacturing firms that a registered with Kenya association of manufacturers of which a sample of 54 firms were selected randomly from the targeted population for the purpose of the research. It was found that manufacturing firms that are proactive in taking over opportunities that arise need to be competitively assertive. The study resolved that enterprises that uphold open line of communication with clients, gather critical and relevant data especially on their preferences that will assist in the organization coming up with appropriate ways of serving them better.

Baariu (2021) undertook a study competitive strategy driver, entrepreneurial orientation, macro environment and performance of manufacturing small and medium enterprises that had a mainly focus on Nairobi City County. Cross sectional survey was used as an approach for research design. The investigation concluded that performance of small and medium manufacturing enterprises is affected by competitive strategy drivers, macro environment and entrepreneurial orientation. The main focus of this study was on Nairobi City County based small and medium enterprises.

Kimani (2019) in a research on the effect of strategic orientation on performance of clearing and forwarding Small and Medium enterprises in Kenya. The study embraced the descriptive research design and used a questionnaire to collect data. The study found out that the firms that have embraced innovation have a competitive advantage through proactivity and this allows the businesses to seize opportunities better and faster than their competitors which gives them an advantage.

Otieno et al. (2012) undertook a study on the influence of entrepreneurial orientation on Kenya's manufacturing firms operating under the East African Regional integration. The

study focused on manufacturing firms registered by Kenya Association of Manufacturing operating in Nairobi and surrounding areas. The study revealed that firms that are operating under East African Community regional integration are significantly influenced by entrepreneurial orientation in terms of sales, profits and employment measures. It concluded that firms that need to enhance performance have to adopt entrepreneurial orientation.

Raila (2017) undertook a study within the Nairobi Central Business that focused on strategic orientation and performance of small and medium enterprises of which descriptive research design was adopted. Firms that participated in the study were selected using simple random sampling technique. The study findings noted and resolved that entrepreneurial orientation had a substantial impact on enterprises successes. The geographical scope of the study was also limiting as it only focused on the Nairobi central business district.

Yet, still a study by Raunch et al. (2009) noted that a large number of empirical researches undertaken, had examined the relationship between a single dimension of strategic orientation such as entrepreneurial orientation and competitiveness but overall, there are fewer studies that examine the holistic effect of a range of multiple strategic orientation on competitiveness. It should be noted that increasing dynamism in the business environment and strong financial pressure as noted by Benson-Rea et al. (2013) forces the firms to employ multiple business models simultaneously to maximize value creation and be competitive. This calls for a multifaceted approach of undertaking strategic orientation as recommended by Hakala (2011) and Cadogan (2012) who stated that empirical studies to investigate a holistic strategic orientation should be adopted. That's why this examination concentrated on a comprehensive approach of the role of strategic orientation and competitiveness of manufacturing firms in Kenya focus being those that who are registered members of the Kenya Association of Manufacturers Central Kenya and Machakos Chapters.

A review of inquiries undertaken in the area demonstrates little attention has been given to the study of the role of strategic orientation on the competitiveness of manufacturing firms in developing nations in a holistic manner. This investigation consequently, tended to study and contribute additional information on the scanty statistics that exists about the strategic orientation role on competitiveness of manufacturing firms in Kenya. The study also took a divergence from what has been done focusing on the single dimension previously by adopting a multifaceted approach and a multisectoral evaluation.

2.6 Summary

This chapter scanned at empirical information on strategic orientation and competitiveness of manufacturing firms. Prevailing literature has basically shown a mixed relationship between various types of strategic orientation and firm's competitiveness. Market orientation is vital to the competitiveness of the firm as it aids in understanding what the market requires hence what manufacturing firms' have to undertake o serve the market appropriately. Technology orientation is very key to the survival of the firm as it helps in coming up with new products and helps in cutting down costs and solving of emerging challenges. Learning orientation is another area that can give a firm an upper advantage in a competitive environment as it is keen on knowledge generation and management, this are resources that have an impact to an organization. Learning orientation acknowledges that organizations that manage well both firms and individual knowledge are better to deal more successful with the challenges of the environment. Manufacturing firms require entrepreneurial orientation approach as the market they serve is competitive, due to globalization development of new products that serves the client is critical. Finally, top management commitment on the adoption of strategic orientation is very critical as they play a key role on how resources will be allocated, how they are involved in the operations and how key decisions will be communicated in the organization. This in one way or the other helps in determining how a given firm operates as it has a great influence on the competitiveness of the manufacturing firms in Kenya.

2.7 Research Gaps

Strategic orientation approach to management of firms has gained a lot of interests due to the increasing complexity and dynamisms of business environment, globalization, and change in quality requirement from the consumers (Chevrollier et al., 2019). Most organization in order to survive they have to adapt to the business environment in which they are operating in which is turbulent and sophisticated through embracing and adopting strategic orientation which main goal is to enhance the firm's competitiveness. The role of manufacturing firms in developing and developed nation can't be overemphasized as they are critical in job creation and provision of goods and services to the population yet despite their importance, they have various constraints they face. In Kenya for instance, manufacturing firms are faced with challenges of globalization that has led cheap imports from developed nations and counterfeit goods which are of low standard or quality, low productivity, and less returns on assets.

Due to these challenges listed above a majority of manufacturing firms have been forced to operate sub optimally and in the worst scenarios they have shut down. This demands for solutions that would be able to address these challenges and hence improve firm's competitiveness. This study purposed to address this gap by focusing on the role of strategic orientation on the competitiveness of manufacturing firms in Kenya.

Study interests in strategic orientation and competitiveness of manufacturing firms have been carried out by various researchers. Researchers such as Cheruiyot et al. (2012), Kiptalam et al. (2016), Kombo et al. (2015) dedicated their investigations on some aspects of strategic orientation components in the manufacturing sector whereas Okwemba (2019) focused on the organizational competences of manufacturing firms in Kenya. Kiiru (2015) focused on how strategic orientation mediates dynamic capabilities and competitive advantage relationships in small and medium enterprises facing dynamic situations especially the large retail enterprises. A study undertaken by Maclean et al. (2023) in regard to the implication of strategic orientation on firm's performance in a lower middle income country and it was undertaken in Ghana. The study noted that strategic orientation

has a significant effect on performance. However, there is a significant lack of enquiry on the role of strategic orientation on the competitiveness of manufacturing firms in Kenya that assumes a multifaceted approach which can be generalized to the manufacturing sector in Kenya. However, through the reviewed literature, the high adoption of various strategic orientation dimensions at firm's level has been recognized. It is imperative to explore how strategic orientations relate to the competitiveness of manufacturing firms using the multidimensional approach in contrast with previous studies that undertook a single or two dimensions.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research philosophy and design, the target population, sampling frame, sampling techniques, and sample size. Further, it also shows how data was collected and how the pilot study was conducted. Finally, it explains how the data was processed, analyzed and presented.

3.2 Research Philosophy

Research philosophy relates to the foundation of knowledge upon which important assumptions and predispositions of the study are made hence it is a belief, the way data about a phenomenon should be collected, analyzed and used (Birks & Mills, 2022). There are three main research philosophies (Epistemological) namely positivism, realism and interpretivism (Saunders et al, 2012) which might also be viewed in the following perceptions of quantitative and qualitative approaches (Cooper & Schindler, 2006). For this study, the research philosophy adopted was positivism. This is because positivism philosophy premises that knowledge is grounded on facts and that no abstractions or personal position of the individuals is considered. Positivisms thus derive quantitative method which holds that there is an objective reality that can be expressed numerically, explanatory and predictive power (Furrer et al., 2008; Neuman, 2006).

With this model, knowledge is valid only if it is grounded on values of reason and facts, collected through direct surveillance and experience measured empirically through quantitative approaches and statistical investigation. Under this paradigm, theoretical models can be established that are generalizable to explain cause and effect association (Saunders et al., 2009).

3.3 Research Design

Research design can be described as the arrangement of all conditions that affect the study as right from data collection to the data analysis (Sachin & Rajesh, 2020) this means it basically gives the structure of the research. According to Hoerl and Snee (2020) research design is a general plan or strategy of conducting a research study to examine specific testable research question of interest. A descriptive, correlation and causal research designs were used to study the role of strategic orientation on the competitiveness of manufacturing firms in Kenya. Descriptive research design was convenient in illustrating the features of the population that has been earmarked for investigation and providing answers to the research questions (Shields & Rangarajan, 2013).

Correlation research design assessed the relationships that existed between the independent, moderating and dependent variables. This was based on the assumption that if their exist a statistically significant relationship between the two variables, then it is possible to predict one variable based on the provided information of the other variable. Correlational and causal research designs were also used as they examined the relationship between the independent and dependent variables.

3.4 Target Population

Target population has been defined differently by several authors. Hancock et al. (2021) defined target population as complete group of individuals or elements that meet certain criterion to be included in a study and have common attributes to which results can be inferred to. Kothari (2009) defined target population as a physical representation that includes all the units that are possible members of the sample. Mugenda and Mugenda (2013) described target population to be all sets of individuals or organizations that have certain homogeneous features of a bigger sample group. The target population for this research were the sectional heads from 134 medium and large manufacturing firms that are registered members of Kenya Association of manufacturers (KAM) in Machakos and Central Kenya Chapters.

3.5 Sampling Frame

Cargill and O'Connor (2021) defined sampling frame as the lists of all population units from which the sample would be carefully chosen from while Mugenda and Mugenda (2013) described it to be a list or index of selected cases. The Kenya Association of Manufacturers Machakos and Central Kenya chapters registered medium and large manufacturing firms were the sample frame for this study (Appendix III). The questionnaires were dropped at the Chief Executive Officers/Directors office who latter on marked them to the relevant sectional heads to respond to areas that targeted them. The sectional heads in the manufacturing firms were the target and accessible sample as they are the ones involved in strategy formulation and execution function. This is because the strategic management issues of any firm are mostly handled by them.

3.6 Sample Size and Sampling Technique.

A sample is defined by Kothari (2009) as the selected respondents representing the population while sampling technique is an approach through which the study can arrive to the most qualified respondents from the entire population as observed by Babbie (2010). A sample is part of the population of which the researcher study in order to make inferences about the whole population (Kothari, 2014). This study undertook a census of all medium and large manufacturing firms that are registered members of Kenya Association of Manufacturers, Machakos and Central Kenya Regions.

The census survey was chosen as the number of firms were small hence warranting all of them be studied. The advantage of the census technique is that the sampling error is minimal (Nachmias, 2004). This study involved strategic orientation initiatives that are undertaken at the organization with staff that are involved in policy formulation and execution hence it requires a respondent will provide extensive information about a given phenomenon under examination (Kombo & Tromp, 2009) hence the choice of respondents. In this study the unit of observation comprised the sectional heads in the manufacturing firms who were purposively sampled since they are deemed to be more

knowledgeable in matters of strategic orientation and its implied effect on competitiveness.

Table 3.1: Sample Size

Category	Target Population
Directors in charge of strategy	134
Total	134

3.7 Data Collection Methods and Instruments

The data gathering approaches involved the collection of both primary and secondary information. The study also utilized quantitative and qualitative approaches. Primary data is the first-hand information that was collected from the field by the researcher during the study while secondary data is a set of information that has already been collected and compiled by other scholars or entities but it is relates to the area of study and the study variables. As noted by Kothari (2010) secondary data can be categorized into the following main sources as either internal or external sourced. The researcher reviewed relevant literature on study variables that included strategy books, publications, journals and periodicals from Kenya Association of Manufacturers such as the strategic plan and any other relevant documents.

Cervone and Pervin (2022) defined data collection as tools and procedures that are used to gather and measure a given phenomenon. This study used a questionnaire which is defined as a document that consists of a number of questions printed in a definite order, a form or a set of forms by Kothari (2019) to gather primary data. A structured questionnaire **(Appendix II)** was divided into two parts with section A requesting for demographic information in regard to the organization while section B was on some salient issues in regard to the study. The questionnaire contained both the open ended and closed questions. Closed questions were used as they are standardized and can be interpreted the same way by all respondents as noted by Coopers and Schindler (2013) and open-ended questions that gave a latitude to the respondents to have their views. A questionnaire was adopted

as data collection tool since as an information gathering instrument used by the researcher in obtaining from the respondents' information with a focus of achieving the objective of the study.

The questionnaire used had been designed on a five-point Likert type scale. The Likert Scale required the respondents to indicate the extent to which they are in agreement with various statements posed in relation to a given statement. It has been observed by Vorm and Combs (2022) that Likert scale is the best tool for measuring opinions as it requires the respondents to provide a relative assessment on a continuum which are commonly used to collect primary data. The Likert Scale response categories used where as follows; 1 = Strongly Disagree, 2 = Disagree, 3 =Not Sure, 4 =Agree and above 5 =Strongly Agree. The respondents of the study were literate hence no problem of responding to questionnaires questions. Questionnaires were also adopted as they are cost effective and they minimize the interviewer's bias thus promoting accuracy during data collection as noted by Koponen et al. (2013). The secondary data was collected through secondary data collection sheet **(Appendix III)** by the researcher through perusing through documents from the manufacturing firms.

3.8 Data Collection Procedure

Data collection is defined as precise, systematic gathering of information relevant to research problem using methods such as interviews, participants' observation, focus group discussion narratives and case studies as opined by Burns and Grove (2003). Likewise, Creswell (2017) defined data collection as a means of obtaining information from the selected target population. Data collection method used for this study was informed by the objectives of the research and both primary and secondary data was collected using the questionnaires and document analysis. Primary data were collected by use of self-administered questionnaires that employed drop and pick strategy or technique.

Participating firms had initially been contacted through which contacts were established. This was very critical bearing in mind that the time data was being collected the world

had been hit by COVID-19 and firms had put in place containment measures and due to this prior arrangement was necessary. A research permit was sought from National Council of Science, Technology and Innovations (NACOSTI) of which was granted in order to conform to ethical issues related to research undertakings. A clearance letter from Jomo Kenyatta University of Agriculture and Technology (JKUAT) that introduced the researcher to the firms where data was collected was also used.

The researcher with the help of research assistants then visited the manufacturing firms who are registered members of Machakos and Central Kenya Chapters of Kenya Association of Manufacturers and are located in the following counties Machakos, Kajiado, Kiambu, Nyeri, Murang'a and Meru and administered the questionnaire for the purpose of primary data collection.

In order to ensure that the respondents received questionnaires, controls were deployed and to achieve this objective, the researcher maintained a register of what had been administered and those that were received. The questionnaires were delivered using the drop and pick later method to the respondents. The questionnaires were accompanied with a letter which clearly introduced the researcher to each respondent and assured the participants of why the data was required and how it will be handled. The objective of using the questionnaires was to allow the respondents to answer freely their understanding on issues asked. Secondary data was gathered from publications and other documented works relevant to the study.

3.9 Pilot Study

To make sure that the investigation instrument that is the questionnaire captured what is required then its validity and reliability were tested through a pilot study. The purpose of the pilot study is to establish the accuracy and the appropriateness of research design and instruments as noted by Rahmah et al. (2022). This is done in order to identify any weakness and provide correction before the main study is undertaken. Through this undertaking the researcher was guaranteed of the appropriateness of the questions, data

collected and method used for collection. The number of firms who participated in the pilot study were 13 which translate to 10% of the target population.

According to Mugenda and Mugenda (2018) a 10% of the target population if used in the pilot study is appropriate. The piloted firms were randomly selected from the target population as recommended by Cooper and Schindler (2016) and they did not form part of the final research. The pilot study was undertaken to ascertain the validity and reliability of the data collecting tool. Mugenda and Mugenda (2018) noted that validity of the data collecting instrument and precision should be improved through pre testing. The pilot test was done so as to discover any inconsistency within the questionnaire and have it addressed. The following two tests were undertaken during the pilot stage.

3.9.1 Reliability of the Instrument

Reliability is the measure of degree to which a research instrument yields consistent results after repeated trials (Gupta & Bhattacharya, 2022) in other words it tests consistency and stability of the measuring instrument (Sekaran & Bougie, 2016). Reliability analysis was used to assess internal consistency among the items of the study variables of which Cronbach Alpha was adopted and computed for all the items. Sekaran and Bougie (2016) observed that Cronbach's Alpha has values ranging between 0 to 1 with the lower limit being 0.7 and the higher the coefficient then means the instrument is reliable.

3.9.2 Validity of the Instruments

Validity refers to whether the questionnaire measures what it purports to evaluate (Bryman & Cramer, 2008) or as observed by Cooper and Schindler (2011) to be the level to which a given data collecting instrument measure what it supposed to. Construct and content validities were of concern in this study. Content validity is defined as a measure of the degree to which data collected using a particular tool represents a specific domain of indicators or content of a particular concept (Cooper, 2017). To achieve this expert

opinion was sought from supervisors, researchers, and other peer who were tasked to evaluate the statements in the questionnaire for relevance and whether they are meaningful to them and how clear they were. The input given was then included in the questionnaire and modification done where necessary.

Construct validity is the ability of the instrument to confirm a network of related hypotheses generated from a theory based on the concepts as noted by Zikmund (2003). For construct validity the questionnaire was divided in various sections and each section measured a specific objective of which was closely tied to the conceptual framework of the study and this was tested by undertaking factor analysis where KMO and Bartlett's test of Sphericity was computed. The KMO value should be above 0.6 while the significance of Bartlett's test should be below 0.05. Factor analysis was used in this study to compute factor loading matrix, Principal Component Analysis (PCA) and commonalities. The aim of factor analysis is where large number of variables are reduced into fewer number of factors and this is done by extracting maximum common variance from all variables and putting them to a common score.

3.10 Data Processing, Analysis and Presentation

Data analysis is the processing of collected data to make meaningful information from it (Saunders et al., 2009). Data analysis in other words relates to how collected data is managed to achieve the objective of the study. Data analysis involves scrutinizing the collected information and making inferences from them (Kombo & Tromp, 2007). Upon collection, the questionnaires were scrutinized, cleaned and arranged to ensure that all the important data is coded, characterized and kept for investigation. Quantitative data analysis was done by use of both descriptive and inferential statistics.

Descriptive statistics was used to determine the trends that enabled comparisons among the study variables in order to make deductions, interpretations, conclusions and recommendations. This gave rise to the frequencies and percentage of distributions as well as the mean scores and standard deviations which were computed, evaluated and then

ranked to give relative importance of each independent variables. For comparison purposes, key variable factors were identified using the Principal Component Analysis (PCA). Principal Component Analysis is s dimension reduction technique which assess the factor structure of a given data set and the factor loading was set at 0.4. After data processing the next step involved data analysis. This involved computation of measures, searching for patterns of relationships, estimating values of unknown parameters and testing of hypotheses (Cooper, 2016). Qualitative data analysis included the condensing the collected data through editing, paraphrasing and summarizing in order to derive meaning from it. The qualitative data collected from the manufacturing firms was organized along themes that were guided by the research hypotheses to establish links between data and key patterns that emerged from the study and it was analyzed using content analysis technique.

Inferential statistics was undertaken to test hypotheses which enabled the researcher to generalize results from the sampled population. Multiple linear regression analysis was a suitable method of examining the relationship amongst the independent and the dependent variables. It has been noted by Cooper and Schindler (2011) that multiple linear regression can be used to control confounding variables to better evaluate the contribution of other variables, to test and explain causal theories, and to test hypotheses and to estimate population values. Relationships between variables was established through multiple linear regression analysis. Analysis of Variance (ANOVA) was used to test the goodness of fit of the regression model. This gave an indication to the strength and direction of association between the variables. Data was then presented using the statistical techniques of tables, equations, graphs and charts in order to draw conclusion. Tables were used to present descriptive data, equations used to present inferential statistics while explanations and discussions of both descriptive and inferential statistics were done using text.

3.11 Models Specification

To draw deductions on the objectives and hypotheses of the research, the statistical models were fitted for the specification purpose of showing the role of strategic orientation on the

competitiveness of manufacturing firms in Kenya. This helped to explain the scope and direction of the relationship between the variables through the use of correlation coefficient of determination and level of significance.

3.11.1 Regression models

Regression models were used to establish the relationship between each independent and the dependent variable as it analyzes the relationship between the any two variables at a time without considering the combined effect. This study made use of the following models to reveal the relationship of individual independent variable to the competitiveness of manufacturing entities in Kenya

Without moderator

H_{01}: Market Orientation has no statistically significant role on the competitiveness of manufacturing firms in Kenya.

$$Y= \beta_0+\beta_i X_i+ \varepsilon$$

H_{02}: Technology Orientation has no statistically significant role on the competitiveness of manufacturing firms in Kenya.

$$Y= \beta_0+\beta_i X_2+ \varepsilon$$

H_{03}: Learning Orientation has no statistically significant role on the competitiveness of manufacturing firms in Kenya.

$$Y= \beta_0+\beta_i X_3+ \varepsilon$$

H_{04}: Entrepreneurial orientation has no statistically significant role on the competitiveness of manufacturing firms in Kenya.

$Y= \beta_0+\beta_i X_4+ \varepsilon$

H_{05}: Top management commitment has no statistically significant moderating role in the relationship between strategic orientation and competitiveness of manufacturing firms in Kenya

$Y= \beta_0+\beta_1 X_1+\beta_2 X_2+\beta_3 X_3+\beta_4 X_4 + \varepsilon$ for multiple regression analysis

With Moderator

H_{01}: $Y= \beta_0 + \beta_i X_i + \beta_2 X_{1*} Z+ \varepsilon;$

H_{02}: $Y= \beta_0 + \beta_i X_2 + \beta_2 X_{2*} Z+ \varepsilon;$

H_{03}: $Y= \beta_0 + \beta_i X_3 + \beta_2 X_{3*} Z+ \varepsilon;$

H_{04}: $Y= \beta_0 + \beta_i X_4 + \beta_2 X_{4*} Z+ \varepsilon;$

H_{05}: $Y= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_1 Z+ \beta_6 X_2 Z+ \beta_7 X_3 Z+ \beta_8 X_4 Z + \varepsilon$ for moderated multiple regression analysis

Where;

Y = Competitiveness of manufacturing firms

X_1 =Market orientation

X_2 = Technology orientation

X_3 = Learning orientation

X_4 =Entrepreneurial orientation

Z = Top Management Commitment (Moderating variable)

β_0 = Constant

β_1 = The coefficients for the individual independent variables (X_1, X_2, X_3,X_4,)

β_z = The coefficient of the moderating variable

βz_1 = The coefficient of the interaction term

X_1Z = Interaction term of the moderating variable with each of the independent variable

ε = Error term

Table 3.2: Hypotheses

No	Hypotheses	Decision criteria
H_{01}:	Market Orientation has no statistically significant role on the competitiveness of manufacturing firms in Kenya.	Reject null hypothesis if $p<0.05$
H_{02}:	Technology Orientation has no statistically significant role on the competitiveness of manufacturing firms in Kenya.	Reject null hypothesis if $p<0.05$
H_{03}:	Learning Orientation has no statistically significant role on the competitiveness of manufacturing firms in Kenya.	Reject null hypothesis if $p<0.05$
H_{04}:	Entrepreneurial orientation has no statistically significant role on the competitiveness of manufacturing firms in Kenya.	Reject null hypothesis if $p<0.05$
H_{05}:	Top management commitment has no statistically significant moderating role in the relationship between strategic orientation and competitiveness of manufacturing firms in Kenya	Reject null hypothesis if $p<0.05$

These statistical models were important in determining the role of strategic orientation on competitiveness of manufacturing firms. The coefficients showed the levels of influence that each of the independent variables has on competitiveness. The regression models were fitted assuming that the error term follows a normal distribution and is non-auto correlated. The researcher tested if the fitted Ordinary Least Squares regression model meets the assumptions of normality of the error term.

3.11.2 Model Assumption Tests

Normality Test

Multiple regression analysis requires that data to be normally distributed so as to be tested through statistical analysis. This requires the data to be tested for normality to ascertain if

it is normally distributed. Normality test is important as it helps determining the shape of the distribution and predicting the dependent variable scores (Paul & Zhang, 2009). It is very important to find out or establish if the distribution the data is normal before the analysis is conducted fully. In this study, the how well the distribution of data is was investigated using various techniques namely skewness and kurtosis, quantile- quantile plot also known as Q-Q plot and Kolmogorov- Smirnov and Shapiro Wilk test.

Kolmogorov- Smirnov and Shapiro Wilk test for normality of which a p-value of greater than 0.05 was used to confirm if the residuals for the fitted multiple regression model is normally distributed. Shapiro-Wilk test was used as the sample was small based on Creswell (2014) recommendation that it is appropriate for small and medium samples of up to 2000 cases. Skewness and kurtosis test was also used to test normality. Skewness measures the deviation of distribution from symmetry while Kurtosis measures peakness of the distribution (Ming'ala, 2002). Skewness and kurtosis values are imputed on the basis of moments. The values of Skewness and Kurtosis should be zero if the data is normally distributed otherwise the data is said to be skewed or highly peaked if the values are outside the acceptable range of values of -2 and +2 (Field, 2009). In addition to the above-mentioned test, normality of the data was also tested using quantile- quantile plot also known as Q-Q plot for the dependent variable (Competitiveness of manufacturing firms in Kenya.). An extension of Q-Q plot was also done on the other independent variables and moderating variable top management commitment.

Linearity Test

Linearity test is usually undertaken to find out if the relationship between the dependent and independent variables are linear so as to fit linear regression model (Cuestas & Regis, 2013). To test for linearity the study adopted Pearson correlation coefficient. This coefficient measures the strength of a linear association between two variables that are being investigated.

Multicollinearity Test

Multicollinearity refers to the presence of correlation between predictor variables (Williams et al., 2013), hence this is concerned with high collinearity between the independent variables that are supposed to predict dependent variable. The presence of multicollinearity indicates that one variable can easily predict the outcome of the other variable (Srivastava, et al., 2005). The existence of multicollinearity between the variables will lead to significant impact on regression. This is because multicollinearity inflates the standard errors and confidence intervals leading to unstable estimates of coefficients for individual predictors. To solve this the study used a large sample as multicollinearity is not known to exist in large sample and this was tested using the Variance Inflation Factor (VIF) of which should be less than 10 as if its more then it indicates presence of multicollinearity (Field, 2009).

Heteroscedasticity and Homoscedasticity

The study investigated the assumption of heteroscedasticity and homoscedasticity which describes a situation where the error term is the same across all values of the independent variables. Cresswell (2014) pointed out that if the model is well fitting, then there should be no clear pattern to the residuals plotted and the study used the scatter diagram. Ordinary Least Squares (OLS) assumptions stipulate that the residual should have a constant variance meaning that they should be Homoscedastic. The Heteroscedascity test that is the unequal variance was checked using the modified Wald test.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the empirical findings and results of the study that is it involves the data analysis, interpretation and discussion as per the research objectives and hypotheses. The response rate, pilot data results, demographic information of the firms, descriptive statistics such as frequencies, mean and percentages are also presented. Inferential statistics of the study of which the regression analysis was used has been presented results are presented using tables, graphs and this is arranged as per the specific objectives of the study.

4.2 Response Rate

Response rate is the percentage of the participants in any given investigation and as noted by Emore (2007) it is interpreted to the extent to which collected data caters for all sample items, ratio and real respondents against the projected number of respondents in the study. A total of 121 questionnaires were administered to 121 manufacturing firms out of which 101 were attended to and submitted back to the researcher representing a response rate of 83.47% as illustrated in Table 4.1. This means a total of 20 manufacturing firms translating to 16.53% didn't respond to or filled the questionnaires submitted to them. This response rate was deemed to be acceptable to make conclusions and inferences for the study based on an observation made by Stedman et al. (2019) who stated that if the response rate is 50% is deemed to be average, if it's between 60% and 70% then it's adequate while a score that is above 70% it's an excellent response rate. Hence, for this study with a response rate at 83.47% then it was excellent to have deductions made.

This good response rate recorded is attributed to the data collection procedure employed where the researcher obtained a research permit from National Commission for Science Technology and Innovation (NACOSTI), had an introduction letter from the university

and the use of research assistants in collection of data. The strategy used to collect the data where questionnaires were dropped and picked later attributed to better response rate. The response rate was therefore considered an excellent representative of the respondents to provide information for analysis and derive conclusions.

Table 4.1: Response Rate

Response	Frequency	Percent
Well filled and returned	101	83.47%
Non –returned	20	16.53%
Total	**121**	**100.0%**

4.3 Pilot Study

The researcher undertook a pilot study to validate the research instrument which was administered to a small group of manufacturing firms as noted by Kothari and Garg (2014). For this research, pilot study was done on 13 manufacturing firms that represented 10% of the sample population as per recommendation by Saunder et al. (2012). The manufacturing firms that participated in the pilot study were from the target population but did not form part the main study. Pilot study gave the researcher the opportunity to rectify the data collection tools such as the questionnaire especially in areas that were not clear to respondents, validated the instrument and enhanced content. The validation and content enhancement were done by having a discussion with the supervisors, experts in the area of strategy and peers who greatly enriched the document. The following tests were undertaken during the pilot stage;

4.3.1 Reliability Results

During the pilot study, the reliability of the research instrument was tested which is defined as the ability of the research instrument to give the same answer in the same circumstances over a given period of time (Sasaka et al., 2014). Yasar and Cogenli (2014) noted that reliability of a research instrument is when the scores from the study are stable and consistent. The research instrument reliability was done using Cronbach's Alpha

which is an adequate model that measures internal consistency. The study variables Cronbach's Alpha results were as follows; market orientation constructs had a Cronbach Alpha of 0.939, technology orientation constructs had Cronbach Alpha of 0.888, learning orientation constructs had Cronbach Alpha of 0.873, entrepreneurial orientation constructs had Cronbach Alpha of 0.903, top management commitment constructs had Cronbach Alpha of 0.898 and finally competitiveness constructs had Cronbach Alpha of 0.890.

All research constructs were found to be reliable and consistent to be used in the study as the Cronbach's Alpha value was between 0.939 and 0.873 for all the variables which was above the acceptable range of which it should be not less than 0.7. This was in line with observation made by Ching, et a. (2015) who noted that reliability of above 0.7 should be accepted. From the study, the highest observed Cronbach Alpha was for market orientation that had a value of 0.939 while learning orientation had the lowest value of 0.873. The study reliability test for each variable is summarized and presented in Table 4.2 below.

Table 4.2: Reliability Results

Variables	Cronbach's Alpha	Number of Items	Conclusion
Market Orientation	0.939	9	Accepted
Technology Orientation	0.888	9	Accepted
Learning Orientation	0.873	9	Accepted
Entrepreneurial Orientation	0.903	9	Accepted
Top Management Commitment	0.898	9	Accepted
Competitiveness of Manufacturing Firms	0.890	9	Accepted
Overall Cronbach	**0.895**	**54**	

4.3.2 Validity Results

Validity denotes to what level the research instrument precisely measures what they were intended to evaluate (Saunder et al., 2012). This means the research instrument should be able to measure the intended subject as per the researcher's intention. The study utilized both the content or face and construct validities. Content or Face validity is the extent to

which the instrument provide adequate coverage of the topic under study. To enhance this validity the researcher sought for expert judgement and opinion from the lecturers in the area of strategy management and other experts in the field in enriching the research instruments. The researcher incorporated the views and feedback from the supervisors and other experts in the area of management and strategy who had to give an input. This ensured that all indicators used in the questionnaire were informed by empirical and theoretical literature on what has been done by other scholars hence they have been tested and proven. Expert judgement from supervisors and other peers assisted in providing support, critique and devil's advocate to the researcher's assumptions.

The second validity was construct validity which measures the degree to which an instrument results conforms to predicted correlation and other theoretical propositions was tested through factor analysis using Principal Component Analysis (PCA) which extracted factor loadings. Internal correlations among the items under consideration was investigated by conducting factor analysis to ensure that there is a consistency among the items as observed by Mugenda (2010). Usually, factor analysis is measured in terms of weights also known as factor loads with values ranging between 0 to 1 of which factor loads with values closer to 1 are highly acceptable contrary to values closer to 0. Cooper and Schindler (2012) suggested that factor loadings which are above 0.4 are acceptable and this study adopted that. To test for construct validity, it was necessary to carry out factor analysis which was used to reduce the number of indicators that do not explain the effect of various strategic orientation indicators on the competitiveness of manufacturing firms in Kenya.

To determine whether the sample size taken for the study was sufficient to conduct Principal Component Analysis (PCA), Kaiser-Meyer-Olkin (KMO) test was initially conducted. Kaiser-Meyer-Olkin (KMO) test compares the values of the observed correlation coefficients with the values of the partial correlation coefficients. This helps in confirming whether the sample size is acceptable for Principal Component Analysis (PCA) to be undertaken of which the sampling adequacy value should be over 0.5 for acceptable or satisfactory factor analysis to be performed. The findings of this study based

on Table 4.3, which is a summary of the KMOs of all the variables implies that the sample taken was within acceptable range because the KMO values were mainly between 0.683 and 0.912 being the least value and highest value respectively, which was also good enough because it was above the minimum of 0.5.

Table 4.3: KMO and Bartlett's Test

Independent/Dependant Variables	Degree of freedom	Approx. Chi-Square	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Bartlett's Test of Sphericity.
Market Orientation	36	831.695	.912	.000
Technology Orientation	36	652.732	.783	.000
Learning Orientation	36	828.341	.764	.000
Entrepreneurial orientation	36	813.737	.813	.000
Top Management Commitment	36	797.212	.871	.000
Competitiveness of manufacturing firms in Kenya.	36	775.312	.683	.000

Market Orientation Factor Analysis

Market orientation, which had 9 statements, and none of the items recorded factor loadings less than 0.40. The factor loadings of all 9 statements for market orientation were ranging between 0.615 and 0.722. From these results, it was clear that all the factor loads recorded were above the threshold therefore all them were considered to be valid for the constructs they represented. Table 4.4 present the finding of factor loadings for every statement of market orientation.

Table 4.4: Factor Loadings for Market Orientation

Market Orientation	Initial	Extraction
Customer Orientation		
The firm gathers information about customer needs.	1.000	.615
The firm's main business objectives are driven primarily by customer satisfaction	1.000	.642
The firm constantly monitor the level of commitment to customers' needs	1.000	.685
Competitor Orientation		
Top management regularly discusses competitors' strengths and strategies.	1.000	.711
The firm' salespeople regularly share information within our organization concerning competitors' strategies.	1.000	.655
The firm responds rapidly to competitors' actions.	1.000	.674
Inter functional Orientation		
Everyone understands how they can contribute to creating customer value.	1.000	.675
The firm's top managers from across the company regularly visit our current and prospective customers.	1.000	.722
All the departments in our company are responsive to one another's needs and requests.	1.000	.687

Technology Orientation Factor Analysis

Technology orientation, which had 9 statements, and none of the items recorded factor loadings less than 0.40. The factor loadings of all 9 statements for technology orientation were ranging between 0.506 and 0.653. From these results, it was clear that all the factor loads recorded were above the threshold therefore all them were considered to be valid for the constructs they represented. Table 4.5 shows the summary of factor loading for every statement of technology orientation.

Table 4.5: Factor Loadings for Technology Orientation

Technology Orientation	Initial	Extraction
New Product		
The firm develops new products frequently	1.000	.525
The firm has invested heavily in technology than our rivals	1.000	.653
The firm is producing new products and services based on consumer needs	1.000	.516
Automation		
The firm has automated our production processes	1.000	.539
The firm is scouting for new technology in the market	1.000	.595
The firm trains its customers on how to use given products	1.000	.506
Research and Development		
The firm has set aside resources for research and development	1.000	.606
Research is highly encouraged in our firm	1.000	.592
The firm carries out market research that informs our product developments	1.000	.511

Learning Orientation Factor Analysis

Learning orientation, which had 9 statements, and none of them recorded factor loadings less than 0.40. The factor loadings of all 9 statements for learning orientation were ranging between 0.502 and 0.659. From these results, it was clear that all the factor loads recorded were above the threshold therefore all the statements were considered to be valid for the constructs they represented. Table 4.6 shows the summary of factor loading for every item of learning orientation.

Table 4.6: Factor Loadings for Learning Orientation

Learning Orientation	Initial	Extraction
Commitment to learning		
All employees strive to achieve the goals of the firm	1.000	.592
There is a common drive in our organization	1.000	.502
Employees are partners in charting the way forward for the firm	1.000	.587
Open mindness		
Company allows staff to be independent in their dealings	1.000	.554
Firms culture is changed as need may arise depending on circumstances	1.000	.531
The firm relooks at its processes from time to time	1.000	.527
Shared vision		
Firm's employees have the high level energy to serve	1.000	.563
The firm's employees are dedicated to serving clients	1.000	.659
The firm ensure harmony is maintained at all times within the organization	1.000	.597

Entrepreneurial Orientation Factor Analysis

Entrepreneurial orientation, which had 9 statements, and none of them recorded factor loadings less than 0.40. The factor loadings of all 9 statements for entrepreneurial orientation were ranging between 0.507 and 0.659. From these results, it was clear that all the factor loads recorded were above the threshold therefore all them were considered to be valid for the constructs they represented. Table 4.7 shows the summary of factor loading for every item of entrepreneurial orientation.

Table 4.7: Factor Loadings for Entrepreneurial Orientation

Entrepreneurial Orientation	Initial	Extraction
Proactiveness		
Creativity and experimentation is highly encouraged in the firm	1.000	.632
The firm acts ahead of the competitors in the market	1.000	.515
The firm is first to introduce new products in the market	1.000	.649
Autonomy		
The firm allows staff to come up with ideas and implement them freely	1.000	.586
In case of any challenge, firm's staff to instigate change	1.000	.507
Staff are allowed to communicate freely	1.000	.560
Risk Taking		
The firm commit large portion of resources to unexplored opportunities	1.000	.659
The firm invest in high risk ventures that have high promises of reward	1.000	.557
The firm continuously seek opportunities in the environment	1.000	.529

Top Management Commitment Factor Analysis

Top management commitment which had 9 statements, and none of them recorded factor loadings less than 0.40. The factor loadings of all 9 statements for top management commitment were ranging between 0.506 and 0.671. From these results, it was clear that all the factor loads recorded were above the threshold therefore all them were considered to be valid for the constructs they represented. Table 4.8 shows the summary of factor loading for every item of top management commitment.

Table 4.8: Factor loadings for Top Management Commitment

Top Management Commitment	Initial	Extraction
Communication		
Decision made by management are clearly communicated to the staff	1.000	.518
Communication done reinforces values of the organization	1.000	.534
Top management maintains an open and transparent communication	1.000	.506
Resource allocation		
There is adequate human resource allocation	1.000	.599
There is adequate budgetary allocation	1.000	.559
Top management team always available to guide employee	1.000	.671
Involvement		
Top management involves all staff in strategy implementation	1.000	.566
Top management are personally involved in firms' activities	1.000	.663
Management ensures that employees are aware of the importance of strategic orientation	1.000	.666

Competitiveness Factor Analysis

Competitiveness had 9 statements, and none of them recorded factor loadings less than 0.50. The factor loadings of all 9 statements for entrepreneurial orientation were ranging between 0.521 and 0.835. From these results, it was clear that all the factor loads recorded were above the threshold therefore all the items were considered to be valid for the constructs they represented. Table 4.9 shows the summary of factor loading for every item of competitiveness.

Table 4.9: Factor Loadings for Competitiveness of Manufacturing Firms in Kenya

Competitiveness of manufacturing firms	Initial	Extraction
Productivity		
Manufacturing lead time has improved in our firm	1.000	.835
We have the ability to respond to market disruptions in a quick way.	1.000	.521
We have made a high investment in machinery to improve our production.	1.000	.593
Quality product		
Customer requirements are met in terms of quality	1.000	.650
Quality production manual is highly adhered to	1.000	.632
We have a formal quality check system	1.000	.689
Return on Asset		
We have been making reasonable profit every year	1.000	.591
The asset base of the firm has been improving over years	1.000	.650
Profit received is ploughed back to the firm	1.000	.781

4.4 Demographic Characteristics of Respondent Firms

This section captures the general information of the manufacturing firms that participated in the study. This gives more details that includes the sector under which the firms who participated in the research operate in, number of employees, the period under which the firm has been in the operation and type of firm's ownership. The analyzed findings are presented below;

4.4.1 Firms by Sector

Kenya Association of Manufacturers (KAM) is a private sector body that represents and advocates for industrialist in Kenya. KAM has categorized manufacturing into fourteen key sectors and this study adopted the same classification. The sector to which the firm belongs is mainly determined with the type of product they produce or the raw material used (KAM, 2024). The sector from which the participating firms belong to was analyzed and summarized in Table 4.10:

Table 4.10: Sector

Sector	Frequency	Percentage
Building, Mining and Construction	4	3.96
Chemical and allied	15	14.85
Energy, Electrical and Electronic	1	1.0
Food and Beverage	38	37.62
Leather and Footwear	3	2.97
Metal and Allied	8	7.92
Motor Vehicle and Accessories	2	1.98
Paper Board and Packaging	11	10.89
Pharmaceutical and medical equipment	5	4.95
Plastic and rubber sector	14	13.86
Total	101	100

A majority of the firm that participated and responded to the research were in the food and beverage sector at 37.62% while the least was energy, electrical and electronic sector which only accounted for 1% of the total population. This study outcome shows that Kenya Association of Manufacturers Machakos and Central Kenya chapters are diversified in their membership of which is a reflection of the country as a whole. These findings are similar to other researches done that have concluded that food and beverage sector have largest representation in manufacturing sector in Kenya (Kidombo, 2007).

4.4.2 Workforce Size

The study also sought to find out the number of employees that the firm have and on this, the study noted that 35.6% of the manufacturing firms under the investigation had between 50-99 workers, and 64.4% of the firms under the study had a workforce of above 100. This study results revealed that the majority of the manufacturing firms that were investigated were large manufacturing enterprises. Based on the firm's classification done by Kenya National Bureau of Statistics (KNBS) micro enterprises have less than ten (10) employees, small enterprises have between 10 and 49 employees, medium enterprises have between 50 and 99 employees while large enterprises have above 100 employees. This study notes that most of the firms in the manufacturing sector in the region are large firms. Large firms have been recognized to be stable in meeting financial obligation and

have high exposure to information (Marete, 2015) and that is why they constitute higher percentage of the manufacturing firms. The workforce size is summarized in Table 4.11.

Table 4.11: Workforce Size

Number of employees	Frequency	Percentage
50-99	36	35.6
Over 100	65	64.4
Total	**101**	**100**

4.4.3 Period of Operation

The study sought from the respondents for how many years the manufacturing firm has been in business. The respondents were expected to specify the period for which their organizations have been in the business of manufacturing as this was deemed to be an important demographic information for the study as shown in Table 4.12.

Table 4.12: Period of Operation

Period of Operation	Frequency	Percentage
Less than 5 years	17	16.8
6-10 years	21	20.8
11-15 years	25	24.8
16-20 years	18	17.8
More than 20 years	20	19.8
Total	101	100

From the study findings, firms that have been in operation for less than 5 years were 16.8%, those in operation for between 6-10 years were at 20.8%, those in operation between 11-15 years were at 24.8%, between 16-20 years were at 17.8% those above 20 years were at 19.8%. Majority of the firms in the study have been in operation for over 6 years which is an indication of them being competitive and age has been known to be a critical determinant of firm's survival based on the industry /sector life cycle as noted by Esteve-Perez et al. (2017) with those having been in existence between 11-15 years being the majority.

Age of the firm it has been noted to be a factor that affects its survival and competitiveness. This is because firms that have been in operation and in existence for a long period of time have been noted to have developed, operationalized and institutionalized strategic orientation which helps them to be competitive in the dynamic business environment. In this regard firm's age, which is indicated by the period of operation shows its resilience, expertise and knowledge in the market dynamism (Atikiya, 2015; Coad et al., 2013).

4.4.4 Type of Business Enterprise Ownership

Type of business enterprise ownership was another key demographic indicator that respondents were asked, the results were as follows; 17.8% were limited partnership while 82.2% were limited companies which were the majority. This means that most of the manufacturing firms have been delimitated from the owners and have protected (owners) from personal liabilities by forming or being registered as companies. Through being registered as companies, this means they can be able to cope with other business uncertainty that arises within the environment as independent entities separated from their owners. The type of business enterprise is indicated in Table 4.13

Table 4.13: Type of Business Enterprise Ownership

Type of ownership	Frequency	Percentage
Limited Partnership	18	17.8
Limited Company	83	82.2
Total	101	100

4.4.5 ISO Certification

On certifications of the firms the results were as shown in Table 4.14 of which firms that had certification in Quality Management System (QMS), Environmental Management System (EMS) and Health and Safety Standards (HSS) were 46 representing 45.5%, those that had only QMS were 25 representing 24.8%, Health and Safety Standards were 17 representing 16.8% while those that had EMS were 13 representing 12.9%. This means that most of the manufacturing firms have been certified and through this they have been

able to standardize their processes. From the study it was found that most of the manufacturing firms had undertaken both the quality management system, environmental management system and health and safety standards which is a clear indication of how concerned they are for quality for their products and standardization.

Table 4.14: Certification

Certification	Frequency	Percentage
Quality Management System	25	24.8
Environmental Management System	13	12.9
Health and Safety Standards	17	16.8
All Three Certifications	46	45.5

4.5 Descriptive Statistics

Descriptive analysis for both the independent, dependent and moderating variables was conducted to enable the researcher to meaningfully describe the distribution of scores using various statistics such as measures of central tendency such as the mean and dispersion that is standard deviation. The mean was used to describe the central position of the frequency distribution and measure of spread of which the standard deviation was used to describe how spread out the scores were. Field (2009) noted that mean of the data represents the midpoint of distribution while standard deviation gives how well the data is spread out. The researcher therefore used the percentages, means and standard deviation to present the findings of the study. The study adopted the use a five-point Likert scale where 1= Strongly Disagree, 2 = Disagree, 3 = Not Sure, 4 = Agree and 5 = Strongly Agree and the respondents were asked to indicate their level of agreement with various statements that had been given. The results as per each study variable is as presented below:

4.5.1 Market Orientation

The first objective of the study was to assess the role of market orientation on competitiveness of manufacturing firms in Kenya. A total of nine research questions were

formulated and posed to the respondents who were to indicate to what level they agreed with the statements in regard market orientation and the outcomes are as illustrated in Table 4.15. The statements were in relation to the following constructs; customer orientation, competitor orientation and inter-functional coordination of market orientation.

Table 4.15: Descriptive Statistics for Market Orientation

Market Orientation	SD	D	N	A	SA	μ	SD
Customer Orientation							
The firm gathers information about customer needs.	10.9%	8.9%	2.0%	40.6%	37.6%	3.85	1.31
Customer satisfaction is our aim	11.9%	9.9%	2.0%	31.7%	44.6%	3.87	1.39
Our level of commitment to client's needs is monitored	12.9%	10.9%	9.9%	32.7%	33.7%	3.63	1.38
						3.78	**1.36**
Competitor Orientation							
Top management regularly discusses competitors' strengths and strategies.	12.9%	9.9%	6.9%	34.7%	35.6%	3.70	1.38
The firm's salespeople regularly share information within our organization concerning competitors' strategies.	9.9%	14.9%	4%	38.6%	32.7%	3.69	1.33
The firm responds rapidly to competitors' actions.	13.9%	8.9%	7.9%	32.7%	36.6%	3.69	1.41
						3.69	**1.37**
Inter functional Orientation							
Everyone understands how they can contribute to creating customer value.	8.9%	7.9%	8.9%	41.6%	32.7%	3.81	1.23
Firm's top managers from across the company regularly visit our current and prospective customers.	13.9% %	8.9%	4.0%	37.6%	35.6%	3.72	1.39
All the departments in our company are responsive to one another's needs and requests.	6.9%	12.9%	2.0%	46.5%	31.7%	3.83	1.21
						3.79	**1.28**
Market Orientation						**3.75**	**1.34**

n= 101, μ= Mean SD= Standard Deviation

Strongly Disagree=1, Disagree = 2, Not Sure = 3, Agree =4 and Strongly Agree = 5

In relation to the construct of customer orientation which had questions on gathering of information, firm's objectives being driven by the customer demands and monitoring the commitment levels to customer needs the average calculated mean was 3.78 which implies that majority of the respondents agreed that most of the firms gather information on customer needs, firms objectives are primarily driven by need to satisfy the customer and as firms they constantly monitor their commitments to customer needs. Nevertheless, the responses were diverse as shown by the standard deviation of 1.36. These findings implied that most of manufacturing firms have embraced customer orientation which basically involves understanding the needs of the customers they are serving. This study is in line with Gerni (2013) who asserted that market oriented firm is expected to organize its processes, activities, products and services in the light of demands and needs of current and potential customers. Customer orientation is critical to the firm's capability to be competitive as it allows for continuous collection and analysis of responses that are received from the customers as noted by Ojiambo et al. (2020) and this helps them to tailor the product they offer to suit the market needs.

On competitor orientation construct that had statements in regard to top management having discussion on competitor's strength and strategies, sharing of information by sales people within the organization and how the firm responds to competitors' action. The response to these statements gave an average calculated mean of 3.69 which implied that most of the respondents were in agreement with the statement that firms' top managers frequently deliberates on competitor's status, data is shared within the organization on competitors strategies and they respond to swiftly to competitors actions. However, the construct had a standard deviation of 1.37 which meant that the responses were diverse. These findings were in tandem with observation made by Muis (2020) who noted that competitor orientation is primarily concerned about gathering data on the competitor in order to determine on how you are going to exceedingly do to satisfy their consumer and through that be able to win them over.

Inter functional coordination construct, of which had statements such as understanding that everyone in the firm has a role to play in creating customer value, management visits

prospective and current customers and all department within the organization being responsive to one another's needs, the average calculated mean was 3.79 which inferred that majority of the responses on the statements were in agreement but were the answers were not similar as exhibited by a standard deviation of 1.28. The findings of the study show that market orientation is critical for any manufacturing firm to be competitive. To be competitive the manufacturing firms have to create a firm's culture that most effectively and efficiently creates superior customer value through generation, assimilation and use of market intelligence on customers' needs and preferences (Enyinnah et al, 2022) and sharing the same information within various departments in the organization. Market oriented manufacturing firm is expected to put in place mechanisms and measures that will help in understand the desires of its customers, then adjust what it offers in order to satisfy those needs (Isaya & Turyakira, 2019) and this can be done if they embrace inter-functional orientation. This means in essence manufacturing firms that needs to serve the customer effectively, efficiently and be competitive should endeavor to gather information on its customers, competitors that is the market in general and approach its activities from a coordinated point of view.

4.5.2 Technology Orientation

The second objective of the study was to determine the role of technology orientation on competitiveness of manufacturing firms in Kenya. A total of nine questions were formulated and responded to by the manufacturing firms and the results are presented in Table 4.16. The respondents were required to state to what extent they were in agreement with various statement posed in relation to how the technology orientation affect manufacturing firms in Kenya. The constructs for technology orientation were new product, automation and research and development. The descriptive results are as follow;

Table 4.16: Descriptive Statistics for Technology Orientation

Technology Orientation	SD	D	N	A	SA	μ	SD
New Product							
The firm develops new products frequently	3.0%	6.9%	8.9%	40.6%	40.6%	4.08	1.02
The firm has invested heavily in technology than our rivals	5.0%	8.9%	3.0%	42.6%	40.6%	4.04	1.11
The firm is producing new products and services based on consumer needs.	4.0%	4.0%	5.0%	41.6%	45.5%	4.21	0.99
						4.11	**1.04**
Automation							
The firm has automated our production process	5.9%	6.9%	6.9%	42.6%	37.6%	3.99	1.13
The firm is scouting for new technology in the market	6.9%	5.0%	4.0%	43.6%	40.6%	4.05	1.13
The firm trains its customers on how to use given products	5.9%	5.0%	5.0%	44.6%	39.6%	4.06	1.09
						4.03	**1.12**
Research and Development							
The firm has set aside resources for research and development	6.9%	5.9%	7.9%	40.6%	38.6%	3.98	1.16
Actively engaged in campaign to recruit the best R & D personnel	5.9%	5.0%	7.9%	42.6%	38.6%	4.03	1.00
The firm carries out market research that informs our product developments	6.9%	5.9%	5.0%	42.6%	39.6	4.02	1.15
						4.01	**1.10**
Technology Orientation						**4.05**	**1.09**

n= 101, μ= Mean SD= Standard Deviation
Strongly Disagree =1, Disagree =2, Not Sure = 3, Agree = 4 and Strongly Agree = 5

On development new product construct which had focused on how frequently new products are released, investment in technology and production of goods and services that focused on consumer needs the calculated mean was 4.1. This meant that most of the responded agreed that they are developing new products frequently, they have invested heavily in technology as compared to their rivals and new products generated are what customer requires. On the other hand, the construct had a standard deviation was 1.04 which indicated the responses were totally different from one another. These study findings are in line with the observation made by of Tutar et al. (2015) who noted that technologically oriented firm has the capability to invest in technology so as to have a

strong technology infrastructure that can be used to develop new products for the customer with ease.

Automation Construct which had statements in regard to automation of production, scouting of new technologies and making sure the customer is trained on how to use the new product the calculated mean was 4.03 with a standard deviation of 1.12. this result implied that majority of the responses were in agreement with the statements such as they have automated their production process, they are always scouting for new technologies in the market and customers are trained on how to use products that have been developed. The study findings are in line with Ibobo and Nzewi, (2020) who noted that a firm that is technologically oriented will devote resources to acquiring new and advanced technologies that leads to creation of new products and improvement of procedures that leads competitiveness. Similarly, a firm that has adopted technology has the competence required to utilize sophisticated machines and procedures in improving new products and services in the market as observed by Meylananda et al. (2021) and through this they become innovative in their production.

Research and development construct that had statements on setting aside research and development resources, actively engaging in campaign to recruit the best R & D personnel and firm undertakes market research that informs product development. The calculated mean was 4.01 implying that most of the responses were in agreement with the statements for instance such as manufacturing firms have resources set aside for research and development, firms are research focused and any development of new products is undertaken after an intensive and collaborative market research with consumers being key participants. Despite having a high calculated mean, the responses were not the same as shown with a standard deviation of 1.10. This finding shows that most of the firms that have adopted technology orientation prioritize innovation as a strategic goal and this results in them being adaptable, keen on technical skill acquisition, being proactive, creative in product development and substantially investing in technology infrastructure (Syahdan et al., 2020) and this can be achieved.

4.5.3 Learning Orientation

The other objective of the study was to examine the role of learning orientation on the competitiveness of manufacturing firms in Kenya. Nine statements in regard to learning orientation were formulated and the respondents were asked to what level they agreed with them and the results are presented in Table 4.17 The constructs for learning orientation were commitment to learning, open mindness and shared vision. The descriptive results are as follows;

Table 4.17: Descriptive Statistics for Learning Orientation

Learning Orientation	SD	D	N	A	SA	μ	SD
Commitment to learning							
All employees strive to achieve the goals of the firm	5.9%	5.0%	6.9%	41.6%	40.6%	4.06	1.11
There is a common drive in our organization	5.9%	7.9%	6.9%	41.6%	37.6%	3.97	1.14
Employees are partners in charting the way forward for the firm	5.0%	5.0%	4.0%	44.6%	41.6%	4.13	1.05
						4.05	**1.10**
Open Mindness							
As a company we allow our staff to be independent in their dealings	5.0%	5.9%	5.9%	40.6%	42.6%	4.10	1.08
The firm change culture as need may arise depending on circumstances	5.9%	10.9 %	2.0%	42.6%	38.6%	3.97	1.18
The firm always relooks at processes from time to time	6.9%	8.9%	4.0%	40.6%	39.6%	3.97	1.19
						4.01	**1.15**
Shared vision							
Firm's employees have the high level energy to serve	3.0%	6.9%	5.0%	44.6%	40.6%	4.13	1.00
The firm's employees are dedicated to serving clients	5.9%	7.9%	6.9%	40.6%	38.6%	3.98	1.15
The firm ensures harmony is maintained at all times	5.0%	3.0%	8.8%	38.6%	44.6%	4.15	1.04
						4.09	**1.06**
Learning orientation						**4.05**	**1.10**

n= 101, μ= Mean SD= Standard Deviation
Strongly Disagree=1, Disagree = 2, Not Sure = 3, Agree =4 and Strongly Agree = 5

On commitment to learning construct, which basically dwelt on how employees strive to achieve the firm's goals, having a common drive in the organization and staff being partners in the organization. The calculated mean from the respondents was 4.05 with a

standard deviation of 1.10 which indicated that most of the respondents were in agreement with the statements indicated above but the answers were diverse. These findings are in line with observation made by Ejdys and Gedvilaite (2017) who stated that learning orientation involves the way the firm learns together with its staff and entire environment. This means bringing everyone on board and it involves the way in the organization learning is planned, undertaken and the entire operating environment being involved.

On the constructs of open mindness which mainly had statements in regard to employees being allowed to be independent in their dealings, change culture being instigated as need may arise and having a relook at organization processes from time to time the calculated mean was 4.01 with a standard deviation of 1.15. This indicated that most of the respondents were in affirmation with the statement given such as independence of staff is highly encouraged, change is undertaken as need may arise and firms' processes are relooked at time from time. These findings are reinforcing observation made by Wahyono and Hutahayan (2021) who noted that learning oriented firm has to be committed to learning and openness to thinking from its employees.

This means they allow staff to create and use knowledge for the advancement of the organization. Through learning, knowledge will be generated which is critical to the enhancement of business competitiveness and this helps the organization to use it for improving its performance through capturing, sharing and using productive knowledge within the organization. Open mindness as noted by Sawaean and Ali (2020) is critical to the enhancement of the firm's survival as helps in probing and inquiring the validity and efficacy of values, attitudes and practices that are held dear by the firm, which when critically looked at can improve the competitiveness of the firm.

On the construct for shared vison, that had statements in regard to employees energy level, firms dedication in serving its clients and maintenance of harmony in the organization, the calculated mean was 4.09 with a standard deviation of 1.06 which implies that most of the respondents were in agreement with the statements regarding the constructs such as employees having high level energy to serve, firm being dedicated to serve the customers

and always maintaining harmony at all times in the organization. These findings are in concurrence with observation made by Jain and Moreno (2015) who noted a significant correlation between organization learning and performance through togetherness that leads to harmony in the organization.

Through harmonious coexistence in an organization, employees can develop new zeal to serve better with dedication in the organization as noted by Eshlaghy et al. (2011). Learning orientation is concerned with the acquisition of knowledge through external linkages and how it is distributed and used for the organization change. This means that a manufacturing firm that has adopted learning orientation can be able to get market knowledge of opportunities and threats and be in a position to reap from the situation available (Nguli & Odunga, 2019).

4.5.4 Entrepreneurial Orientation

The fourth specific objective of the research was to establish the role of entrepreneurial orientation on the competitiveness of manufacturing firms in Kenya. A total of nine statements were posed to the respondents and the findings are presented in Table 4.18. The researcher requested the respondents to what degree they agreed with various statement posed in relation to how the entrepreneurial orientation affect manufacturing firms in Kenya. The constructs for entrepreneurial orientation were proactiveness, autonomy and risk taking. The descriptive results are as follows;

Table 4.18: Descriptive Statistics for Entrepreneurial Orientation

Entrepreneurial orientation	SD	D	N	A	SA	μ	SD
Proactiveness							
Creativity and experimenting are highly encouraged in our firm	8.9%	3.0%	9.9%	38.6%	39.6%	3.97	1.19
The firm acts ahead of our competitors in the market	6.9%	4.0%	4.0%	46.5%	38.6%	4.06	1.10
The firm is first to introduce new products in the market	7.9%	7.9%	3.0%	41.6%	39.6%	3.97	1.21
						4.00	**1.17**
Autonomy							
The firm allow staff to come up with ideas and implement them freely.	3.0%	4.0%	5.0%	45.5%	42.6%	4.21	0.94
In case of a challenge, the firm allow our staff to instigate change.	8.9%	3.0%	4.0%	41.6%	42.6%	4.06	1.18
Staff are allowed to communicate freely	5.0%	7.9%	5.9%	39.6%	41.6%	4.05	1.12
						4.11	**1.08**
Risk taking							
The firm has committed large portion of resources to unexplored opportunities	10.9 %	5.0%	4.0%	39.6%	40.6%	3.94	1.28
The firm invest in high risk ventures that has high promises of rewards	3.0%	5.0%	7.9%	43.6%	40.6	4.14	0.97
The firm continuously seek for opportunities in the environment	7.9%	4.0%	3.0%	41.6%	43.6	4.09	1.16
						4.06	**1.14**
Entrepreneurial orientation						**4.05**	**1.13**

n= 101, μ= Mean SD= Standard Deviation

Strongly Disagree=1, Disagree = 2, Not Sure = 3, Agree = 4 and Strongly Agree = 5

The respondents were required to indicate the extent to which they were in agreement with various statement on proactiveness construct which included creativity and experimenting being highly encouraged in the firm, acting ahead of competitors and being pioneer in production of products. The calculated mean was 4.08 with a standard deviation 1.17 which indicated that most of the respondents were in agreement with the statements such their creative and experimenting is highly encouraged approach. The respondents also stated that their organizations are always a pioneer in the market by being first in introduction of new products before their competitors. This confirms that most of the responses were in affirmative that in order to be competitive a firm has to be proactive. These findings were in line with Frishammar and Anderson (2009) observation that proactive firms tend to possess the first movers' advantages that enables them to get profit

from new products and hitting the market before it is saturated with the products from the competitors.

On autonomy construct, which had the statements on staff being allowed to come up with ideas freely, initiate change and communicating freely, the calculated mean was 4.11 with standard deviation 1.08. This implied that majority of the respondents agreed with the statements on staff are allowed to implement ideas they have come up with freely, initiate change and communicate freely within themselves and to the management. These findings are in line with a study undertaken by Lumpkin et al. (2009) who noted that autonomy allows for discretionary action where solutions are needed and employees are allowed to implement it without restrictions such firms do better.

The respondents were asked to indicate the extent to which companies are involved in risk taking. The construct had the following statements in regard to resource commitment, investment in risky ventures and seeking of opportunities within the environment. The results of the study had a calculated mean was 4.06 with a standard deviation of 1.14. This showed that the most of the respondents were in agreement with the statement such as firms have committed large portion of resources to the unexplored opportunities, investment in high risky ventures that have high promises of returns and continuously seeking opportunities in the environment This study is in line with Acar et al. (2013) finding which they noted that entrepreneurship is the process of creating brand new value by taking financial, physical and social risks while devoting sufficient time and energy to achieve the desired goal.

4.5.5 Top Management Commitment

The last specific objective of this study was to examine the moderating role of top management commitment on strategic orientation and competitiveness of manufacturing firms in Kenya. Nine statements were generated, presented to the respondents and the study findings are illustrated as shown in Table 4.19. The researcher had requested the respondents to what degree they agreed with various statement posed in relation to how

the top management commitment affect competitiveness of manufacturing firms in Kenya. The constructs for top management commitment were communication, resource allocation and involvement. The descriptive results are as follows;

Table 4.19: Descriptive Statistics for Top Management Commitment

Top Management Commitment	SD	D	N	A	SA	μ	SD
Communication							
Decision made by management are clearly communicated to the staff	5.0%	4.0%	6.9%	39.6%	44.6%	4.15	1.05
Communication reinforces values of the organization	6.9%	4.0%	7.9%	41.6%	39.6%	4.03	1.13
Top management maintains an open and transparent communication	5.9%	2.0%	5.0%	47.5%	39.6%	4.13	1.03
						4.10	**1.07**
Resource allocation							
There is adequate human resource allocation	4.0%	7.9%	3.0%	40.6%	44.6%	4.14	1.07
There is adequate budgetary allocation	9.9%	2.0%	5.9%	40.6%	41.6	4.02	1.21
Top management team always available to guide employee	6.9%	8.9%	4.0%	42.6%	37.6	3.95	1.19
						4.04	**1.16**
Involvement							
Top management involves all staff in strategy implementation	5.0%	5.0%	6.9%	41.6%	41.6%	4.10	1.06
Top management are personally involved in firms' activities	5.9%	8.9%	6.9%	40.6%	37.6%	3.95	1.16
Management ensures that employees are aware of the importance of strategic orientation	7.9%	4.0%	6.9%	41.6%	39.6%	4.01	1.16
						4.02	**1.13**
Top Management Commitment						**4.05**	**1.12**

n= 101, μ= Mean SD= Standard Deviation

Strongly Disagree =1, Disagree = 2, Not Sure= 3, Agree = 4 and Strongly Agree = 5

On the construct of communication which had statements on how decisions are communicated, if it reinforces the organization value and if they have open and transparent communication, it had 4.10 as calculated mean with 1.07 as standard deviation. This showed that majority of the respondents agreed on the statements in relation to decisions made by the management are clearly communicated, communication is used to reinforce the values of the organization and top management maintains an open and transparent communication within the firm. These findings are in line with Oyagi and Mjomba (2021) observation that top management team formulates, frames, expresses policies into

objectives and goals that a firm pursues of which it is passed to the staff below them. Top management have the vision of the future and communicates the same to the entire organization. This means that the way decisions that have been made in regards to the objectives and goals of the firm will be communicated has a great impact on their attainment. Obiefuna (2014) and William et al. (2014) observed that the decisions made by the top management and how they are communicated affect the organizations operations. This means that the top management team is responsible for the any success or failure that may be attained by the organization.

On resource allocation construct which had statements in regard to adequate human and budgetary allocation and r staff being guided had 4.04 as the calculated mean and 1.16 as the standard deviation. This result indicates that majority of the respondents agreed on the statements in regard to having adequate human resource and budgetary allocation and finally junior staff being guided by the top management. This is clear that the top management commitment will be reflected by how much resources will be availed to a given task and these resources may either be in form of personnel or finances.

On the construct of involvement which had statements on staff involvement, top management engagement in firms' activities at personal level and if employees are aware of the importance of strategy implementation had 4.02 as calculated mean with a standard deviation of 1.13. This result indicates that most of the respondents agreed on the statements on top management are personally involved in firms' activities, involves all staff in strategy implementation and ensures employees are aware of the importance of strategic orientation. This study findings are in line with the observation made by Helpap (2016) who noted that employee commitment depends on the direction, quality of communication and leaders' communication style which includes how they have been involved.

4.5.6 Competitiveness of Manufacturing Firms

The researcher required the respondents to indicate their view regarding competitiveness of the manufacturing firms in Kenya. The study adopted the constructs for competitiveness to be productivity, quality product and return on assets. The responses were rated on a five-point Likert scale as presented in the Table 4.20 below.

Table 4.20: Descriptive Statistics for Competitiveness

Competitiveness	SD	D	N	A	SA	μ	SD
Productivity							
Manufacturing lead time has improved in our firm	6.9%	4.0%	2.0%	43.6%	43.6%	4.13	1.11
We have the ability to respond to market disruptions in a quick way.	4.0%	7.9%	5.9%	40.6%	41.6%	4.08	1.07
We have made high investment in machinery to improve our productions.	7.9%	5.0%	5.9%	39.6%	41.6%	4.02	1.18
						4.08	**1.12**
Quality product							
Customer requirements are met in terms of quality	4.0%	6.9%	5.0%	45.5%	38.6%	4.08	1.04
Quality production manual is highly adhered to	9.9%	5.0%	1.0%	43.6%	40.6%	4.00	1.23
We have a formal quality check system	5.9%	4.0%	8.9%	41.6%	39.6	4.05	1.09
						4.04	**1.12**
Return on asset							
We have been making profit over years	7.9%	4.0%	3.0%	42.6%	42.6	4.08	1.15
The asset base of the firm has been improving over years	4.0%	5.9%	6.9%	37.6%	45.5%	4.15	1.05
Profit received is ploughed back to the firm	7.9%	3.0%	6.9%	43.6%	38.6%	4.02	1.14
						4.08	**1.11**
Competitiveness						**4.07**	**1.12**

n= 101, μ= Mean SD= Standard Deviation
Strongly Disagree=1, Disagree = 2, Not Sure = 3, Agree = 4 and Strongly Agree = 5

In regard to the construct of productivity which had statements in regard to lead time, ability to respond to market disruption and investment in production machinery the findings from the study had 4.08 as calculated mean and a standard deviation of 1.12. This implies most of the respondents were in agreement with the statement such as the manufacturing lead time has improved, firm's ability to respond to the market disruption

in a quick way and high investment in machinery has been undertake to improve production.

On quality of products construct, the findings from the study had a calculated mean of 4.04 with a standard deviation of 1.12. This infers that majority of the respondents agreed on the statement such as customer quality requirements are met, quality production manual being adhered to and firms having developed formal quality checks.

On the construct of return to assets, the study findings had a calculated mean was 4.08 and a standard deviation of 1.11. This implies that majority of the respondents agreed on the statement in regard to firms making profit over years and having it ploughed back into the business and the asset base of the firm improving over years.

Secondary Data Analysis

4.5.7 Productivity Index

Descriptive analysis on the productivity index and return on assets was done for the year 2017 to 2022. The data presented provides various insights into the productivity and financial performance of manufacturing firms over the years, specifically focusing on productivity index, input and output costs, and return on assets.

Table 4.21: Productivity Index (2017-2021)

Year	Mean	N	Std. Deviation
2017	1.1365	78	0.35474
2018	1.1919	78	0.36929
2019	1.2004	78	0.43162
2020	1.2241	78	0.39598
2021	1.1853	78	0.39785
Mean	1.1876	390	0.38984

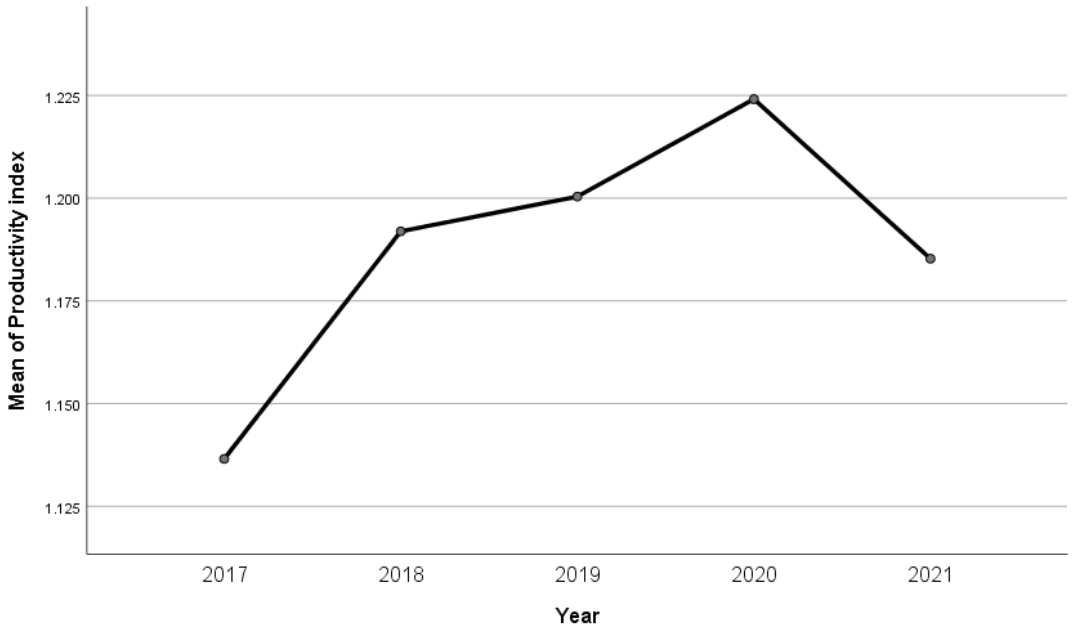

Figure 4.1: Productivity Index

The Table 4.21 and Figure 4.1 depicting the Productivity Index over five years (2017-2021) show a steady increase in the productivity of manufacturing firms. The mean value of the productivity index ranged from 1.1365 in 2017 to 1.853 in 2021. This positive trend indicates an improvement in manufacturing productivity over the period under review. The standard deviations suggest that there were some fluctuations in the individual data points, but the overall trend is upward. The total mean of 1.1876 reflects the average level of productivity across all years. Manufacturing firms have steadily improved their productivity, which could be attributed to factors such as better resource management, technology adoption, or strategic orientations influencing efficiency.

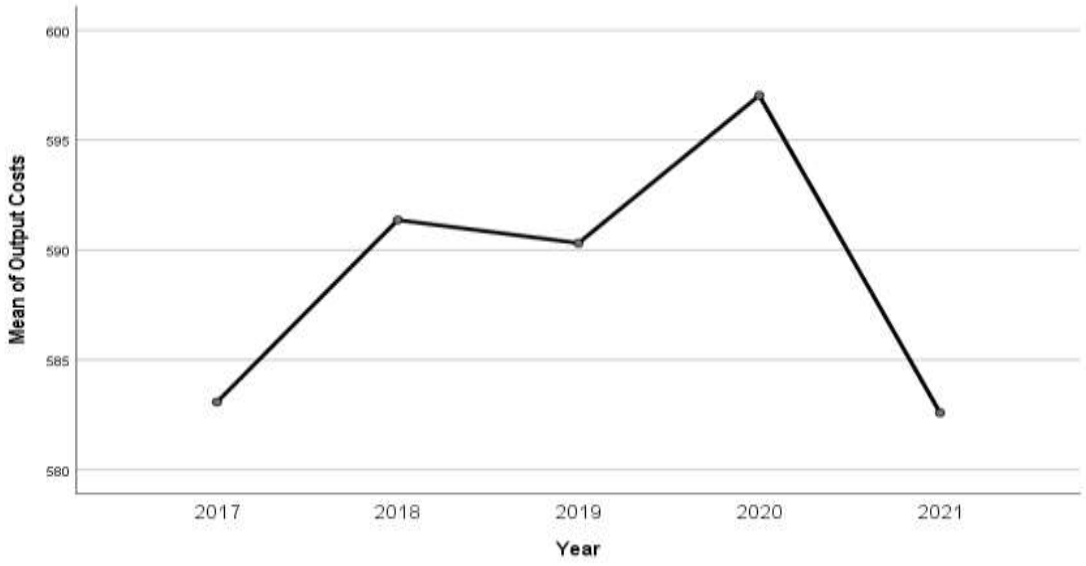

Figure 4.2: Output Costs (2017-2021)

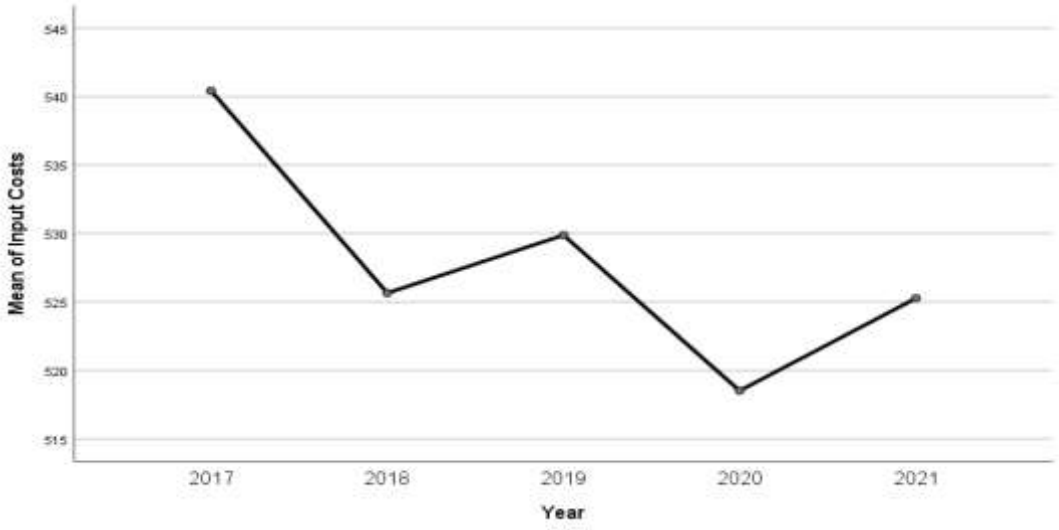

Figure 4.3: Input Costs (2017-2021)

Figure 4.2 for output costs and Figure 4.3 for input costs further confirm the trend in productivity changes. The mean of output costs shows an increase until 2020, followed by a decline in 2021. Similarly, input costs declined slightly between 2017 and 2021, showing a steady decrease in costs associated with inputs. This suggests that while firms were managing their input costs effectively, external factors (e.g., changes in market demand, raw material prices) could have influenced the costs of output production. Effective cost management and technological improvements might have led to a decrease in input costs, while the slight increase in output costs, particularly in 2020, could point to market pressures or other environmental factors impacting the firms' cost structure.

4.5.8 Return on Assets

Based on Table 4.22, the distribution of Return on Assets (ROA) for the year 2021 reveals that 51% of firms had ROA changes of 21-40%, while 45.1% reported return changes of 0-20%. This indicates that most firms had performance changes moderately and stability in productivity, but a significant portion is still lagging behind in generating high returns. The majority of manufacturing firms are showing moderate returns, with few firms (2.8%) achieving higher ROA changes, indicating potential challenges in profitability or investment strategies across the sector.

From the analysis, it's evident that the manufacturing sector has generally seen improvements in productivity, cost management, and returns on assets. However, challenges remain, particularly in managing output costs and ensuring higher returns for a larger proportion of firms. The overall trend suggests that strategic orientation, such as better market and technological orientation, plays a pivotal role in improving firm competitiveness, but more focused strategies might be needed to enhance profitability across the sector.

Table 4.22: Return on Assets (ROA) Changes 2017 - 2021

Return on Asset	Frequency	Percent
0-20	176	45.1
21-40	199	51.0
41-60	11	2.8
61-80	4	1.0

Qualitative Data Analysis

The study collected qualitative data through the questionnaire that had both open and closed ended questions. The respondents were tasked to respond to various statements that had been put across in regard to market orientation, technology orientation, learning orientation and entrepreneurial orientation.

In regard to the question on market orientation that inquired about what other strategies firms have put in place to make sure they are responsive to the market needs, majority of the firms noted they undertake market research which a majorly done through the use the customer feedback forms. Through this they are able to get to know what the customer preferences and requirements are. Minority of the firms noted they undertake flexible pricing strategies to respond to the market needs. A majority of the firms noted that the strategies they employ have been effective in serving the customers though at a times some initiatives are not sustainable in the long run as they are expensive to sustain.

On what is being done by the firms to adopt technology majority of the respondents noted that they make sure they acquire the required technology, train staff on it so that they are able to accept it, when it is deployed. They noted that technology acquisition is an expensive affair hence they seek support from financial partners who advance finances to them. Some of the firms noted they have been forced to lease technology and seek strategic partnership with other organizations that offer the services especially those that develop software.

On learning orientation, the respondents were asked to state strategies that have been put in place to enhance organization learning of which support for learning is given to employees who require to further studies through flexible working hours, study leaves and even in-house training. This is done with an aim of empowering the employee. Other firms noted they encourage knowledge sharing between departments, open communication and finally supporting employees to attend the continuous professional development courses.

Finally, on how the firm responds to the competition, majority of the respondents stated that they usually analyze what the rival is offering through rival surveillance, they also offer products that are differentiated and keep innovating. Through these initiatives they are able to check on threats and competition that may arise in the market.

4.6 Diagnostic Tests

This section contains the diagnostic tests that were done before regression analysis which was undertaken to ascertain the suitability of data collected for inferential statistics. The aim of undertaking diagnostic testing was to ensure that the estimates obtained were adequate enough to explain the relationship between the independent, moderating and dependent variables. The tests undertaken were as follows; normality test, multicollinearity and heteroscedastic to ensure that data complied with the study objectives.

4.6.1 Normality Test

The test of normality was undertaken to ensure that the data collected conformed with the assumption of normal distribution. When using the regression model, it is required that one has to use normally distributed data that forms a linear pattern and takes a shape of a symmetric bell-shaped curve. This study used the Kolmogorov-Smirnov and Shapiro Wilk tests, skewness and kurtosis test for normality and Q-Q plots to test for normality.

a). Kolmogorov-Smirnov and Shapiro Wilk Test

Kolmogorov-Smirnov and Shapiro Wilk tests were used to establish whether the data under consideration for the study assumed the Gaussian condition of normality for all the independent, moderating and dependent variables. Usually Kolmogorov-Smirnov and Shapiro Wilk compares the scores in the samples and check whether they have the same mean or standard deviation (Sarstedt & Mooi, 2014). The findings for Kolmogorov-Smirnov for the study showed that, the p- values were greater than 0.05 for all the independent, moderating and dependent variables (market orientation, technology orientation, learning orientation, entrepreneurial orientation, top management commitment and competitiveness). This finding indicated that the distributions were normally distributed. Shapiro-Wilk test results also showed that all five variables were normally distributed. The details of the findings are shown in Table 4.23.

Table 4.23: Kolmogorov-Smirnov and Shapiro-Wilk

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	**Df**	**Sig.**	**Statistic**	**df**	**Sig.**
Market Orientation	.051	101	.200*	.989	101	.602
Technology Orientation	.052	101	.200*	.993	101	.862
Learning Orientation	.069	101	.200*	.984	101	.247
Entrepreneurial orientation	.072	101	.200*	.990	101	.653
Top Management Commitment	.077	101	.156	.988	101	.481
Competitiveness of manufacturing firms in Kenya.	.076	101	.166	.975	101	.053

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

b). Skewness and Kurtosis Test for Normality

It was important to find out whether the distribution the data was normal before the analysis is done and, in this case, to approximate the normality, skewness and kurtosis test was employed. Skewness measures the deviation of distribution from symmetry and Kurtosis measures peakness of the distribution (Ming'ala, 2002). The values of Skewness and Kurtosis should be zero if the data is normally distributed but the acceptable range of

values is -2 and +2 (Field, 2009). In this study skewness and kurtosis values were summarized as shown in table 4.24 and from the finding, it was clear that all the variables were within acceptable range of skewness in this case values between -2 and +2 are considered normal. Table 4.24 shows the results.

Table 4.24: Skewness and Kurtosis

Description		Statistic	Std. Error	Remarks
Market Orientation	Mean	3.4526	.01860	Normally Distributed
	Std. Deviation	.33534		
	Skewness	-.035	.135	
	Kurtosis	-.176	.270	
Technology Orientation	Mean	3.6504	.02306	Normally Distributed
	Std. Deviation	.41578		
	Skewness	.112	.135	
	Kurtosis	.116	.270	
Learning Orientation	Mean	3.5601	.02387	Normally Distributed
	Std. Deviation	.43035		
	Skewness	-.004	.135	
	Kurtosis	-.030	.270	
Entrepreneurial orientation	Mean	3.6348	.03011	Normally Distributed
	Std. Deviation	.54289		
	Skewness	.000	.135	
	Kurtosis	-.353	.270	
Top Management Commitment	Mean	3.6650	.03061	Normally Distributed
	Std. Deviation	.55185		
	Skewness	-.032	.135	
	Kurtosis	-.297	.270	
Competitiveness of manufacturing firms in Kenya.	Mean	3.5988	.02674	Normally Distributed
	Std. Deviation	.48203		
	Skewness	-.034	.135	
	Kurtosis	-.237	.270	

Although in most cases it is assumed that in multiple linear regressions the residuals are normally distributed with mean zero and variance sigma ($X \sim N(0,\delta^2)$ it is therefore, it is important to test for the distribution of major variables of interest as Ming'ala (2002) observed. This can be conducted before making final conclusions about the variables of interest. Histograms are a good way of getting an instant picture of the distribution of data

(Field, 2009) therefore, a histogram was employed in this study to test normality of the dependent variable as shown in figure 4.4

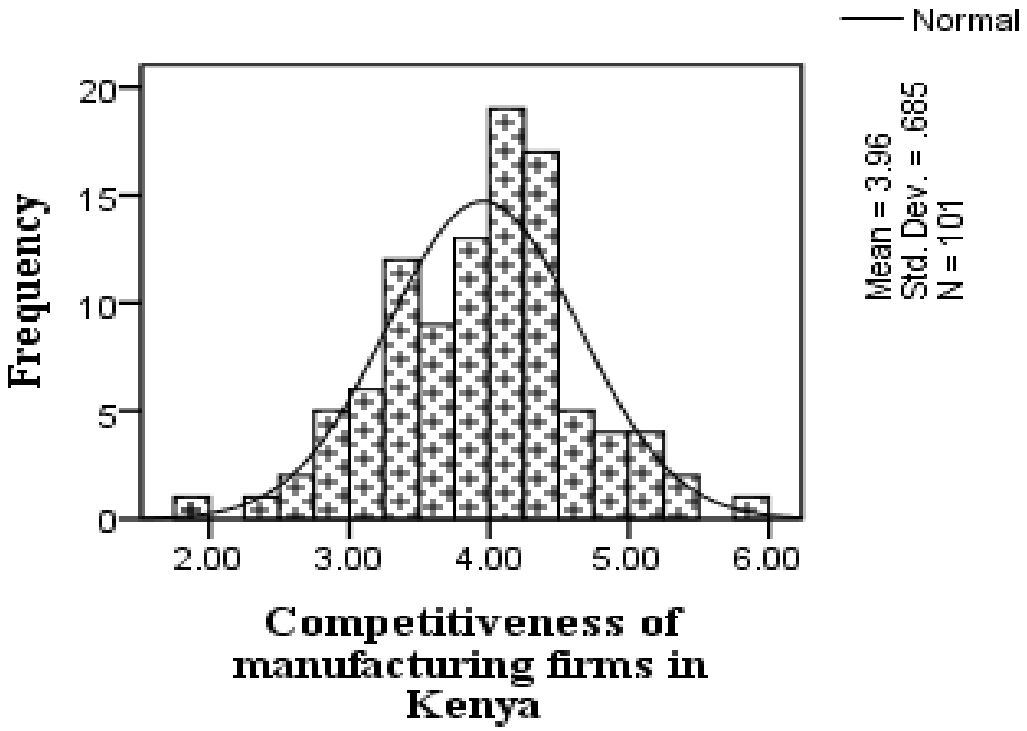

Figure 4.4: Histogram for Normality Test

c). Normality using Q-Q plot

In addition to the above-mentioned tests, normality of the data was also verified using quantile- quantile plot also known as Q-Q plot for the dependent variable (competitiveness of manufacturing firms in Kenya) based on the results as illustrated in Figure 4.2, it was clear that most of the observed values were falling along a straight line. This therefore indicates that the dependent variable (competitiveness of manufacturing firms in Kenya) was normally distributed. An extension of Q-Q plot was also done on the other independent variables; market orientation, technology orientation, learning orientation, entrepreneurial orientation and moderating variable top management commitment and the

result did disappoint since they all were also normally distributed as also indicated on Figure 4.5. These results on normality were consistent with the earlier findings based on skewness and Kurtosis test, Kolmogorov- Smirnov and Shapiro Wilk test.

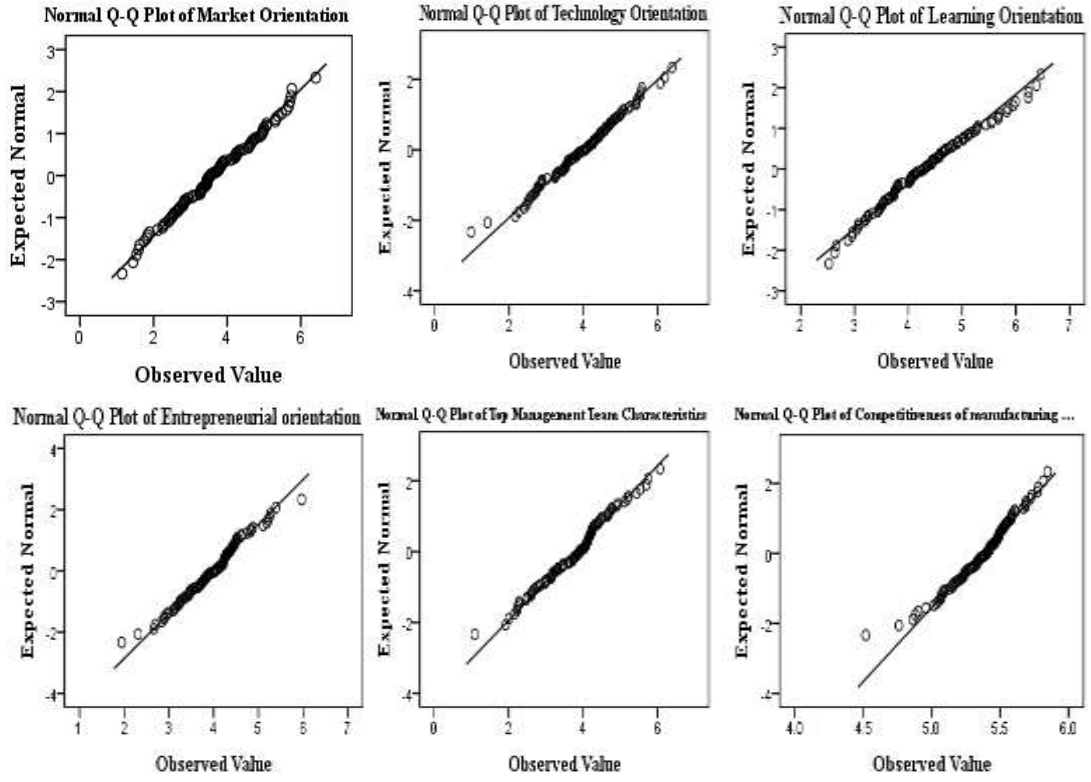

Figure 4.5: Q-Q Plots

4.6.2 Multicollinearity

Multicollinearity according to William et al. (2013) refers to the presence of correlation between the independent variables and this makes it impossible to separate the effect between the variables. Multicollinearity can be tested using Tolerance and Variance Inflation Factor (VIF) which quantifies the severity of multicollinearity in regression analysis. Predictor variables are said to collinear whenever the tolerance limit is less than 0.1 and variance inflation factor is more than 10. VIF values in excess of 10 is an indication of the presence of multicollinearity according to Field (2009). In this study

multicollinearity was assessed using both the Variance Inflation Factor (VIF) and tolerance. The Variance Inflation Factor of the findings are presented in Table 4.25 without the moderator. The VIF values for all the variables was less than 10, a clear indication that multicollinearity doesn't exist between the study variables. The variables were found to lack high correlations among themselves; therefore, multiple regression analysis was conducted.

Table 4.25: Multicollinearity Test without Moderator (Model 1)

(Constant)	Tolerance	VIF
Market Orientation	.992	1.008
Technology Orientation	.931	1.074
Learning Orientation	.990	1.010
Entrepreneurial orientation	.937	1.068

In model 2 (when the moderator-top management commitment is introduced) the tolerance was less than 0.1 and the VIF was less than 10 hence an indication of no multicollinearity when the moderator is introduced. This is presented in Table 4.26

Table 4.26: Multicollinearity Test with Moderator (Model 2)

(Constant)	Tolerance	VIF
Market Orientation	.983	1.018
Technology Orientation	.922	1.084
Learning Orientation	.984	1.017
Entrepreneurial orientation	.867	1.153
Market Orientation *z	.949	1.054
Technology Orientation *z	.918	1.090
Learning Orientation *z	.908	1.101
Entrepreneurial orientation*z	.907	1.103

4.6.3 Heteroscedasticity and Homoscedasticity

Heteroscedasticity refers to non-constant variance while homoscedasticity refers to constant variance within the independent variables. Fletcher et al., (2012) noted that heteroscedasticity is usually present when the size of the error term differs across values

of an independent variable and this is indicated when the residuals are not evenly scattered around the line. The error term may be homoscedastic within cross-sectional units, but its variance may differ across units a condition known as group wise heteroscedasticity (Stevenson, 2014). For the purpose of testing heteroscedasticity in this study, Breusch Pagan Test was performed in order to calculate group wise heteroscedasticity in the residuals. Heteroscedasticity test was run in order to test whether the error terms are correlated across observation in the panel data (Long & Ervin, 2000). As a rule of thumb, if the p value is more than 0.05, the data has the problem of heteroscedasticity. A large chi-square value greater than 9.22 would indicate the presence of heteroscedasticity (Tabachnick & Fidel, 2001).

In this study, the chi-square values resulting from each regression where every independent variable is considered individually were: 6.352, 4.471, 3.728, and 5.833, with corresponding p-values 0.016, 0.014, 0.002 and 0.015 which were all less than 0.05 indicating that heteroscedasticity was not a problem. The null hypothesis tested was that variance is constant versus the alternative that variation was not constant. The Variables were market orientation, technology orientation, learning orientation and entrepreneurial orientation. The Table 4.27 shows the Breusch-Pagan test for Heteroscedasticity test for independent variables.

Table 4.27: Breusch-Pagan test for Heteroscedasticity

Ho	Variables	Chi2(1)	Prob > Chi2
Constant Variance	Market Orientation	6.352	0.016
Constant Variance	Technology Orientation	4.471	0. 014
Constant Variance	Learning Orientation	3.728	0.002
Constant Variance	Entrepreneurial orientation	5.833	0.015

The Breusch-Pagan Test for Homoscedasticity (Overall for Independent Variables) was also undertaken for the group wise analysis. The chi-square value resulting from overall regression was 7.124 clearly demonstrating that heteroscedasticity was not present hence variance was constant Table 4.28 gives the details of the findings.

Table 4.28: Breusch-Pagan Test for Homoscedasticity (Overall for Independent Variables)

Ho	Variables	Chi2(1)	Prob > Chi2
Constant Variance	Market Orientation, Technology Orientation, Learning Orientation Entrepreneurial Orientation	7.124	0.026

4.6.4 Correlation Analysis of Independent Variables

To establish the extent to which the predictor variables relates with each other, a correlation analysis based on Pearson product moment correlation coefficient was conducted. The findings are summarized in Table 4.29 and they suggest that there was no significant relationship between the independent variables as there was no significant relationship among the variables since some of p-values recorded were less than 0.05 while other the p-values were more than 0.05 both in the present of moderator and in the absent of moderator. According Tobich (2005) multicollinearity mainly exist when the correlation coefficient values are 0.8 and above and since in this study, all the correlation coefficient values recorded were below 0.8 indicating that there was no problem of multi-collinearity among the explanatory variables.

Table 4.29: Correlation Analysis of Independent Variable without Moderator

		Market Orientation	Technology Orientation	Learning Orientation	Entrepreneurial orientation
Market Orientation	Pearson Correlation	**1**	**-.075**	**-.031**	**.022**
	Sig. (2-tailed)		**.457**	**.755**	**.831**
	N	**101**	**101**	**101**	**101**
Technology Orientation	Pearson Correlation	**-.075**	**1**	**.066**	**.239***
	Sig. (2-tailed)	**.457**		**.513**	**.016**
	N	**101**	**101**	**101**	**101**
Learning Orientation	Pearson Correlation	**-.031**	**.066**	**1**	**-.056**
	Sig. (2-tailed)	**.755**	**.513**		**.581**
	N	**101**	**101**	**101**	**101**
Entrepreneurial orientation	Pearson Correlation	**.022**	**.239***	**-.056**	**1**
	Sig. (2-tailed)	**.831**	**.016**	**.581**	
	N	**101**	**101**	**101**	**101**

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.30: Correlation Analysis of Independent Variable with Moderator

		Market Orientation *z	Technology Orientation *z	Learning Orientation *Z	Entre orientation*Z
Market Orientation *z	Pearson Correlation	1	.094	-.055	-.141
	Sig. (2-tailed)		.349	.587	.160
	N	101	101	101	101
Technology Orientation *Z	Pearson Correlation	.094	1	.026	.157
	Sig. (2-tailed)	.349		.795	.117
	N	101	101	101	101
Learning Orientation *Z	Pearson Correlation	-.055	.026	1	-.171
	Sig. (2-tailed)	.587	.795		.087
	N	101	101	101	101
Entrepreneurial orientation*Z	Pearson Correlation	-.141	.157	-.171	1
	Sig. (2-tailed)	.160	.117	.087	
	N	101	101	101	101

4.6.5 Linearity

Linearity refers to when the dependent variable has a linear relationship with one or more independent variables and thus can be calculated as a linear function as noted by Cuestas and Regis (2013). The study undertook linearity tests of the for the independent and dependent variables to test if a linear relationship exists and the results are as shown below;

Market Orientation Linearity Test

To verify whether there was a linear relationship between the independent and dependent variable as suggested by Cohen et al. (2003) Pearson moment's correlation coefficients was used. This tested if a linear relationship exists between market orientation and the competitiveness of manufacturing firms in Kenya. The findings of the investigation indicate that the two variables namely competitiveness of manufacturing firms in Kenya and market orientation had a positive relationship as shown by a correlation coefficient value of 0.355^{**}. This implies that there was a linear positive relationship between market

orientation and the competitiveness of manufacturing firms in Kenya which indicates that an increase in market orientation would lead to a linear increase in the competitiveness of manufacturing firms in Kenya. The result is presented on Table 4.31

Table 4.31: Market Orientation Correlations Coefficients

Variable		Competitiveness	Market Orientation
Competitiveness of manufacturing firms in Kenya.	Pearson Correlation	1	
	P-value (2-tailed)		
Market Orientation	Pearson Correlation	.355**	1
	P-value (2-tailed)	.000	
	N	101	101

**Correlation is significant at the 0.01 level (2- tailed)

Linearity Test for Technology Orientation

In addition to that, the test of linear relationship between competitiveness of manufacturing firms in Kenya and technology orientation was undertaken by using the Pearson moment's correlation coefficients. The study results are illustrated in table 4.32. The findings show that a positive relationship exists between competitiveness of manufacturing firms in Kenya and technology orientation as indicated by a correlation coefficient of .346**. This infers that arise in technology orientation would result in a direct boost in the competitiveness of manufacturing firms in Kenya.

Table 4.32: Technology Orientation Correlations Coefficients

Variable		Competitiveness	Technology Orientation
Competitiveness of manufacturing firms in Kenya.	Pearson Correlation	1	
	P-value (2-tailed)		
Technology Orientation	Pearson Correlation	.346**	1
	P-value (2-tailed)	.000	
	N	101	101

**Correlation is significant at the 0.01 level (2- tailed)

Linearity Test for Learning Orientation

Further analysis using correlation coefficients as suggested by Cohen et. al. (2003) indicated that there was linear relationship between independent variable (learning orientation) and manufacturing firms' competitiveness in Kenya. The result of the analysis is as illustrated in Table 4.33 and from findings, it was clear that there exists a positive link between competitiveness of manufacturing firms in Kenya and learning orientation. The finding is backed with correlation coefficient of 0.227^{**} which suggest that an increase in learning orientation would have positive increase in manufacturing firm's competitiveness in Kenya.

Table 4.33: Learning Orientation Correlations Coefficients

Variable		Competitiveness	Learning Orientation
Competitiveness of manufacturing firms in Kenya.	Pearson Correlation	1	
	P-value (2-tailed)		
Learning Orientation	Pearson Correlation	$.227^{**}$	1
	P-value (2-tailed)	.000	
	N	101	101

**Correlation is significant at the 0.01 level (2- tailed)

Entrepreneurial Orientation Linearity Test

Similar test for linearity using correlation coefficients as suggested by Cohen et al. (2003) established that between competitiveness of manufacturing firms in Kenya and entrepreneurial orientation that their exist a linear relationship. The study adopted the Pearson moment's correlation coefficients which after analysis the results are presented in Table 4.34. From the outcome of the analysis indicated that the two variables had a robust positive relationship as indicated by a correlation coefficient of 0.415**. With this any increase in entrepreneurial orientation would result in a linear increase for the manufacturing firms in Kenya competitiveness.

Table 4.34: Entrepreneurial Orientation Correlations Coefficients

Variable		Competitiveness	Entrepreneurial Orientation
Competitiveness of manufacturing firms in Kenya.	Pearson Correlation	1	
	P-value (2-tailed)		
Entrepreneurial Orientation	Pearson Correlation	.415**	1
	P-value (2-tailed)	.000	
	N	101	101

**Correlation is significant at the 0.01 level (2- tailed)

Scatter Plot between Dependent Variable and Independent Variables

Besides using the product moment correlation coefficient to test linearity, the study also deployed the usage of scatter plot which is a visual representation of data between the dependent and independent variables. This was performed to test linearity between independent variables (market orientation, technology orientation, learning orientation and entrepreneurial orientation) and dependent variable (competitiveness). The results of the investigation clearly suggested that there was some linearity relationship between the independent and dependent variables. In conclusion, the analysis noted that any improvement in market orientation, technology orientation, learning orientation and entrepreneurial orientation will lead to increase in the manufacturing firm's competitiveness in Kenya. The variables visual representations are as shown in Figure 4.6 below.

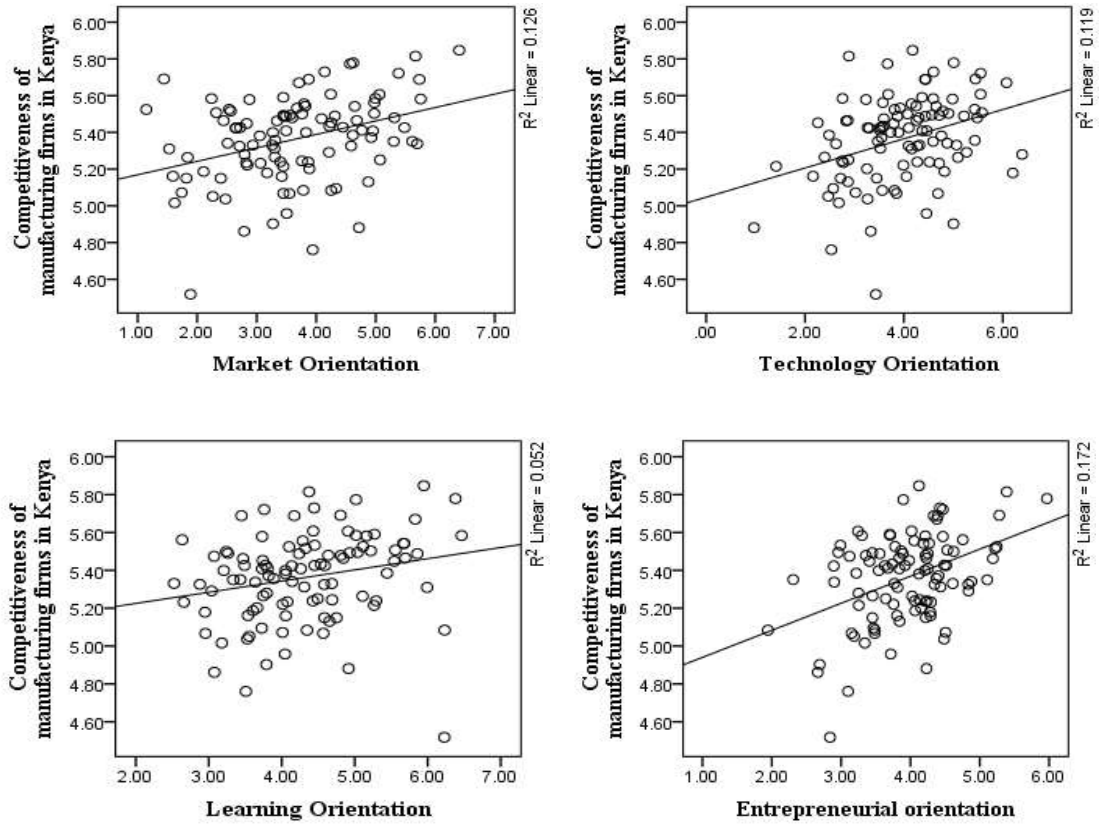

Figure 4.6: Scatter Diagram

4.7 Inferential Statistics

4.7.1 Regression Analysis

Regression analysis is defined as the determination of a statistical relationship between two or more variables (Kothari, 2014). Where only two variables (one defined as independent variable) is the cause of the behavior of the other one (dependent variable), this is known as simple regression analysis also known as univariate regression. The other type of regression analysis is the multivariate regression which assesses the combined effect of the independent and moderating variables on dependent variable. This is also known as the multiple linear regression analysis. The regression analysis was used by this

research to determine the role of strategic orientation on manufacturing firms in Kenya competitiveness.

The regression analysis was used to come up with deductions about the relationship that exist between the independent and dependent variable. It was used to ascertain the impact of each independent variable to the dependent variable of which its strength and reliability was determined by the coefficient of determination (R^2) and F Test. The study tested the null (H_0) hypotheses and this was for significant purpose. The H_0 (null) hypothesis denotes no existence to any kind of relationships between the variables. This hypothesis testing enabled the researcher on the basis on the sampled data either to accept or reject the null hypothesis. The p values and t values were used to test the variables significance while the r^2 - R^2 was used to quantify the model goodness of fit test (coefficient of determination).

Objective One: To Assess the Role of Market Orientation on Competitiveness of Manufacturing Firms in Kenya

The study sought to assess the role of market orientation on competitiveness of manufacturing firms in Kenya by testing the following hypothesis.

H_{O1}: Market orientation has no statistically significant role in the competitiveness of manufacturing firms in Kenya.

An F test was conducted to check the overall significance of the regression model. The Analysis of the Variance (ANOVA) of the relationship between the two variables namely market orientation and competitiveness is presented in Table 4.35. From the results it was noted that market orientation (X_1) F indicator was statistically significant at ($F = 14.272$, $P<0.000$), which signified that competitiveness of the manufacturing firms in Kenya is statistically influenced by market orientation without the moderator. Upon moderating variable (top management commitment) introduction, the F statistic changed statistically significant to ($F = 9.947$, $p <0.000$). This finding concluded that top management

commitment has an impact on the relationship between market orientation and competitiveness of manufacturing firms in Kenya.

Table 4.35: ANOVA Table for Market Orientation

Model		Sum of Squares	Degree of freedom	Mean Square	F	P-value
1	Regression	.702	1	.702	14.272	.000[b]
	Residual	4.867	99	.049		
	Total	5.568	100			
2	Regression	.940	2	.470	9.947	.000[b]
	Residual	4.629	98	.047		
	Total	5.568	100			

a. Response Variable: Competitiveness of manufacturing firms in Kenya.
b. Predictors: (Constant), Market Orientation and Market Orientation *z (top management commitment) model 1 and 2

In order to ascertain whether the model is statistically significant coefficient of multiple determination R^2 was obtained to explain the variation in competitiveness of manufacturing firms in Kenya. Table 4.36 shows the regression analysis results of market orientation and competitiveness of manufacturing firms in Kenya where the value of R^2 was 0.126. This signified that 12.6% of disparity in competitiveness of manufacturing firms in Kenya can be attributed to market orientation. When the moderator is introduced, the value of R^2 increased to 0.169. This signified that 16.9% of variation in competitiveness of manufacturing firms in Kenya was attributed to market orientation in the presence of moderator. This also implies that 87.4% (without moderator) and 83.1% (moderator) of the variation in the dependent variable is attributed to other factors other than market orientation or that are not captured by the model.

Table 4.36: Model Summary for Market Orientation and Competitiveness of Manufacturing Firms in Kenya

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.355[a]	.126	.117	.22172	2.018
2	.411[a]	.169	.152	.21733	1.978

a. Predictors: (Constant), Market Orientation and Market Orientation *z (top management commitment) model 1 and 2
b. Dependent Variable: Competitiveness of manufacturing firms in Kenya.

T-test was also used to examine the relationship existing between the independent variable that is the market orientation and dependent variable competitiveness of manufacturing firms in Kenya. Analysis of the T test shows that there was statistically significant relationship between the two variables with p-value= 0.000 < 0.05 for the model. Regression coefficient results in Table 4.37 revealed that market orientation had a (β =0.073, t = 3.778, p-value<0.000) which was statistically significant, inferring that market orientation alone contributed 0.073 to manufacturing firms in Kenya competitiveness when the moderator is absent. Similarly, when the moderator (top management commitment) is introduced that is in model 2, there was a steady increase of the beta to (β = 0.076, t = 4.013, p-value<0.000) which is shows that it's statistically significant.

Table 4.37: Coefficients for Market Orientation (X_1)

Model		Unstandardized Coefficients		Standardized Coefficients	t	P-value
		B	Std. Error	Beta		
1	(Constant)	5.096	.074		68.800	.000
	Market Orientation	.073	.019	.355	3.778	.000
2	(Constant)	4.869	.125		39.075	.000
	Market Orientation	.076	.019	.371	4.013	.000
	Market Orientation *z	.057	.025	.207	2.245	.027

a. Dependent Variable: Competitiveness of manufacturing firms in Kenya.

The regression equations between market orientation and competitiveness of manufacturing firms in Kenya for the model can be expressed as; **$Y=5.096+ 0.073X_1$** for

model 1 (without the moderator) and **$Y= 4.869+ 0.076X_2+0.057X_2*Z$** for model 2 (with the moderator). Based on and these results it was clear that the null hypothesis was to be rejected and the alternative hypothesis accepted. For this reason, the study findings concluded that market orientation had significant and positive impact on manufacturing firms in Kenya competitiveness.

The study's results are consistent with previous studies that have been undertaken that found out that market oriented firm are always competitive. Studies undertaken by Saunila (2014), Vazquez-Avila (2014), Heramn et al. (2018) and Udriyah et al. (2019) all found out that market orientation leads to competitiveness in a firm as organizations who have adopted such an orientation will always be performing better as compared to their counterparts that are yet to adapt it. This relationship is grounded on the notion that firms that are market oriented are better positioned to satisfy their clients desires and preferences which subsequently leads them to perform better leading to them being competitiveness.

The study model can be summarily presented as follows;

$Y=5.096+ 0.073X_1$. (Without moderator)

$Y= 4.869+ 0.076X_2+0.057X_2*Z$ (With moderator).

Objective Two: To Determine the Role of Technology Orientation on Competitiveness of Manufacturing Firms in Kenya

To determine the role of technology orientation on competitiveness of manufacturing firms in Kenya by testing the following hypothesis.

H_{O2}: Technology orientation has no statistically significant role in the competitiveness of the manufacturing firms in Kenya.

Analysis of Variance (ANOVA) test used to determine the significance of the two statistical models. The technology orientation (X_2) F statistic for was statistically significant at (F = 13.422, P<0.000). This implied that competitiveness of manufacturing firms in Kenya is statistically influenced by technology orientation. When top management commitment which is the moderator was introduced, the F statistics declined which was still statistically significant (F = 11.060 p <0.000).

Table 4.38: ANOVA for Technology Orientation

Model		Sum of Squares	Degree of freedom	Mean Square	F	P-value
1	Regression	.665	1	.665	13.422	.000[b]
	Residual	4.903	99	.050		
	Total	5.568	100			
2	Regression	1.025	2	.513	11.060	.000[b]
	Residual	4.543	98	.046		
	Total	5.568	100			

a. Dependent Variable: Competitiveness of manufacturing firms in Kenya.
b. Predictors: (Constant), Technology Orientation *z (top management commitment) model 1 and 2

In order to ascertain whether the model is statistically significant coefficient of multiple determination R^2 was obtained as presented in Table 4.39 indicating that R^2 value for the association between technology orientation and competitiveness was 0.119. This signifies that 11.9% of disparity in competitiveness of manufacturing firms in Kenya can be credited to technology orientation. Upon top management commitment (moderator) introduction, the R^2 value was enhanced to 0.184. This in other words indicates that 18.4% of variation in competitiveness of manufacturing firms in Kenya is attributable to technology orientation with the moderator that is the top management commitment introduction. This suggests that 88.1% and 81.6% variations in model 1 and model 2 respectively in competitiveness of manufacturing firms in Kenya can be attributed to other influences that were not captured with the two models. Table 4.40 shows the summary model findings.

Table 4.39: Model Summary for Technology Orientation and Competitiveness of Manufacturing Firms in Kenya

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.346[a]	.119	.110	.22255	1.790
2	.429[a]	.184	.168	.21530	1.682

a. Predictors: (Constant), technology orientation, Technology Orientation *z (top management commitment) model 1and 2
b. Dependent Variable: Competitiveness of manufacturing firms in Kenya.

From the coefficient Table 4.40, t-test was also used to test the relationship between the predictor variable technology orientation and competitiveness of manufacturing firms in Kenya and there was significant relationship between the two variables with p-value= 0.000 < 0.05 for the model.

Regression of coefficients results are summarized in Table 4.42.

Table 4.40: Coefficients for Technology Orientation (X_2)

Model		Unstandardized Coefficients		Standardized Coefficients	t	P-value
		B	Std. Error	Beta		
1	(Constant)	5.047	.089		56.729	.000
	Technology Orientation	.080	.022	.346	3.664	.000
2	(Constant)	4.756	.135		35.144	.000
	Technology Orientation	.082	.021	.356	3.900	.000
	Technology Orientation *z	.076	.027	.255	2.789	.006

a. Dependent Variable: Competitiveness of manufacturing firms in Kenya.

Table 4.40, model 1 demonstrate that technology orientation has a beta of 0.080 (β =0.080, t = 3.664, p-value<0.000) indicating that it was statistically significant. The study generated the following model **$Y=5.047+ 0.080X_2$** when moderator (top management

commitment) was absent demonstrating that every unit change in technology orientation the value of competitiveness of manufacturing firms in Kenya changes by 0.080 and in model 2 **$Y= 4.756+ 0.082X_2+0.076X_2*Z$** with moderator (top management commitment) is introduced indicating that the moderator positively influences competitiveness. The corresponding p- values were all 0.000 which were less than 0.05 significance levels.

The study findings are similar to Ogbari et al. (2022), Therrien et al. (2011), Al-Ansari et al. (2013) and Khan et al. (2017) who found out that technology orientation positively influences competitiveness of firms. This implies that firms that have adopted or incorporates technology in their operations are able to produce new products, automate and compete favourably in the market. On the top management commitment, the study concluded that it had a moderating role on the relationship between competitiveness of manufacturing firms in Kenya and technology orientation. Varis and Littunen (2010) who noted that the ultimate reason as to why firms engage in innovative activities by adopting technology is to improve their competitiveness and success.

These outcomes indicated that there was a positive significant contribution that technology orientation impacts on competitiveness of manufacturing firms in Kenya both in the presence and absence of moderator however the most appealing model was when the moderator was present.

From the analysis, the presence of top management commitment, the contribution of technology orientation towards manufacturing firms in Kenya competitiveness of is significant. The results also reinforced the earlier views that top management commitment moderate the relationship between competitiveness of manufacturing firms in Kenya and technology orientation. The study findings were in line with Gao et al. (2007) who revealed that due to the globalization of the environment best way of stimulating and sustaining progress of manufacturing firms is through technology as most of such firms realize high turnover of goods introduced within a short period of time and increases their competitiveness. This indicated that the null hypothesis was rejected that there is no significant relationship between technology orientation and competitiveness of

manufacturing firms in Kenya. Therefore, the study concluded that technology orientation has significant influence on competitiveness of manufacturing firms in Kenya.

Further the study suggests the use of the following model;

Y (Without moderator) $= 5.047 + 0.080X_2$

Y (With moderator) $= 4.756 + 0.082\ X_2 + 0.076X_2Z$

Objective Three: To Examine the Role of Learning Orientation on Competitiveness of Manufacturing Firms in Kenya

Examining the role of learning orientation on competitiveness of manufacturing firms in Kenya was also undertaken by testing the following hypothesis.

H_{O3}: Learning orientation has no statistically significant role in the competitiveness of manufacturing firms in Kenya.

The Analysis of Variance (ANOVA) of the relationship between learning orientation and competitiveness of manufacturing firms in Kenya is presented in Table 4.41. The results showed that the model was statistically significant and having been reinforced by having a calculated F statistic of 5.377 and 6.169 for model 1 and model 2 respectively at the reported p value (0.000) which was less than the conventional probability of 0.05 significance level.

Table 4.41: ANOVA for Learning Orientation (X_3)

Model		Sum of Squares	Degree of freedom	Mean Square	F	P-value
1	Regression	.287	1	.287	5.377	.022[b]
	Residual	5.281	99	.053		
	Total	5.568	100			
2	Regression	.623	2	.311	6.169	.003[b]
	Residual	4.946	98	.050		
	Total	5.568	100			

a. Dependent Variable: Competitiveness of manufacturing firms in Kenya.

b. Predictors: (Constant), Learning Orientation and Learning Orientation*Z (top management commitment)

In order to ascertain whether the model is statistically significant coefficient of multiple determination R^2 was obtained for learning orientation and competitiveness. The finding in table 4.42 shows R^2 value of 0.052 when the moderator is not available indicating 5.2% of the variation of competitiveness can be attributed to learning orientation and 0.112 was recorded when moderator available indicating 11.2% in the variation of manufacturing firms in Kenya competitiveness is explained by learning orientation as illustrated in the summary model table 4.43. The remaining 94.8% in model 1 and 88.8% in model 2 of competitiveness of manufacturing firms in Kenya is explained by other aspects not contained within the current model.

Table 4.42: Model Summary for Learning Orientation (X_3) and Competitiveness of Manufacturing Firms in Kenya.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.227[a]	.052	.042	.23097	2.035
2	.334[a]	.112	.094	.22464	1.987

a. Predictors: (Constant), Learning Orientation and Learning Orientation *z (top management commitment) model 1 and 2

b. Dependent Variable: Competitiveness of manufacturing firms in Kenya.

From the coefficient Table 4.43, t-test was also employed to assess the relationship between the independent variable and competitiveness of manufacturing firms in Kenya

and from the analysis there was a significant relationship between the two variables namely learning orientation and competitiveness with p-value= 0.000 < 0.05 for the model. Regression of coefficients results of the objective are summarized in Table 4.43 below;

Table 4.43: Coefficients for Learning Orientation (X_3)

Model		Unstandardized Coefficients		Standardized Coefficients	t	P-value
		B	Std. Error	Beta		
1	(Constant)	5.107	.113		45.348	.000
	Learning Orientation	.059	.025	.227	2.319	.022
2	(Constant)	4.892	.138		35.501	.000
	Learning Orientation	.061	.025	.235	2.462	.016
	Learning Orientation *z	.054	.021	.246	2.580	.011

a. Dependent Variable: Competitiveness of manufacturing firms in Kenya.

From Table 4.43 model 1 shows learning orientation beta of 0.059 (β =0.059, t = 2.319, p-value<0.022) implying it was statistically significant, concluding that learning orientation alone contributed 0.059 (5.9%) to the competitiveness of manufacturing firms in Kenya. Equally, in model 2 when top management commitment was introduced and combined with learning orientation, the beta significantly increased to 0.061 (β =0.061, t = 2.462, p-value<0.016, (β =0.054, t = 2.580, p-value<0.011) which is statistically significant. The model generated was **$Y=5.107+ 0.059X_3$** when moderator (top management commitment) was absent demonstrating that every unit of learning orientation the value of competitiveness of manufacturing firms in Kenya changes by 0.059 and in model 2 **$Y= 4.892+ 0.061X_3+0.054X_3*Z$**. The results implied that learning orientation is a good influencer of competitiveness.

The findings also agreed with that of Wong et al. (2012), Sawaean and Ali (2020), Sajjad et al. (2022) and Martinez et al. (2020) who noted that learning oriented firm enhances its business performance and competitiveness as it can use the knowledge to improve its

operation through capturing, sharing and using productive knowledge within the organization to improve on the areas that need attention and what consumers requires attention to. This therefore implies that the null hypothesis **H_{03}:** learning orientation has no significant role on the competitiveness of manufacturing firms in Kenya was rejected and thus concluded that learning orientation has a significant role on competitiveness of manufacturing firms in Kenya. Therefore, the study concluded that learning orientation influences competitiveness.

Further, the study suggests the use of the following model

Y (without moderator) $= 5.107 + 0.059\ X_3$

Y (With moderator) $= 4.892 + 0.061\ X_3 + 0.054 X_3 Z$

Objective Four: To Establish the Role of Entrepreneurial Orientation on Competitiveness of Manufacturing Firms in Kenya

In order to establish the role of entrepreneurial orientation on competitiveness of manufacturing firms in Kenya the following hypothesis was tested

H_{O4}: Entrepreneurial orientation has no statistically significant role in the competitiveness of manufacturing firms in Kenya.

The Analysis of Variance (ANOVA) of the relationship between independent and dependent variable Kenya is presented in Table 4.44 below. The F statistic for independent variable (X_4) was statistically significant ($F = 20.580$, $P<0.000$), which indicated that manufacturing firm's competitiveness is statistically influenced by entrepreneurial orientation. Upon introduction of moderating variable that is top management commitment, the F statistic declined which was statistically significant ($F =17.285$, $p<0.000$). From these results, it is noted that top management commitment moderates positively the relationship between manufacturing firms in Kenya competitiveness and entrepreneurial orientation. The study findings implied that entrepreneurial orientation is

a good predictor of competitiveness and firms that need to be competitive have to invest and adopt entrepreneurial orientation.

Table 4.44: ANOVA for Entrepreneurial orientation (X_4)

Model		Sum of Squares	Degree of freedom	Mean Square	F	P-value
1	Regression	.958	1	.958	20.580	.000[b]
	Residual	4.610	99	.047		
	Total	5.568	100			
2	Regression	1.452	2	.726	17.285	.000[b]
	Residual	4.116	98	.042		
	Total	5.568	100			

a. Dependent Variable: Competitiveness of manufacturing firms in Kenya.
b. Predictors:(Constant), Entrepreneurial orientation and Entrepreneurial orientation*z(moderator) model 1& 2

The model summary is represented in Table 4.45 from which the value of R^2 was 0.172. This implied that 17.2% of competitiveness of manufacturing firms in Kenya was attributable to entrepreneurial orientation in the absence of moderator. When top management commitment which is the moderator was introduced R^2 value 0.261 was recorded. This indicates that 26.1% of competitiveness of manufacturing firms in Kenya can be attributed to entrepreneurial orientation in the presence of moderator (top management commitment). The remaining 82.8% and 73.9% in model 1 and model 2 respectively of variation in competitiveness of manufacturing firms in Kenya is explained by other attributes not captured by the model.

Table 4.44: Model Summary for Entrepreneurial Orientation and Competitiveness of Manufacturing Firms in Kenya.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.415[a]	.172	.164	.21579	2.041
2	.511[a]	.261	.246	.20494	2.137

a. Predictors:(Constant), Entrepreneurial orientation and Entrepreneurial orientation*z (top management commitment) model 1& 2
b. Dependent Variable: Competitiveness of manufacturing firms in Kenya.

From Table 4.46 shows the regression coefficient for the models, model 1 shows entrepreneurial orientation beta of 0.143 (β =0.143, t = 4.537, p-value<0.000) implying it was statistically significant, concluding that entrepreneurial orientation alone contributed 0.143 (14.3%) to the competitiveness of manufacturing firms in Kenya. Similarly, in model 2 when top management commitment was introduced and combined with entrepreneurial orientation, the beta value remained the same to 0.143 (β =0.143, t = 4.793, p-value<0.000, β =0.080, t = 3.429, p-value<0.000) which is statistically significant.

Table 4.45: Coefficients for Entrepreneurial Orientation (X_4)

Model		Unstandardized Coefficients		Standardized Coefficients	t	P-value
		B	Std. Error	Beta		
1	(Constant)	4.798	.127		37.921	.000
	Entrepreneurial orientation	.143	.032	.415	4.537	.000
2	(Constant)	4.481	.151		29.579	.000
	Entrepreneurial orientation	.143	.030	.416	4.793	.000
	Entrepreneurial orientation*z	.080	.023	.298	3.429	.001

a. Dependent Variable: Competitiveness of manufacturing firms in Kenya.

The model generated was **$Y=4.798+ 0.143X_4$** when moderator (top management commitment) was absent demonstrating that every unit of entrepreneurial orientation the value of competitiveness of manufacturing firms in Kenya changes by 0.143 and in model 2 **$Y= 4.481+ 0.143X_4+0.080X_4*Z$** in the presence of the moderating variable.

The findings agree with a similar study undertaken by Baba and Elumalai (2011), Zeebarel and Siron (2017), Wegwu and Princewill (2022), Raparo and Fernandes (2014) and Ogueze et al. (2017) who observed that entrepreneurial orientation has a strong influence to the firm's performance and competitiveness. The study findings are in concurrent with that of a study undertaken in Taiwan by Li et al. (2009) who found out that entrepreneurial orientation positively affects competitiveness of enterprises. This therefore implies that the null hypothesis **H_{04}:** entrepreneurial orientation has no significant role on the

competitiveness of manufacturing firms in Kenya was rejected and thus resolved that entrepreneurial orientation significant has an effect on Kenya's manufacturing firm's competitiveness. Therefore, the investigation established that entrepreneurial orientation influences competitiveness.

Further the study suggests the use of the following model

Y (Without moderator) $= 4.798 + 0.143X_4$

Y (With Moderator) $= 4.481 + 0.143\ X_4 + 0.80X_4Z$

Multivariate Regression Analysis

As was already mention in chapter three multivariate regression analysis was used to investigate the overall effect on the dependent variable (competitiveness) from the independent variables (market orientation, technology orientation, learning orientation, entrepreneurial orientation) and moderating variable (top management commitment). Multivariate regression was used to test the joint effect of all the independent variables on dependent variables with or without the moderator by testing the following hypothesis

H_{O5}: Top management commitment has no statistically significant moderating role in the relationship between strategic orientation and competitiveness of manufacturing firms in Kenya.

Analysis of the Variance (ANOVA) was used to establish the overall goodness of the model for the study. In this instance the main interest was to establish the fitness of the two models that is when the moderator is present and absent. As illustrated in Table 4.47, it demonstrates that the F statistics values of 18.063 and 21.290 of the overall models with reported corresponding p values of 0.000 and 0.000 which were far much less than the conventional probability of 0.05 significance level were fit enough. The outcomes show

that the independent variables are good predictors of the manufacturing firms in Kenya competitiveness.

Table 4.46: ANOVA for the Overall Model

Model		Sum of Squares	Degree of freedom	Mean Square	F	P-value
1	Regression	2.391	4	.598	18.063	.000[b]
	Residual	3.177	96	.033		
	Total	5.568	100			
2	Regression	3.860	8	.482	21.290	.000[b]
	Residual	2.085	92	.023		
	Total	5.945	100			

a. Dependent Variable: Competitiveness of manufacturing firms in Kenya.
b. Predictors: (Constant), Market Orientation, Technology Orientation, Learning Orientation, and Entrepreneurial orientation, Model 2: all predictors with moderator Top Management Commitment.

The coefficient of determination also known as R-square which can also be extended to R-square adjusted was used to determine the overall fitness of the model for the study. In this study, summary of the results was presented in Table 4.48 and the results evidently shows that the model adopted by the investigation was a good model and this was upheld by coefficient of determination R-square of 0.429 when the moderator was omitted and R-square value of 0.649 in the when the moderator was used. The above coefficient of determination values clearly reveals that the combined effect of independent variables contributes about 42.9% and 64.9% of the dependent variable (competitiveness of manufacturing firms in Kenya.) when the moderator (top management commitment) was absent and present in the model respectively.

Table 4.47: Overall Model Summary for Regression Analysis for Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.655[a]	.429	.406	.18192	2.000
2	.806[a]	.649	.619	.15054	1.891

a. Predictors: (Constant), Market Orientation, Technology Orientation, Learning Orientation, Entrepreneurial orientation;
Model 2 all the predictors with moderator Top Management Commitment
b. Dependent Variable: Competitiveness of manufacturing firms in Kenya.

The overall Regression Coefficients results as shown in the Table 4.49 below clearly demonstrate an existence of a positive and significant relationship between manufacturing firms in Kenya competitiveness (dependent variable), independent variables namely technology orientation, learning orientation, market orientation, entrepreneurial orientation, and the moderator variable top management commitment.

Table 4.48: Overall Model Regression Coefficients

Model		Unstandardized Coefficient		Standard Coefficient	t	P-value
		B	Std. Err	Beta		
1	(Constant)	4.076	.159		25.590	.000
	Market Orientation	.077	.016	.375	4.849	.000
	Technology Orientation	.063	.018	.273	3.417	.001
	Learning Orientation	.063	.020	.241	3.104	.003
	Entrepreneurial orientation	.122	.027	.355	4.456	.000
2	(Constant)	2.904	.194		14.956	.000
	Market Orientation	.083	.013	.390	6.257	.000
	Technology Orientation	.063	.015	.265	4.117	.000
	Learning Orientation	.067	.017	.248	3.986	.000
	Entrepreneurial orientation	.127	.024	.358	5.394	.000
	Market Orientation *z	.075	.018	.265	4.174	.000
	Technology Orientation *Z	.065	.020	.213	3.304	.001
	Learning Orientation *Z	.043	.015	.190	2.933	.004
	Entrepreneurial orientation*z	.098	.018	.354	5.453	.000

From the finding, the overall model obtained was expressed as

$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$ when the moderator is not present and

$\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_1 Z + \beta_6 X_2 Z + \beta_7 X_3 Z + \beta_8 X_4 Z + \varepsilon}$ with the moderator thus represented as follows

$\mathbf{Y = 4.076 + 0.077 X_1 + 0.063 X_2 + 0.063 X_3 + 0.122 X_4}$ Without moderator

$\mathbf{Y = 2.904 + 0.083 X_1 + 0.063 X_2 + 0.067 X_3 + 0.127 X_4 + 0.075 X_1 Z + 0.065 X_2 Z + 0.043 X_3 Z + 0.098 X_4 Z}$ with the moderator

where

Y = Competitiveness of manufacturing firms in Kenya.
X_1 = Market Orientation
X_2 = Technology Orientation
X_3 = Learning Orientation
X_4 = Entrepreneurial orientation
Z = Top Management Commitment (Moderator)

From these findings it was evident that for every unit change in either of the variables, the respective variable will definitely lead to increase in the value of manufacturing firms in Kenya competitiveness. These findings are in line with the studies undertaken by Nduati and Kavale (2015), Ibobo and Nzewi (2020) and Nakhola (2016) which noted that strategic orientation has an effect on competitiveness.

The study's null hypotheses that had been derived earlier were rejected based on the above assessment. This is to say that is market orientation, technology orientation, learning orientation, and entrepreneurial orientation for model 1 had a significant influence on

competitiveness of manufacturing firms in Kenya. Also, for model 2 all the null hypotheses derived for the study were also rejected and the conclusion was that the explanatory variables; market orientation, technology orientation, learning orientation, and entrepreneurial orientation in the presence of top management commitment as a moderator had a significant influence on the manufacturing firms in Kenya competitiveness. Table 4.50 below show the brief of the hypotheses formulated for the study and were rejected for the first model that is without the moderator.

Table 4.49: Overall Regression Coefficients (Moderator Absent)

No	Hypotheses	t- value	P- value	Decision
H_{01}:	Market Orientation has no significant role on the competitiveness of manufacturing firms in Kenya.	4.849	.000	Reject **H_{01}**
H_{02}:	Technology Orientation has no significant role on the competitiveness of manufacturing firms in Kenya.	3.417	.000	Reject **H_{02}**
H_{03}:	Learning Orientation has no significant role on the competitiveness of manufacturing firms in Kenya.	3.104	.000	Reject **H_{03}**
H_{04}:	Entrepreneurial orientation has no significant role on the competitiveness of manufacturing firms in Kenya.	4.456	.000	Reject **H_{04}**

Table 4.51 show the summary of the hypotheses rejected in the second model when the moderating variable is introduced.

Table 4.50: Overall Regression Coefficient (Moderator Present)

No	Hypotheses	t- value	P- value	Decision
H_{01}:	Market Orientation has no significant role on the competitiveness of manufacturing firms in Kenya in the present of moderator	4.174	.000	Reject **H_{01}**
H_{02}:	Technology Orientation has no significant role on the competitiveness of manufacturing firms in Kenya in the present of moderator	3.304	.000	Reject **H_{02}**
H_{03}:	Learning Orientation has no significant role on the competitiveness of manufacturing firms in Kenya in the present of moderator	2.933	.000	Reject **H_{03}**
H_{04}:	Entrepreneurial orientation has no significant role on the competitiveness of manufacturing firms in Kenya in the present of moderator	5.453	.000	Reject **H_{04}**

4.7.2 Optimal Model

The key study's key observations based on the assessment conducted it was clear that the dependent variable that is competitiveness of manufacturing firms in Kenya is influenced by market orientation, technology orientation, learning orientation and entrepreneurial orientation which constituted the independent variables. The moderating variable (top management commitment) was found to have a controlling influence on the association between independent variables and dependent variable since its presence enhanced their influence on the competitiveness of manufacturing firms in Kenya. This was supported by comparing the overall regression model 1 (without moderator) and overall regression model 2 (with moderator) in Table 4.48. From the finding it was clear that R square value for model 1 was less than R square value for model 2 that is $R_{m1}^2 < R_{m2}^2 = 0.429 < 0.649$. Implying that top management commitment had a moderating role on the overall model thus the proposed model for the study was retained as the optimal model. Figure 4.7 gives the optimal model.

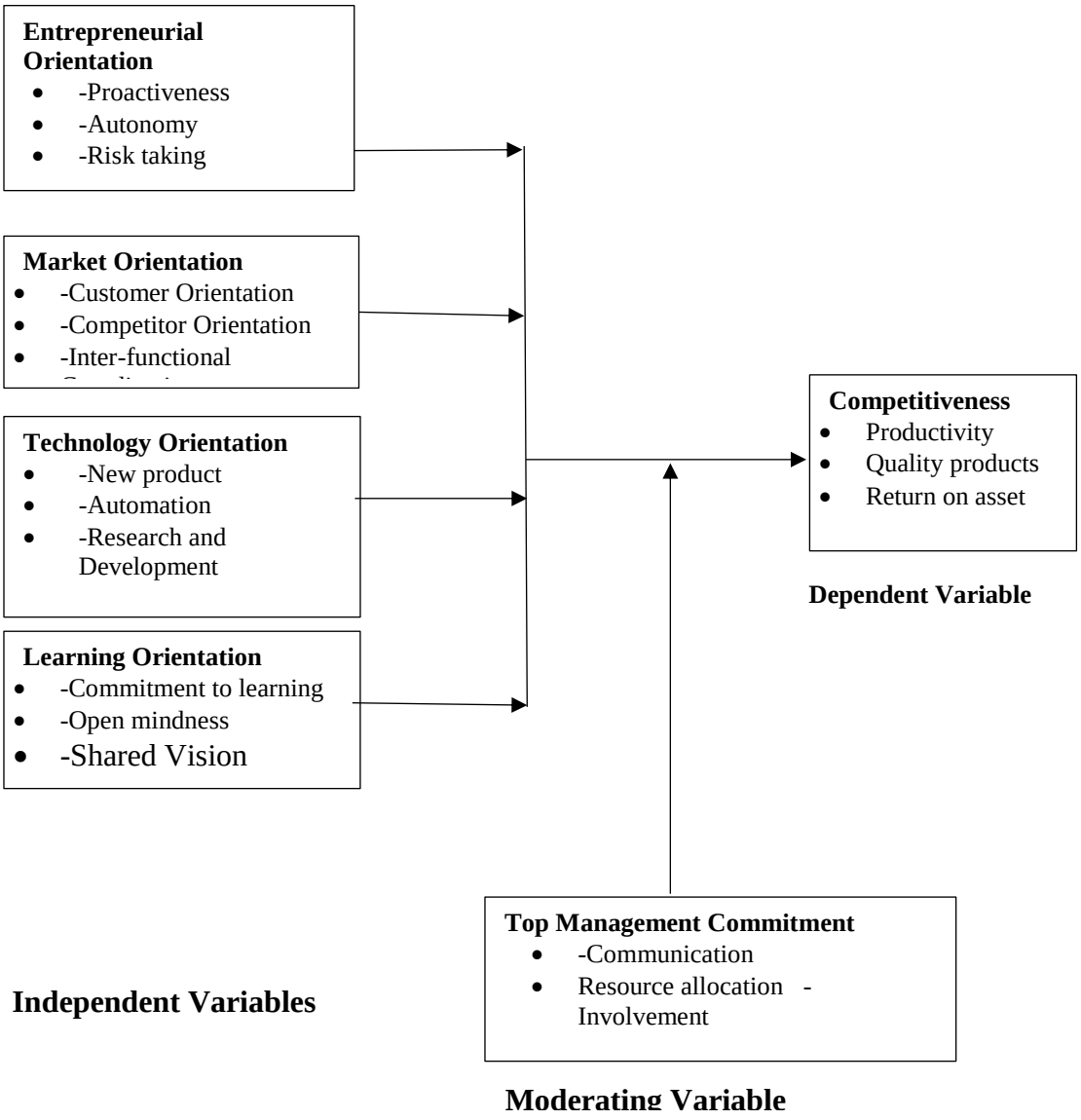

Figure 4.7: Revised Conceptual framework

CHAPTER FIVE

SUMMARY, CONCLUSSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter communicates the key research summary of the findings based on the research objective which is to examine the role of strategic orientation on competitiveness of manufacturing firms in Kenya. Conclusions and recommendations as per the study objectives and areas for further research have been isolated. The study pursued to examine the role of strategic orientation on competitiveness of the manufacturing firms in Kenya. Further, the section makes conclusion based on findings and recommendations on how competitiveness of manufacturing firms can be improved.

5.2 Summary of Research Findings

The study sought to determine the role of strategic orientation on competitiveness of manufacturing firms in Kenya with focus being on the following; market orientation, technology orientation, learning orientation, entrepreneurial orientation and their influence on Kenyans manufacturing firm's competitiveness. The key research findings are presented as listed below;

5.2.1 Market Orientation and Competitiveness

The first specific objective of the investigation was to assess the role of market orientation on manufacturing firms in Kenya competitiveness. Market orientation was assessed using the following constructs namely; customer, competitor and inter-functional constructs. The nine measurement items for market orientation were subjected to both descriptive and inferential analysis. Descriptive results of all the constructs had a mean of above three which meant that most of the firms in the manufacturing sector have adopted market orientation by putting in place mechanisms that help in collection of data from clients continuously. The study noted a majority of the manufacturing firms have invested in

market orientation as most of the activities they are undertaking are geared towards serving the customer better.

The study found that most of the manufacturing firm's main business objective is primarily driven by the desire to satisfy customers' needs hence a market oriented enterprises endeavors to continuously understand the needs of their clientele and will produce or modify goods and services, they are offering products and services that suit consumer's needs and expectations. Also, the firms have embraced measures that keeps their competitors in check for instance top management having meetings that review of strategies and initiatives competitors are employing and sharing the information within the entire organization and this constitutes to development of the organization culture. On delivering as one, the findings of the study showed that most of the manufacturing firms have a coordination unit which main task is to bring together all the departments for the purpose of sharing relevant information in regard to the customer needs and expectations. Through this they work coherently together which in the long run creates an enhanced customer value that leads to the firms being competitive.

Through linear regression analysis, the study noted that market orientation has a positive and significant role on Kenyan's manufacturing firm's competitiveness. In conclusion, a market focused firm have a collaborative approach in which everyone in the organization has a role to play in its activities. Through this they understand their role in creating customers value, checking on current and prospective clients and department having a responsibility to each other in task delivery.

5.2.2 Technology Orientation and Competitiveness

The second specific objective of the study was to establish the role of technology orientation on manufacturing firms in Kenya competitiveness. Technology orientation was measured using the following constructs namely; new product, automation and research and development. The descriptive statistics revealed that all the constructs had a mean of above four. The study findings revealed that technology-oriented manufacturing

firms have invested heavily in technology which makes them have a strong technology infrastructure at their disposal giving them capacity to produce new products as per the market, customer requirements and needs. It was also noted due to high technology infrastructure such firms are able to engage in innovation easily.

Research and development was identified as a strategic tool used by the technology oriented firms for them to achieve goals that makes them to be adaptable, proactive and creative. Investment in research is also a crucial aspect for a technologically oriented firm as it helps the organization to be at breast with the market requirement and which calls for setting aside of resources for the purposes of research and development. Technology oriented firms because of investment heavily in research and development support them to produce new products with ease as per the market demands and requirements. Technology assist the firm to be able to understand and appreciate emerging market trends hence making them meet the demands of the customers by producing goods and products they require. Most of the respondents agreed that automation is the hallmark of a technology-oriented firm. Regression analysis confirmed that a unit change in technology has a significant and positive impact to manufacturing firms in Kenya competitiveness. The study also showed that firms that are technologically aligned serve their clients swiftly and effectively.

5.2.3 Learning Orientation and Competitiveness

The third specific objective was to explore the role of learning orientation on competitiveness of manufacturing firms in Kenya. Learning orientation was operationalized by the following constructs namely; commitment to learn, open mindness and shared vision. The study noted manufacturing firms that are committed to learning endeavor to have their employees devoted to the goals they are pursuing. Employees in this organizations have a commonality of purpose and they are empowered to be part and parcel of what is being done. It was also observed that learning oriented manufacturing firms encourage open thinking, which aids in changing values that are held by its employees are also encouraged and even sponsored to learn new skills. Through this

organizations improve their capabilities that assist it positioning themselves competitively as compared to other entities in the same environment.

The study concluded that learning orientation makes manufacturing firms to be zealous in knowledge generation and dissemination with aim of enhancing competitiveness. The study also noted that learning oriented firms have empowered staff to be independent and always relook at their processes time to time. Employees also have high level of energy and are looking forward to serving their clients efficiently and effectively. Through regression analysis it was established that a unit change in learning orientation has a significant and positive impact to firm's competitiveness.

5.2.4 Entrepreneurial Orientation and Competitiveness

The other specific objective of the examination was to establish the role of entrepreneurial orientation on competitiveness of manufacturing firms in Kenya. Entrepreneurial orientation was measured using the following constructs namely proactiveness, autonomy and risk taking. From the study findings it was found out that firms that have adopted entrepreneurial orientation, they practice brave and open mind approach, act ahead of their competitors and are always pioneers in production of new products in the market. Entrepreneurial oriented manufacturing firms also empower their staff to come with ideas, implement them and communication is done freely.

Entrepreneurial oriented manufacturing firms have a tendency of trying and attaining new markets ahead of their competitors and this is done through extensive searching of new market prospects. Finally, manufacturing firms that entrepreneurial oriented always dare, invest and undertake high risky ventures and are always searching for unexplored opportunities within the environment. Regression analysis confirmed a positive and significant effect that entrepreneurial orientation has on competitiveness of firms in Kenya.

5.2.5 Top Management Commitment and Competitiveness

The final objective of the research was to establish the moderating role of the top management commitment on strategic orientation on manufacturing firms in Kenya competitiveness. Top management commitment was measured using the following constructs communication, resource allocation and involvement. Top management who are people entrusted with the responsibility of communicating the organization vision and goal and allocating of resources. Their involvement in any organization activities is very critical and paramount as they are responsible for reinforcing the values held by the organization this in turn makes the organization to be competitive.

On resource allocation, it was noted that the firms that have adequate human resource, budgetary allocation and other resources that are required, perform comparatively competitively better than those without though it was noted that resources are always limited and optimal usage is critical. The study noted that organization that involve the staff in strategy formulation and implementation makes them feel part and parcel of what the organization and are involved in all the undertaking as they are in a position to contribute effectively. Involvement of staff in strategy implementation by the top management is key in owning whatever that is undertaken through the firm. Regression analysis showed that top management commitment has a positive and significant moderating role on strategic orientation and firm's competitiveness.

5.3 Conclusions

The goal of the study was to ascertain the role of strategic orientation on competitiveness of firms in Kenya with precise focus being medium and large manufacturing enterprises. The following conclusions were made from the study's findings;

5.3.1 Role of Market Orientation on Competitiveness of Manufacturing Firms in Kenya

Market orientation determines how competitive a firm will be and for this reason most firms that are competitive have adopted it. Market orientation is primarily externally focused as it aims at satisfying the market needs through creation of value for the customers. The study notes that competitiveness of manufacturing firms in Kenya is positively and significantly impacted by the market orientation. Due to this in order for a firm to be competitive, change or improvement in market orientation would steer manufacturing firms to competitiveness. The study concludes that competitiveness of manufacturing firms in Kenya rests on how well they settle on the needs and the wants of the clients and how effectively, efficiently they provide fulfilment than the other firms in the industry they are operating in. Market orientation is central to competitiveness of businesses and it is concerned with how to gather, scrutinize and act to customer's information at the disposal of the firm. This demands for firms to employ strategies that will constantly help in generating information, tackling concerns and advantageously aligning in the operating environment.

5.3.2 Role of Technology Orientation on Competitiveness of Manufacturing Firms in Kenya

Technology helps in determining how will be by having a strong technological infrastructure that enhances how they serve their customers and production of goods and services that are required within a shorter period of time. The study concludes that competitiveness of a firm is greatly influenced with technology as it has a positive and significant role to contribute. Hence manufacturing firms that want to be competitive as a prerequisite they have to proactively procure and deploy technology as this will upgrade and enhance the organization's enthusiasm and competences.

5.3.3 Role of Learning Orientation on Competitiveness of Manufacturing Firms in Kenya

Learning orientation is more of behavioral and it helps the firms to have a committed goal to pursue to which all employees adhere to, creates a common purpose to be pursued and making the employees to be part of the organization. Firms that have invested in learning orientation are able to have their employees committed to organizations goals and have commonality of purpose. Learning orientation deals with how resources and environment are connected with each other to achieve competitiveness. In a dynamic environment, manufacturing firms have to pursue the process of learning, changing of behavior that questions the validity of the current values and improving of their capabilities faster than their competitors. In addition, the study concludes that competitiveness of a firm is significantly and positively influenced with learning orientation. This denotes that for any manufacturing entity to be competitive it is essential to accept and capitalize in new undertakings with a purpose of advancing new knowledge or insights that will have the capability to induce a strategic behavior transformation.

5.3.4 Role of Entrepreneurial Orientation on Competitiveness of Manufacturing Firms in Kenya

Entrepreneurial orientation is an alignment to which a firm takes a bold and an open-minded approach to solve concerns that affect them and the market they are in generally. This lead the manufacturing organizations being proactive, autonomous, investing in risky, unexplored ventures and development of new products. This is critical construct that help the manufacturing firms to be competitive. The study further concludes that competitiveness of manufacturing firms in Kenya is positively and significantly impacted by entrepreneurial orientation. Manufacturing firms that that engage in uncertain, risky and innovative undertakings tend to be competitive than those that don't and, in the end, leads to an innovation and seizing of new opportunities before other firms in the market.

5.3.5 The Moderating Role of the Top Management Commitment on the Strategic Orientation and Competitiveness of Manufacturing Firms in Kenya.

The study observes that top management commitment has a moderating role on the strategic orientation and competitiveness of manufacturing firms in Kenya. Top management of any given enterprises have the duty to communicate firms' position, allocate resources and make sure that all employees are involved in the operations of the firm. The research notes that how the communication, resource allocation and staff involvement in day to day operations are undertaken by the firms has a positive and significant moderating role on competitiveness. The top management have to involve the staff, communicate appropriately and allocate resources to enhance the competitiveness of manufacturing firms in Kenya. Management of any organization have a great influence on the way a firm will operate that in one way or the other translates to success of any given enterprise, hence it has a moderating role on the competitiveness of the manufacturing firms.

5.4 Recommendations

In view of the conclusions noted above from this study, the following recommendations are made;

5.4.1 Market Orientation and Competitiveness of Manufacturing Firms in Kenya

The study has noted that on manufacturing firms in Kenya being competitive, adoption and incorporation of market orientation is very important. The study, in this regard recommends that manufacturing firms should adopt measures that will enhance the utilization of market orientation as a strategy for doing business. This can be done through manufacturing firms developing mechanisms that will lead them to continuously gather information from and about their clients. The gathered data should then be analyzed to know what the customer's needs, requirements are in order to respond to them appropriately through development of products and services that they require.

Manufacturing firms should also constantly gather and review data on its competitors through discussion with the sales people in order to understand the strategies they have and through this they can be able to develop a superior customer value. This gathering of information from the other players in the field will help the manufacturing understand what is available in the market and how to improve or counter the competitors' products. The organization wide approach should be embraced by all the firms as this is critical in helping to bring all department together in synergizing their commitment to serve the client. This calls for all the organization's departments having a clear knowledge of what needs to be done in order to serve the customer satisfactorily. Finally, it's prudent for the manufacturing firms to be have forums where the top management meet their current and prospective customers as this can act as a feedback session that in one way or the other keeps them abreast of the market needs. This fora's will be critical in assessing what the firms offer and what the market requires, building of loyalty and enhancing the acceptability of firm's products in the market through customer engagement.

5.4.2 Technology Orientation and Competitiveness of Manufacturing Firms in Kenya

The study urges that in order for manufacturing firms to be competitive they need to invest in a strong technological infrastructure. This is because technology is paramount for firms endeavor to be competitive as it can be a catalyst for innovation which will enhance faster production of goods and services that the market requires and reduction of the production costs for the manufacturing firms. The study also recommends that the manufacturing firms need to invest in production of new products that as per the needs of customers since through such initiatives they will be competitive in the market. Products produced should be readily acceptance and be as per the market trends and needs. In order for the firms to be able to adopt a technology infrastructure that suits its needs, the study recommends that manufacturing firms owners and funders should always have resources budgeted for the purposes of firms automation, research and development investment as this will help in producing products that the market requires and at a faster rate and lead the firm to be technologically oriented.

5.4.3 Learning Orientation and Competitiveness of Manufacturing Firms in Kenya

Any manufacturing firm for it to be competitive, must be keen on knowledge generation and retention through commitment to learning this is critical as the staff are encouraged to enhance their knowledge through learning. Learning orientation basically deals with how knowledge is generated and used in the organization. The study recommends that manufacturing firms need to adopt commonality of purpose among its employees and have mechanisms that will encourage employees to be committed to the goals that are pursued. Employees need to be given some independence and allowed to alter some routines that have been used over time that are not working for them and finally relooking at the firms processes periodically as need arises as such strategies enhance competitiveness of the organization. The study recommends that manufacturing firm need to invest in activities and approaches that will enhance employee's participation and skills acquisition by tapping into their energy. Policy makers should prioritize enhancement of commitment to learning at the firm level.

5.4.4 Entrepreneurial Orientation and Competitiveness of Manufacturing Firms in Kenya

Competitiveness of the manufacturing firm can be enhanced by how they give their employees some autonomy to make decision in the way they operate. In this regard the study recommends that manufacturing firms should have a proactive approach which can be attained through developing a brave and open minded approach to the market. Employees need to be given autonomy to make decision that in one way will be beneficial to the firm and allow for free flow of information through open communication channels. Manufacturing firms should also invest after undertaking a clears and calculated risks bearing in mind that this sector is very dynamic and firm that make decisions within short time have the ability to move on. From the study findings it can be noted that it is paramount for manufacturing firms to be proactive as this will help them to seize any opportunity that exists in the environment and capitalize on them. Being proactive will help the firms to predict the market future requirements and be able to manufacture goods

and services that are in tandem with the demands of the market and adoption of technology that is appropriate.

5.4.5 Top Management Commitment and Competitiveness of Manufacturing Firms in Kenya

The study recommends that top management of any manufacturing firm should have a clear, open and transparent communication of any decisions that have been arrived at to the staff in an effective way. Reason being that any strategic communication if done appropriately can improve the firm competitiveness as it reinforces values that they hold dear to them. Resource allocation inform of human, material and financial should be sufficiently appropriate in order to make the manufacturing firm accomplish its mandate effectively. Through such allocation, if adequate and appropriate can improve the organizations competitiveness and be able to accomplish its mandate. In this regard the study recommends that top management should design mechanisms where every member of the manufacturing firm is incorporated in strategy implementation. The top management should also be personally involved in various activities being undertaken by the firms.

5.4.6 Policy Recommendation

The role of manufacturing firms in any economy cannot be overemphasized. The study recommends that the Government of Kenya should develop policy that will guard and encourage the growth of all sectors in Kenya. From the study it has been noted that some sectors are lagging behind by having very few firms of which can be attributed to competition from the other developed countries. The Government needs to come up with a policy that will see these sectors expand to play their critical role in national development of which will create employment and lead to economic growth. In regard to financing of the sector, financiers need to come up with modalities in which they will develop products for the sectors that are yet to fully develop while maintaining others. Through this the

government can develop incentives that attract investors in sectors that are yet to optimally function.

5.5 Areas for Further Research

This study sought to examine the how strategic orientation affects the competitiveness of manufacturing firms in Kenya. Through this study some insight in regard manufacturing sector has been provided but it isn't exhaustive hence it is expected to ignite other researchers to carry out in this area. The study dwelt on the following dimensions of strategic orientation namely market orientation, learning orientation, technology orientation, entrepreneurial orientation and through this has made a significant contribution in both theory and practice. This study has been characterized with a number of limitations of which a further examination can be undertaken. The recommendations from this study are basically for the manufacturing sector in Kenya which was the focus of the research. Therefore, such a study can be undertaken focusing on different industry all together. The study focused on the following constructs of strategic orientation; the market, learning, technology and entrepreneurial orientations of which were not exhaustive dimensions. The same research can be done with a major focus on other strategic orientation constructs that were not included in this research. Main focus of the investigation was Kenya Association of Manufacturers registered members who belong to Machakos and Central Kenya Chapters mainly operate in the following counties; Machakos, Kiambu, Kajiado, Nyeri and Meru hence the sample used was then limited to these areas. There is need for a further research to be undertaken to cover other areas where Kenya Association of Manufacturers have Chapters.

5.6 Contribution to the Existing Body of Knowledge

This study on the role of strategic orientation and competitiveness of manufacturing firms in Kenya has enhanced the existing body of knowledge in the area of strategic management. Its contribution towards the area of theoretical frameworks and models understanding of which is enhanced since the current research delves in to the relationship

that exists between the strategic orientation and competitiveness within the context of manufacturing sector. This study relied on the following foundational theories namely dynamic capability theory, game theory, diffusion of innovation theory, resource based theory and finally the upper echelon theory.

In regard to dynamic capability theory, the research enriches how a firm can enhance its competitiveness by utilizing various resources they own or have at their disposal. This is because the resources owned by a firm, can be assembled, integrated and configured to address various challenges that could be existing internally or externally. When these resources are well configured, they assist the manufacturing firms to renew their operational competencies leading them meeting their obligations to either consumers or shareholders. Secondly, from the perspective of game theory, the study expands the insight in the area by acknowledging that manufacturing firms are operating in a dynamic and very competitive environment. Due to this scenario, interaction with other players in the environment is inevitable hence decision making process plays a critical role in outmaneuvering the competitors. Rivalry and anticipation of moves by the other players is critical. By effectively predicting the moves of the other players has a great role in making one succeed.

Thirdly, in relation to the resource based theory which scrutinizes at how the organizations uses is bundle of resources they own to achieve competitiveness. The theory notes that all organizations have assets, capabilities, organization processes, attributes and knowledge that is controlled and owned by them. This resources that are owned can be used by the firm to come up and implement strategies that can improve efficiency and effectiveness hence giving them an advantage over the others in the same environment. Fourthly, on diffusion of innovation theory, the study notes that innovation is critical to the firms in order for them to survive and be competitive. In order for the firms to be competitive, acquisition, use of technology and its communication is important. Technology can be used to alter the culture that exist within an organization and bring about the change which can either be embraced or resisted by both the management and staff, but the way it is introduced can greatly improve the performance of the firm.

Finally, in regard to the upper echelon theory which basically tries to provide perspective as to why organization act and perform the way they do. The study notes that decision makers are unique given their knowledge, value biasness and system, familiarities and preferences. Due to this each manager will bring on board their own set of cognitive base and personality which has a great impact on the competitiveness of manufacturing firms.

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APPENDICES

Appendix I: Letter of Introduction to Respondents

John Gogo
P.O. Box 9583-00200
Nairobi
0721760663
10th April, 2021

To……

Dear Respondent

RE: REQUEST FOR RESPONSE

I am John Gogo, a PhD Student Jomo Kenyatta University of Agriculture and Technology (JKUAT) undertaking studies in the field of Business Administration (Strategic Management). Am undertaking academic research whose main objective is to establish the role of strategic orientation on the competitiveness of manufacturing firms in Kenya.

Your firm has been selected to participate in the study and I would like kindly to request for your input to the study by responding to the attached questionnaire. This is in regard to your firm's view on the role of strategic orientation to competitiveness in your firm. The response obtained during the study will be treated with utmost confidentiality and used only for academic purpose only.

Thanks for your participation.

Thanks

John Gogo

Appendix II: Questionnaire

This questionnaire seeks to collect data for academic purpose purely. The study seeks to investigate the role of strategic orientation on the competitiveness of manufacturing firms in Kenya. All the information provided would be treated with strict confidence.

Kindly fill your responses in the space provided or tick (√) appropriately

SECTION ONE

Demographic information

1. Name of the enterprise (optional).....

2. Sector in which the firm operate

Building, Mining and Construction ☐

Chemical and allied ☐

Energy, Electrical and Electronic ☐

Food and Beverage ☐

Leather and Footwear ☐

Metal and Allied ☐

Motor Vehicle and Accessories ☐

Paper Board and Packaging ☐

Pharmaceutical and medical equipment ☐

Plastic and rubber sector ☐

3. Number of employees

50-99 ☐ over 100 ☐

4. Period for which the firm has been in business

Less than 5 years ☐

6 -10 years ☐

11-15 years ☐

16-20 years ☐

More than 20 years ☐

5. Type of business enterprise ownership

Limited Partnership ☐

Limited company ☐

Any other specify ……..

6. Which of the following ISO standards is your firm certified on?

Quality Management standards ☐

Environmental management standards ☐

Health and safety standards ☐

None of the above ☐

All ☐

SECTION TWO

Market Orientation

A). To what extent do you agree with the following statement on market orientation indicators influence on the competitiveness of your enterprise? Where **1-Strongly Disagree (SD), 2 = Disagree (D), 3 = Not Sure (N), 4 = Agree (A) and 5 = Strongly Agree (SA)**

	Market Orientation	SD	A	N	A	SA
Customer Orientation						
1	The firm gathers information about customer needs.					
2	The firm's main business objectives are driven primarily by customer satisfaction.					
3	The firm constantly monitor the level of commitment to customers' needs.					
Competitor Orientation						
4	Top management regularly discusses competitors' strengths and strategies.					
5	The firm's sales people regularly share information within our organization concerning competitors' strategies.					
6	The firm respond rapidly to competitors' actions.					
Inter functional Orientation						
7	The firm's managers understand how everyone in our business can contribute to creating customer value.					
8	The firm's top managers from across the company regularly visit our current and prospective customers.					
9	Departments in the company are responsive to one another's needs and requests.					

B). What other strategies have you put in place to make sure that the company responds to the market needs? ……

……

……

……

C). How effective are these strategies in making the firm responsive to market needs

……

……

……

SECTION THREE

Technology Orientation

A). To what extent do you agree with the following statement on technology orientation indicators influence on the competitiveness of your enterprise? Where **1-Strongly Disagree (SD), 2 = Disagree (D), 3 = Not Sure (N), 4 = Agree (A) and 5 = Strongly Agree (SA)**

	Technology Orientation	SD	D	N	A	SA
New Product						
1	The firm develops new products frequently					
2	The firm has invested heavily in technology than our rivals					
3	The firm is producing new products and services based on consumer needs.					
Automation						
4	The firm has automated our production process					
5	The firm is scouting for new technology in the market					
6	The firm trains its customers on how to use given products					
Research and Development						
7	The firm has set aside resources for research and development					
8	Actively engaged in campaign to recruit the best R & D personnel					
9	The firm carries out market research that informs our product developments					

B). Technology it has been noted can improve the competitiveness of the manufacturing firm. What is your firm doing to adopt technology? ……

……..

SECTION FOUR

Learning Orientation

A). To what extent do you agree with the following statement on learning orientation indicators effect on the competitiveness of your enterprise Where **1-Strongly Disagree (SD), 2 = Disagree (D), 3 = Not Sure (N), 4 = Agree (A) and 5 = Strongly Agree (SA)**

	Learning Orientation	SD	D	N	A	SA
Commitment to learning						
1	All employees are committed to the goals of the firm					
2	There is a commonality of purpose in our organization					
3	Employees view themselves as partners in charting the course of the organization					
Open mindness						
4	The company we allow our staff to be independent in dealings					
5	The firm's culture is changed as need may arise depending on circumstances					
6	The firm reviews its processes from time to time					
Shared Vision						
7	The firm's employees have the high level energy to serve					
8	The firm is dedicated to serving our clients					
9	The firm ensures harmony is maintained at all times					

B). What are other strategies has your firm undertaken to ensure that learning is enhanced

……

……

…….

C). What are the incentives have been put in place by the firm to enable your staff to enhance their skills and techniques? ……

SECTION FIVE

Entrepreneurial orientation

A). To what extent do you agree with the following statement on entrepreneurial orientation indicators influence on the competitiveness of your enterprise? Where **1- Strongly Disagree (SD), 2 = Disagree (D), 3 = Not Sure (N), 4 = Agree (A) and 5 = Strongly Agree (SA)**

	Indicators	SD	D	N	A	SA
Proactiveness						
1	Creativity and experimenting are highly encouraged in our firm					
2	The firm act ahead of our competitors in the market					
3	The firm is the first to introduce new products in the market					
Autonomy						
4	The firm allows staff to come up with ideas and implement them freely					
5	In case of any challenge, the firm allow our staff to initiate change					
6	Staff are allowed to communicate freely					
Risk Taking						
7	The firm commits large portion of resources to unexplored opportunities					
8	The firm invest in high risk ventures that has high promises of rewards					
9	The firm continuously seek for opportunities in the environment					

B). How does your firm respond to existing threats and competition in the market

……

SECTION SIX

Top Management Commitment

To what extent do you agree with the following statement on top management team commitment indicators impact on the competitiveness of enterprise? Where **1-Strongly Disagree (SD), 2 = Disagree (D), 3 = Not Sure (N), 4 = Agree (A) and 5 = Strongly Agree (SA)**

	Top Management Commitment	SD	D	N	A	SA
Communication						
1	Decision made by management are clearly communicated to the staff					
2	Communication reinforces values of the organization					
3	Top management maintains an open and transparent communication					
Resource allocation						
4	There is adequate human resource allocation					
5	There is adequate budgetary allocation					
6	Top management team always available to guide employee					
Involvement						
7	Top management involves all staff in strategy implementation					
8	Top management are personally involved in firms' activities					
9	Management ensures that employees are aware of the importance of strategic orientation					

SECTION SEVEN

Competitiveness

To what extent do you agree with the following statement in regard to competitiveness of your manufacturing firm? Where **1-Strongly Disagree (SD), 2 = Disagree (D), 3 = Not Sure (N), 4 = Agree (A) and 5 = Strongly Agree (SA)**

	Competitiveness	SD	D	N	A	SA
Productivity						
1	Manufacturing lead time has improved in our firm					
2	The firm has the ability to respond to market disruptions in a quick way.					
3	The firm has made high investment in machinery to improve our productions.					
Quality product						

4	Customer requirements are met in terms of quality					
5	Quality production manual is highly adhered to					
6	The firm has formal quality check system					
Return on Asset						
7	The firm has been making profit over years					
8	The asset base of the company has been improving over years					
9	The profit received is ploughed back in to the firm					

Appendix III: Secondary Data Collection Sheet

Input Cost and output cost for the last Five (5) years

1. **Manufacturing Costs for the firms**

Year	**Input Cost**	**Output Cost**
2017		
2018		
2019		
2020		
2021		

2. **Return on Assets**

Year	**Net Income**	**Average Assets**
2017		
2018		
2019		
2020		
2021		

Appendix IV: List of Manufacturing Firms in Kenya

1. Acme Containers Ltd
2. Adpack Ltd
3. African Cotton Industries
4. African Spirits Ltd
5. Agri Pro-Pak Ltd
6. Alliance One Tobacco Ltd
7. Alltex Epz Ltd
8. Alpha Knits Ltd
9. Alpharama Ltd
10. Alternation Energy System Ltd
11. Andest Bites Ltd
12. Andika industries Ltd
13. Apex Still Ltd (Rolling Mill Division)
14. Athi River Tanneries Ltd
15. Bata Shoe Company Ltd
16. Batex Millers Ltd
17. Bdelo Ltd
18. Belat Enterprises
19. Benmed Pharmaceutical Company Ltd
20. Bidco Africa Ltd
21. Blue Sky Industries
22. Booth Extrusion Ltd
23. Broadway Bakery Ltd
24. Brookside Dairy Ltd
25. Burton and Member Enterprises
26. Buuri Millers Enterprises
27. Caffedel Duca Ltd
28. Capwell Industries Ltd

29. Cement Company Ltd
30. Centrofood Industries Ltd
31. Cocorico Investment Ltd
32. Coffee Agriworks Ltd
33. Crown Beverages Ltd
34. Darfords Enterprises Ltd
35. Del Monte Kenya Ltd
36. Devki Steel Mills Ltd
37. Doshi And Company Hardware Enterprises Ltd
38. Dune Packaging Ltd
39. East African Paper Mill
40. East African Portland Ltd
41. Eastern Produce (K) Ltd
42. Erdermann Gypsum Ltd
43. Essential Drugs Ltd
44. Ethical Fashion Artisons Epz Ltd
45. Farmers Choice Ltd
46. Githunguri Dairy Farmers Cooperative Society Ltd
47. Global Apparels Ltd
48. Golden Africa Kenya Ltd
49. Golden Africa Kenya Ltd
50. Green Pencils Ltd
51. Heritage Food Kenya Ltd
52. Highland Mineral Water Company Ltd
53. Hope Plastics
54. Insta Products (Epz) Ltd
55. Jetlak Foods Ltd
56. Juja Pulp and Paper Ltd
57. Jungle Group Holdings
58. Just Plastics Ltd

59. Kapa Oil Refineries Ltd
60. Kel Chemicals Ltd
61. Kenafric Bakery
62. Kenblest Ltd
63. Kenrub Ltd
64. Kenwear Garment Manufacturers
65. Kenya Meat Commission
66. Kenya Nut Company Ltd
67. Kenya Tents Ltd
68. Kenya Vehicle Manufacturers Ltd
69. Kevian Kenya Ltd
70. Kikoy Co. Ltd
71. Leather Industries of Kenya Ltd
72. Mabati Rolling Mills Ltd
73. Mafuko Industries Ltd
74. Mama Millers Ltd
75. Mayfeeds Kenya Ltd
76. Medivet Products Ltd
77. Megatech Ltd
78. Meru Greens Horticulture Ltd
79. Meru Water and Sewerage Services
80. Mjengo Ltd
81. Mombasa Cement Ltd
82. Mombasa Maize Millers
83. Morani Ltd
84. Motorbike Africa Ltd
85. Mount Kenya Bottlers
86. Munyiri Special Honey Ltd
87. Nampak Kenya Ltd
88. National Cement Ltd

89. New Wide Garments (K) Ltd
90. New Wide Garments Kenya EPZ Ltd
91. Ngeru Holdings Ltd
92. Niceynicey Maize Millers
93. Njimia (K)Ltd
94. Norbrook Kenya Ltd
95. Olivado EPZ
96. Ombi Rubber Rollers
97. Orbit Chemicals
98. Palmhouse Dairies Ltd
99. Patnet Steel Maker Manufacturers
100. Promasidor
101. Pyrrex General Agencies Ltd
102. Raka Milk Processors
103. Red Land Roses Ltd
104. Richfield Engineering Ltd
105. Roc Industries Ltd
106. Royal Garment Industries Ltd
107. Sandblasting and Coating (Kenya) Ltd
108. Sanpac Africa
109. Sanvoks Industries Ltd
110. Savannah Cement Ltd
111. Selecta Kenya Ghmb And Sons Kg
112. Silvercoin Imports
113. Silverspread Hardware
114. Sintel Security Print Solutions Ltd
115. Sky Foods
116. Spinners And Spinners Ltd
117. Sunland Roses Ltd
118. Sunny Processors Ltd

119. Superfoam Ltd
120. Tatu City Ltd
121. Thika Cloth Mills Ltd
122. Top Pak Ltd
123. Trust Feeds Ltd
124. Trust Flour Mills Ltd
125. Turea Ltd
126. Umoja Maintenance Centre (K) Ltd
127. United Bags Manufacturers Ltd
128. Universal Corporation Ltd
129. Vallem Construction Ltd
130. Vallem Construction Ltd
131. Vectus Kenya Ltd
132. Vinepack Ltd
133. Virji Vishram Patel and Sons
134. Zene Ltd

(Kenya Association of Manufacturers Directory 2018/2019)

Appendix V: NACOSTI Permit

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